



FPT UNIVERSITY

Capstone Project Document

Digital Tourism Platform with Integrated AI Chatbot for Consultation and Tour Booking in Binh Dinh

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Capstone Project code	SP25SEAI26

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- **Our families and friends**, whose encouragement and unwavering support motivated us to overcome challenges during this journey.

Lastly, we humbly acknowledge that, as students, our limited experience with certain technologies may have led to inevitable mistakes. We sincerely hope for your understanding and forgiveness for any shortcomings.

Thank you all for being part of our learning journey.

Respectfully,

The Project Team

Definition and Acronyms

Acronym	Definition
BA	Business Analysis
BR	Business Rule
ERD	Entity Relationship Diagram
GUI	Graphical User Interface
PM	Project Manager
SDD	Software Design Description
SPMP	Software Project Management Plan
SRS	Software Requirement Specification
UC	Use Case
API	Application Program Interface

Table 1 - Definition and Acronyms

I. Project Introduction

1. Overview

1.1 Project Information

✂ **Project name:** Digital Tourism Platform with Integrated AI Chatbot for Consultation and Tour Booking in Binh Dinh.

✂ **Project code:** SP25SEAI26

✂ **Group name:** BDT

✂ **Software type:** Web Application, Mobile Application

1.2 Project Team

1.2.1 Supervisor

Full Name	Role	Email	Mobile
Nguyen Van Tai	Lecturer	(FU HCM) Nguyễn Trọng Tài	
Nguyen Quang Tuyen	Lecturer		

Table 2 - Supervisor

1.2.2 Team member

Full Name	Role	Email	Mobile
Phan Mai Son	Leader	Phan Mai Son (K17 QN)	0972839374
Truong Dinh Van	Member	Truong Dinh Van (K17 QN)	0833597927
Tran Dang Khoa	Member	Tran Dang Khoa (K17 QN)	0368737203
Vo Cong Huy	Member	Vo Cong Huy (K17 QN)	0853642941
Le Trung Kien	Member	Le Trung Kien (K17 QN)	0988717191

Table 3- Team member

2. Product Background

Our Tour Booking Platform is designed to offer a comprehensive solution for managing and booking travel tours. Unlike traditional travel agencies that rely on manual processes, our system automates many aspects of tour management and booking. It enables travel agencies and tour operators to efficiently create, schedule, and manage tours. Additionally, travelers can easily browse, book, and track their tour itineraries through dedicated mobile applications. This dual approach—web management for staff and mobile apps for travelers and on-field personnel—ensures that all stakeholders benefit from a streamlined and effective process.

3. Existing Systems

The travel and tour booking industry has several effective digital platforms that streamline service delivery. Notable examples include:

3.1 Klook

Link: [klook.com](https://www.klook.com)

Klook is a leading tour booking platform that offers unique travel experiences. It features a user-friendly interface, integrated payment solutions, and live customer support. Klook provides comprehensive information on tours, attraction tickets, and various travel services, making it easy for users to compare options and make bookings.

3.2 Traveloka

Link: [traveloka.com](https://www.traveloka.com)

Traveloka serves as an integrated platform not only for booking flights but also for tours and hotels. It delivers a complete travel service experience through an intuitive user interface, fast booking processes, and multiple payment options, ensuring convenience for both end-customers and service providers.

3.3 Other Platforms

Additional systems like GetYourGuide and Viator also employ advanced technologies to optimize tour booking and management processes. These systems collectively illustrate the industry's digital transformation, where integrated management tools simplify operations and enhance customer engagement.

4. Business Opportunity

The project aims to build a web-based Tour Booking Platform with the following primary components:

1. **Web-Based Administration System:**

This system is designed for travel agency staff and tour operators to manage all aspects of tour activities. It covers functionalities such as managing tour information, schedules, ticketing, bookings, payments, transaction history, customer feedback, as well as handling related data like destinations, destination activities, and ticket types.

2. **Mobile-Compatible Web Interface:**

Although there is no separate mobile application, the web platform is designed to be responsive. This ensures that both customers and staff can effectively access and interact with the system on mobile devices like smartphones and tablets, no matter where they are.

5. Software Product Vision

The vision behind our Tour Booking Platform is to transform the tour management process into a highly efficient, automated, and customer-centric experience. The system is built to:

1. **Streamline Operations:**
Automate and simplify all aspects of tour management—from scheduling and ticketing to financial transactions and post-tour feedback—thus reducing manual workload and minimizing errors.
2. **Enhance Customer Experience:**
Provide travelers with an intuitive interface to easily browse, book, and manage tours, ensuring that they have all the necessary information and support at their fingertips.
3. **Empower On-Field Staff:**
Equip tour guides and support teams with mobile tools to handle live requests, monitor tour progress, and address issues in real time, thereby ensuring smooth and high-quality service delivery.

By addressing these aspects, the system offers significant benefits over traditional tour booking methods, saving time, reducing costs, and ultimately delivering a superior experience for travel agencies, their staff, and the end-customers.

6. Project Scope & Limitations

6.1 Major Features

6.1.1 For Admin Role

As a user in the Admin role using the Tour Booking Platform, the following capabilities are available to ensure overall system management and user administration:

- **FE-01. Login/Logout:** Secure authentication to access the administrative console.
- **FE-02. Manage Personal Profile:** View and update personal profile details, including password changes.
- **FE-03. Manage User Accounts:** View, add, update, and enable/disable employee (Operator/Manager) accounts.
- **FE-04. Manage Tour Categories & Destinations:** Create and update tour category information, manage destination details, and ensure data integrity for tour-related metadata.
- **FE-05. Oversee Tours & Schedules:** Access, create, and update tours and their schedules, ensuring proper ticket allocation and availability monitoring.
- **FE-06. Manage Payments & Transactions:** Monitor financial transactions, review payment histories, and generate financial reports.
- **FE-07. View System Statistics and Reports:** Generate insights on booking trends, revenue, and operational performance.

6.1.2 For Operator/Manager Role

Users in the Operator/Manager role (typically staff at travel agencies or tour operators) have access to features focused on day-to-day tour operations:

- **FE-08. Login/Logout:** Secure access to the system for operations.

- **FE-09. Manage Personal Profile:** View profile details, update contact information, and change passwords.
- **FE-10. Manage Tour Bookings:** Receive new booking requests, confirm bookings, cancel reservations when necessary, and track booking statuses.
- **FE-11. Manage Tour Schedule Tickets:** Allocate available tickets for a tour schedule, monitor ticket inventory, and adjust pricing as needed.
- **FE-12. Process Customer Feedback:** Review and respond to customer feedback and ratings to continually improve service quality.
- **FE-13. Access Operational Dashboards:** View key performance metrics, such as booking volumes and tour attendance, to support decision-making.

6.1.3 For Tourist Role

Although there is no dedicated mobile app, the web interface is designed responsively to ensure a great user experience on all devices. Tourists can:

- **FE-14. Login/Logout or Register:** Securely create and manage their accounts.
- **FE-15. Browse and Search Tours:** Explore available tours with filtering, sorting, and detailed tour information.
- **FE-16. Book Tours:** Select desired tour schedules, purchase tickets, and receive booking confirmations with up-to-date status tracking.
- **FE-17. Manage Personal Account:** View and update profile information, review booking history, and manage communication preferences.
- **FE-18. Provide Reviews and Ratings:** Submit feedback on tours to share experiences and help improve service quality.

6.2 Limitations & Exclusions

Limitations

1. **LI-01. Optimality:** Although the system is robust and feature-rich, it may not be the most optimal solution when compared to specialized niche platforms.
2. **LI-02. Mobile Functionality:** The solution is delivered as a responsive web application. While it is optimized for mobile access, it may not provide the full range of functionalities available in a dedicated mobile app.
3. **LI-03. Real-Time Features:** Certain advanced real-time functionalities (such as instantaneous notification updates) might require additional enhancements beyond the current scope.

Exclusions

1. **EX-01. Non-Tour Services:** The platform is dedicated exclusively to tour management and booking; it does not cover other travel services such as flights or hotel reservations.
2. **EX-02. Offline Operations:** Full functionality of the system requires an active internet connection; offline functionality is not supported.
3. **EX-03. External Service Integration:** The system presently focuses on internal tour management operations and does not integrate with external property or building management services.

II. Project Management Plan

1. Overview

1.1 Scope & Estimation

1. Project Initiating		
1.1 Requirement Analysis	Medium	2
1.2 Problem Analysis	Complex	3
1.3 Determine Project Scope	Complex	2
1.4 Listing Requirements	Medium	1
2. Project Planning		
2.1 Featural List	Medium	1
2.2 User Stories	Medium	2
2.3 Use Case Diagram	Medium	2
2.4 Conceptual Diagram	Medium	1
2.5 ERD	Medium	1
2.6 Physical Diagram	Medium	1
2.7 Team Meeting	Simple	1
2.8 Supervisor Meeting	Medium	1
2.9 Create Source Base	Complex	6
3. Project Executing		
3.1 Iteration 1		
3.1.1 Weekly Meeting	Simple	1
3.1.2 Requirement & Design	Medium	2
3.1.3 Code & Implementation	Complex	4
Back-end:		
3.1.3.1 Set up Environment	Complex	1
3.1.3.2 Create Domain Entities, DTOs & Mapping	Simple	1.5
3.1.3.3 Repository & Service Layers	Medium	3
3.1.3.4 Authorization & Authentication Service	Simple	1
3.1.3.5 Data Validation	Complex	3
3.1.3.6 Set up Email Service	Medium	0.5
3.1.3.7 Develop CRUD Functions for Core Entities (Tour, Booking, Payment)	Medium	5
3.1.3.8 Middleware (Error Handling)	Medium	1
3.1.3.9 Configure Cloud Database (e.g., Azure SQL)	Medium	1
3.1.3.10 Configure Redis Cache	Medium	1
3.1.3.11 Code Review with Supervisor	Medium	0.5
3.1.3.12 Fix Issues from Code Review	Medium	3
3.1.3.13 Pre-Merge Code Review	Medium	0.5
Front-end:		

3.1.4.1 Set up Front-end Environment	Medium	2
3.1.4.2 Develop Home (Tour Listing) Screen	Medium	1.5
3.1.4.3 Implement Home Screen Functionality	Medium	1.5
3.1.4.4 Develop Login/Registration & Forgot Password Screens	Simple	1
3.1.4.5 Develop Tour Listing Screen	Medium	2
3.1.4.6 Develop Tour Details Screen	Medium	2
3.1.4.7 Develop Booking Screen	Medium	2
3.1.4.8 Develop User Profile Management Screen	Medium	2
3.1.4.9 Develop Admin Dashboard/Operator Portal Screen	Medium	2
3.1.4.10 Front-end Deployment Settings	Medium	1
Mobile Responsive Adjustments:		
3.1.5.1 Set up Mobile Environment Adjustments	Medium	1
3.1.5.2 Optimize Login/Registration for Mobile	Simple	0.5
3.1.5.3 Optimize Tour Listing & Details for Mobile	Simple	0.5
3.1.5.4 Optimize Booking & Payment Screens for Mobile	Medium	0.5
3.1.5.5 Optimize User Profile for Mobile	Medium	0.5
3.1.6 Test		
3.1.6.1 Create Test Cases (Iteration 1)	Medium	4
3.1.6.2 Execute Tests (Iteration 1)	Medium	2
3.1.6.3 Verify Test Results (Iteration 1)	Medium	2
3.1.6.4 Fix Bugs (Iteration 1)	Medium	3
3.1.7 Setup Deployment		
3.1.7.1 Set up CI/CD Environment	Complex	3
3.1.7.2 Configure Domain & DNS	Simple	1
3.1.7.3 Integrate Source Code into CI/CD Pipeline	Medium	2
3.1.8 Summary & Evaluation (Iteration 1)	Medium	2
3.2 Iteration 2		
3.2.1 Weekly Meeting	Simple	1
3.2.2 Requirement & Design (Iteration 2)	Medium	3
3.2.3 Code & Implementation (Iteration 2)	Complex	4
Back-end:		
3.2.3.1 Develop Additional API Endpoints (e.g., Payment, Feedback)	Medium	2

3.2.3.2 Address Cache/Performance Issues	Medium	1
3.2.3.3 Fix Cloud Deployment Issues	Medium	1
Front-end:		
3.2.3.4 Connect Front-end to New APIs	Simple	2
3.2.3.5 Fix Front-end Bugs	Medium	2
3.2.3.6 Resolve Web Deployment Issues	Medium	2
Mobile:		
3.2.3.7 Further Optimize Mobile Layout	Simple	0.5
3.2.3.8 Minor Mobile UI Tweaks	Medium	1
3.2.3.9 Build APK (if needed)	Simple	0.5
3.2.4 Deploy Setting	Medium	2
3.2.5 Test (Iteration 2)		
3.2.5.1 Summary & Evaluation (Iteration 2)	Medium	2
3.2.5.2 Finish Project Executing	Medium	2
4. Project Finishing		
4.1 Collect & Prepare Project Closure Documents	-	5
4.2 Supervisor Weekly Meeting	Medium	1
4.3 Team Weekly Meeting	Medium	1
4.4 Close Project	Simple	1
Total Estimated Effort (man-days)		137

Table 4- Scope & Estimation

1.2 Project Objectives

Timeliness: 90%

Allocated Effort: 5 (members) * 4 (months) * 30 (days/month) = 600 man-days

1.3 Project Risks

#	Risk Description	Impact	Possibility	Response Plans
1	Technology risk: cannot find the suitable solution for technique problems, the software cannot fulfill the expectation.	High	Medium	Do more research on official resources, discuss with mentor
2	Technology risk: host server dies	Medium	Low	Change host server

3	Requirement changes: requirements unexpected changes.	Critical	Medium	Choose another way of solution to respond to those changes.
4	Time risk: Cannot finish on time because of human issue	Critical	Low	Reduce scope, make assumptions, optimize schedule

Table 5- Project Risks

2. Management Approach

2.1 Project Process

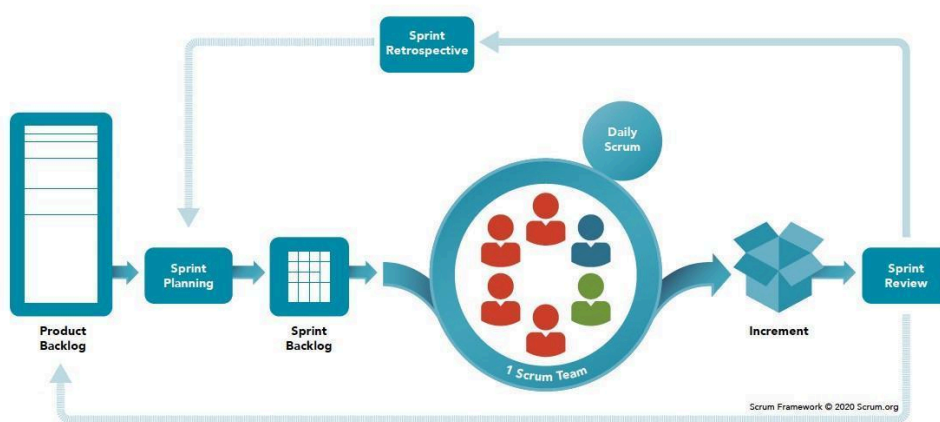


Figure 1 - Project Process

This project was developed using the Scrum model, which is part of the Agile framework for project development, for the following reasons:

- The planning and documentation phases in advance allow large or changing teams to stay informed and work towards a common goal.
- The force is structured and disciplined.
- Is simple to understand, follow and organize the tasks.
- Allows for easy implementation of early specification or design changes.
- Clearly define milestones and deadlines.

- Face to face meeting, online meeting.
- Work together to define and unify solutions.

2.2 Quality Management

To increase the project quality and user experience, the team apply the:

- Do a survey to understand what users want and their need.
- Acceptance testing:
 - Do a survey to understand how users receive the application and collect feedback.
 - Based on the users' feedback, the team fix bug and update.
- Hold a daily meeting to track project progress and support each other.

2.3 Training Plan

Training Area	Participants	When, Duration	Waiver Criteria
NextJS	Võ Công Huy, Trương Đình Văn	1-2 weeks	Mandatory
Asp .NET 8 Web API	Lê Trung Kiên, Trần Đăng Khoa, Phan Mai Sơn	1-2 weeks	Mandatory
MySQL	Lê Trung Kiên, Trần Đăng Khoa, Phan Mai Sơn	1-2 weeks	Mandatory
Git desktop, GitHub	Everyone	1-2 weeks	Mandatory

Table 6 - Training Plan

3. Project Deliverables

#	Deliverable	Due Date	Deliverable Scope
1	Project Plan document	23/01/2025	Overall project plan
2	SRS documents	15/02/2025	Software requirements
3	Design documents	22/03/2025	Architecture Design, Detailed design, Database, UI design
4	Software Testing Document	12/05/2025	Testing Reports
5	User Guides documents	22/04/2025	Installation guides, User manual guides

6	Web and mobile application	25/04/2025	Code, System test cases
7	Code Front-end and mobile package	25/05/2025	Code, System test cases
8	Code Back-end package	25/05/2025	Code, System test cases
9	Final project package	25/05/2025	Final codes & documents

Table 7- Project Deliverables

4. Responsibility Assignments

Full name	Roles	Responsibility
Lâm Hữu Khánh Phương Nguyễn Thế Hoàng	Supervisor	<ul style="list-style-type: none"> • Instruct project team • Supervise project status • Review deliverables • Answer questions about the project
Phan Mai Sơn	Leader	<ul style="list-style-type: none"> • Plan projects/tasks • Determine impediments and provide solutions to complete tasks • Track member's progress • Resolve conflicts impact on the team
Lê Trung Kiên Trương Đình Văn Võ Công Huy Trần Đăng Khoa	Team members	<ul style="list-style-type: none"> • Gather and analysed requirements • Design UI • Implement code for the web application • Test the web application • Implement API • Test API • Review code • Contribute to improving project quality • Write documents

Table 8 - Responsibility Assignments

5. Project Communications

Communication Item	Target	Purpose	Frequency	Type, Tool, Methods
Daily meeting	Team member	Report task progress Identify obstacles	Always	Discord Google meet
Weekly Report	Supervisors Team members	Discuss project's status, solution Review diagram, document	Weekly	Zalo Google meet Offline meetings
Weekly meeting	Customer Team members	Get requirements	Weekly	Zalo Google meet Offline meetings

Table 9 - Project Communications

6. Configuration Management

6.1 Document Management

- Use Google Docs to save documents and for real-time editing.
- Use Google Sheet to save meeting report, meeting record, diagram, image, design, document to each category folder

6.2 Source Code Management

- GitHub server to store source code.
- Follow the rule of team when using Git:
 - Commit and note the changes details often.
 - Review carefully before pushing into the develop branch.
 - Fetch, review and resolve conflicts when merging usually

6.3 Tools & Infrastructures

Category	Tools / Infrastructure
Technology	Javascript (Front-end), C# (Back-end), Redis (Cache), React Native (Mobile)
Framework	ASP.NET Core, NextJS, React Native
Database	MySQL
IDEs/Editors	Visual Studio Code, Visual Studio, Rider
Diagramming	Draw.io, DbForge
Documentation	Google Docs, Google Sheet
Version Control	GitHub (Source Codes), Google Drive (Documents)

Deployment server	Azure, VPS (Digital Ocean)
Project management	Google Sheet

Table 10 - Tools & Infrastructures

III. Software Requirements Specification

1. Product Overview

- The **Digital Tourism Platform with Integrated AI Chatbot for Consultation and Tour Booking in Binh Dinh** (DTP-BD) is a web-based application designed to modernize and enhance the tourism experience in Binh Dinh province. Developed as part of a digital transformation initiative, this platform aims to serve both tourists and tourism service providers with an intelligent, interactive, and efficient digital environment.
- At its core, DTP-BD offers essential services such as tour discovery, booking management, and AI-based consultation. The platform is equipped with a responsive user interface that ensures accessibility on both desktop and mobile devices. Tourists can browse and book tours, receive personalized recommendations, and provide feedback, while tour operators can manage tour details, customer interactions, and monitor business performance in real time.
- A standout feature of DTP-BD is its **integrated AI chatbot**, capable of providing 24/7 support by answering common queries, suggesting tours based on user preferences, and facilitating bookings. This component significantly improves customer service efficiency and user satisfaction.
- The system is governed by an administrative backend that supports account management, content moderation, and overall system health monitoring. Tourism managers can use the system to optimize tour combinations, handle customer issues, and oversee operational activities.
- The platform defines four main user roles: **Admin**, **Tour Operators**, **Tourism Managers**, and **Tourists**, each granted specific privileges to access, update, and manage relevant functionalities.

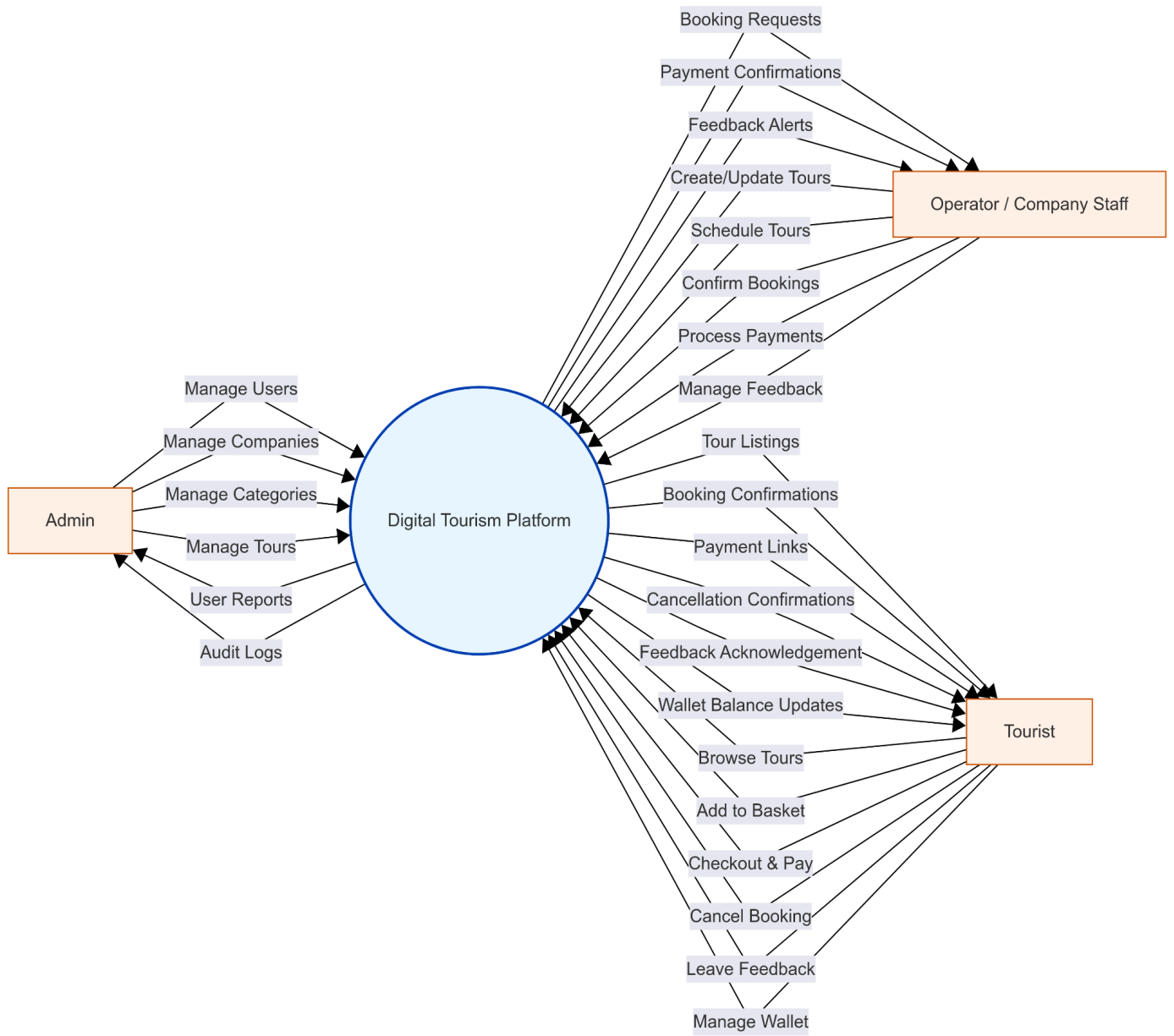


Figure 2 - Product Overview Diagram

2. User Requirements

2.1 Actors

#	Actor	Description
1	Tourist	The end-user who browses, selects, and purchases bundled service packages that include tickets to multiple attractions. Tourist can view

		tour details, including availability and additional services, and complete their purchases through the app
2	Administrator	Oversees system management, including user roles, destination setup, and overall application settings. Admins ensure smooth operations by managing service bundles and coordinating with suppliers.
3	Operator	As a system administrator, has the right to do every task a manager can do plus account managing task like create new tour

Table 11 - Actors

2.2 Use Cases

2.2.1 Diagram(s)

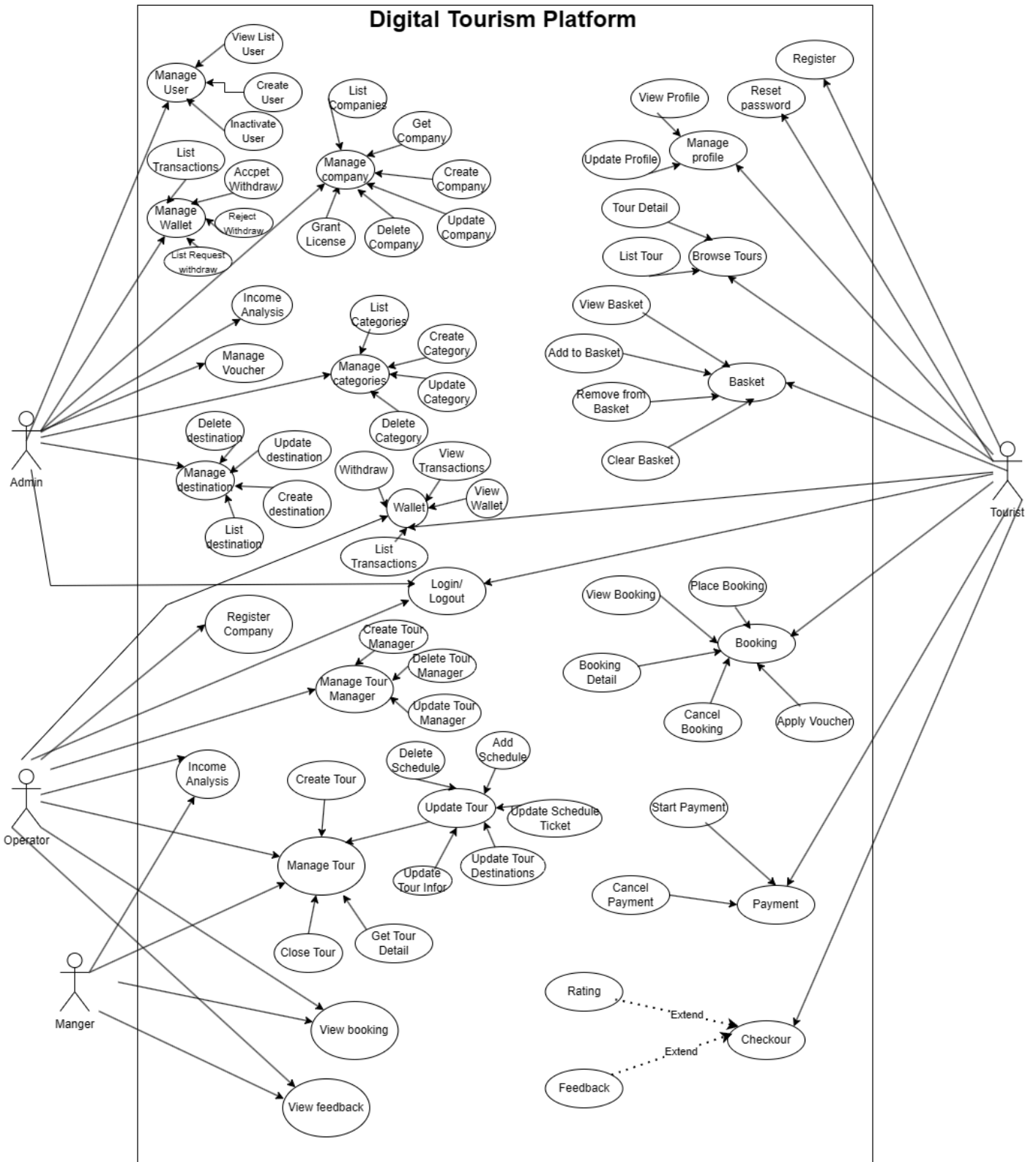


Figure 3 - Use Case Diagram

2.2.2 Use Case Description

ID	Use Case	Actors	Description
1	Login	User	Authenticate credentials and issue JWT access & refresh tokens.
2	Logout		Invalidate the current refresh token to log the user out.
3	Register	Tourist	Create a new tourist account with required personal and login information.
4	Reset Password		Allow a tourist to set a new password using a valid reset token.
5	View Profile		Retrieve the current user's profile details (name, email, address, phone).
6	Update Profile		Modify personal information such as name, address and phone number.
7	List Tour		Display a paginated list of available tours with basic info (title, dates, starting price) and filtering options.
8	View Tour Detail		Show full details of a selected tour: itinerary, destinations, ticket types, availability, pricing and ratings.
9	View Basket		Retrieve contents of the current user's basket: selected schedules, ticket types and quantities.
10	Add to Basket		Add a specified tour schedule and ticket type (with quantity) into the basket.
11	Remove from Basket		Delete one basket item (specific schedule + ticket type) from the basket.
12	Clear Basket		Empty all items from the user's basket.
13	Place Booking		Checkout the basket to create a booking, reserve tickets and generate booking record.
14	List Bookings		Retrieve all bookings made by the current user, including status and summary.
15	Get Booking		Fetch detailed information of one booking by its ID.
16	Cancel Booking		Cancel an existing pending booking before the tour start date and release reserved tickets.
17	Start Payment		Initiate the payment process for a booking and provide the payment link or redirect URL.
18	Cancel Payment		Cancel a pending payment transaction and release any holds.
19	Rating		Retrieve the list of ratings and reviews submitted by users for a given tour.
20	Feedback		Submit a star rating and comment for a completed tour experience.
21	List Companies	Admin	Retrieve a filtered and paginated list of all registered companies (supports OData queries).
22	Get Company		Fetch detailed information of one company by its ID.
23	Create Company		Add a new company record with full details (name, email, phone, tax code, commission rate).
24	Update Company		Modify existing company data such as name, contact info, tax code and commission rate.
25	Delete Company		Soft-delete a company so it no longer appears in active lists but remains in the database.
26	Grant/Revoke License		Approve or revoke a company's license, enabling or disabling their ability to operate tours.

27	List Users		Retrieve all user accounts, optionally filtered by role or status.
28	Create User		Register a new user with a specified role (Admin, Operator or Tourist).
29	Delete User		Disable (soft-delete) a user account to prevent further access.
30	List Categories		Retrieve all tour categories available in the system.
31	Get Category		Fetch details of a specific tour category by its ID.
32	Create Category		Add a new category to classify tours.
33	Update Category		Modify the name or attributes of an existing category.
34	Delete Category		Soft-delete a category to prevent its use in new tours while preserving historical data.
35	List Destinations		Retrieve all tour destinations, including name and geographic coordinates.
36	Get Destination		Fetch detailed information for one destination by its ID.
37	Create Destination		Add a new destination entry with name, latitude and longitude.
38	Update Destination		Modify details of an existing destination (e.g., name or coordinates).
39	Delete Destination		Soft-delete a destination to prevent its assignment to future tours.
40	Accept External Withdrawal		Approve a pending external withdrawal request and change its status to Done.
41	Reject External Withdrawal		Reject a pending external withdrawal request and change its status to Rejected.
42	List Request Withdraw		Retrieve all withdrawal requests made by the current user, showing status, date and amount.
43	List Transactions	Admin, Tourist, Operator	Retrieve wallet transaction history, showing amount, type, date and status.
44	Income Analysis	Operator, Admin, Manager	Provide aggregated income analytics (daily sales, top tours, newest bookings) according to role permissions.
45	Register Company		Allow a new company to sign up by submitting required details (name, email, phone, tax code, commission rate).
46	Create Tour Manager		Assign the Tour Manager role to a user, granting them permissions to manage tours.
47	Delete Tour Manager		Revoke the Tour Manager role from a user, removing their tour management permissions.
48	Update Tour Manager	Operator	Modify an existing Tour Manager's assignment details or scope of responsibility.
49	List Tours		Retrieve all tours managed by the current operator, with filtering and sorting options.
50	Get Tour Detail		Fetch comprehensive details of a tour (destinations, schedules, ticket types) by its ID.
51	Create Tour		Add a new tour offering including title, description, category and company association.
52	Update Tour Info		Modify basic tour information such as title, description and category.
53	Update Tour Destinations		Assign or reorder the list of destinations for a given tour.
54	Add Tour Schedule	Operator, Manager	Create a new schedule entry by specifying open/close dates for a tour.

55	Update Schedule Ticket		Change ticket availability or pricing within a specific tour schedule.
56	Delete Tour Schedule		Remove an existing schedule from a tour, cancelling future reservations if applicable.
57	Close Tour		Mark a tour as closed to booking, preventing any new reservations.
58	View Feedback		Display feedback entries for tours, including user comments, star ratings and submission dates.
59	View Booking		Retrieve booking records across all users for administrative review, including payment status and remarks.
60	View Wallet	Admin, Tourist, Operator	Display current wallet balance and a summary of recent transactions.
61	View Transaction	Admin, Tourist, Operator	Fetch detailed information of a specific transaction by its transaction code.
62	Withdraw	Tourist, Operator	Submit a request to withdraw funds from the wallet, specifying amount and optional description.

Table 12 - Use Case Description

3. Functional Requirements

3.1 System Functional Overview

3.1.1 Screens Flow

a. Web user

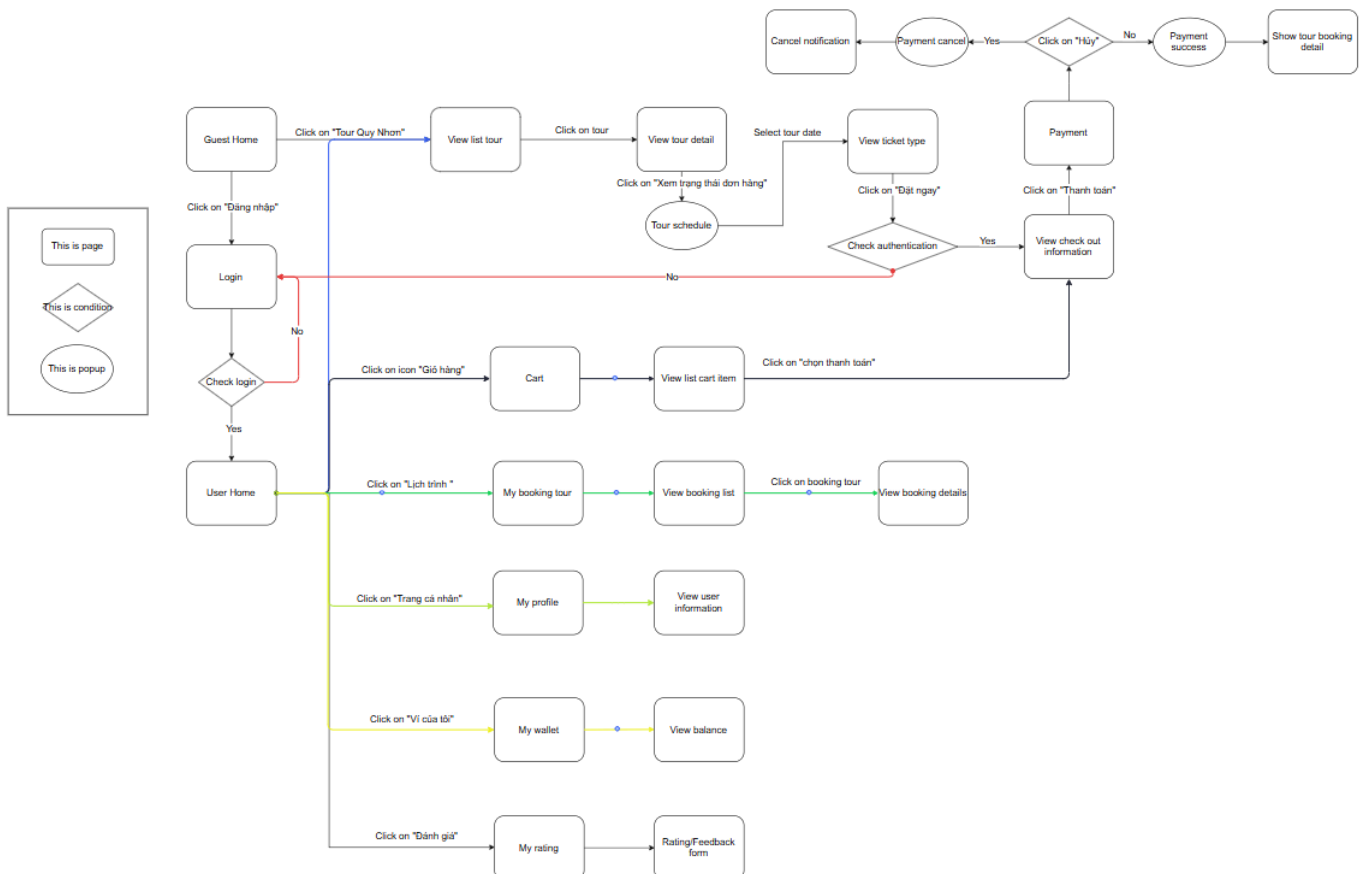


Figure 4 - Web user screen flow

b. Web admin

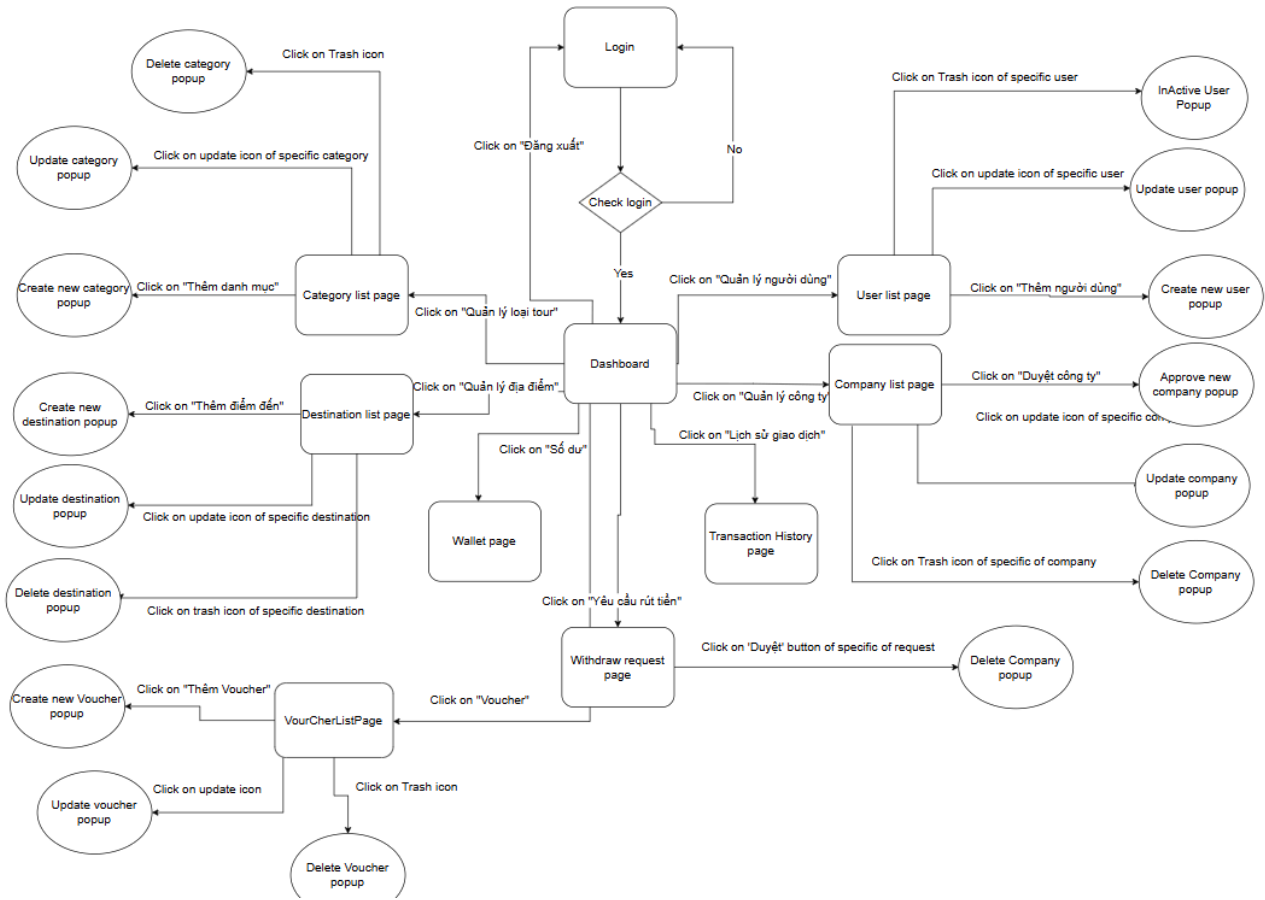


Figure 5 - Web admin screen flow

c. Web operator

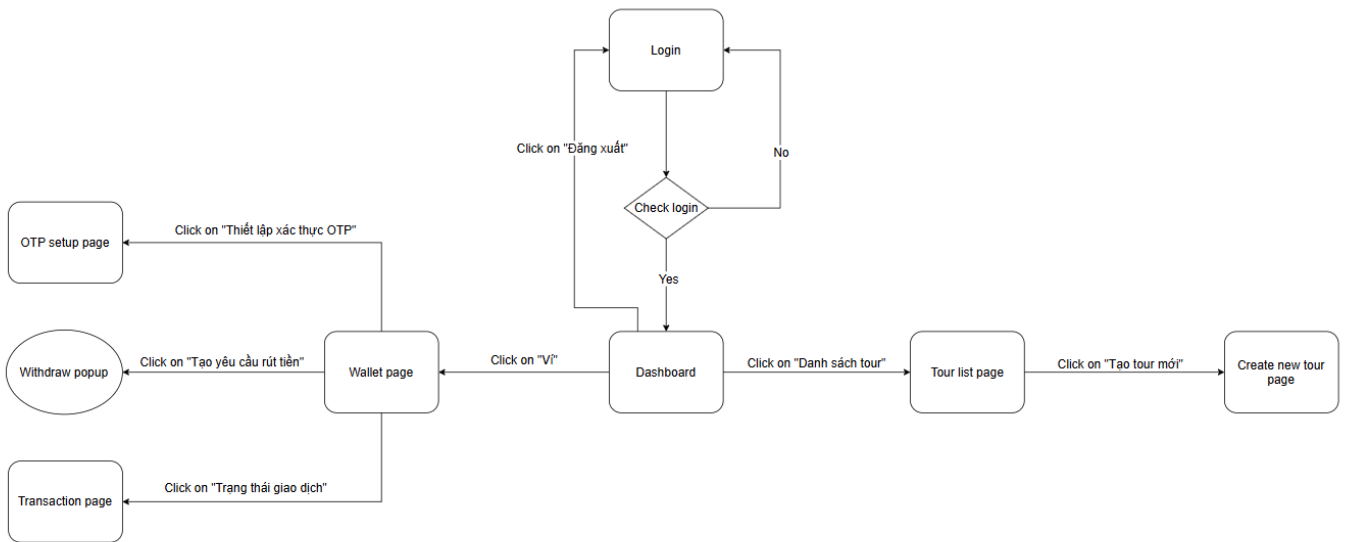


Figure 6 - Web operator screen flow

c. User Mobile App

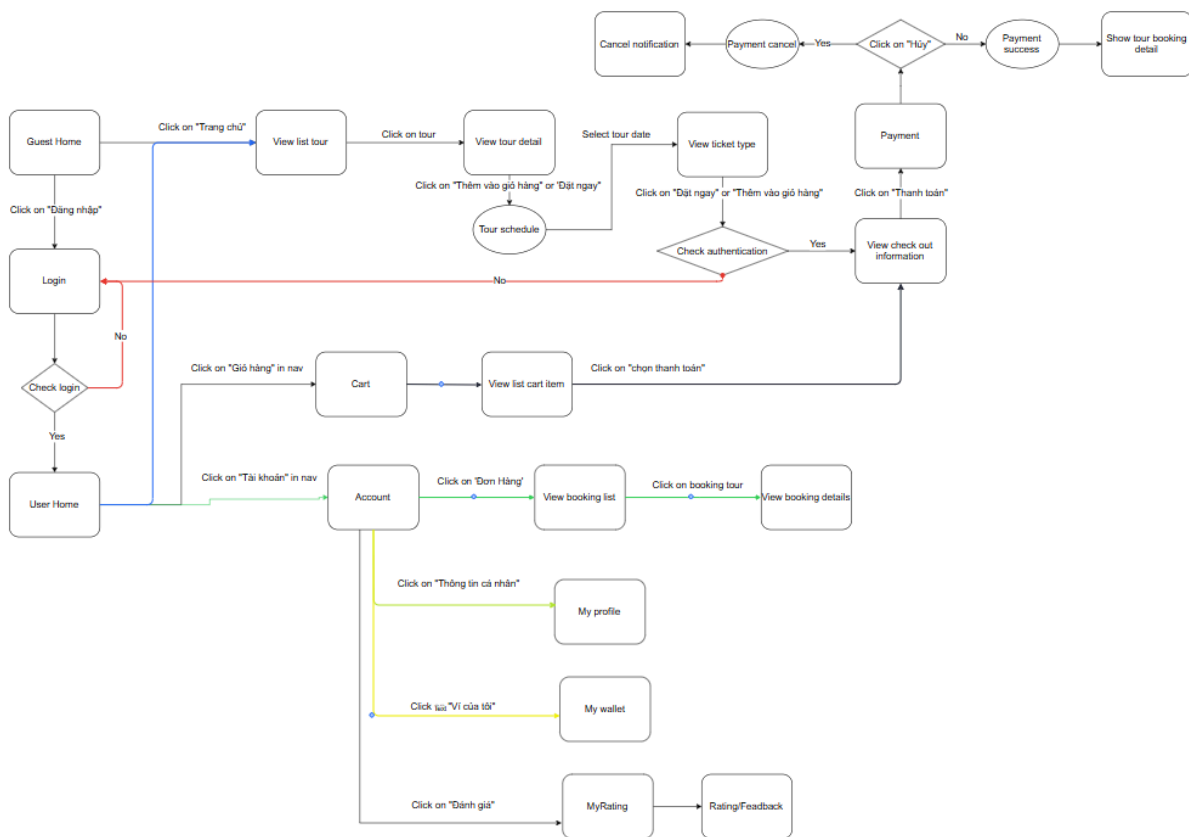


Figure 7 - Mobile app screen flow

3.1.2 Functional requirements

No	Actor	Function Name	Purpose	Data requirements	Data validation	Business Rules
1	Admin, Operator	View DTP's Account List	View Account List		FullName : + Type: Text Field (string) + Max length = 100	N/A
2	Admin, Operator	View Account	View An Account	Id	FullName : + Type: Text Field (string) + Max length = 100	N/A
3	Admin	Create Account	Create An Account	User Name Full Name Email Phone Number Company Name Address Role Id	UserName : + Type: Text Field (string) + Max Length = 100 FullName : + Type: Text Field (string) + Max length = 100 Email : + Type: Text Field (string) + Max Length = 100 Phone Number : + Type: Text Field (string) + Max Length = 10 + Valid Vietnam Phone Number Address : + Type : Text Field (string) + Max Length = 100 Role Id : + Type: Dropdown list (Guid) Company Name + Max Length = 100 + Type : Text Field (string)	N/A

4	Admin	Update Account	Update Account Information	Id User Name Full Name Email Phone Number Company Name Address Role Id	Id : + Type: Guid UserName : + Type: Text Field (string) + Max Length = 100 FullName : + Type: Text Field (string) + Max length = 100 Email : + Type: Text Field (string) + Max Length = 100 Phone Number : + Type: Text Field (string) + Max Length = 10 + Valid Vietnam Phone Number Address : + Type : Text Field (string) + Max Length = 100 Role Id : + Type: Dropdown list (Guid) Company Name + Max Length = 100	
5	Admin, Operator	Deactivate Account	Delete Account	Id	+ Type: Guid	
6	Admin	Grant License	Allow Company Create Tour	Company Id Accept	Id + Type: Guid Accept + Type : button (boolean)	

No	Actor	Function Name	Purpose	Data requirements	Data validation	Business Rules
7	Admin, Operator	Get Category List	View category list			
8	Admin, Operator	Get Detail Category	View category information	Id		
9	Admin, Operator	Create Category	Create Tour Category	Name	Name : + Type: Text Field (string)	
10	Admin, Operator	Update Category	Update Category	Id Name	Id : + Type: Guid Name: + Type: Text Field (string)	
11	Admin, Operator	Delete Category	Delete Category	Id	+ Type: Guid	
12	Admin, Operator	Get Destination List	View Destination List			

No	Actor	Function Name	Purpose	Data requirements	Data validation	Business Rules
13	Admin, Operator	Get Destination	View Destination Information	Id	+ Type: Guid	
14	Admin, Operator	Create Destination	Create New Destination	Name Latitude Longitude	Name : + Type: Text Field (string) + Max Length = 100 Latitude : + Type: Text Field (string) + Max Length = 100 Longitude : + Type: Text Field (string) + Max Length = 100	
15	Admin, Operator	Update Destination	Update Destination Information	Id Name Latitude Longitude	Id : + Type: Guid Name : + Type: Text Field (string) + Max Length = 100 Latitude : + Type: Text Field (string) + Max Length = 100 Longitude : + Type: Text Field (string) + Max Length = 100	
16	Admin, Operator	Delete Destination	Delete Destination	Id	+ Type: Guid	
17	Tourist	Get Tour	Overview list of tour information			

No	Actor	Function Name	Purpose	Data requirements		Business Rules
18	Tourist	Get Tour Detail	View Tour Detail Information	<ul style="list-style-type: none"> • TourId 	<ul style="list-style-type: none"> • TourId: <ul style="list-style-type: none"> + Type: Guid 	
19	Tourist	Booking Tour	Create a tour booking	<ul style="list-style-type: none"> • TourScheduleId • Name • PhoneNumber • Email • VoucherCode • Tickets <ul style="list-style-type: none"> ○ TicketTypeId ○ Quantity 	<ul style="list-style-type: none"> • TourScheduleId: <ul style="list-style-type: none"> + Type: Guid • Name: <ul style="list-style-type: none"> + Type: Text Field (string) + Max Length = 100 • PhoneNumber: <ul style="list-style-type: none"> + Valid Phone Number + Type: Text Field (string) + Max Length = 10 • Email: <ul style="list-style-type: none"> + Valid Email + Type: Text Field (string) + Max Length = 25256 • VoucherCode: <ul style="list-style-type: none"> + Type: Text Field (string) + Max Length = 100 • Tickets <ul style="list-style-type: none"> + Type: List ○ TicketTypeId <ul style="list-style-type: none"> + Type: Guid ○ Quantity <ul style="list-style-type: none"> + Type: Integer + Constraint: Positive 	BR-48 BR-16 BR-15 BR-17
20	Tourist	Cancel Tour Booking	Customers cancel tours they have booked	<ul style="list-style-type: none"> • OrderId 	<ul style="list-style-type: none"> • OrderId: <ul style="list-style-type: none"> + Type: Guid 	BR-49

No	Actor	Function Name	Purpose	Data requirements	Data validation	Business Rules
21	Tourist	Get Bookings	Get bookings that customers have made			
22	Tourist	Get Bookings Detail	View detailed information about the booking that the customer has booked	<ul style="list-style-type: none"> • OrderId 	<ul style="list-style-type: none"> • OrderId: + Type: Guid 	
23	Tourist, Operator, Admin	Get Wallet	View the balance of the traveler's wallet			
24	Tourist, Operator, Admin	Get Transaction History	View transactions that customers have made			
25	Tourist, Operator, Admin	Get Transaction Detail	View details of transactions that customers have made	<ul style="list-style-type: none"> • TransactionId 	<ul style="list-style-type: none"> • TransactionId: + Type: Guid 	
26	Tourist, Operator, Manager	Withdraw money	Make a withdrawal request from your wallet	<ul style="list-style-type: none"> • Amount 	<ul style="list-style-type: none"> • Amount: + Type: decimal 	BR-33
27	Operation, Manager	Get Order By Tour	View a list of bookings for tours provided by the host company that the tourist has booked.	<ul style="list-style-type: none"> • TourId 	<ul style="list-style-type: none"> • TourId: + Type: Guid 	
28	Operation, Manager	Get Order By Tour Schedule	View the list of bookings in the	<ul style="list-style-type: none"> • TourScheduleId 	<ul style="list-style-type: none"> • TourScheduleId: + Type: Guid 	

			tour schedule provided by the host company that the tourist has booked.			
29	Tourist	List Tours	Retrieve a paginated, filterable list of available tours	<ul style="list-style-type: none"> • PageNumber • PageSize • CategoryId (optional) • DateFrom (optional) • DateTo (optional) • MinPrice (optional) • MaxPrice (optional) 	PageNumber : + Type: Number (int) + Min = 1 PageSize : + Type: Number (int) + Min = 1 CategoryId : + Type: Dropdown list (Guid) DateFrom : + Type: DateTime DateTo : + Type: DateTime MinPrice : + Type: Number (decimal) + Min = 0 MaxPrice : + Type: Number (decimal) + Min = 0	
30	Tourist	View Tour Detail	Show all thông tin	<ul style="list-style-type: none"> • TourId 	TourId :	

			chi tiết của một tour		+ Type: Guid	
31					<p>Title :</p> <p>+ Type: Text Field (string)</p> <p>+ Max length = 200</p> <p>CategoryId :</p> <p>+ Type: Dropdown list (Guid)</p> <p>CompanyId :</p> <p>+ Type: Dropdown list (Guid)</p> <p>Code :</p> <p>+ Type: Text Field (string)</p> <p>+ Max length = 100</p> <p>Description :</p> <p>+ Type: Text Field (string)</p> <p>+ Max length = 500</p> <p>About :</p> <p>+ Type: Text Field (string)</p> <p>+ Max length = 500</p> <p>Include :</p> <p>+ Type: Text Field (string)</p> <p>+ Max length = 500</p> <p>PickInfor :</p> <p>+ Type: Text Field (string)</p>	
	Operator	Create Tour	Thêm mới một tour	<ul style="list-style-type: none"> • Title • CategoryId • CompanyId • Code (optional) • Description (optional) • About (optional) • Include (optional) • PickupInfo (optional) 		

					+ Max length = 500	
31	Operator	Update Tour Info	Sửa thông tin cơ bản của tour	<ul style="list-style-type: none"> • TourId • Title • CategoryId • Description (optional) • About (optional) • Include (optional) • PickupInfo (optional) 	<p>TourId :</p> <p>+ Type: Guid</p> <p>Title :</p> <p>+ Type: Text Field (string)</p> <p>+ Max length = 200</p> <p>CategoryId :</p> <p>+ Type: Dropdown list (Guid)</p> <p>Description :</p> <p>+ Type: Text Field (string)</p> <p>+ Max length = 500</p> <p>About :</p> <p>+ Type: Text Field (string)</p> <p>+ Max length = 500</p> <p>Include :</p> <p>+ Type: Text Field (string)</p> <p>+ Max length = 500</p> <p>PickupInfo :</p> <p>+ Type: Text Field (string)</p> <p>+ Max length = 500</p>	
33	Operator	Update Tour Destinations	Gán hoặc sắp xếp lại các điểm đến cho một tour	<ul style="list-style-type: none"> • TourId • Destinations: List of { DestinationId, StartTime, EndTime, 	<p>TourId :</p> <p>+ Type: Guid</p> <p>DestinationId :</p>	

				SortOrder (opt), SortOrderByDate (opt) }	+ Type: Dropdown list (Guid) StartTime : + Type: DateTime EndTime : + Type: DateTime + Must be after StartTime SortOrder : + Type: Number (int) + Min = 0 SortOrderByDate : + Type: Number (int) + Min = 0	
34	Operator	Add Tour Schedule	Tạo mới một lịch trình (ngày mở – đóng) cho tour	<ul style="list-style-type: none"> • TourId • OpenDate • CloseDate 	TourId : + Type: Guid OpenDate : + Type: DateTime CloseDate : + Type: DateTime + Must be after OpenDate	
35	Operator	Update Schedule Ticket	Thay đổi giá hoặc số vé khả dụng trong một lịch trình	<ul style="list-style-type: none"> • TourScheduleTicketId • NetCost • AvailableTicket 	TourScheduleTicketId : + Type: Guid NetCost : + Type: Number (decimal)	BR52

					+ Min = 0 AvailableTicket : + Type: Number (int) + Min = 0	
36	Operator	Delete Tour Schedule	Xoá một lịch trình chưa bắt đầu	• TourScheduleId	TourScheduleId : + Type: Guid	
37	Operator	Close Tour	Đánh dấu tour không còn cho phép đặt mới	• TourId	TourId : + Type: Guid	
38	Tourist	CreateFeedback	Submit textual feedback for a specific tour schedule.	• TourScheduleId • Description	TourScheduleId : + Type: Guid Description : + Type: Text Field (string) + Max Length = 500	
39	Tourist, Operator, Admin	GetListFeedbackByTour	Retrieve all feedback entries for a given tour, including user info.	• TourId	TourId : + Type: Guid	
40	Tourist	CreateRating	Submit a star-rating, comment and optional images for a tour.	• TourId • Star • Comment • Images (List<string>, optional)	TourId : + Type: Guid Star : + Type: Number (int) + Min = 1 + Max = 5 Comment : + Type: Text Field (string) + Max Length = 500	

					Images : + Type: List of Text Field (string) + Each must be valid URL (optional)	
41	Tourist, Operator, Admin	GetListRatingByTour	Retrieve all ratings (stars, comments, images) for a given tour.	• TourId	TourId : + Type: Guid	

Table 13 - Functional requirements

3.1.3 Screen Authorization

3.1.3.1 Web Application Screen Authorization

Screen	Admin	Operator	Manager	Tourist
Login	X	X	X	X
Dashboard	X	X	X	
Landing				X
User Management	X			
Destination Management	X			
Category Management	X			
Company Management	X			
Profile				X
Booked Tours				X
Tour Management		X		
Checkout				X
Cart				X
Statistics/Reports	X	X		
View transitions/bookings		X		
Wallet		X		X
Rating				X
Ticket	X			

Table 14 - Web Application Screen Authorization

3.1.3.2 Mobile Application Screen Authorization

Screen	Admin	Operator	Manager	Tourist
Login	X	X	X	X
Home	X	X	X	X
Cart				X
Profile				X
Booked Tours				X

		kind).
7	TourDestination	Junction entity linking Tour ↔ Destination, with visit times and ordering.
8	DestinationActivity	Specific activity at a TourDestination, with start/end times and sequence.
9	TourSchedule	Booking window for a Tour (open/close dates) plus price-change rules.
10	TourScheduleTicket	Defines availability and net price for a TicketType within a TourSchedule.
11	TourBooking	A User's reservation for a TourSchedule; holds Tickets, status, voucher & discount info.
12	Ticket	Line-item ticket in a Booking; has code, type, quantity, and gross cost.
13	Basket	A User's shopping cart before checkout; contains multiple TourBasketItems.
14	TourBasketItem	Item in a Basket linking a TourSchedule and TicketType with desired quantity.
15	Wallet	A User's e-wallet balance; supports deposits, withdrawals, transfers and records Transactions.
16	Transaction	Financial record in a Wallet (Deposit, Withdrawal, Transfer, etc.) with balance snapshot and status.
17	ExternalTransaction	A subtype of Transaction for withdrawals handled by external systems; has its own codes and statuses.
18	Payment	A subtype of Transaction for TourBooking payments; ties back to Booking and external transaction codes.
19	Feedback	User's textual feedback on a specific TourSchedule.
20	Rating	User's star-rating and optional comment on a Tour.
21	Voucher	
22	ImageUrl	

Table 17 - Entity Descriptions

4. Non-Functional Requirements

4.1 External Interfaces

ID	Requirements
User Interface	
UI-01	The language used in the application is Vietnamese.
UI-02	The font size is easy to distinguish where is the title, where is the content
UI-03	The colour of the background and text are contrasting and easy to read

UI-04	Whenever a user performs an action that requires a connection to the server, a load indicator will appear so that the user knows what is going on and does not mistakenly think that the service is down
UI-05	There should be a clear warning when something goes wrong with the server.
Admin, Operator, Manager Interface	
AI-01	The administration interface should provide a clear summary dashboard of statistics of the managed system units.
AI-02	The interface must be fully accessible from the web.
AI-03	The management button should be easy to understand, avoiding wrong operation and leading to wrong data
Software Interface	
SI-01	The client should communicate with the backend service to get the data.
SI-02	Data synchronization between the website and the database must take place in real time.
SI-03	Web app can integrate with JSON Web Token (JWT) for user authentication

Table 18 - External Interfaces

4.2 Quality Attributes

4.2.1 Usability

- The application should be friendly and easy for users to use after training.
- Administrators and Managers can use the web with less than a day's instruction.

4.2.2 Reliability

- System failure is less than 5% and system availability is above 80%.
- The system must ensure the consistency and integrity of all data, particularly for transactions such as bookings, service management, and ticket updates. In the event of system failure, no data corruption should occur, and any in-progress transactions must be recoverable.
- In case of system failures, the system must have automated recovery processes to restart services and minimize downtime. Users should be notified of the issue and, where possible, redirected to alternative workflows until normal operations resume.

4.2.3 Performance

- The system must provide a response time of under 2 seconds for 95% of user interactions, including viewing tours, updating tickets, managing services, and processing bookings. Critical actions, such as purchasing a ticket or viewing statistics, must be completed within 5 seconds.
- The system should be able to handle increased loads seamlessly, supporting up to 1,000 concurrent users with no degradation in performance. It must dynamically scale to accommodate peak periods, such as during promotional events or holidays.

4.2.4 Security

- The system must implement role-based access control (RBAC) to ensure that only authorized users (e.g., Admin, Manager, Operator, Tourist) can access specific functions and data. Each user role must have clearly defined permissions for creating, viewing, updating, and deleting data.
- All sensitive data, including customer information, financial data, and user credentials, must be encrypted both in transit (using TLS/SSL) and at rest (using AES-256 encryption) to prevent unauthorized access or data breaches.
- The system must enforce a strong password policy, requiring passwords to be at least 8 characters long, with a mix of uppercase, lowercase, numbers, and special characters.
- The system must comply with data protection regulations (e.g., GDPR, CCPA) to ensure the privacy of customer and user data. This includes collecting only the necessary data, providing users with the ability to view or delete their personal data, and not sharing data with third parties without explicit consent.

5. Requirement Appendix

5.1 Business Rules

ID	Rule Definition
BR-1	If the account is correct, system redirect users to corresponding home page: - User logs in as role "Admin", the system will display admin dashboard page - User logs in as role "Operator", the system will display operator dashboard page - User logs in as role "Manager", the system will display manager dashboard page - User logs in as role "Tourist", the system will display user home screen
BR-2	The system must log all successful and failed login attempts for security purposes.
BR-3	Username and email must be unique for user
BR-4	Phone number must be 10 digits and valid Vietnamese number
BR-5	Email must be in standard email format
BR-6	User can only update their profile
BR-7	Banned account cannot interact with the system until it is unbanned
BR-8	User can only change their password
BR-9	The new password must comply with the system's security policies.
BR-10	The current password must be validated before allowing the user to change it
BR-11	All data must be display to valid user
BR-12	All updates must comply with the system's data integrity and validation rules
BR-13	The system must ensure that selected daily tours are available at the time of booking.
BR-14	The system must not allow tourist to book a tour that is no longer available
BR-15	Customers should receive a booking confirmation immediately after successful payment, and the system must update the tour schedule availability in real-time.

BR-16	The system must update the booking details in real-time if changes are made (e.g., if the booking is modified or canceled).
BR-17	The customer should have access to booking details at any time after the booking is made, unless explicitly restricted by business rules.
BR-18	The system must allow the customer to refine or modify their search criteria at any point during the search process.
BR-19	The system must provide a clear notification if no daily tours are found matching the search criteria.
BR-20	The system must ensure that the total amount charged to the customer matches the displayed price, including discounts.
BR-21	The system must only allow feedback for completed bookings to ensure accuracy and relevance.
BR-22	Feedback must be tied to a specific customer and booking to prevent misuse or fraudulent reviews.
BR-23	Only customers who have completed a booking can rate it to ensure accurate and relevant feedback.
BR-24	Ratings must be linked to a specific tour
BR-25	The system must ensure all requests are correctly routed to the relevant service.
BR-26	All activities on the trip can be flexible depending on weather conditions.
BR-27	If a tour is canceled by the company or due to an irreparable issue from the service provider, 100% of the deposit amount is refunded.
BR-28	In case of any dispute between tour company and tourist, the final decision will be made by the platform.
BR-29	The commission rate for the platform is based on the agreement.
BR-30	Only admin users with the appropriate permissions can add or remove other users' permissions.
BR-31	Only admin users with the proper permissions can create, update accounts
BR-32	Only operator with the appropriate permissions can view statistics and revenue data.
BR-33	Must withdraw money with a minimum amount of 100,000 VND.
BR-34	Statistics should be updated in real-time or at regular intervals to ensure accuracy
BR-35	The dashboard must support different types of visual elements, such as bar charts, line graphs, or pie charts, for easier data interpretation
BR-36	The system must support different types of requests (e.g., bookings, inquiries, complaints, refund) to accommodate various customer needs.
BR-37	The system must support the assignment of multiple destinations to a tour, with each destination containing multiple activities that provide various services.
BR-38	The system needs to display detailed information corresponding to the tour that the user accesses.
BR-39	The system must not physically remove any field from the database but instead mark it as inactive
BR-40	Each tour schedule must include at least one ticket type
BR-41	The system must validate that no destination or location is duplicated within the tour schedule
BR-42	The price of a service must be a positive number and adhere to the business's pricing policies.

BR-43	Only admin, operator, or manager can manage (create, update, or delete) services.
BR-44	The system must validate the status of the booking before issuing, updating, or cancelling a ticket
BR-45	The system must ensure that only authorized operator can manage tickets.
BR-46	Start date must be after current date, end date must be after current date
BR-47	Discount can't greater than 100%
BR-48	Users can only book a tour when the tour is available, + The number of available tickets is greater than the number of tickets the user has booked + The tour has not started yet
BR-49	Tour bookings can only be cancelled before the departure date Cancellation of tour bookings within the free refund period will be refunded 100% of the net cost (including refund of discount), Cancellation of tour bookings 3 days before the departure date will be refunded 70% of the net cost (including refund of discount), Cancellation of tour bookings within 3 days before the departure date will not be refunded (including discount).
BR-50	Tour booking has a payment waiting time of 1 hour, after 1 hour if the user does not pay the system will automatically cancel. On the contrary, if the user pays the order status is paid.
BR-51	The payment time is from the time the user creates the payment until 1 hour from the time the order is created.
BR-52	Operator cannot update Ticket 1 day before departure
BR-53	The user's wallet can only be used for withdrawals and cannot be used for payments in any form.

Table 19 - Business Rules

5.2 Common Requirements

CR-1 Login: User can log in to the system

CR-2 Logout: User can sign out of system

CR-3 View profile: User can view information of profile

CR-4 Update profile: User can update the information of profile

5.3 Application Messages List

#	Message code	Message Type	Context	Content
1	MSG01	Inline	There is not found any tour that match search condition	<i>Không tìm thấy tour nào</i>
2	MSG02	In red, under the text box	Input-required fields are empty	<i>Trường * là bắt buộc</i>

3	MSG03	Inline	Confirming email of registering account is sent successfully	<i>Đăng ký tài khoản thành công - kiểm tra email để xác nhận tài khoản</i>
4	MSG04	Toast message	Login successfully	<i>Đăng nhập thành công</i>
5	MSG05	In red, under the text box	Input value length > max length	<i>Vượt quá {max-length} cho phép</i>
6	MSG06	Toast message	Username, email or password is not correct when clicking sign-in	<i>Invalid email, username or password</i>
7	MSG07	Inline	Booking is successfully	<i>Đặt tour thành công</i>
8	MSG08	Toast message	Ticket quantity is less than 1	<i>Vui lòng chọn ít nhất một tour</i>
9	MSG09	Inline	Cancel payment for a booked tour	<i>Hủy đặt tour thành công</i>
10	MSG10	Toast message		<i>Hủy thanh toán thành công</i>
11	MSG11	Toast message	Update user information successfully	<i>Cập nhật thông tin thành công</i>
12	MSG12	Toast message	Update user information unsuccessfully	<i>Cập nhật thông tin thất bại</i>
13	MSG13	Toast message	Quantity ticket > available ticket	<i>Số lượng vé không được vượt quá số lượng tối đa cho phép</i>
14	MSG14	Toast message	Log out	<i>Đăng xuất thành công</i>
15	MSG15	Toast message	Booking tour while unauthorized	<i>Vui lòng đăng nhập để tiếp tục</i>
16	MSG16	Toast message	Send email to reset password	<i>Email đặt lại mật khẩu đã được gửi</i>
17	MSG17	Toast message	Creating category with valid (correct) data	<i>Tạo danh mục mới thành công</i>
18	MSG18	Toast message	Creating category with invalid (incorrect) body	<i>Không thể tạo danh mục mới</i>
19	MSG19	Toast message	Editing category with valid (correct) data	<i>Cập nhật danh mục thành công</i>
20	MSG20	Toast message	Editing category with invalid (incorrect) data	<i>Không thể cập nhật danh mục</i>
21	MSG21	Toast message	Deleting category with valid (correct) data	<i>Xóa danh mục thành công</i>
22	MSG22	Toast message	Deleting category with invalid (incorrect) data	<i>Không thể xóa danh mục</i>
23	MSG23	Inline	Categories search	<i>Không thể tìm thấy loại tour</i>
24	MSG24	Toast message	Location search in destination create form	<i>Không thể tìm thấy địa điểm.</i>

25	MSG25	Toast message	Create a destination with valid data.	<i>Tạo điểm đến mới thành công</i>
26	MSG26	Toast message	Destination update with valid data	<i>Cập nhật điểm đến thành công</i>
27	MSG27	Toast message	Destination deletion with invalid data	<i>Xóa điểm đến thành công</i>
28	MSG28	Toast message	Destination update with valid data	<i>Cập nhật điểm đến thành công</i>
29	MSG29	Toast message	Destination update with invalid data	<i>Lỗi khi cập nhật điểm đến</i>
30	MSG30	Toast message	Approve company request	<i>Đã duyệt công ty {company.name}</i>
31	MSG31	Toast message	Company data exists.	<i>Không thể duyệt công ty</i>
32	MSG32	Toast message	Inactive companies with valid data	<i>Vô hiệu hóa công ty thành công</i>
33	MSG33	Toast message	Inactive companies with invalid data.	<i>Không thể vô hiệu hóa công ty</i>
34	MSG34	Toast message	Editing user information with valid data.	<i>Cập nhật người dùng thành công</i>
35	MSG35	Toast message	Editing user information with invalid data	<i>Không thể cập nhật người dùng. Vui lòng thử lại.</i>
36	MSG36	Toast message	Inactive user with valid data	<i>Người dùng {user.email} đã được vô hiệu hóa</i>
37	MSG37	Toast message	Admin accepts the withdrawal request of the operator.	<i>Duyệt thành công</i>
38	MSG38	Inline	Searching tour with titles	<i>Không tìm thấy tour nào</i>
39	MSG39	Inline red, under text box	Invalid tours information when creating tours.	<i>Trường * là bắt buộc</i>
40	MSG40	Toast message	Valid tour information when creating tours.	<i>Tour đã được tạo thành công!</i>
41	MSG41	Toast message	Close tour	<i>Đóng tour thành công~!</i>
42	MSG42	Toast message	Create a new schedule for tours with valid data.	<i>Thêm lịch trình thành công</i>
43	MSG43	Inline red, under text box.	Create a new schedule for tours with invalid data (date of schedule)	<i>Khoảng thời gian đã chọn có chứa ngày đã được lên lịch</i>
44	MSG44	Toast message	Delete schedule with valid data	<i>Xóa lịch trình thành công</i>
45	MSG45	Toast message	Delete schedule with invalid data	<i>Không thể xóa lịch trình</i>
46	MSG46	Toast message	Create/Update tickets for the date have a schedule with valid data.	<i>Cập nhật vé thành công</i>
47	MSG47	Toast message	Create/Update tickets but don't choose date	<i>Vui lòng chọn khoảng thời gian</i>

48	MSG48	Inline red, under text box.	Withdraw without OTP.	Mã OTP phải có ít nhất 6 ký tự
49	MSG49	Toast message	Withdraw with amount large than balance in wallet	Số tiền không được vượt quá số dư
50	MSG50	Toast message	Withdraw with valid data	Yêu cầu rút tiền thành công

Table 20 - Application Messages List

IV. Software Design Description

1. System Design

1.1 System Architecture

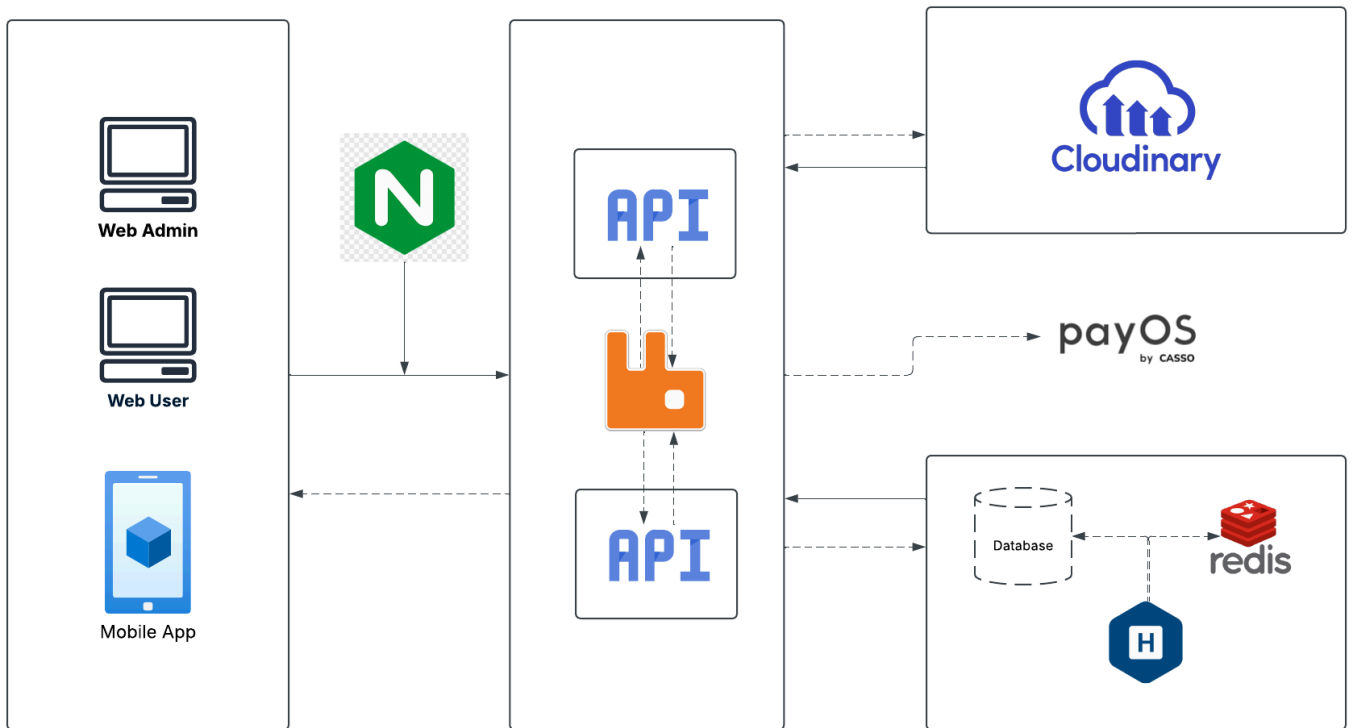


Figure 9 - System Design

1.2 Package Diagram

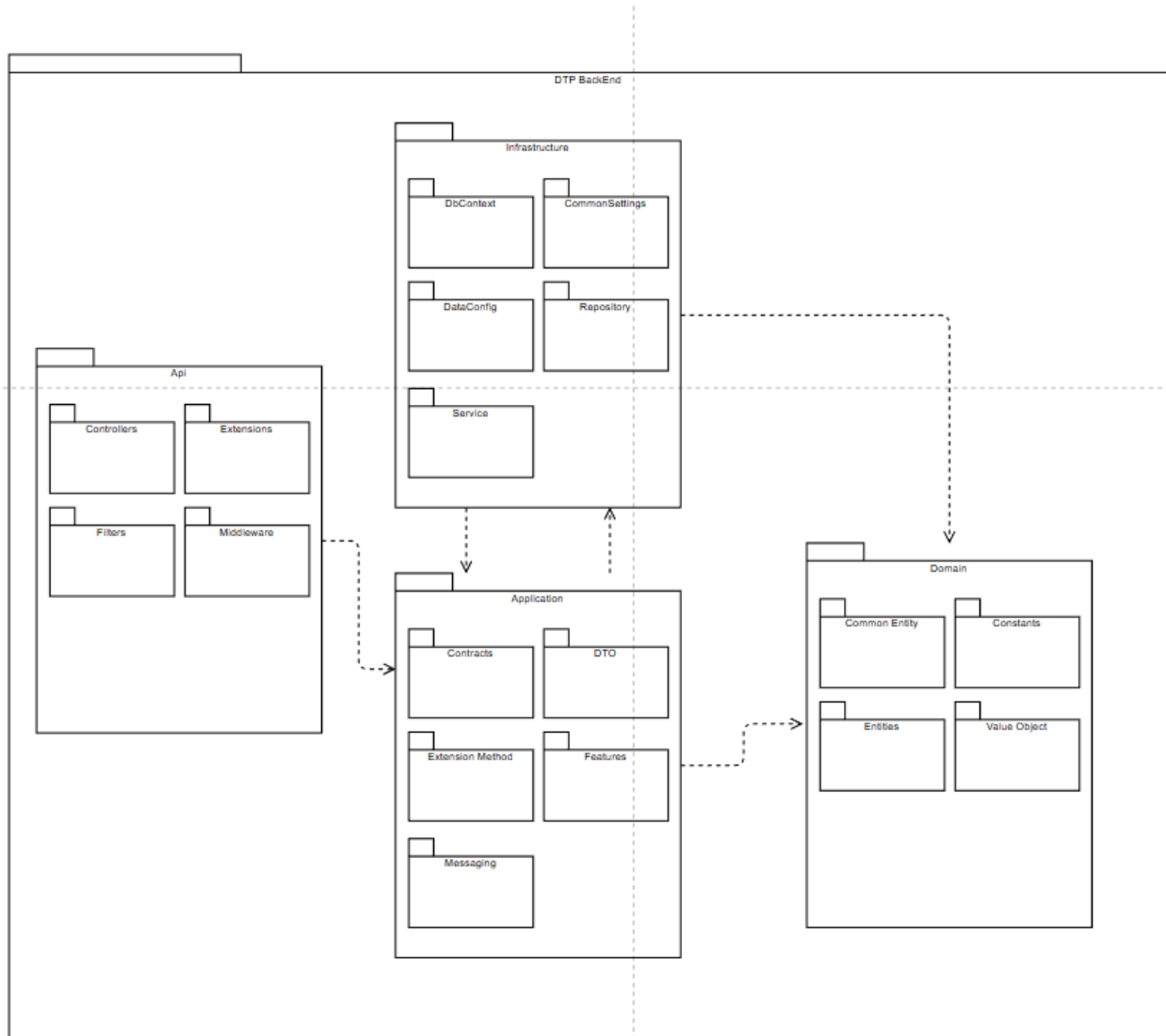


Figure 10 - Package Diagram

2. Database Design

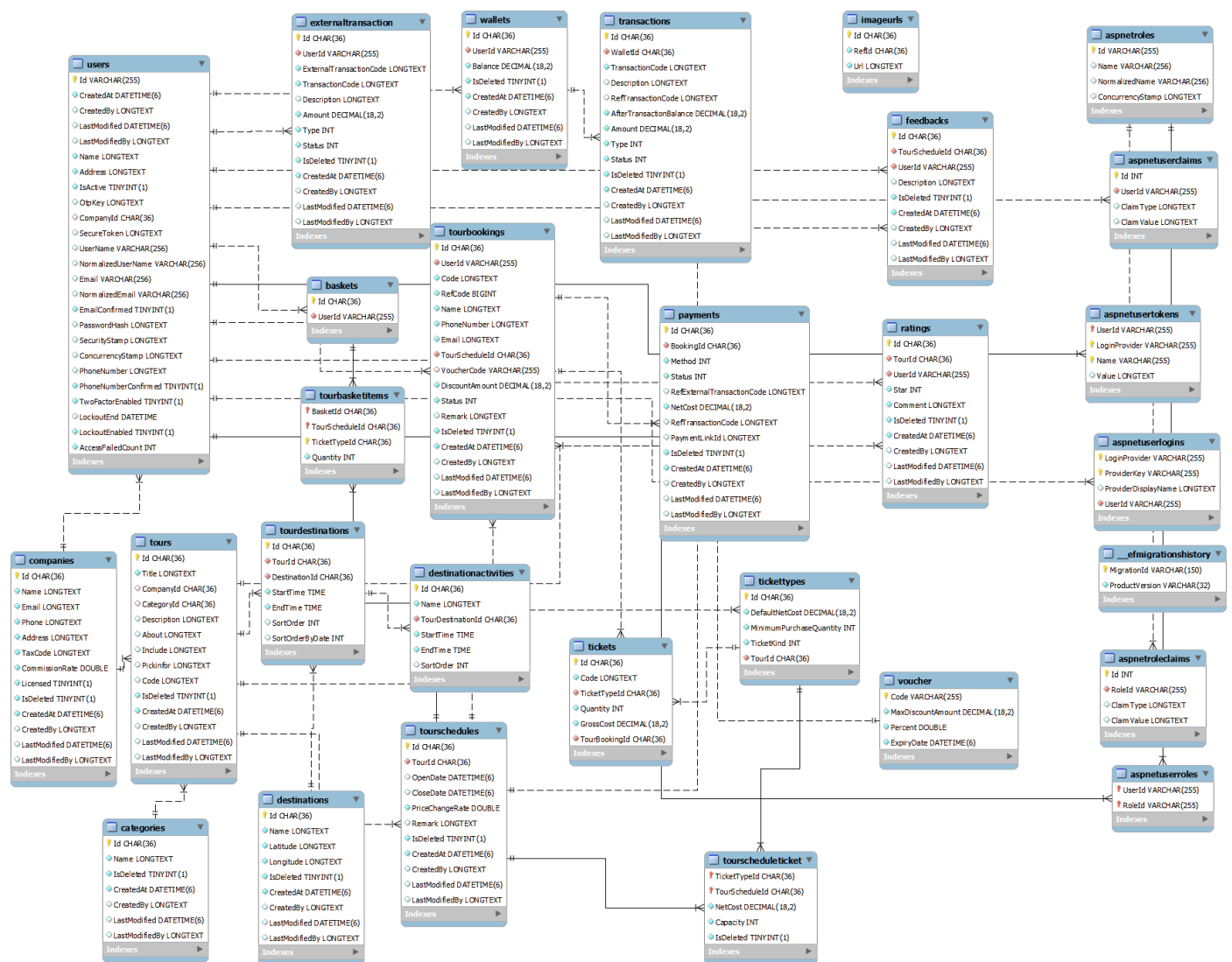


Figure 11 - Database Diagram

Table Descriptions

No	Table	Description
01	User	Describe the user in the system
02	Basket	Describe the basket in the system
03	Category	Describe the category in the system
04	Company	Describe the company in the system
05	Destination Activities	Describe the destination activity in the system
06	Destination	Describe the destination in the system
07	External Transaction	Describe the external transaction in the system
08	Feedback	Describe the feedback in the system
09	Images Url	Describe the image url in the system
10	Payment	Describe the payment in the system
11	Rating	Describe the rating in the system
12	Tickets	Describe the ticket in the system
13	Ticket Types	Describe the ticket type in the system
14	Tour Basket Items	Describe the tour basket item in the system
15	Tour bookings	Describe the tour booking in the system
16	Tour Destinations	Describe the tour destination in the system
17	Tours	Describe the tour in the system
18	Tour Schedules	Describe the tour schedule in the system
19	Tour Schedule Ticket	Describe the tour schedule ticket in the system
20	Transactions	Describe the transaction in the system
21	Voucher	Describe the voucher in the system
22	Wallets	Describe the wallet in the system

Table 21 - Table Descriptions

Attribute Data Dictionary

Entity Name	Attributes	Description	Domain	Null
Company	Id	Primary key	GUID	No
	Name	Company name	nvarchar(255)	No
	Email	Company email	nvarchar(255)	No
	Phone	Company phone number	nvarchar(50)	No
	TaxCode	Tax identification code	nvarchar(50)	No
	CommissionRate	Commission percentage	float	No
	Licensed	Whether company is licensed	bit	No
	CreatedAt	Creation timestamp	datetime	No
	CreatedBy	Created by (user or system)	nvarchar(MAX)	No
	LastModified	Last modification timestamp	datetime	Yes
	LastModifiedBy	Last modified by	nvarchar(MAX)	Yes
	IsDeleted	Soft-delete flag	bit	No
User	Id	Primary key (ASP-NET Identity)	nvarchar(450)	No
	UserName	Login username	nvarchar(256)	No
	Email	User email	nvarchar(256)	No
	PhoneNumber	Contact phone	nvarchar(20)	No
	Name	Full name	nvarchar(100)	No
	Address	Postal address	nvarchar(500)	No

	IsActive	Whether account is active	bit	No
	OtpKey	One-time password key	nvarchar(100)	Yes
	SecureToken	Refresh/security token	nvarchar(100)	Yes
	CompanyId	FK → Company	GUID	Yes
	CreatedAt	Creation timestamp	datetime	No
	CreatedBy	Created by	nvarchar(MAX)	No
	LastModified	Last modification timestamp	datetime	Yes
	LastModifiedBy	Last modified by	nvarchar(MAX)	Yes
Wallet	Id	Primary key	GUID	No
	UserId	FK → User	nvarchar(450)	No
	Balance	Current balance	decimal(18,2)	No
	CreatedAt	Creation timestamp	datetime	No
	CreatedBy	Created by	nvarchar(MAX)	No
	LastModified	Last modification timestamp	datetime	Yes
	LastModifiedBy	Last modified by	nvarchar(MAX)	Yes
	IsDeleted	Soft-delete flag	bit	No
Basket	Id	Primary key	GUID	No
	UserId	FK → User	nvarchar(450)	No
TourBasketItem	BasketId	PK, FK → Basket	GUID	No
	TourScheduleId	PK, FK → TourSchedule	GUID	No

	TicketTypeId	PK, FK → TicketType	GUID	No
	Quantity	Number of tickets in basket	int	No
Category	Id	Primary key	GUID	No
	Name	Category name	nvarchar(200)	No
	CreatedAt	Creation timestamp	datetime	No
	CreatedBy	Created by	nvarchar(MAX)	No
	LastModified	Last modification timestamp	datetime	Yes
	LastModifiedBy	Last modified by	nvarchar(MAX)	Yes
	IsDeleted	Soft-delete flag	bit	No
Destination	Id	Primary key	GUID	No
	Name	Destination name	nvarchar(200)	No
	Latitude	GPS latitude	nvarchar(50)	No
	Longitude	GPS longitude	nvarchar(50)	No
	CreatedAt	Creation timestamp	datetime	No
	CreatedBy	Created by	nvarchar(MAX)	No
	LastModified	Last modification timestamp	datetime	Yes
	LastModifiedBy	Last modified by	nvarchar(MAX)	Yes
	IsDeleted	Soft-delete flag	bit	No
TourDestination	Id	Primary key	GUID	No
	TourId	FK → Tour	GUID	No

	DestinationId	FK → Destination	GUID	No
	StartTime	Visit start time	time	No
	EndTime	Visit end time	time	No
	SortOrder	Order in itinerary	int	Yes
	SortOrderByDate	Day index in multi-day tour	int	Yes
DestinationActivity	Id	Primary key	GUID	No
	TourDestinationId	FK → TourDestination	GUID	No
	Name	Activity name	nvarchar(200)	No
	StartTime	Activity start time	time	No
	EndTime	Activity end time	time	No
	SortOrder	Order among activities	int	Yes
Tour	Id	Primary key	GUID	No
	CompanyId	FK → Company	GUID	Yes
	CategoryId	FK → Category	GUID	Yes
	Title	Tour title	nvarchar(200)	No
	Description	Full description	nvarchar(MAX)	Yes
	About	About the tour	nvarchar(MAX)	Yes
	Include	What's included	nvarchar(MAX)	Yes
	Pickinfor	Pickup info	nvarchar(MAX)	Yes
	Code	Reference code	nvarchar(100)	Yes

	CreatedAt	Creation timestamp	datetime	No
	CreatedBy	Created by	nvarchar(MAX)	No
	LastModified	Last modification timestamp	datetime	Yes
	LastModifiedBy	Last modified by	nvarchar(MAX)	Yes
	IsDeleted	Soft-delete flag	bit	No
TicketType	Id	Primary key	GUID	No
	TourId	FK → Tour	GUID	No
	DefaultNetCost	Base price per ticket	decimal(18,2)	No
	MinimumPurchaseQuantity	Min tickets per booking	int	No
	TicketKind	Enum: adult/child/etc.	int	No
TourSchedule	Id	Primary key	GUID	No
	TourId	FK → Tour	GUID	No
	OpenDate	Booking opens	datetime	No
	CloseDate	Booking closes	datetime	No
	PriceChangeRate	Multiplier on default cost	float	No
	Remark	Admin notes	nvarchar(MAX)	Yes
	CreatedAt	Creation timestamp	datetime	No
	CreatedBy	Created by	nvarchar(MAX)	No
	LastModified	Last modification timestamp	datetime	Yes
	LastModifiedBy	Last modified by	nvarchar(MAX)	Yes

	IsDeleted	Soft-delete flag	bit	No
TourScheduleTicket	TourScheduleId	PK, FK → TourSchedule	GUID	No
	TicketTypeId	PK, FK → TicketType	GUID	No
	NetCost	Price for this schedule/ticket	decimal(18,2)	No
	AvailableTicket	Remaining seats	int	No
TourBooking	Id	Primary key	GUID	No
	UserId	FK → User	nvarchar(450)	No
	TourScheduleId	FK → TourSchedule	GUID	No
	Code	Booking code	nvarchar(100)	No
	RefCode	Numeric reference	bigint	No
	Name	Booker name	nvarchar(100)	No
	PhoneNumber	Booker phone	nvarchar(20)	No
	Email	Booker email	nvarchar(256)	No
	VoucherCode	Applied voucher	varchar(255)	Yes
	DiscountAmount	Amount discounted	decimal(18,2)	No
	Status	Enum: Pending/Paid/...	int	No
	Remark	Admin notes	nvarchar(MAX)	Yes
	CreatedAt	Creation timestamp	datetime	No
	CreatedBy	Created by	nvarchar(MAX)	No
	LastModified	Last modification timestamp	datetime	Yes

	LastModifiedBy	Last modified by	nvarchar(MAX)	Yes
	IsDeleted	Soft-delete flag	bit	No
Ticket	Id	Primary key	GUID	No
	TourBookingId	FK → TourBooking	GUID	No
	TicketTypeId	FK → TicketType	GUID	No
	Code	Ticket code	nvarchar(100)	No
	Quantity	Number of persons	int	No
	GrossCost	Price × quantity	decimal(18,2)	No
	Transaction	Id	Primary key	GUID
WalletId		FK → Wallet	GUID	No
TransactionCode		Unique transaction code	nvarchar(100)	No
Description		Notes	nvarchar(MAX)	Yes
RefTransactionCode		Linked transaction code	nvarchar(100)	Yes
AfterTransactionBalance		Balance after this tx	decimal(18,2)	No
Amount		Amount moved	decimal(18,2)	No
Type		Enum: Deposit/Withdraw/...	int	No
Status		Enum: Pending/Completed/...	int	No
ExternalTransaction		Id	Primary key	GUID
	UserId	FK → User	nvarchar(450)	No
	ExternalTransactionCode	Third-party reference code	nvarchar(100)	No

	TransactionCode	Internal transaction code	nvarchar(100)	No
	Description	Notes	nvarchar(MAX)	Yes
	Amount	Amount moved	decimal(18,2)	No
	Type	Enum: Withdraw/Deposit/...	int	No
	Status	Enum: Pending/Done/Rejected	int	No
	CreatedAt	Creation timestamp	datetime	No
	CreatedBy	Created by	nvarchar(MAX)	No
	LastModified	Last modification timestamp	datetime	Yes
	LastModifiedBy	Last modified by	nvarchar(MAX)	Yes
Payment	Id	Primary key	GUID	No
	BookingId	FK → TourBooking	GUID	No
	Method	Enum: PayOs/...	int	No
	Status	Enum: Pending/Completed/...	int	No
	RefExternalTransactionCode	ExternalTx reference	nvarchar(100)	Yes
	RefTransactionCode	Internal tx reference	nvarchar(100)	Yes
	NetCost	Final charged amount	decimal(18,2)	No
	PaymentLinkId	Online payment link ID	nvarchar(200)	Yes
	CreatedAt	Creation timestamp	datetime	No
	CreatedBy	Created by	nvarchar(MAX)	No

	LastModified	Last modification timestamp	datetime	Yes
	LastModifiedBy	Last modified by	nvarchar(MAX)	Yes
	IsDeleted	Soft-delete flag	bit	No
Feedback	Id	Primary key	GUID	No
	TourScheduleId	FK → TourSchedule	GUID	No
	UserId	FK → User	nvarchar(450)	No
	Description	Feedback text	nvarchar(MAX)	Yes
	CreatedAt	Creation timestamp	datetime	No
	CreatedBy	Created by	nvarchar(MAX)	No
	LastModified	Last modification timestamp	datetime	Yes
	LastModifiedBy	Last modified by	nvarchar(MAX)	Yes
	IsDeleted	Soft-delete flag	bit	No
Rating	Id	Primary key	GUID	No
	TourId	FK → Tour	GUID	No
	UserId	FK → User	nvarchar(450)	No
	Star	Rating score (1–5)	int	No
	Comment	Optional comment	nvarchar(MAX)	Yes
	CreatedAt	Creation timestamp	datetime	No
	CreatedBy	Created by	nvarchar(MAX)	No

	LastModified	Last modification timestamp	datetime	Yes
	LastModifiedBy	Last modified by	nvarchar(MAX)	Yes
	IsDeleted	Soft-delete flag	bit	No
Voucher	Code	Primary key (voucher code)	varchar(255)	No
	MaxDiscountAmount	Maximum discount amount	decimal(18,2)	No
	Percent	Discount percent	double	No
	ExpiryDate	Valid until	datetime	No
ImageUrl	Id	Primary key	char(36)	No
	RefId	FK → any entity (company/tour/user)	char(36)	No
	Url	Image URL	longtext	No

Table 22 - Attribute Data Dictionary

3.Detail Design

3.1. Authentication Feature

3.1.1 Class Diagram

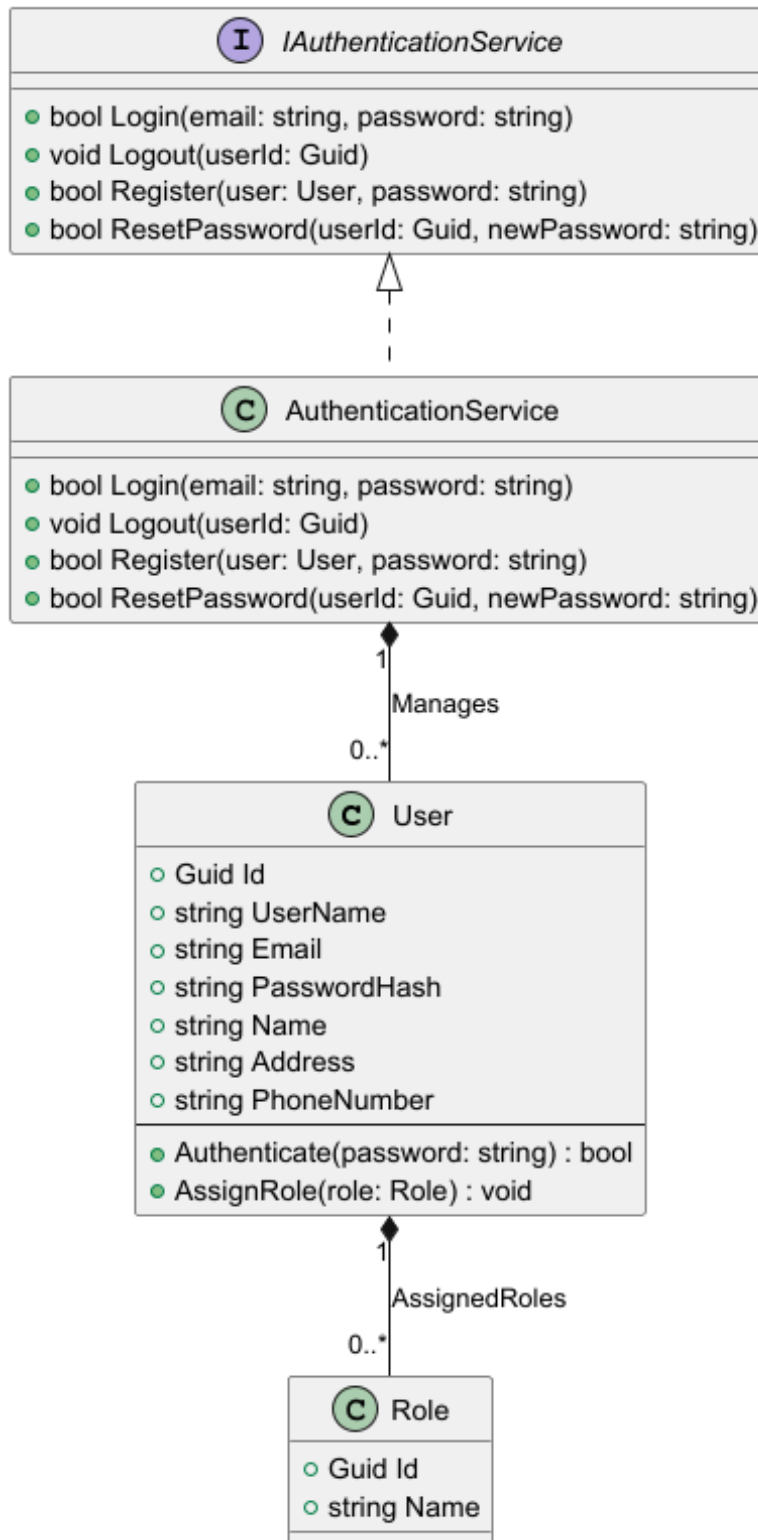


Figure 12 - Authentication Class Diagram

3.1.2 Class Diagram Specification

No	Method	Description
1	RegisterAsync(RegistrationRequestDto)	Register Account
2	LoginAsync(LoginRequestDto)	Login
3	LogoutAsync(userId)	Logout
4	ResetPassowrd(confirmToken,newPassword)	Reset Password

Table 23 - Class Diagram Specification - Authentication Feature

3.1.3 Authentication Activity Diagram

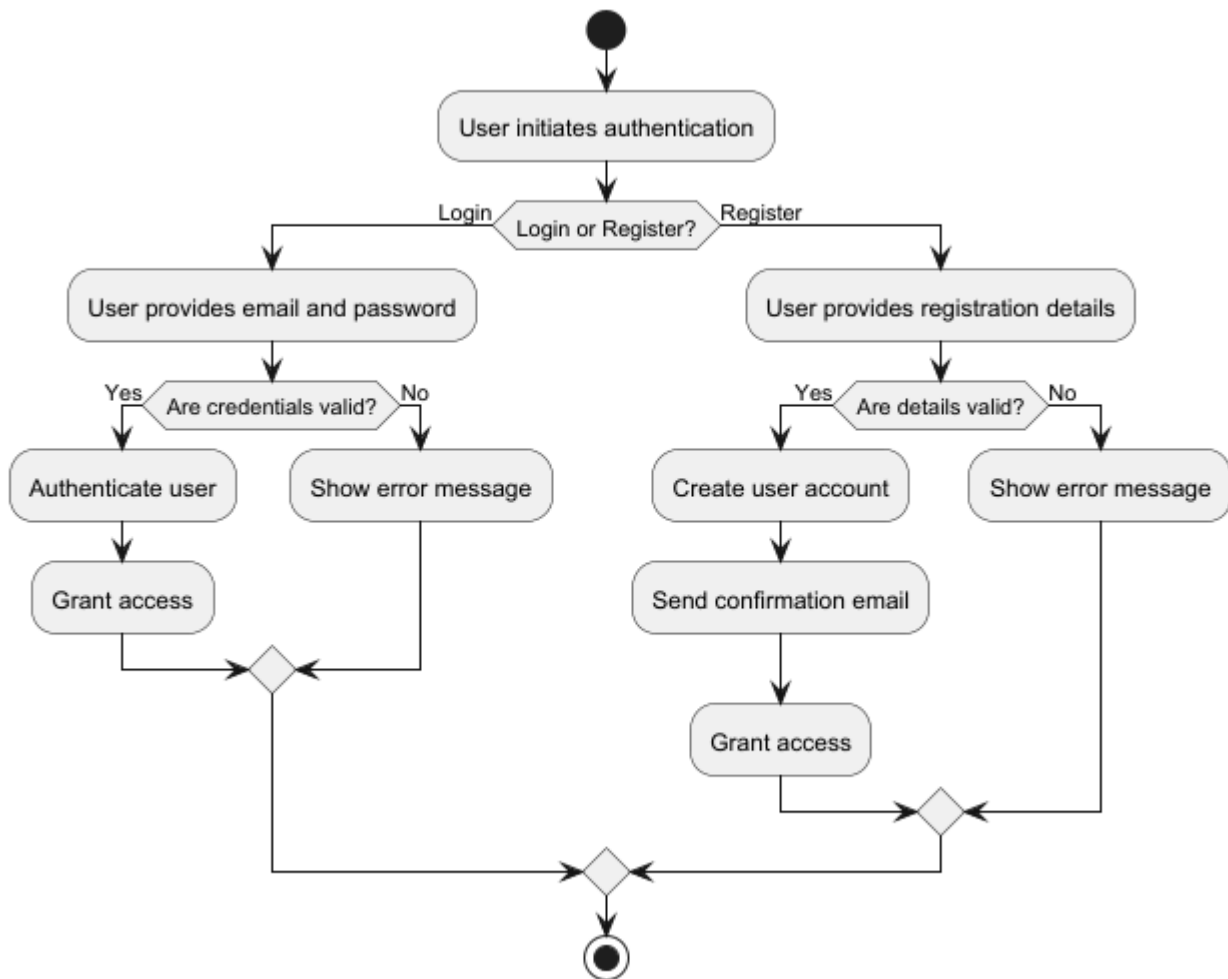


Figure 13 - Authentication Activity Diagram

3.1.4 Authentication Sequence Diagram

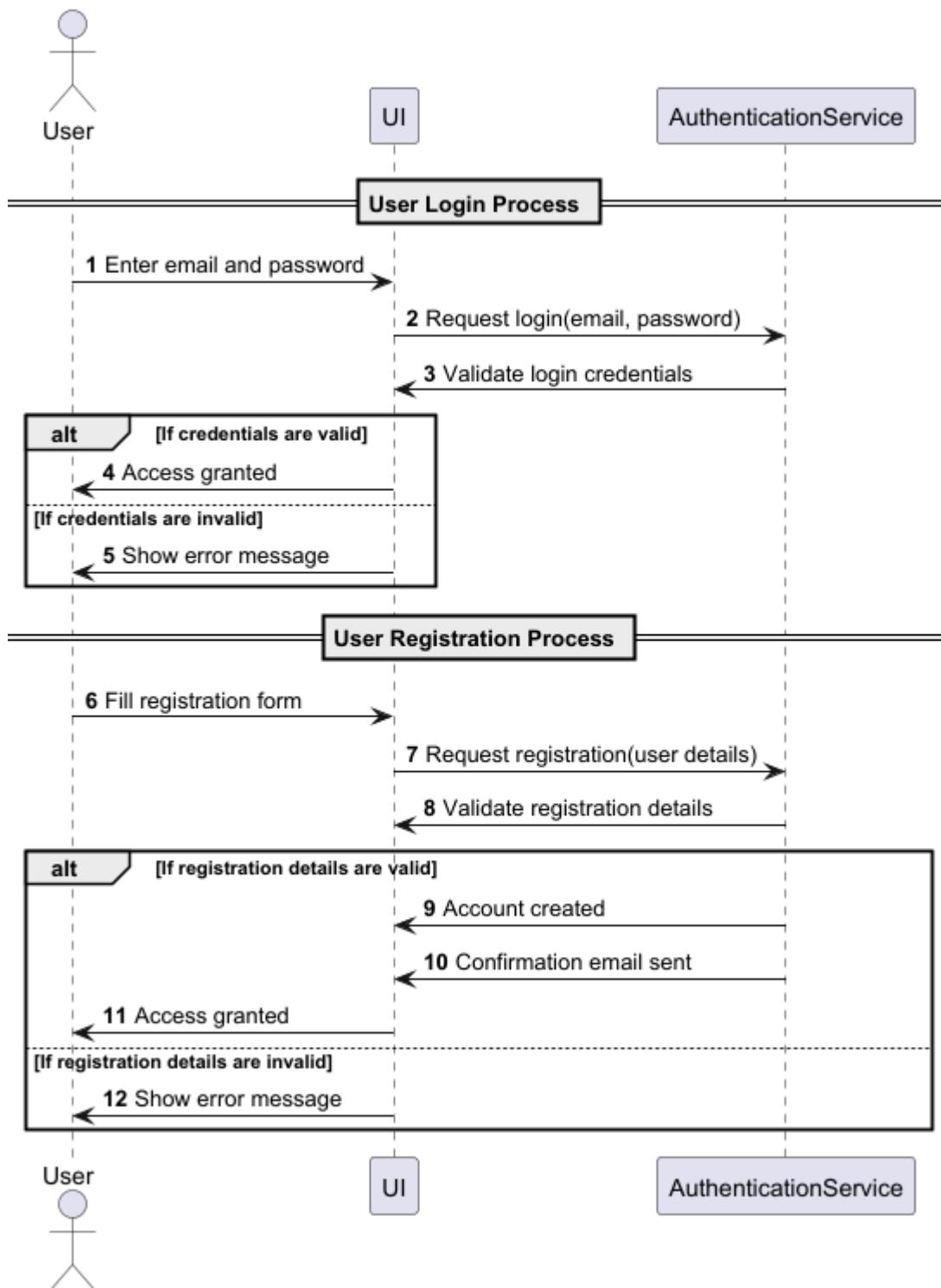


Figure 14 - Authentication Sequence Diagram

3.2 Admin Manage Company Feature

3.2.1 Class Diagram

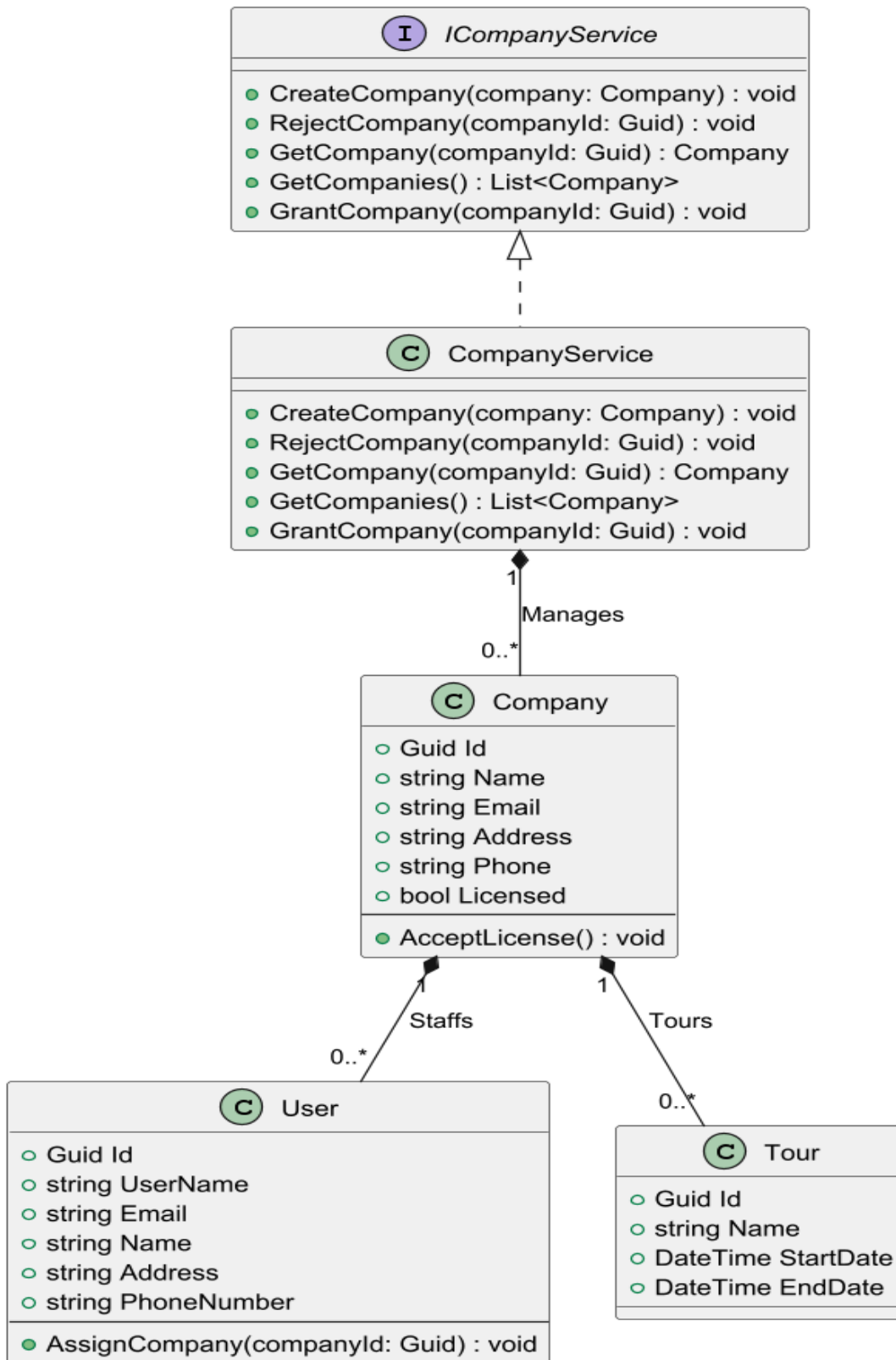


Figure 15 - Admin Manage Company Class Diagram

3.2.2 Class Diagram Specification

No	Method	Description
1	CreateCompany(company)	Create New CompanCompany
2	RejectCompany(companyId)	Reject Company
3	GetCompany(companyId)	Get company based on id
4	GetCompanies()	Get company list
5	GrantCompany(companyId)	Licensing for the company

Table 24 - Class Diagram Specification - Admin Manage Company Feature

3.2.3 Admin Manage Company Activity Diagram

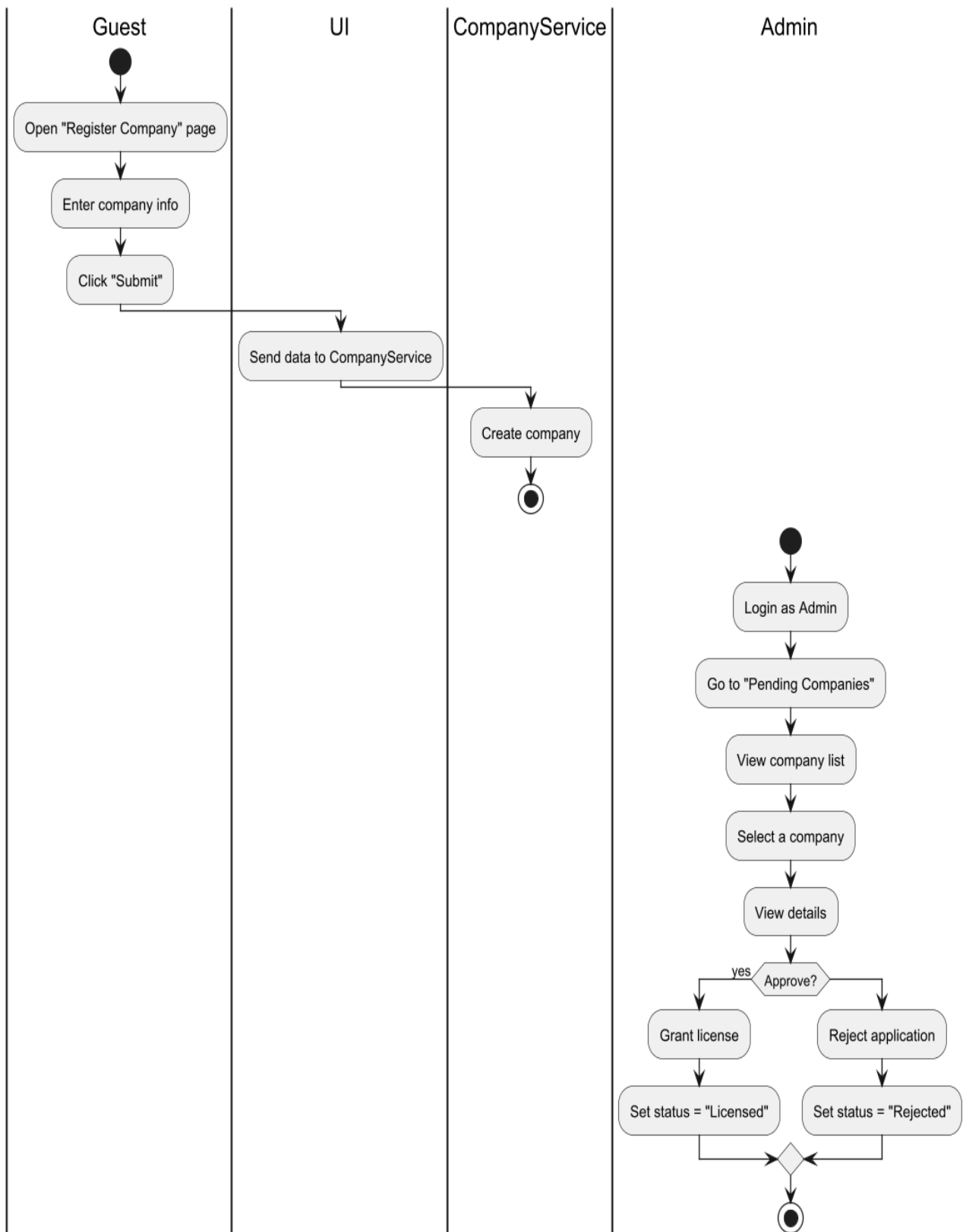


Figure 16 - Admin Manage Company Activity Diagram

3.2.4 Admin Manage Company Sequence Diagram

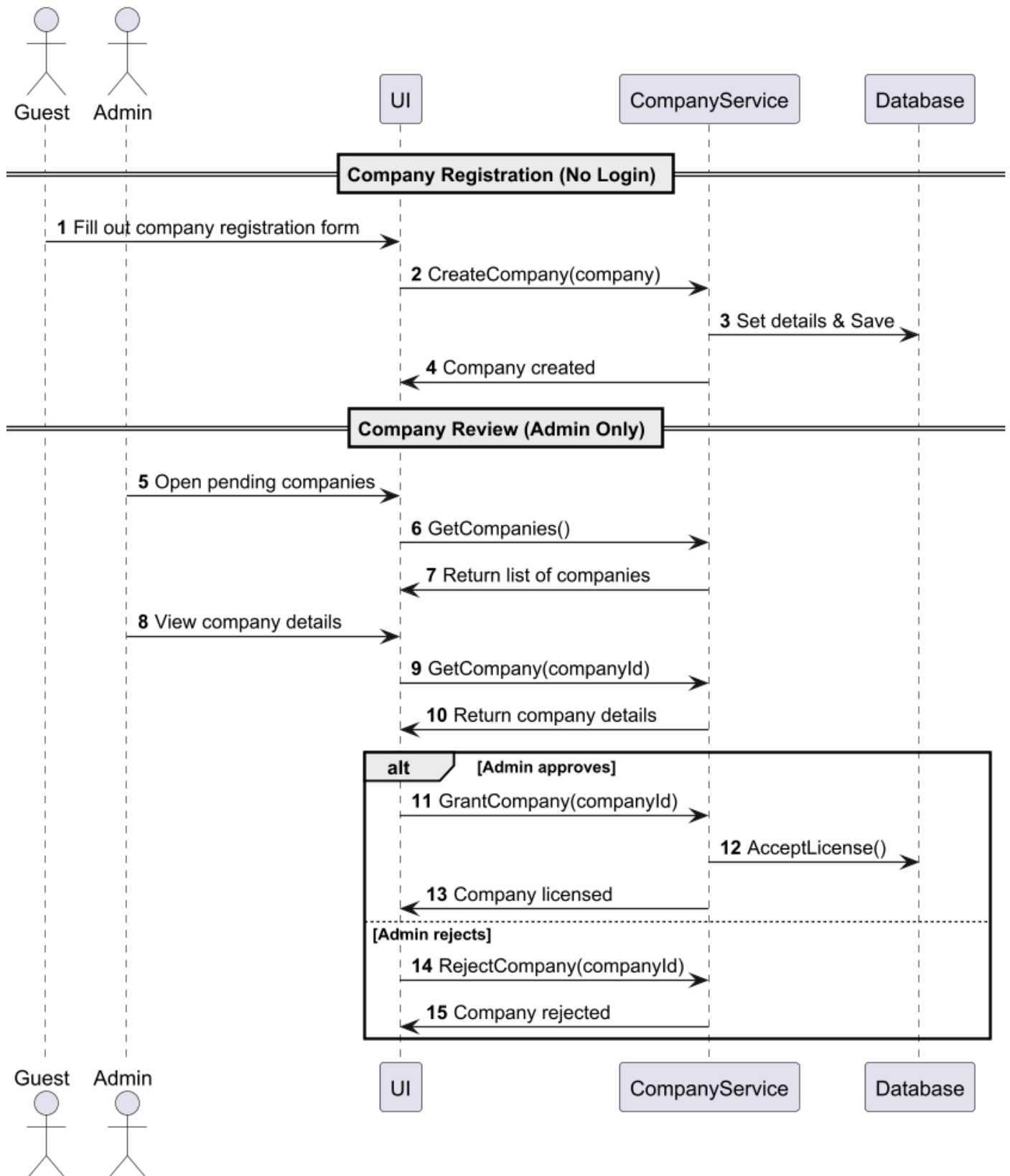


Figure 17 - Admin Manage Company Sequence Diagram

3.3 Tourist Tour Booking Feature

3.3.1 Class Diagram

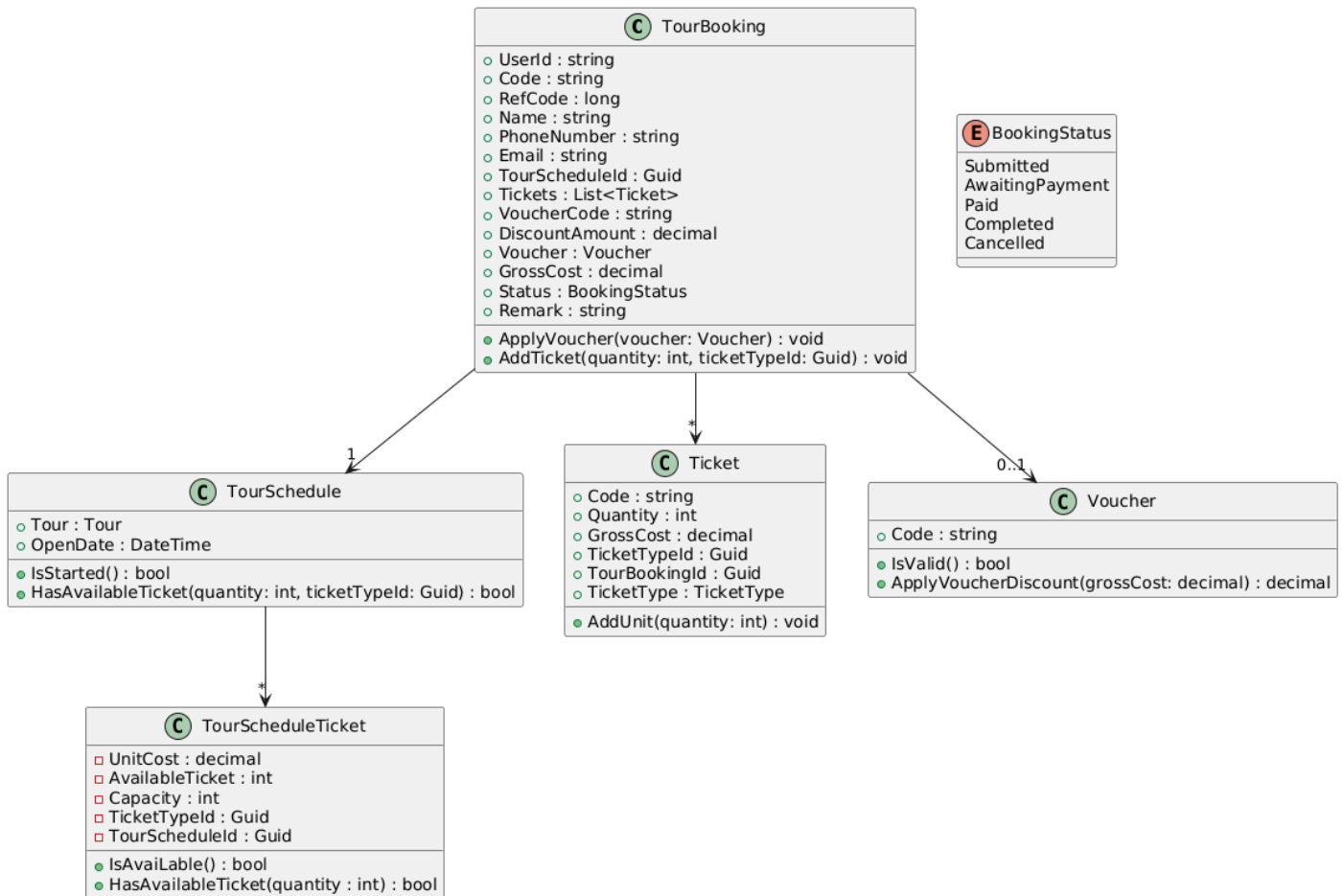


Figure 18 - Tourist Tour Booking TourClass Diagram

3.3.2 Class Diagram Specification

No	Method	Description
1	TourBooking.AddTicket(quantity: int, ticketTypeId: Guid)	Add booking Ticket for tour booking
2	TourBooking.ApplyVoucher(voucher: Voucher)	Apply valid voucher for tour booking
3	Voucher.IsValid()	Validate voucher
4	Voucher.ApplyVoucherDiscount(grossCost: decimal)	Apply discount for tour booking
5	TourSchedule.HasAvailableTicket(quantity: int, ticketTypeId: Guid)	Check quantity of booking ticket is available or not
6	Ticket.AddUnit(quantity: int)	Add unit of booking ticket
7	TourSchedule.IsStarted()	Check tour schedule start or not yet
8	TourScheduleTicket.IsAvailable()	Check if tickets are available

Table 25 - Class Diagram Specification - Tourist Tour Booking Feature

3.3.3 Tourist Tour Booking Activity Diagram

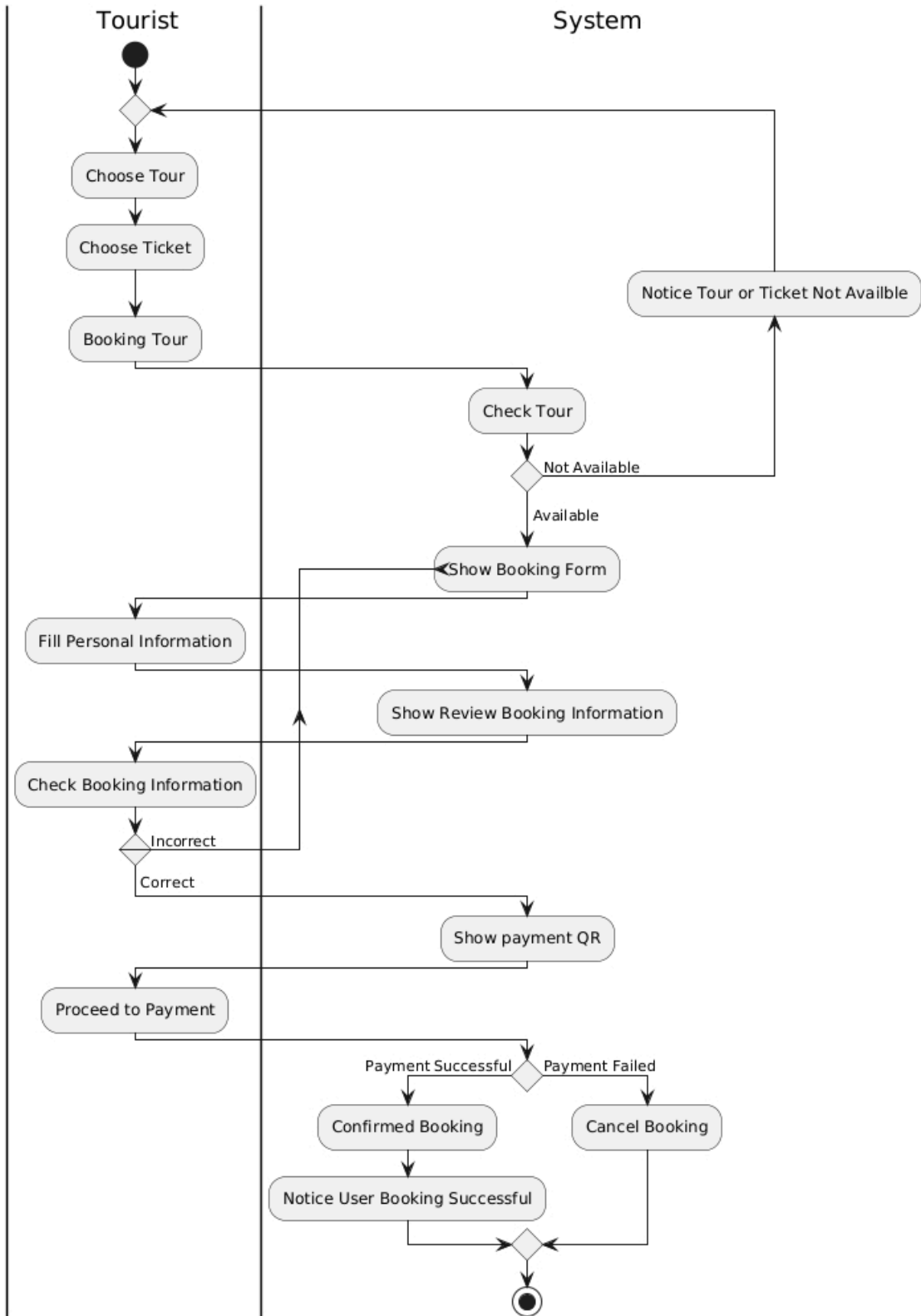


Figure 19 - Tourist Tour Booking Activity Diagram

3.3.4 Tourist Tour Booking Sequence Diagram

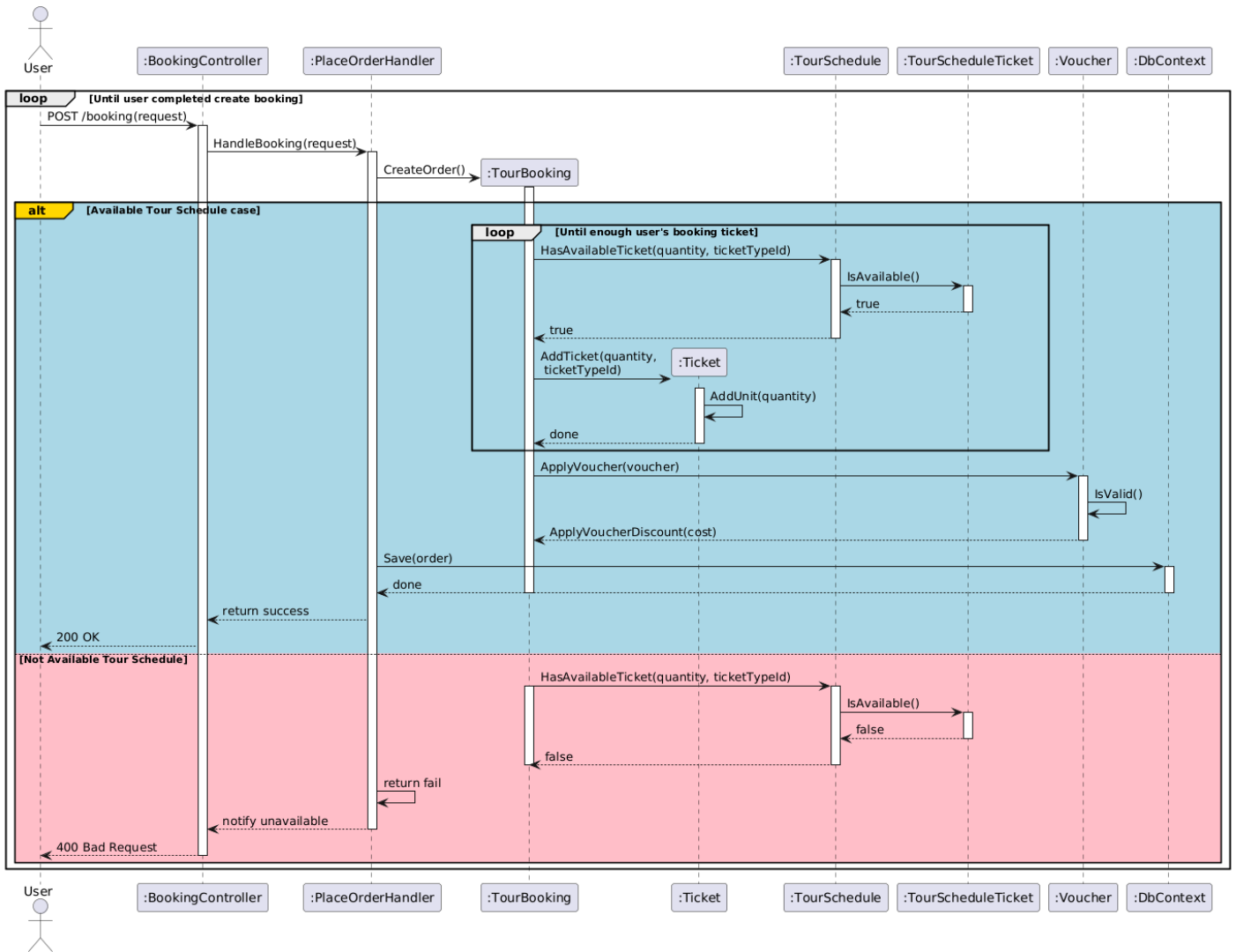


Figure 20 - Tourist Tour Booking Sequence Diagram

3.4 Tourist Cancel Tour Booking Feature

3.4.1 Class Diagram

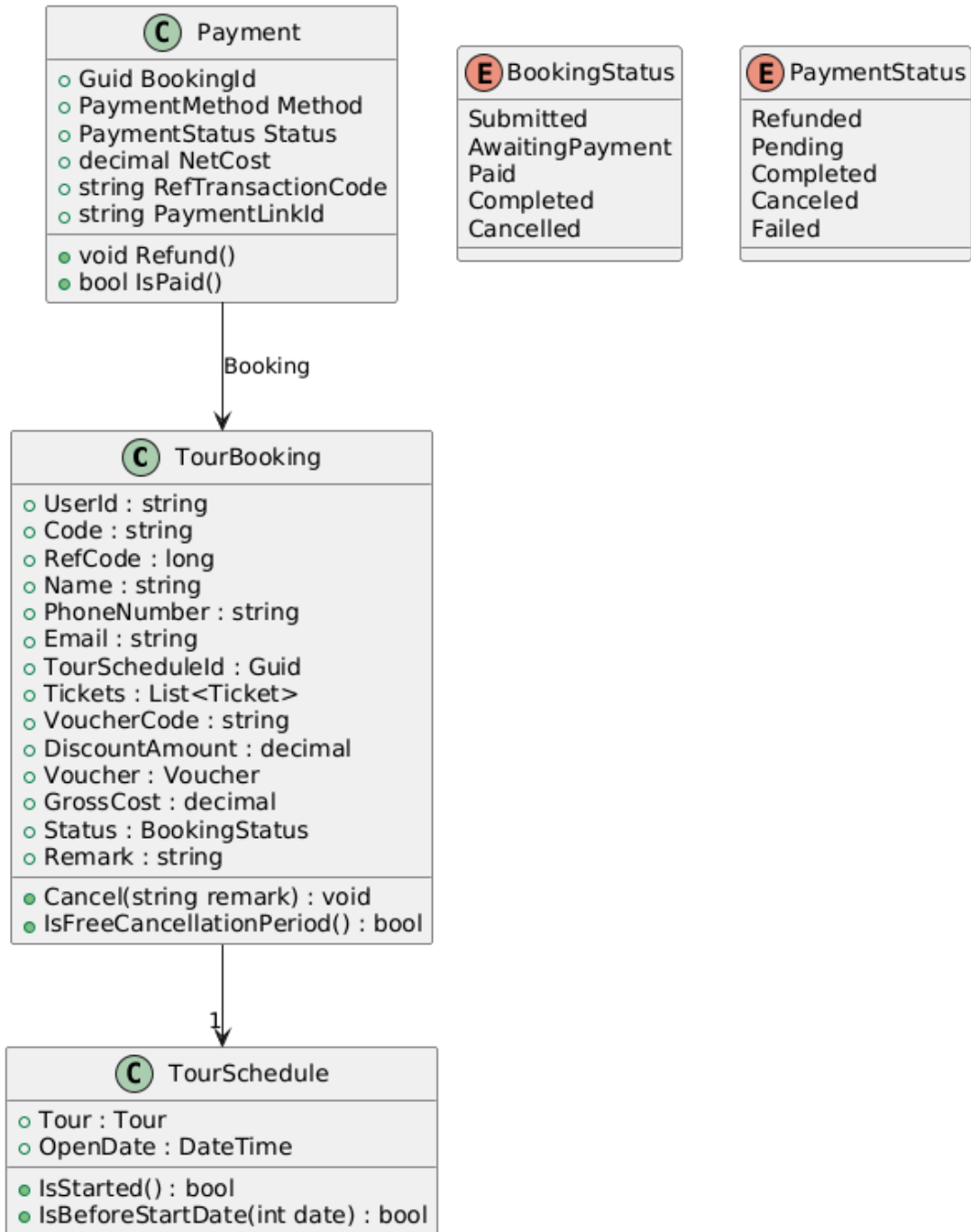


Figure 21 - Tourist Cancel Tour Booking Class Diagram

3.4.2 Class Diagram Specification

No	Method	Description
1	TourBooking.Cancel(string remake)	Cancel tour booking
2	TourBooking.IsFreeCancellationPeriod()	Check booking in free cancelation period (24h)
3	Payment.IsPaid()	Check payment of booking is paid or not
4	Payment.Refund()	Refund cost for tourist
5	TourSchedule.IsStarted()	Check tour schedule start or not yet
6	TourSchedule.IsBeforeStartDate(int date)	Check tour schedule is n date before start date

Table 26 - Class Diagram Specification - Tourist Cancel Tour Booking Feature

3.4.3 Tourist Cancel Tour Booking Activity Diagram

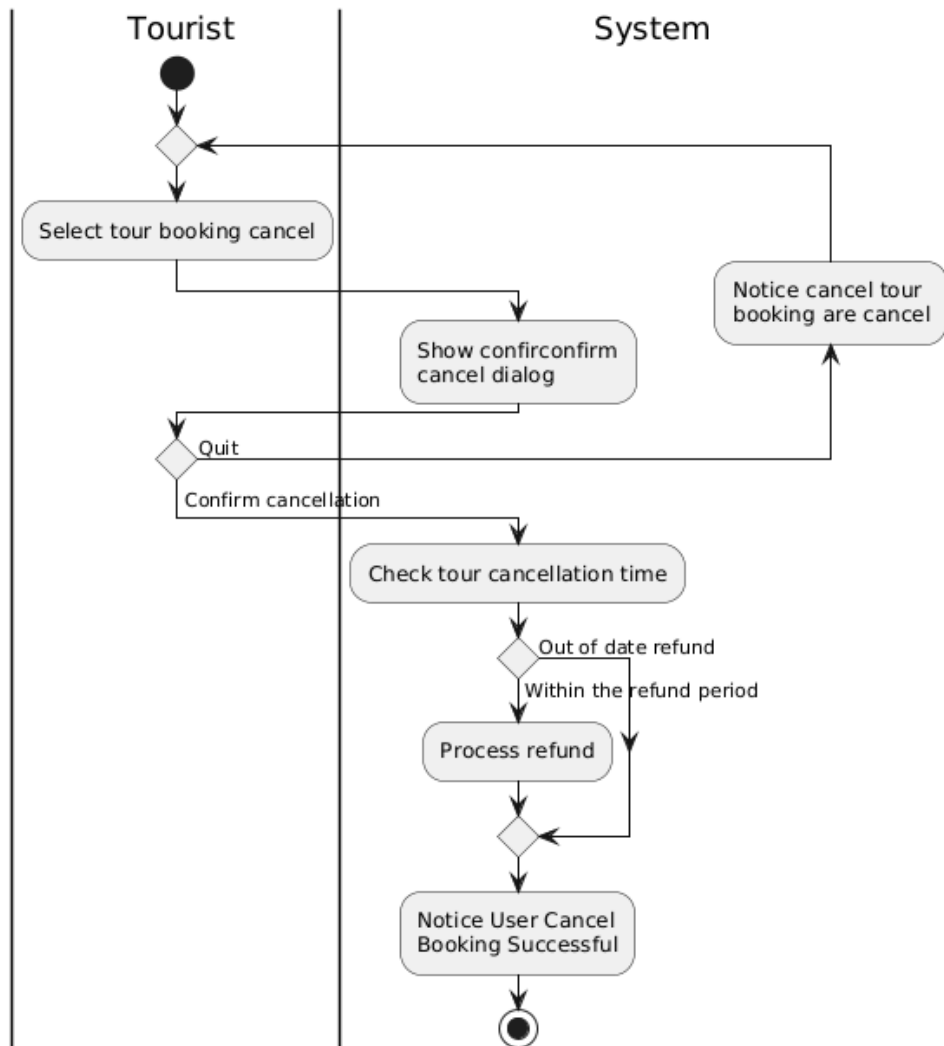


Figure 22 -Tour Cancel Tour Booking Activity Diagram

3.4.4 Tourist Cancel Tour Booking Sequence Diagram

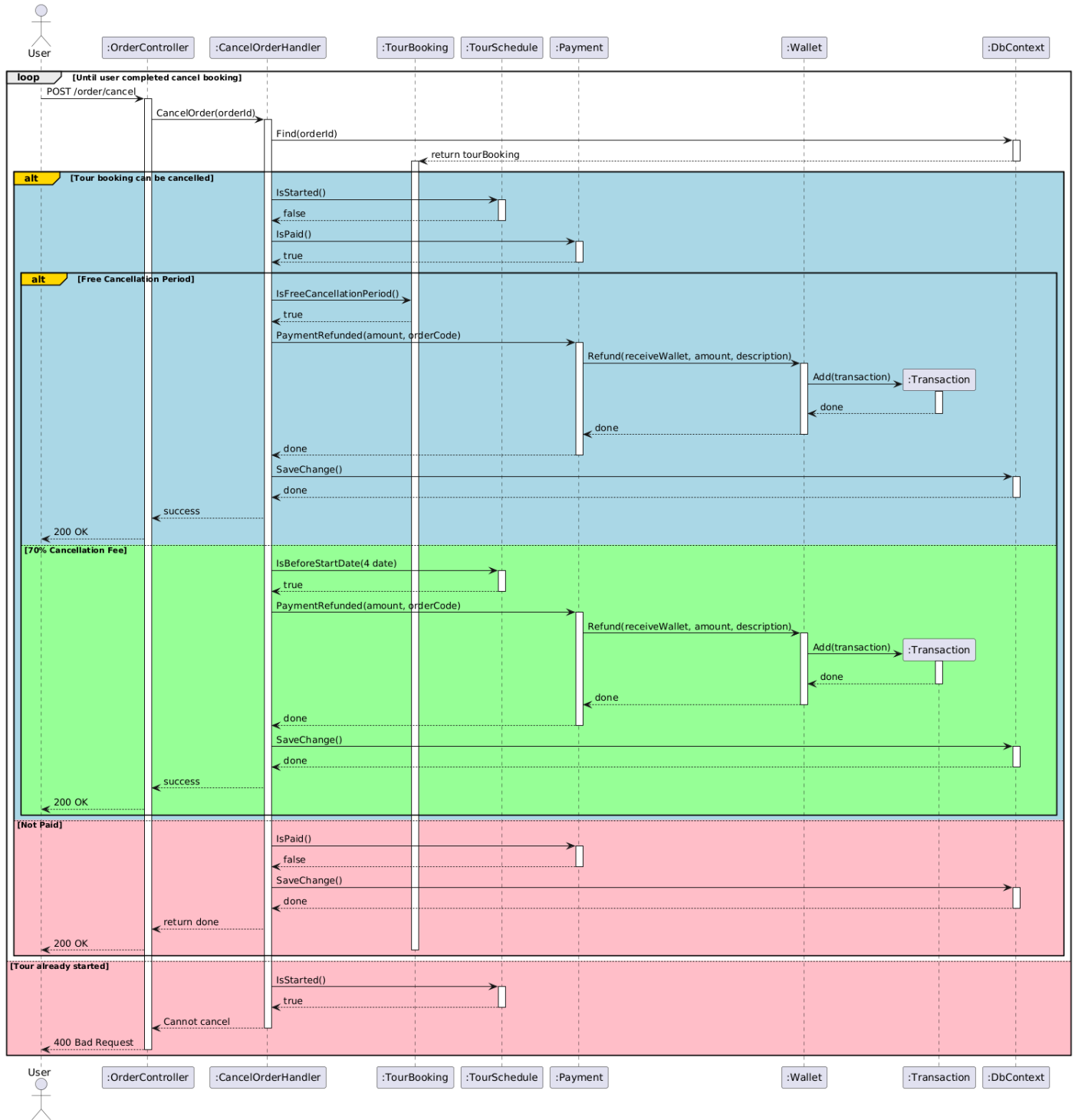


Figure 23 - Tourist Cancel Tour Booking Activity Diagram

3.5 Operator Manage Tour Feature

3.5.1 Class Diagram

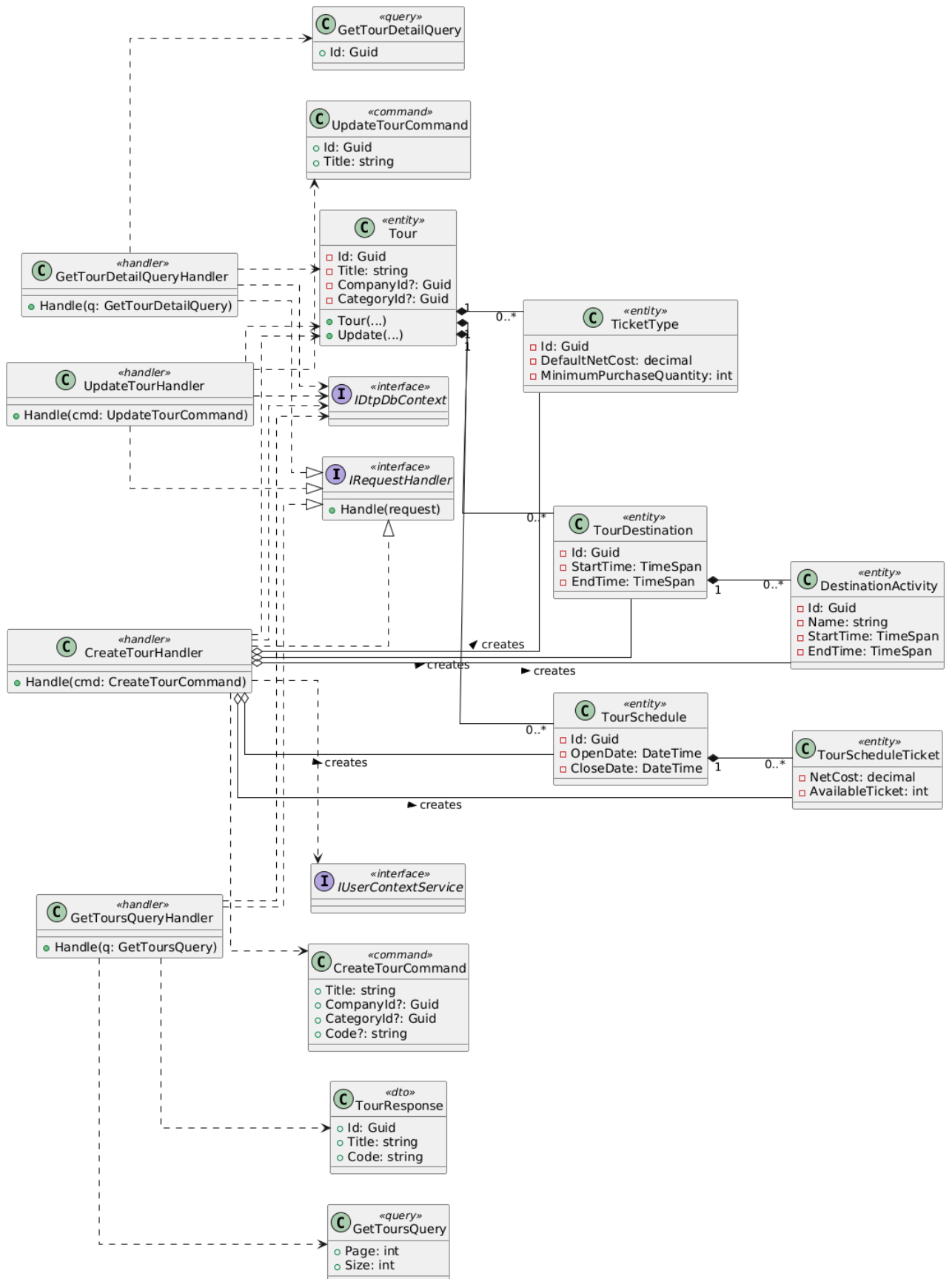


Figure 24 - Operator Manage Tour Class Diagram

3.5.2 Class Diagram Specification

No	Method	Description
1	CreateTour(CreateTourCommand)	Create a new tour with its basic info, destinations, schedules, tickets and activities
2	UpdateTour(UpdateTourCommand)	Update an existing tour's title (and other editable fields)
3	CloseTour(CloseTourCommand)	Mark a tour as "closed" (no longer bookable)
4	AddSchedule(AddScheduleCommand)	Add a new schedule (open/close dates, pricing) to an existing tour
5	UpdateTicketSchedule(UpdateTicketScheduleCommand)	Modify net cost or availability of a specific schedule's ticket
6	DeleteTourSchedule>DeleteTourScheduleCommand)	Remove a schedule (and its tickets) from a tour
7	UpdateTourDestination(UpdateTourDestinationCommand)	Update timing or order of a tour's destination
8	GetTours(GetToursQuery)	Retrieve a paged list of tours with summary info
9	GetListTour(GetListTourQuery)	Retrieve a lightweight list of tours (e.g. for dropdowns)
10	GetTourDetail(GetTourDetailQuery)	Get full detail of one tour (including children collections)
11	GetTourDestinations(GetTourDestinationByTourIDQuery)	List all destinations (and activities) for a given tour
12	GetTicketSchedules(GetListTicketScheduleByTourIDQuery)	List all schedule-tickets (cost & availability) for a given tour
13	GetAdminIncomeAnalysis(GetAdminIncomeAnalysisQuery)	Calculate total and breakdown revenue per tour (admin view)
14	GetOperatorIncomeAnalysis(GetOperatorIncomeAnalysisQuery)	Calculate total and breakdown revenue per tour (operator view)

Table 27 - Class Diagram Specification - Operator Manage Tour Feature

3.5.3 Operator Manage Tour Activity Diagram

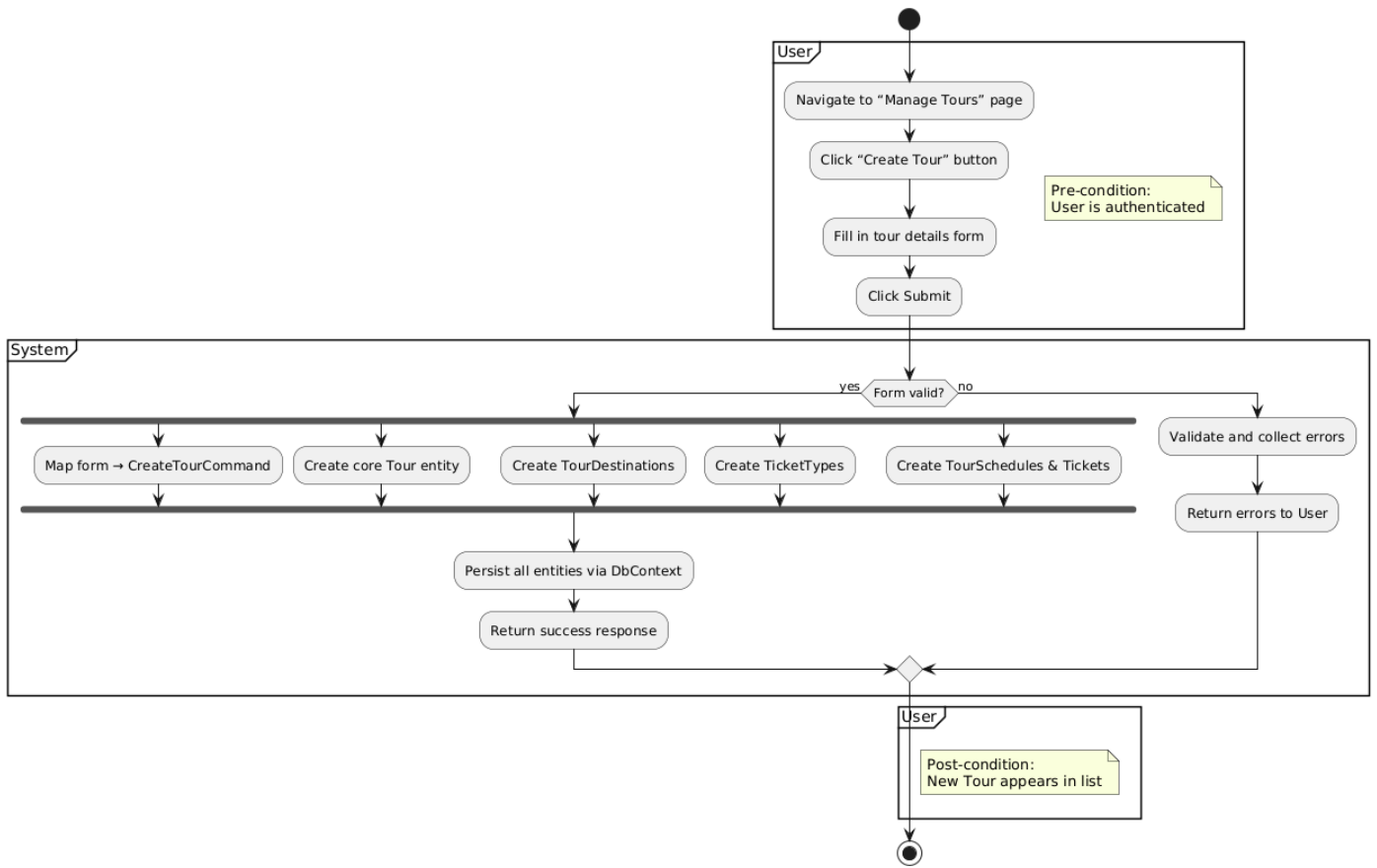


Figure 25 - Operator Manage Tour Activity Diagram

3.5.4 Operator Manage Tour Activity Diagram

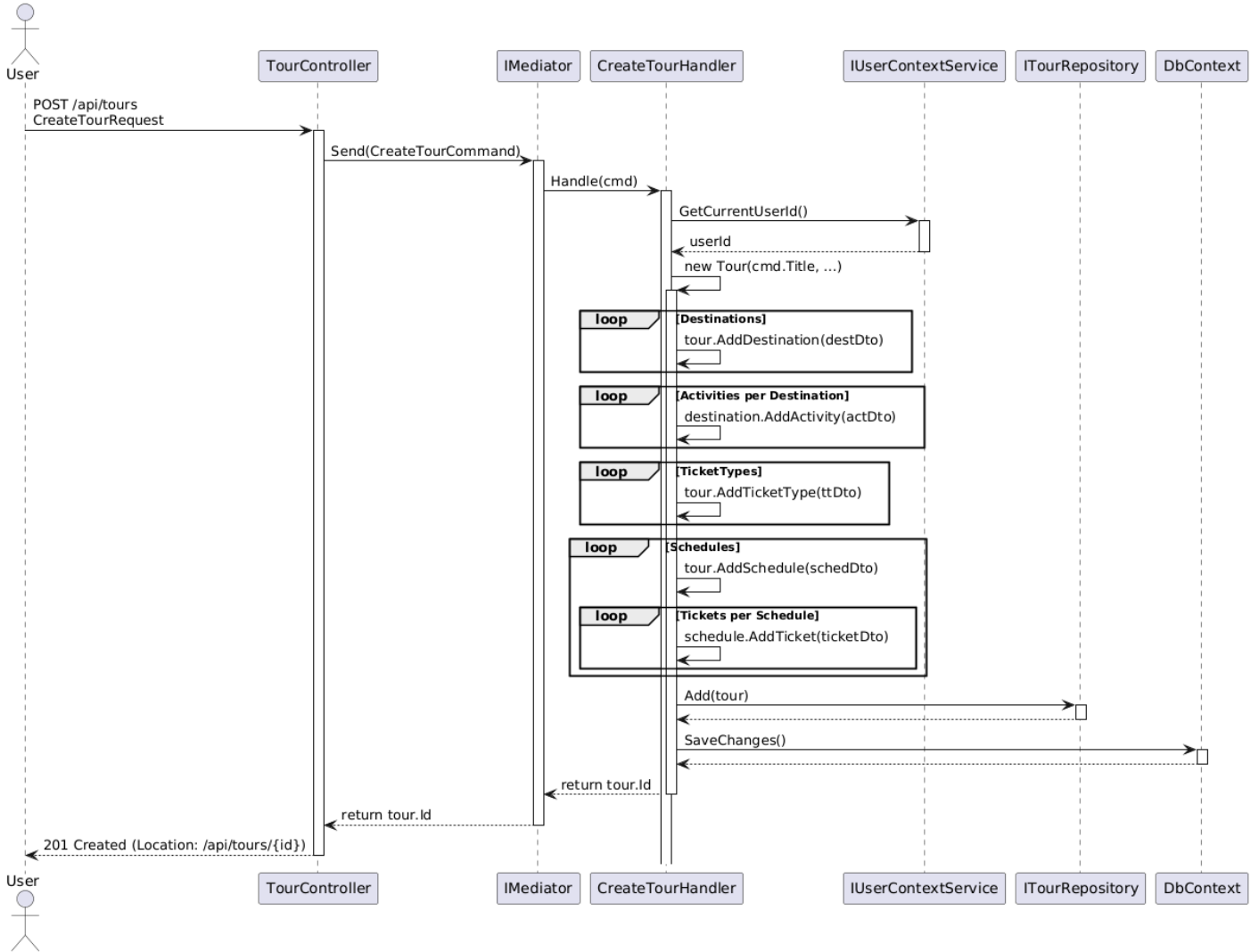


Figure 26 - Sequence Manage Tour Activity Diagram

3.6 User Withdrawal Request Feature

3.6.1 Class Diagram

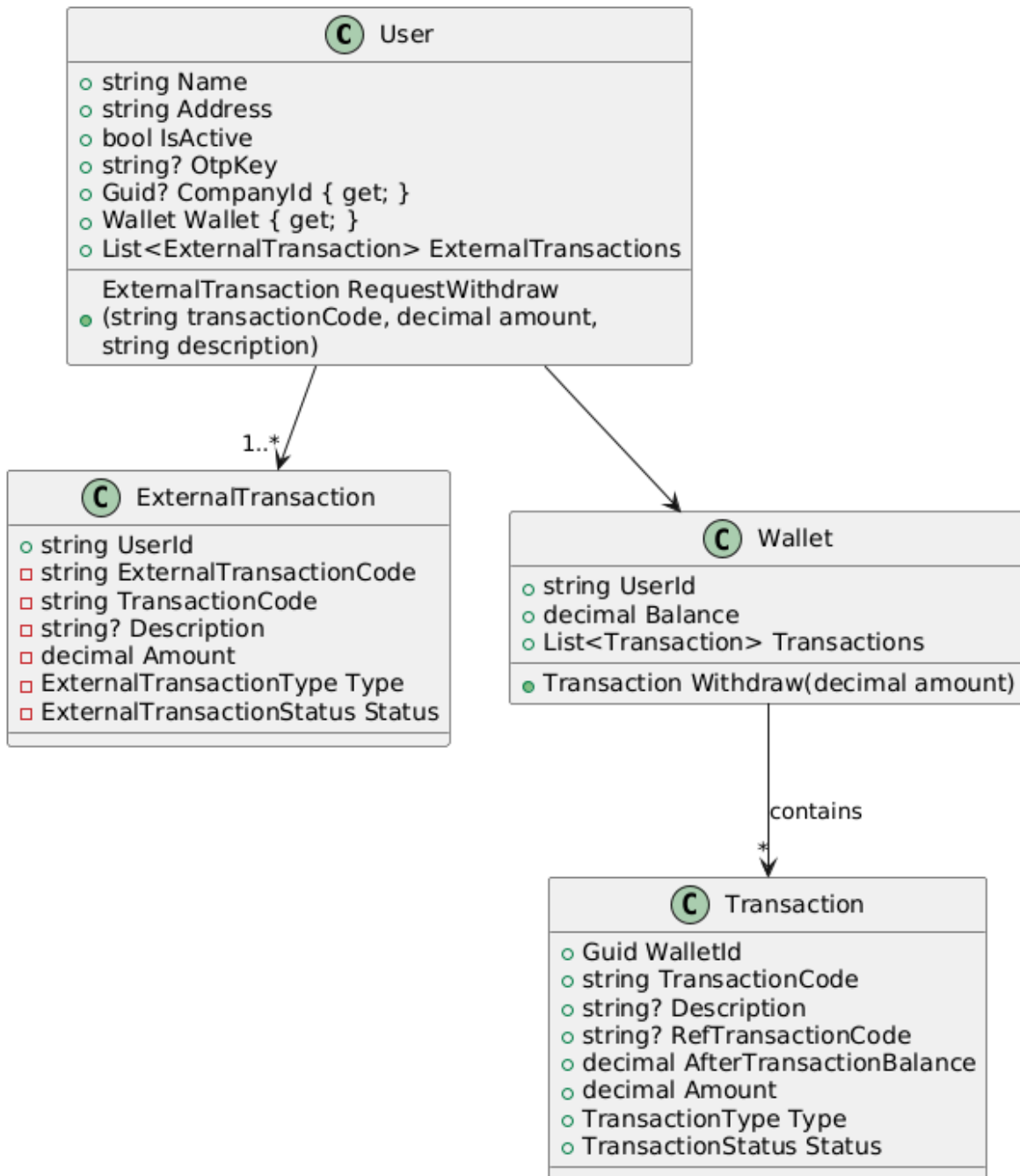


Figure 27 - User Withdrawal Request Class Diagram

3.6.2 Class Diagram Specification

No	Method	Description
1	User.RequestWithdraw (string transactionCode, decimal amount, string description)	Create request withdraw
2	Wallet.Withdraw(decimal amount)	Withdraw money (wallet in app)

Table 28 - Class Diagram Specification - User Withdrawal Request Feature

3.6.3 User Withdrawal Request Activity Diagram

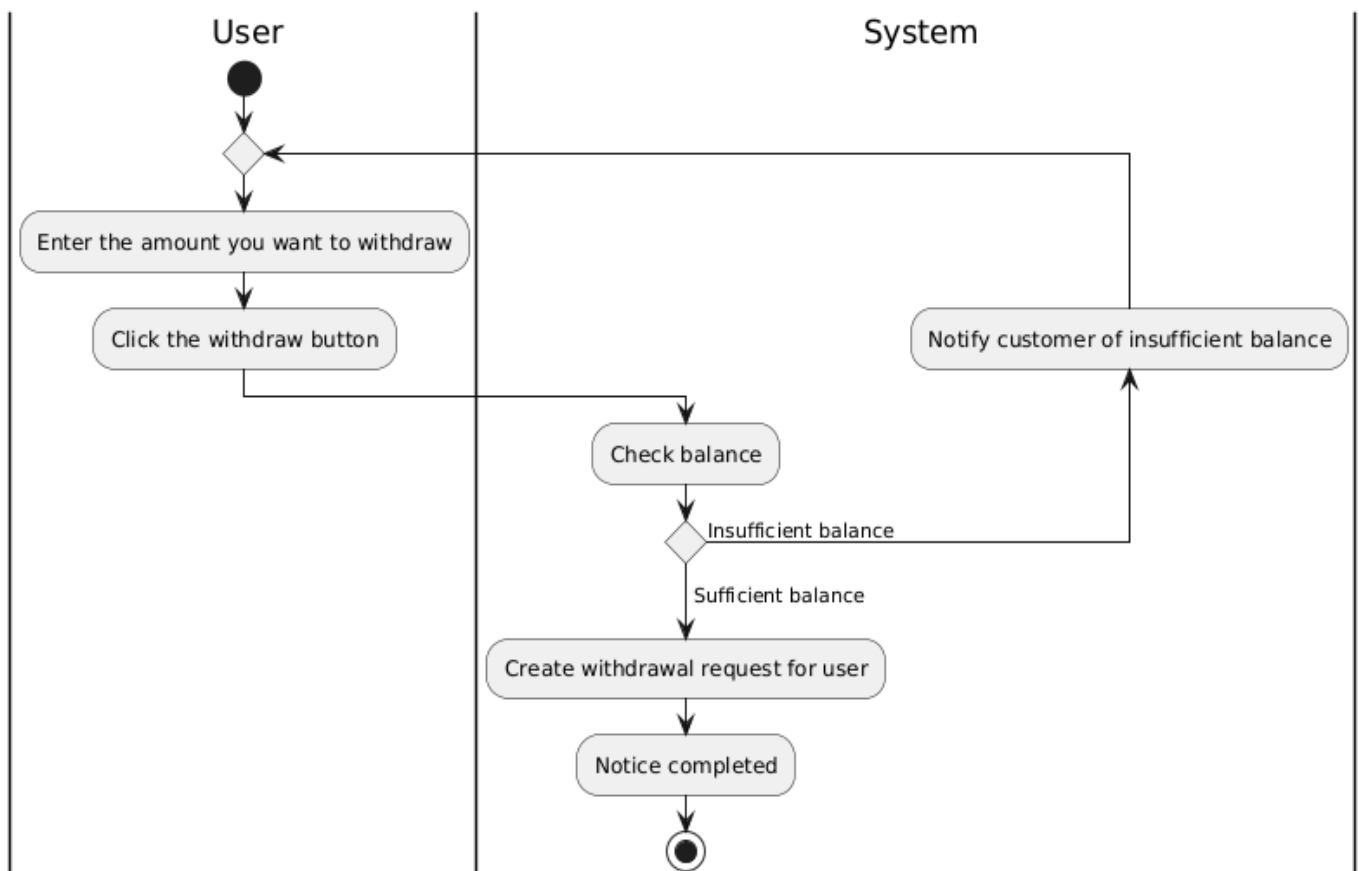


Figure 28 - User Withdrawal Request Activity Diagram

3.6.4 User Withdrawal Request Sequence Diagram

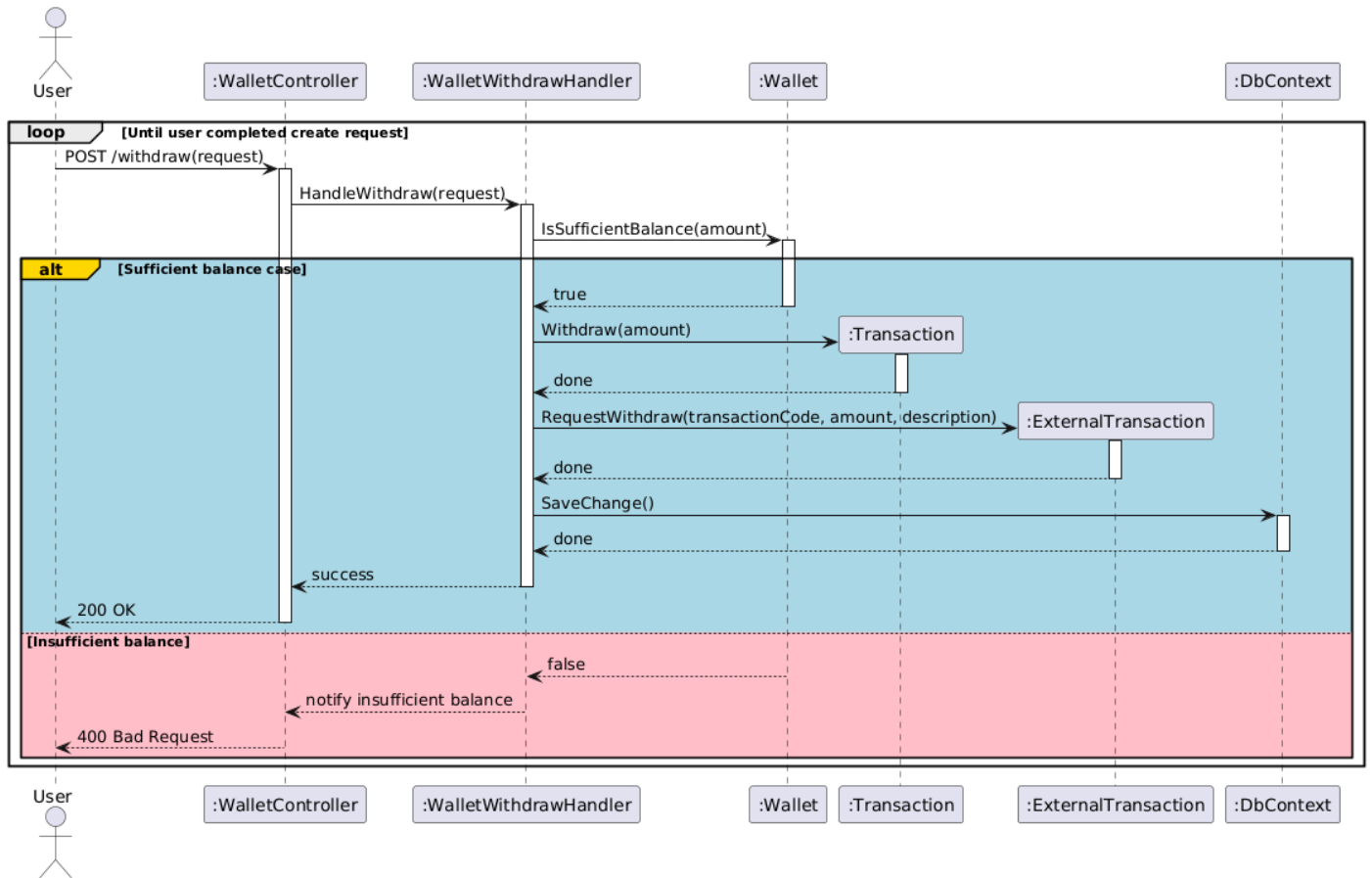


Figure 29 - User Withdrawal Request Sequence Diagram

3.7 State Machine Diagram

3.7.1 Company State Diagram

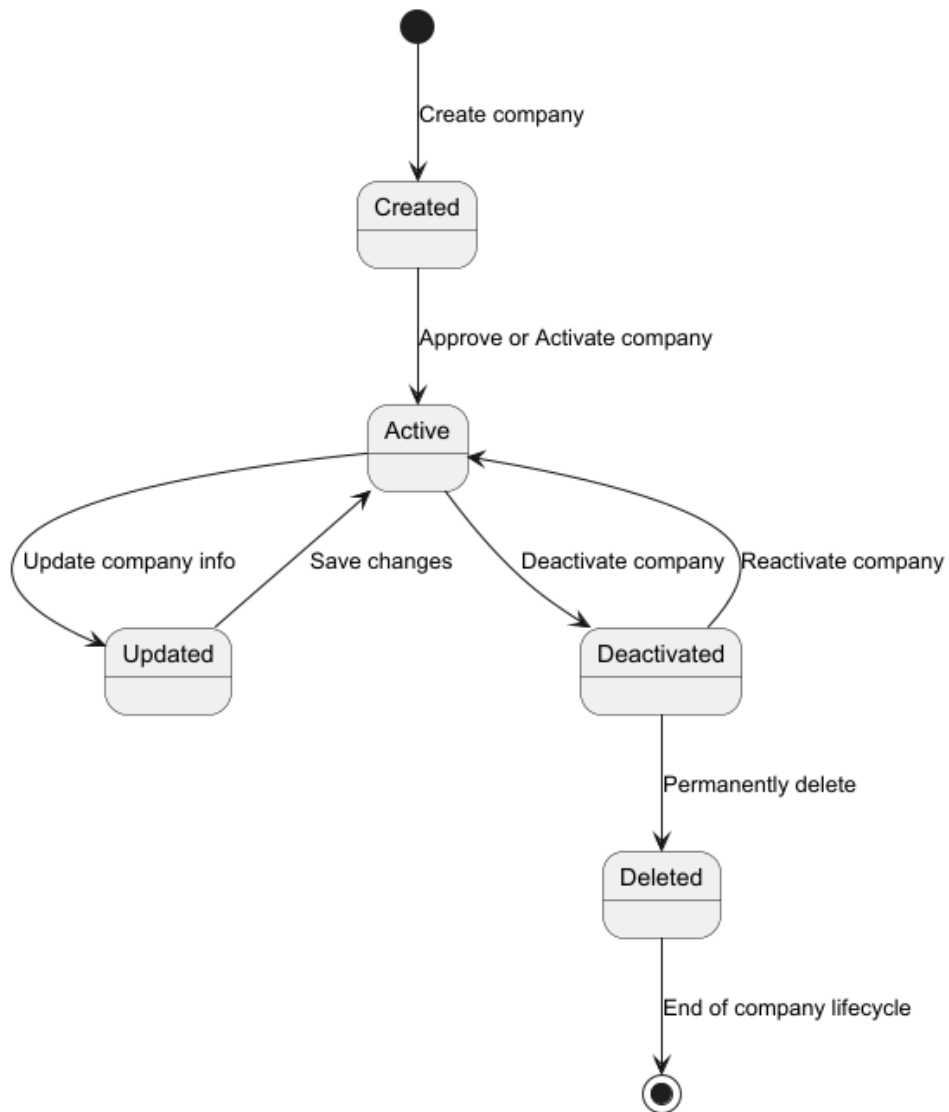


Figure 30 - Company State Diagram

3.7.2 Tour State Diagram

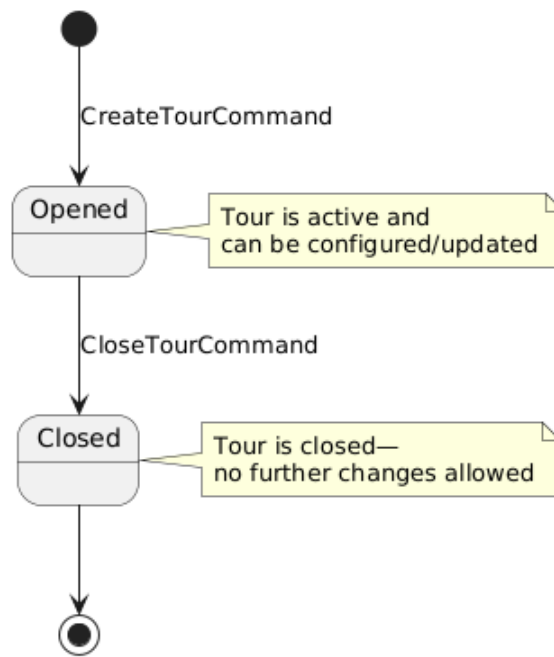


Figure 31 - Tour State Diagram

3.7.3 Payment Diagram

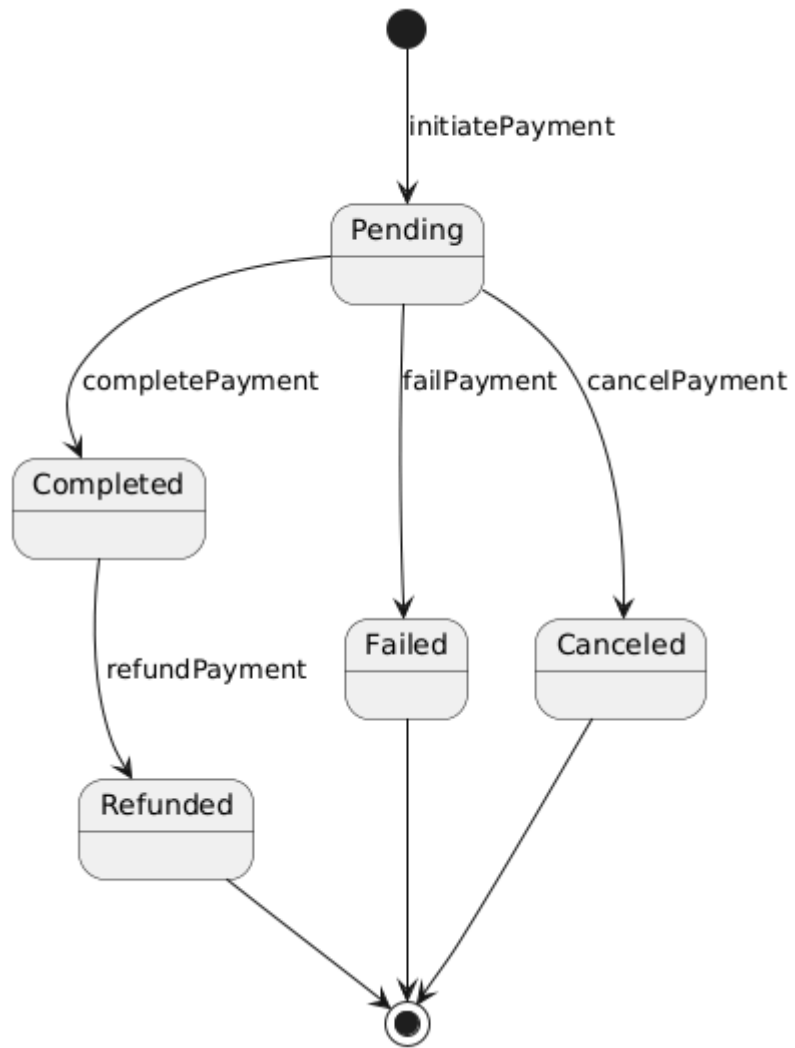


Figure 31 - Payment State Diagram

3.7.4 Booking Diagram

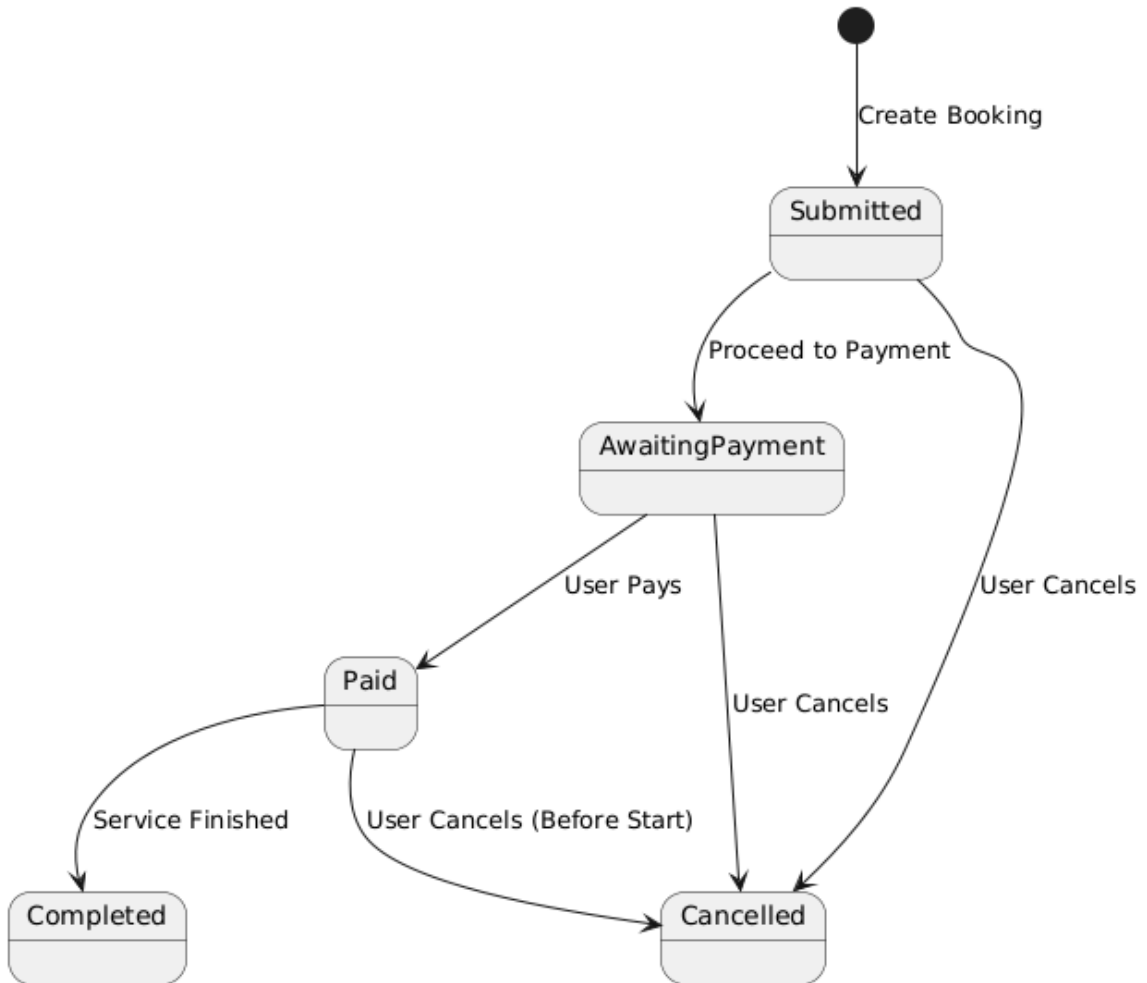


Figure 32 - Booking State Diagram

3.7.5 External Transaction Diagram

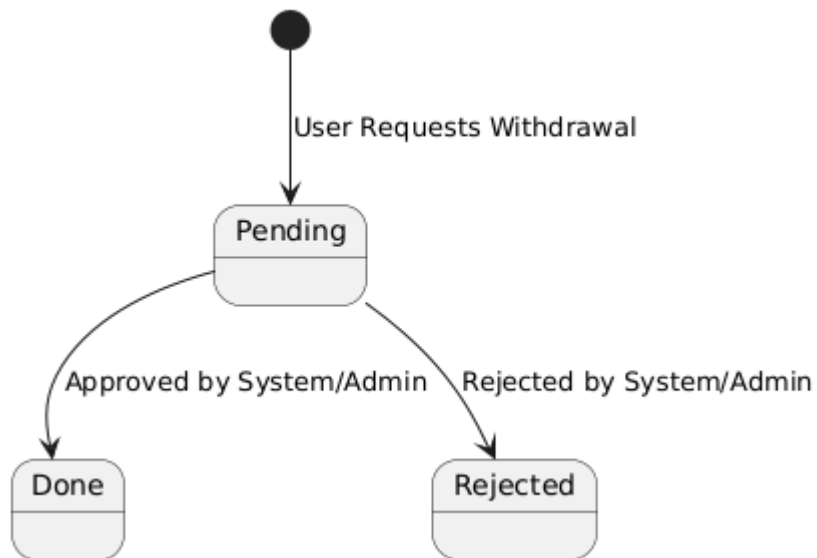


Figure 33 - External Transaction State Diagram

V. Software Testing Documentation

1. Overall Description

1.1 Testing model

- In the Binh Dinh Tour System project, we apply Incremental Testing and End-to-end Testing for the following purposes:
 - Each module (destination management, tour management, payment processing) plays a crucial role in the system structure and is tested independently before integration, which ensures that each part of the system operates correctly and minimizes errors during module integration.
 - Early functional testing ensures the accuracy of tour creation, service management, and payment processing, which helps identify business logic errors promptly, improving the performance and quality of each module.
 - End-to-end Testing verifies the seamless interaction between processes, including tour creation and management, payment processing, this testing ensures the system provides a smooth and reliable experience for end users.

1.2. Testing level

Testing Level	Description	Purpose
Unit Testing	Unit test is used to test functions	Re check all requirements and cases that might be happening to a function and check if it can adapt them or not.
System Testing	System test is used to test a complete integrated system.	To test overall system and verify all logic and data stream of system

1.3 Testing Types

Testing Type	Description
Function Testing	Test functions of system and check if each function is correct or not and if they can work with each other well or not
User Interface Testing	Test user interface, including: component, font, size, color...

2. Test Plan

2.1 Test stages

Test type/Test	Unit Test	Integration Test	System Test
Function Testing	x		x
User Interface Testing			x

2.2 Resources

2.2.1 Human Resources

Worker	Role	Specific Responsibilities
Phan Mai Sơn	Test Leader, Tester, Back-end developer	Create a test plan, test process. Create test cases, create reports, execute test, create and modify test documents, fix bug of back-end feature
Lê Trung Kiên	Back-end developer	fix bug of back-end feature
Trần Đăng Khoa	Back-end developer	fix bug of back-end feature
Trương Đình Văn	Front-end developer	Fix bug of front-end feature
Võ Công Huy	Front-end developer	Fix bug of front-end feature

2.2.2 Environment

Purpose	Type	Tool	Provider
Define, writing test cases, documents	Software/framework	Excel	Google
Test report documents	Software/framework	Excel	Google
Running Integration test	Software/framework	Google Chrome	Google

case			
Running System test case	Software/framework	Google Chrome	Google

2.2.3 Test Milestones

Milestone Task	Start Date	End Date
Create test plan	28/2/2025	3/3/2025
Create unit test document and execute test case	4/3/2025	21/3/2025
Create test report document and execute test case	22/3/2025	05/4/2025
Full system testing	06/4/2025	11/4/2025

3. Test Cases and Test Reports

Testing Level	File Name
Unit Test	
System Test	SP25SEAI26 Test Report

VI. Release Package & User Guides

1. Deliverable Package

1.1. Source code and documents

No	Items	Sub-Items	Type	Version
Code Package				
01	Web User	BinhDinhTourSystem_FE.zip	New	1.0.0
02	Web Admin	BinhDinhTourSystem_FE_Admin.zip	New	1.0.0
03	Web API	BinhDinhTour_BE.zip	New	
04	Api Service	BinhDinhTourService_BE.zip	New	
Database				
01	Database Script(s)	BDT_script.sql	New	
Documents				
01	Final Report Document	BDT Final Report.docx		

1.2 Known Issues, Limitations & Restrictions

- Installers for each projects haven't been packaged
- Database must be initialised by using database scripts

2. Installation Guides

2.1 System Requirements

2.1.1 Hardware requirements

- Web Application

PC	Minimum	Recommended
Internet connection	Cable, Wi-fi (4 Mbps)	Cable, Wi-fi (8 Mbps)
Processor	Intel Core i3 1.4Ghz	Intel Core i7 2.5Ghz
Memory	2GB RAM	4GB RAM up
Storage	HDD 100GB	SSD 200GB
Web Browser	Chromes (v69) Microsoft Edge (v109)	Chromes latest stable version Microsoft Edge latest stable version

2.1.2 Software requirements

Component	Name and Version	Description
Operating System	Windows 10/11 other open sources (Linux, Ubuntu)	Operating system for building production
DBMS	MySQL Workbench 8.0	Used to manage database
Cache	Redis v7.8.6	In-memory key-value store
.Net	.NET SDK 8.0, .NET Core 8.0 Runtime	Used to hosting API server
Node JS	>18	Used to run frontend application
Load balancer/reverse proxy	Nginx (latest stable or 1.24.x)	High-performance web server and reverse proxy
IDE	Visual Studio, Visual Studio Code	Used to edit and run code

2.2 Setup file

- BinhDinhTourSystem_FE.zip
- BinhDinhTourSystem_FE_Admin.zip
- BinhDinhTourSystem_BE.zip
- BinhDinhTourService_BE.zip
- BDT_script.sql

2.3 Installation Instruction

2.3.1 Setup Docker Desktop by guidelines link:

<https://docs.docker.com/desktop/setup/install/windows-install/>

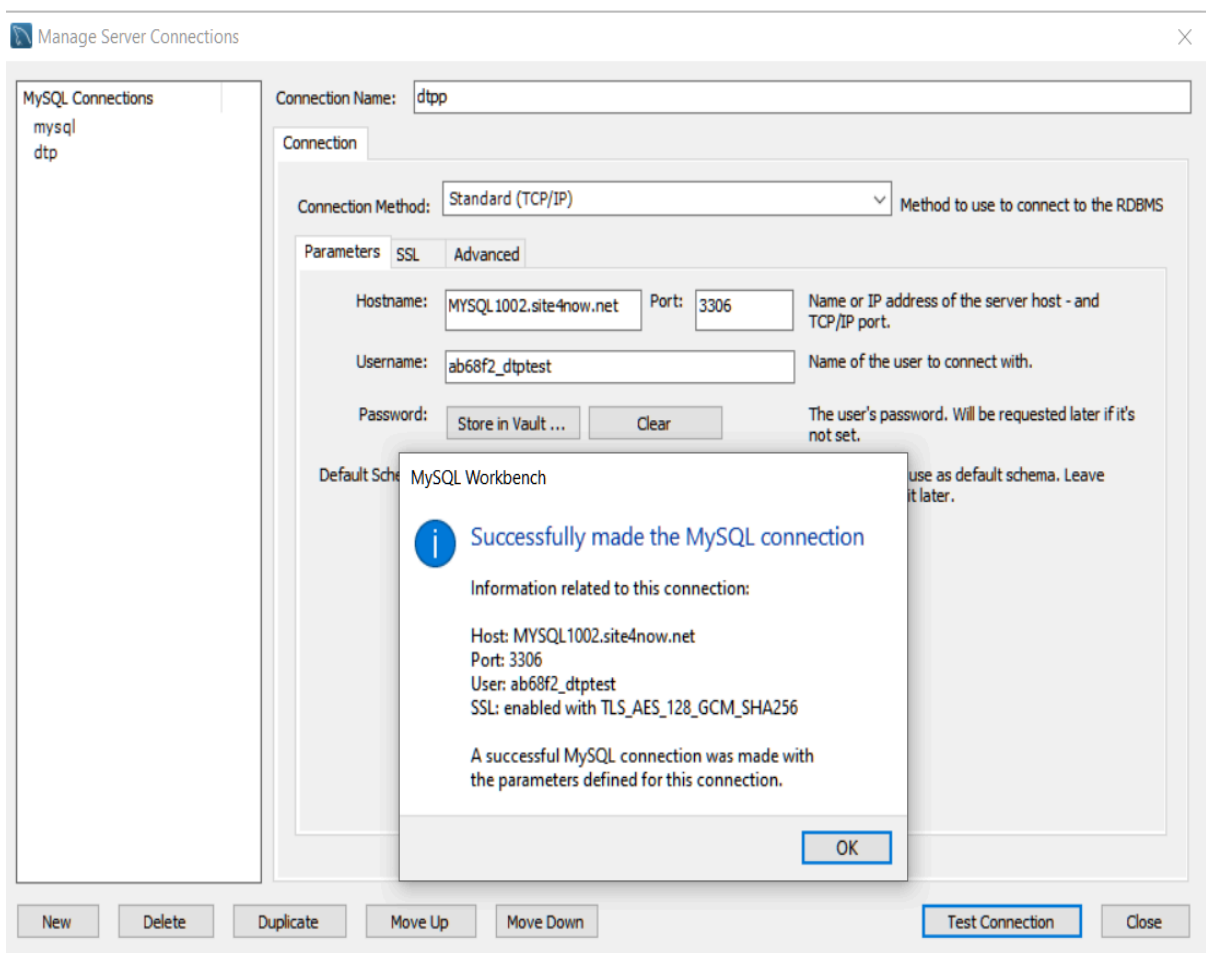
2.3.2 Backend

2.3.2.1 Setup Database

- Install MySQL by following guidelines link:

<https://www.thegioididong.com/game-app/huong-dan-cach-tai-cai-dat-mysql-ban-moi-nhat-chi-tiet-tung-1299084>

- Connect database with localhost, 1433



2.3.2.2 Setup Backend API

- Install Visual Studio by following guidelines link:

<https://learn.microsoft.com/en-us/visualstudio/install/install-visual-studio?view=vs-2022>

- Extracting: BinhDinhTourSystem_BE.Zip

Name	Date modified	Type	Size
▼ Today			
Infrastructure	4/25/2025 4:42 PM	File folder	
Application	4/25/2025 4:42 PM	File folder	
Domain	4/25/2025 4:42 PM	File folder	
Api	4/25/2025 4:42 PM	File folder	
.github	4/25/2025 4:42 PM	File folder	
▼ Yesterday			
.gitignore	4/24/2025 8:14 AM	Git Ignore Source ...	2 KB
compose.yaml	4/24/2025 8:14 AM	YAML File	2 KB
dtp-backend.sln	4/24/2025 8:14 AM	SLN File	3 KB
global.json	4/24/2025 8:14 AM	JSON Source File	1 KB
README.md	4/24/2025 8:14 AM	MD File	3 KB

- Open dtp-backend.sln with visual studio 2022
- Open docker desktop
- Run project with container
- Extracting: BinhDinhTourService_BE.Zip

Name	Date modified	Type	Size
▼ Today			
.github	4/25/2025 4:43 PM	File folder	
Api	4/25/2025 4:43 PM	File folder	
Application	4/25/2025 4:43 PM	File folder	
Infrastructure	4/25/2025 4:43 PM	File folder	
▼ Earlier this week			
.dockerignore	4/23/2025 7:57 AM	DOCKERIGNORE F...	1 KB
.gitignore	4/23/2025 7:57 AM	Git Ignore Source ...	13 KB
dtp-service.sln	4/23/2025 7:57 AM	SLN File	2 KB
global.json	4/23/2025 7:57 AM	JSON Source File	1 KB
README.md	4/23/2025 7:57 AM	MD File	1 KB

- Open dtp-backend.sln with visual studio 2022
- Project in browser by go to url : <https://localhost:44372/swagger>

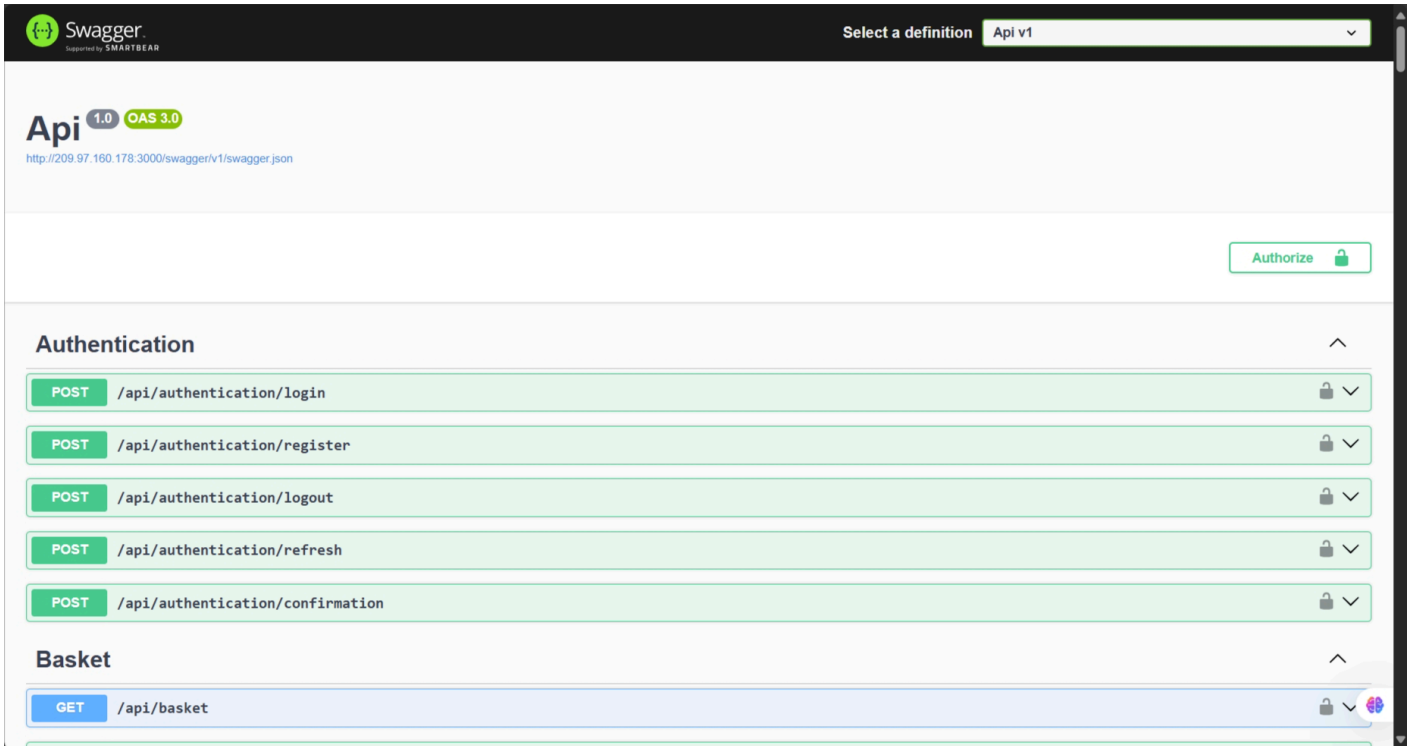


Figure 65 - Setup Backend Api

2.3.3 Frontend

- Install Visual Studio Code by following guidelines link:

<https://code.visualstudio.com/docs/setup/windows>

- Install nodejs by following guidelines link:

[Set up Node.js on native Windows | Microsoft Learn](#)

- Extracting BinhDinhTourSystem_FE.zip
- Open BinhDinhTourSystem_FE with vscode
- Open terminal, use this command to create a .env file based on .env.example:

```
cp .env.example .env
```

Then, update the necessary environment variables inside **.env**

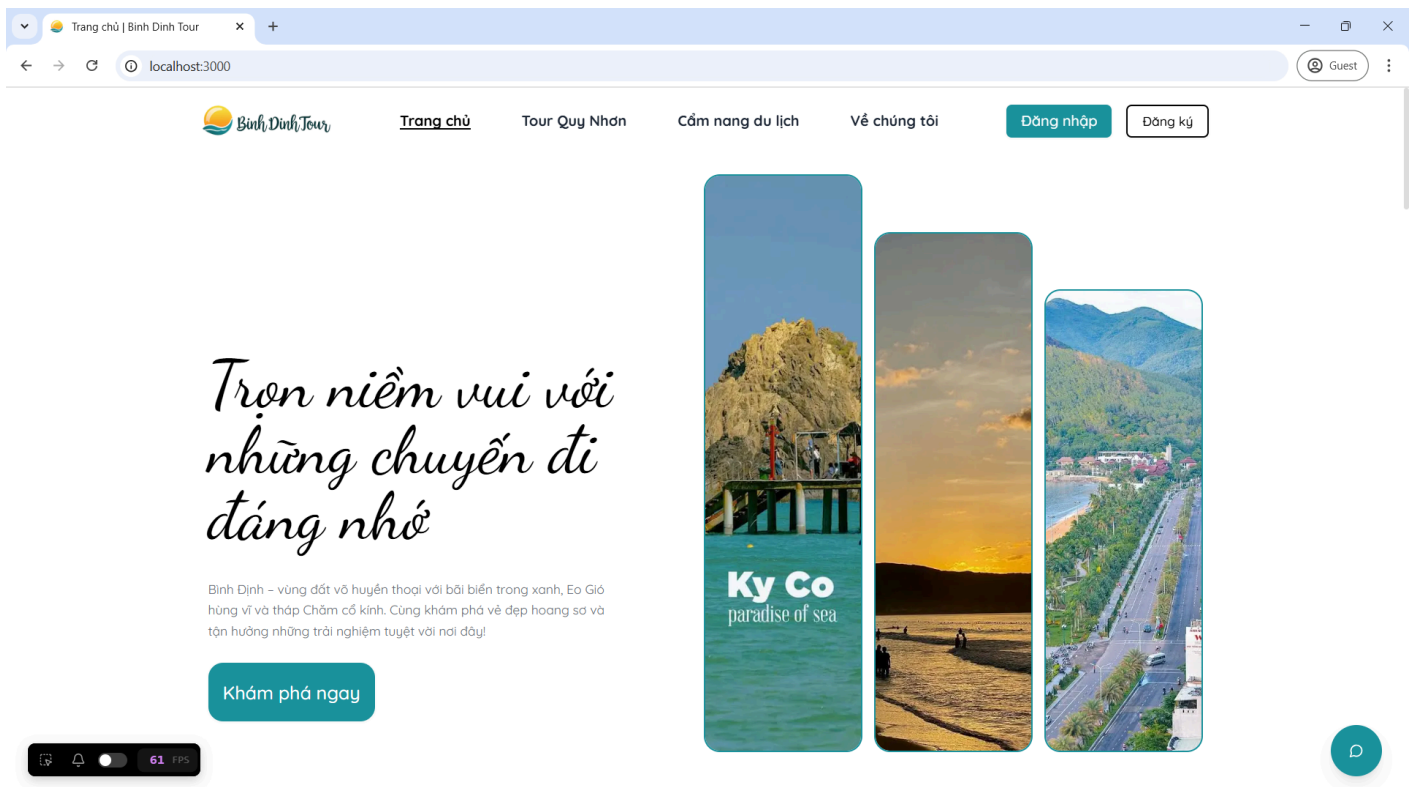
- Download all dependencies:

```
npm i
```

- Run project:

```
npm run dev
```

- Project in browser by go to url: <http://localhost:3000>



3. User manual

3.1 Term and conditions

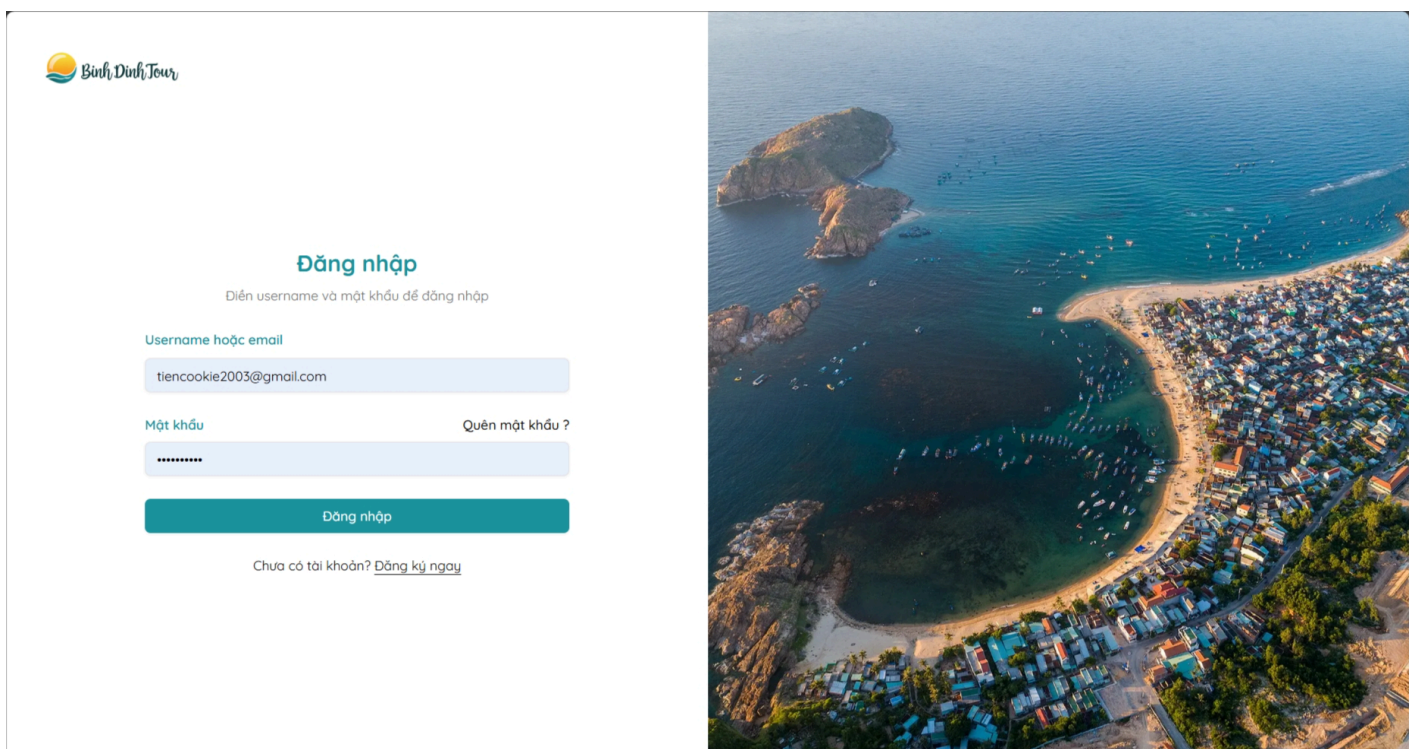
N/A

3.2 Application usage

3.2.1 Web user

- Authorization - Login

Step 1: Enter website: <https://dtp-frontend-three.vercel.app/login>



Step 2: If user doesn't have account then click sign up to create a new account



Đăng ký

Username

Tên

Email

Số điện thoại

Địa chỉ

Mật khẩu

Nhập lại mật khẩu

Đăng ký

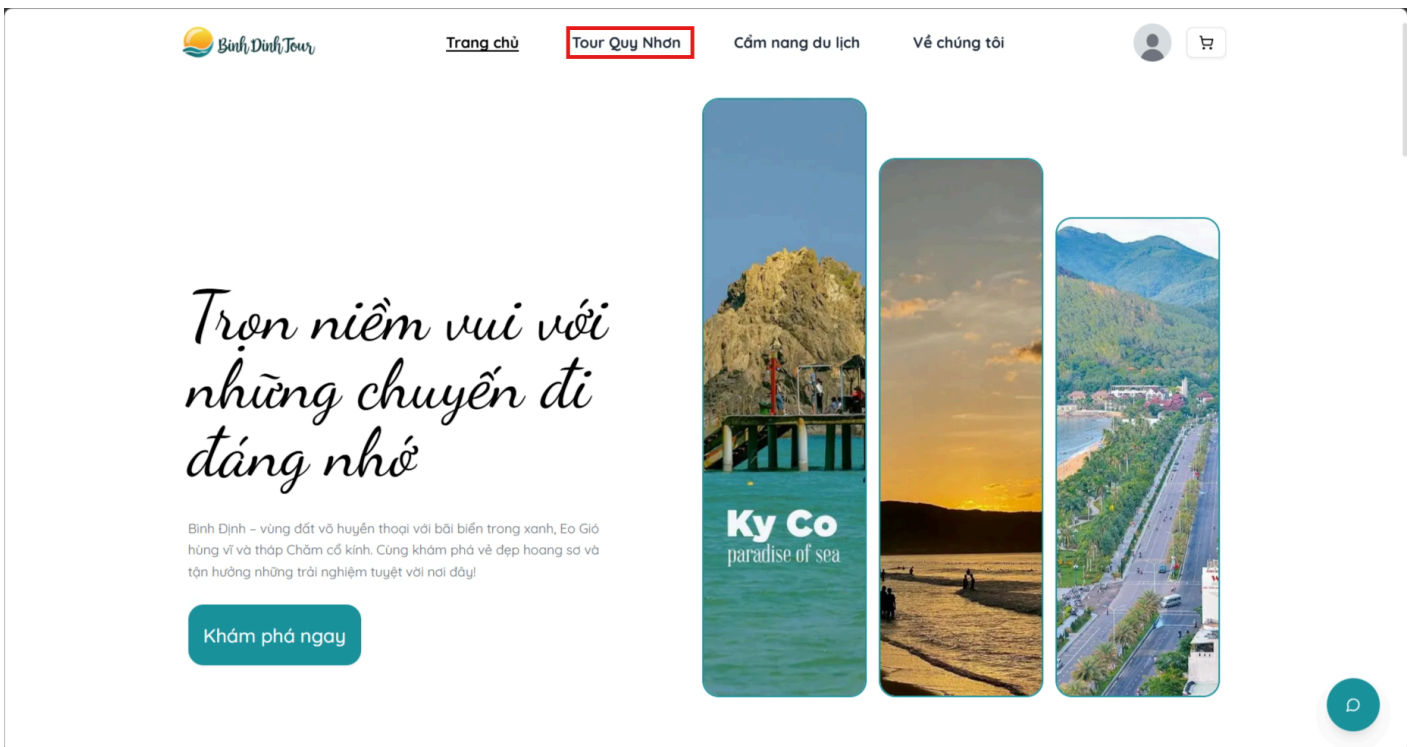
Đã có tài khoản? [Đăng nhập ngay](#)

https://dtp-frontend-three.vercel.app



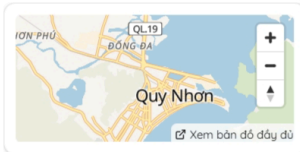
- **View tour, booking tour**

Step 1: Navigate to Tour Quy Nhon



Step 2: Choose your tour

Tất cả hoạt động ở Quy Nhơn



Tim thấy 3 kết quả

Có thể đặt

Mức giá

Sắp xếp theo:

Đề xuất

Tim kiếm

Xóa tất cả

địa điểm...



Xóa



Tour Riêng Tham Quan Kỳ Co - Eo Gió và Lặn Ngắm San Hô ở...

★ 0.0 (0) • 10+ Đã đặt

Từ 2.111 ₫ - 4.222 ₫



Tour Riêng Tham Quan Phú Yên Trong Ngày Từ Quy Nhơn: Nh...

★ 0.0 (0) • 10+ Đã đặt

Từ 2.010 ₫ - 4.020 ₫



Tour Riêng Tham Quan Kỳ Co - Eo Gió và Lặn Ngắm San Hô ở...

★ 5.0 (1) • 10+ Đã đặt

Từ 2.001 ₫ - 4.002 ₫

Kinh nghiệm du lịch Quy Nhơn

[Xem tất cả >](#)

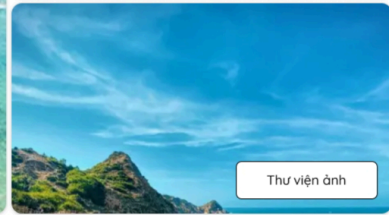
Sala Ouu Nhon Beach Hotel -- Biểu

Ouu Nhon Tourist túra bừa tham

Step 3: Check tour information

Tour Riêng Tham Quan Kỳ Co - Eo Gió và Lặn Ngắm San Hô ở Quy Nhơn Trong Ngày

★ 0.0 (0 Đánh giá) • 10+ Đã đặt



Thư viện ảnh

Khám phá Quy Nhơn để tham quan nhiều địa điểm nổi tiếng tại thành phố biển Nam Trung Bộ này. Sau đó đắm mình và tận hưởng vẻ đẹp trong xanh cùng với thiên nhiên hoang sơ tại Kỳ Co - Thiên đường Maldives thu

2.111 đ



Vui lòng chọn ngày và gói dịch vụ

[Xóa tất cả](#)

Xin chọn ngày đi tour

[📅 Xem trạng thái dịch vụ](#)

Loại gói dịch vụ

Tour ghép

2.111 đ

[Đặt ngay](#)

Chi tiết gói dịch vụ

Lịch trình



Thông tin tập trung/đón khách



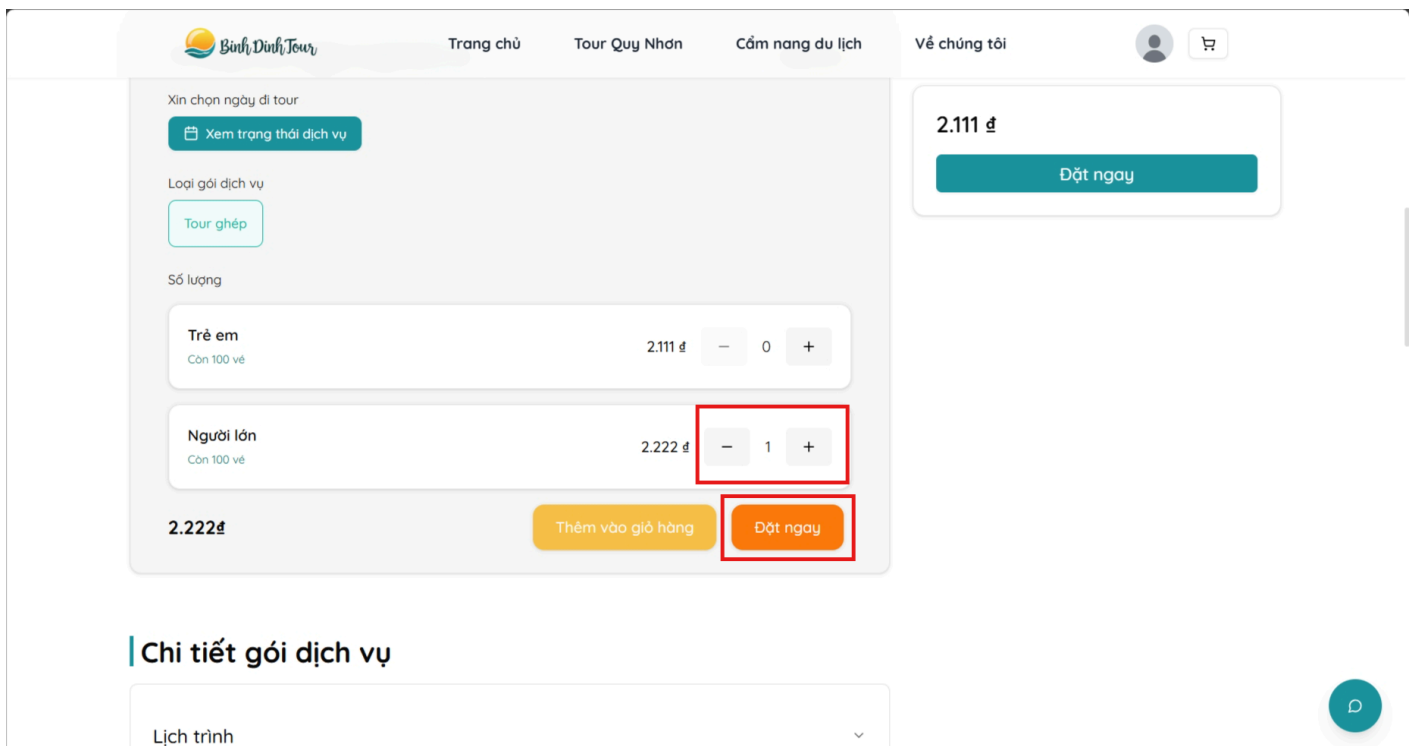
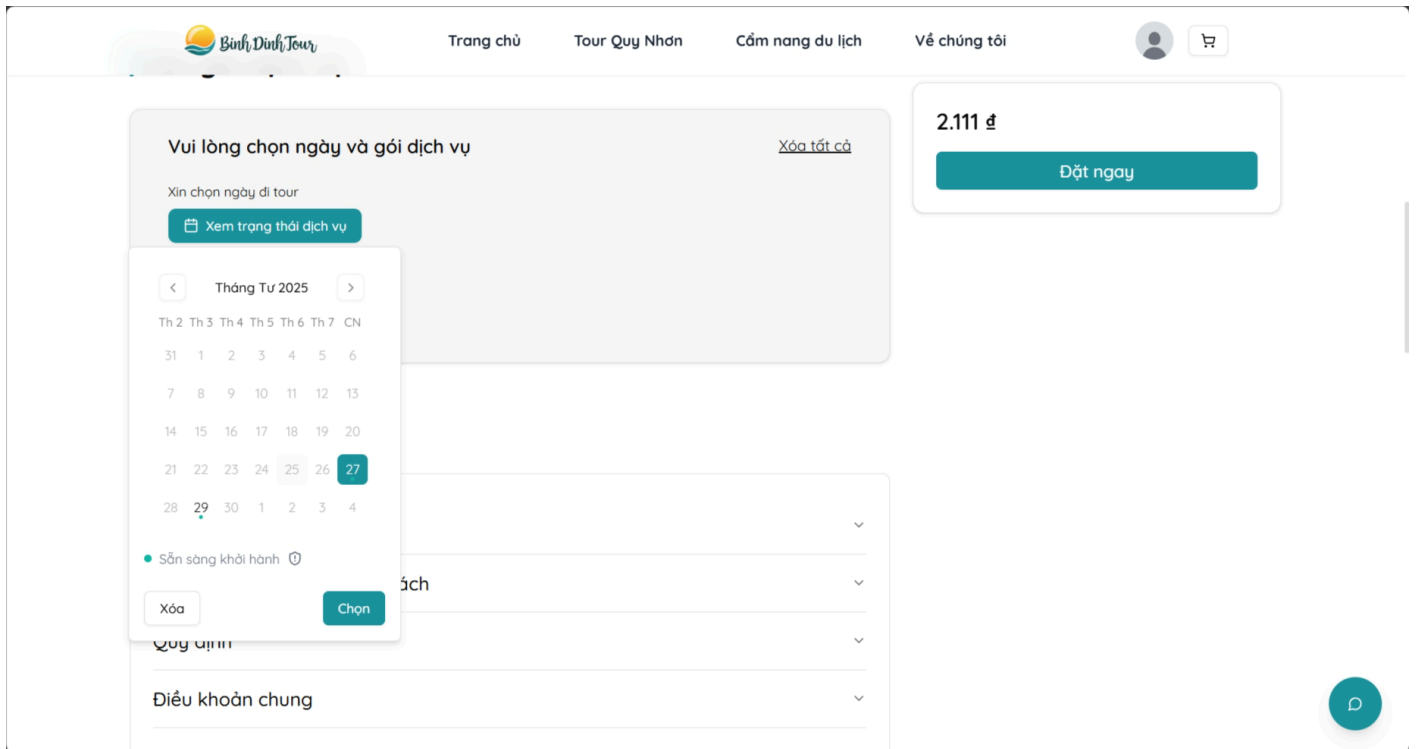
Quy định



Điều khoản chung




Step 4: Click on “Trạng thái dịch vụ”, select date, select ticket and booking



Step 5: Confirm your booking

Điền thông tin

Thông tin đơn hàng



Tour Riêng Tham Quan Kỳ Co - Eo Gió và Lặn Ngắm San Hô ở Quy Nhơn Trong Ngày
Khám phá Quy Nhơn để tham quan nhiều địa điểm nổi tiếng tại thành phố biển Nam Trung Bộ này Say đắm với vẻ đẹp trong xanh cùng với thiên nhiên hoang sơ tại Kỳ Co - Thiên...
27-04-2025

Thông tin liên lạc

Chúng tôi sẽ thông báo mọi thay đổi về đơn hàng cho bạn

Tên	Huy nè	Chỉnh sửa
Số điện thoại	0853642941	
Email (để cập nhật thông tin đơn hàng của bạn)	tiencookie2003@gmail.com	

Vui lòng điền thông tin chính xác. Một khi đã gửi thông tin, bạn sẽ không thay đổi được.

Đơn hàng sẽ được gửi đi sau khi thanh toán. Bạn sẽ thanh toán ở bước tiếp theo.

[Thanh toán](#)

Tour Riêng Tham Quan Kỳ Co - Eo Gió và Lặn Ngắm San Hô ở Quy Nhơn Trong Ngày

Ngày	27-04-2025
Đơn vị	Người lớn x 1
Tổng cộng	₫ 2.222

Tổng cộng	₫ 2.222
Số tiền phải thanh toán	₫ 2.222


DTP - BÌNH ĐỊNH TOUR

payOS by CASO

Thanh toán trước thứ sáu, 25 tháng 4 2025, 11:37:22

Chi tiết đơn hàng [Xem](#)

Mở App Ngân hàng bất kỳ để **quét mã VietQR** hoặc **chuyển khoản** chính xác số tiền bên dưới



Ngân hàng
Ngân hàng TMCP Quân đội

Chủ tài khoản:
TRAN DANG KHOA

Số tài khoản:
VQRQACERU6512 [Sao chép](#)

Số tiền:
2,222 vnd [Sao chép](#)

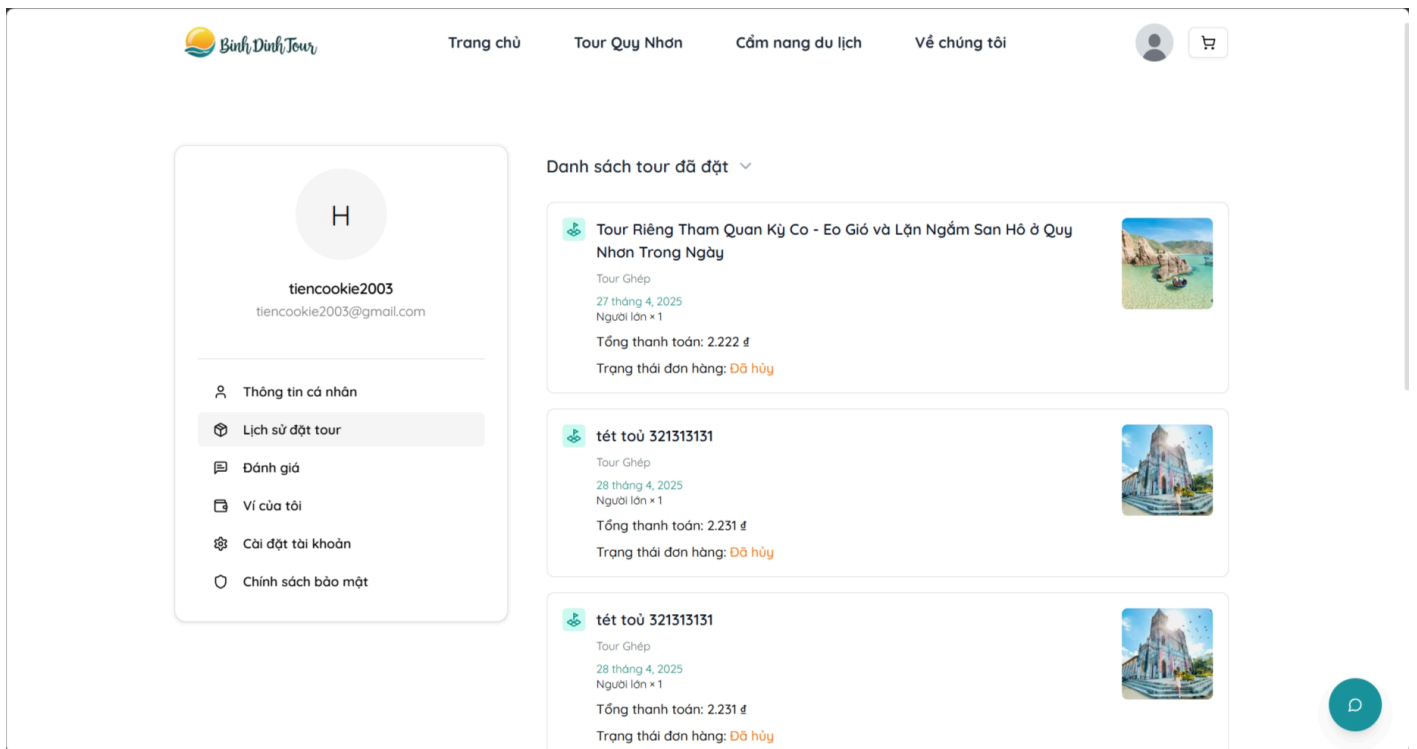
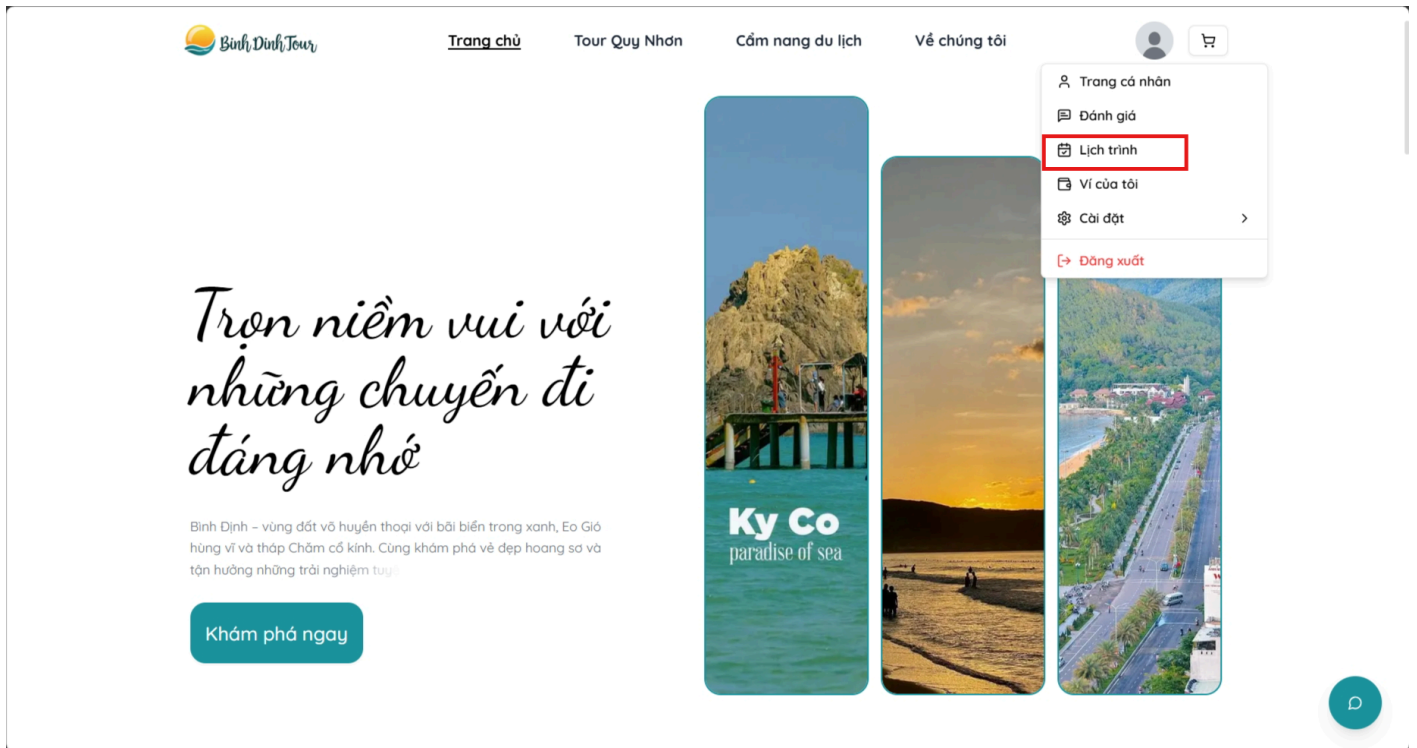
Nội dung:
DTP Payment [Sao chép](#)

[Huỷ](#)

Lưu ý: Nhập chính xác số tiền **2,222** khi chuyển khoản

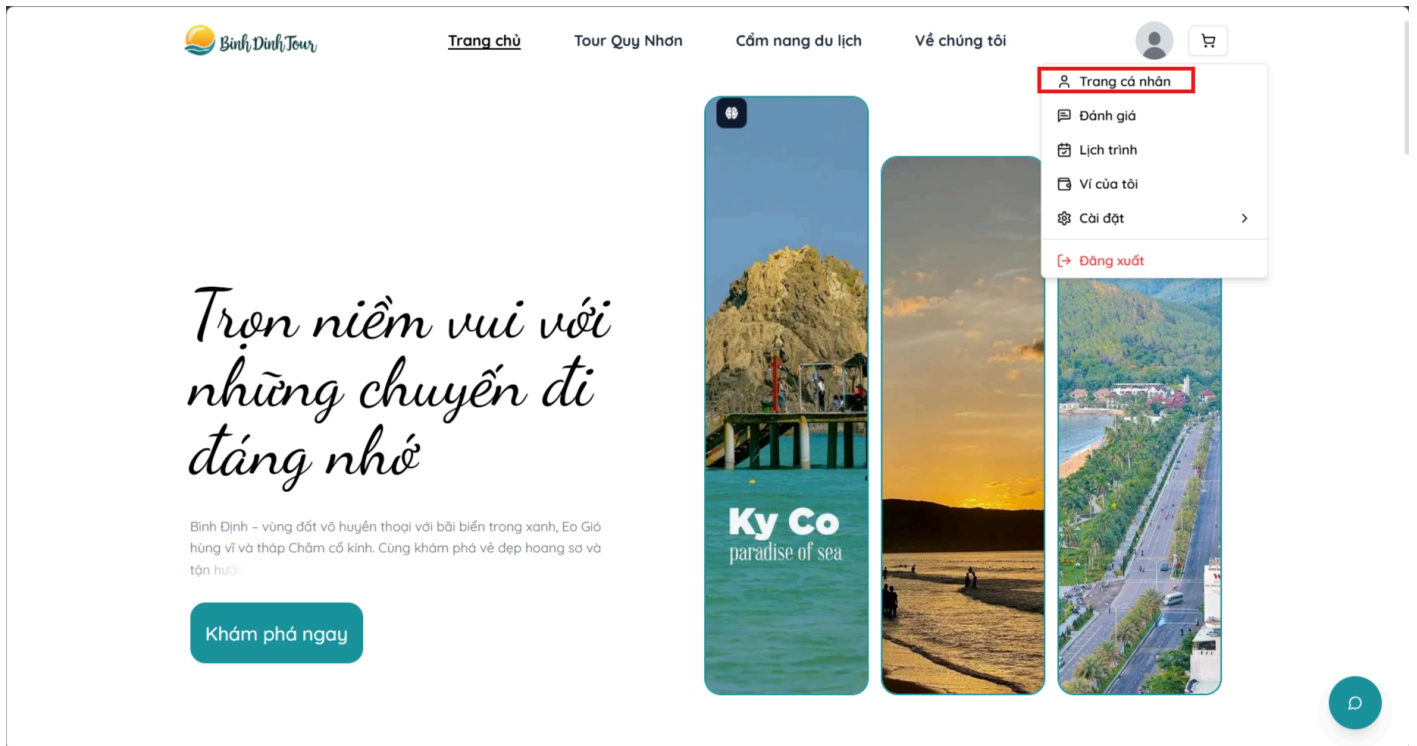
- **View your tour**

Step 1: Click on “Lịch trình”

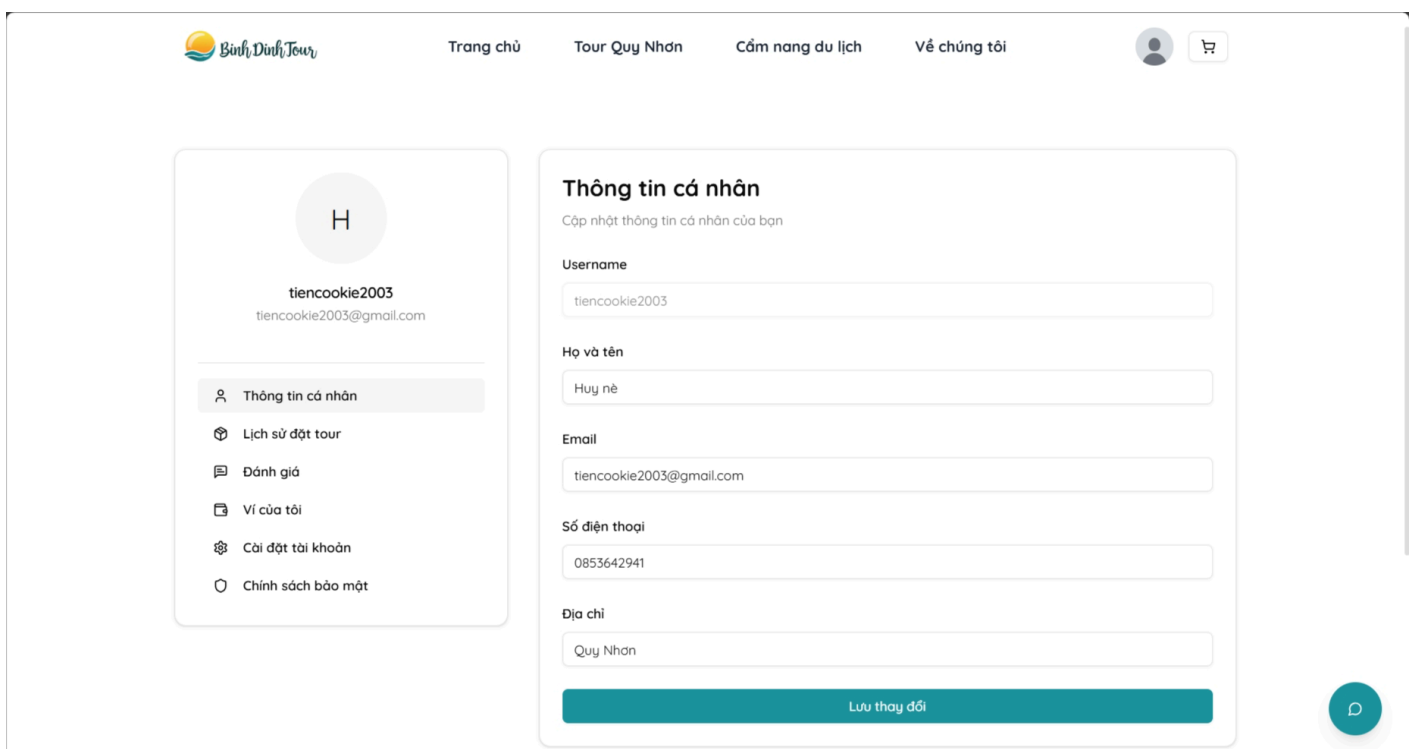


- **View profile**

Step 1: Click on “Trang cá nhân”

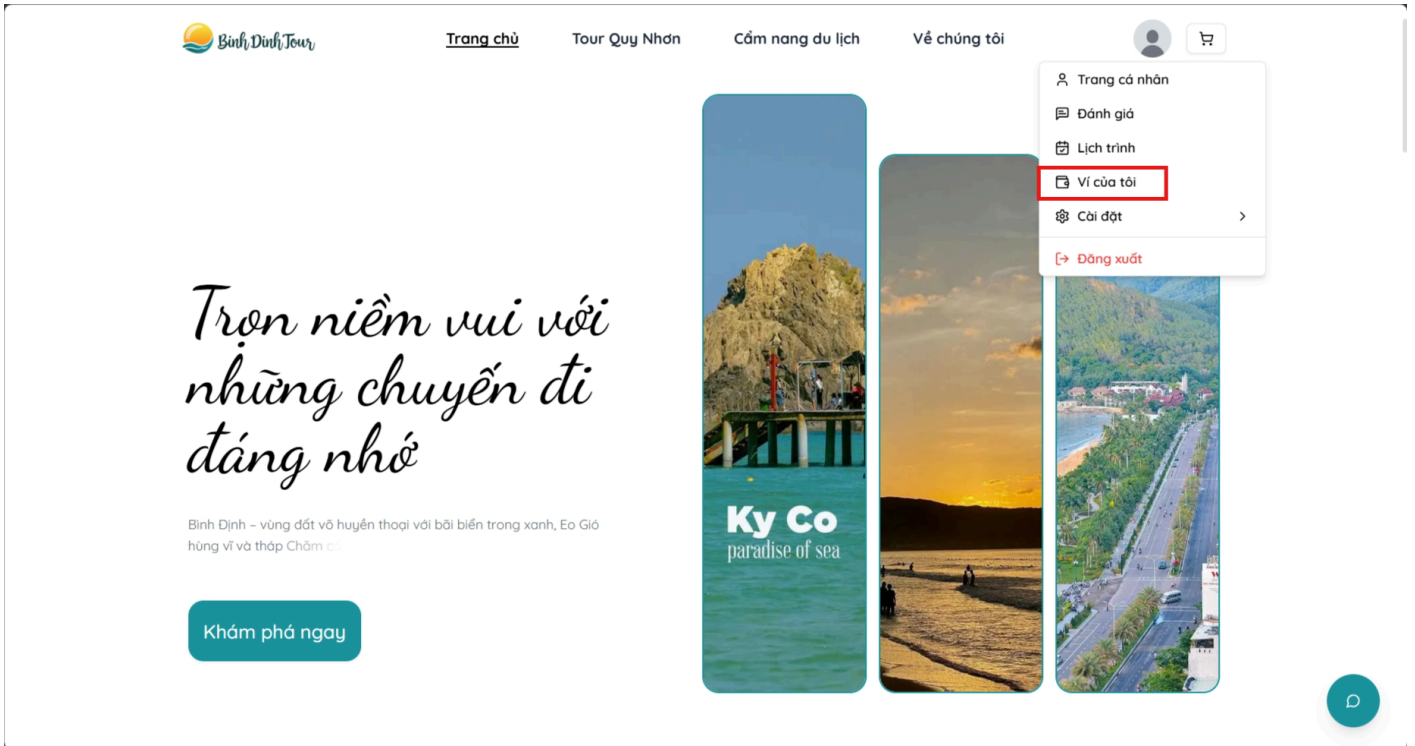


Step 2: View your profile

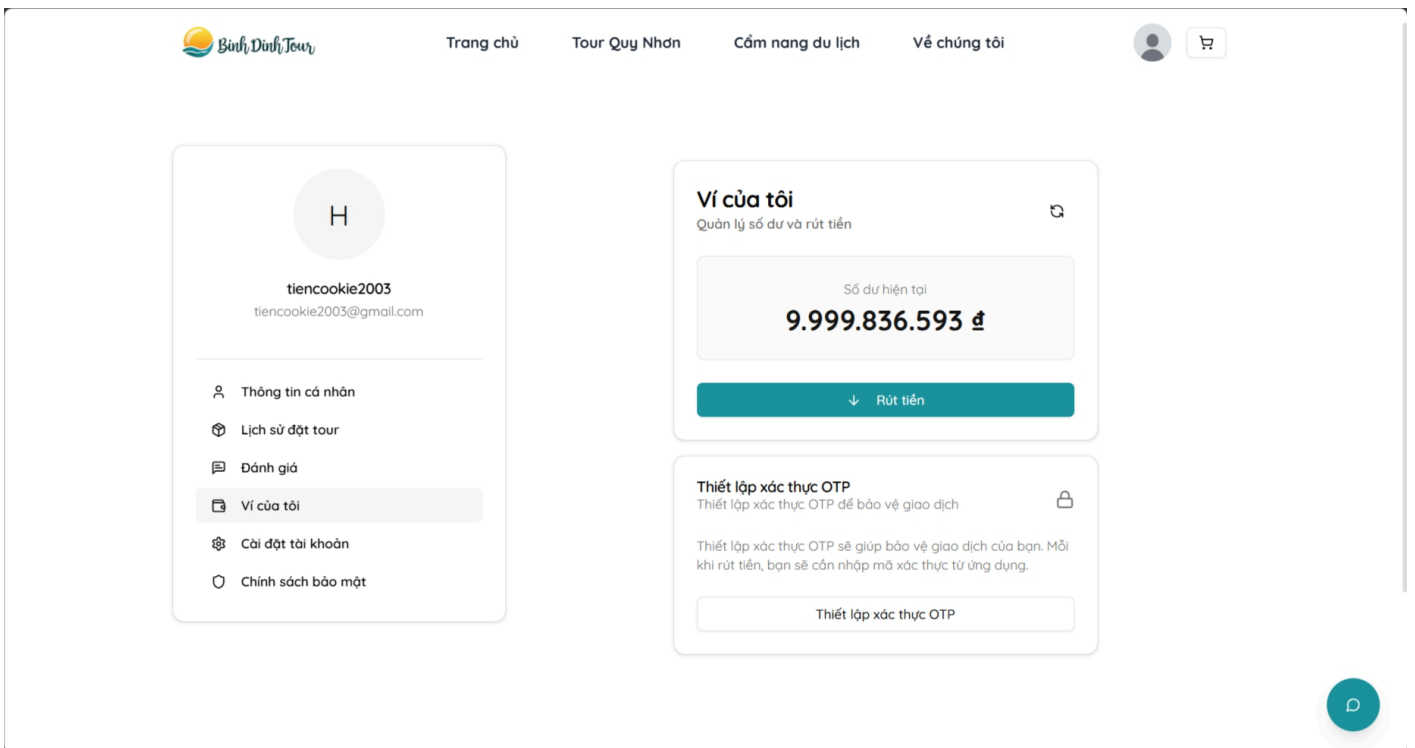


- **View wallet**

Step 1: Click on “Ví của tôi”



Step 2: View your wallet

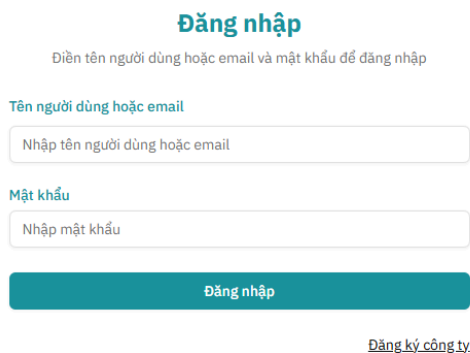


3.2.2 Web admin

- **Authorization - Login**

Step 1: Enter website <https://dtp-control-center.vercel.app/login>

Step 2: Enter the **username or email** and **password** for the operator or admin account that has been provided. Then click the '**Đăng nhập**' button. If the login is successful, you will be redirected to the dashboard page. If the logged-in account is an operator, the system will redirect to the operator dashboard. If it is an admin account, the system will redirect to the admin dashboard.

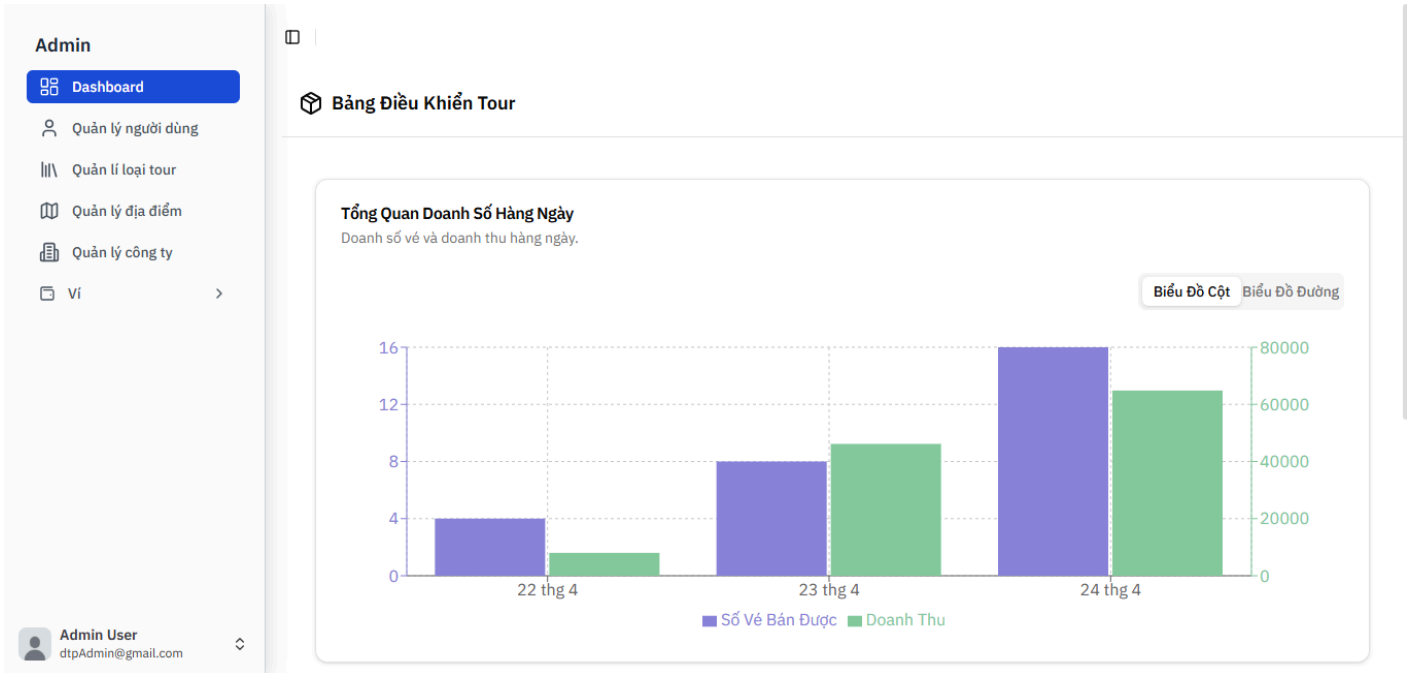


The image shows a login form with the following elements:

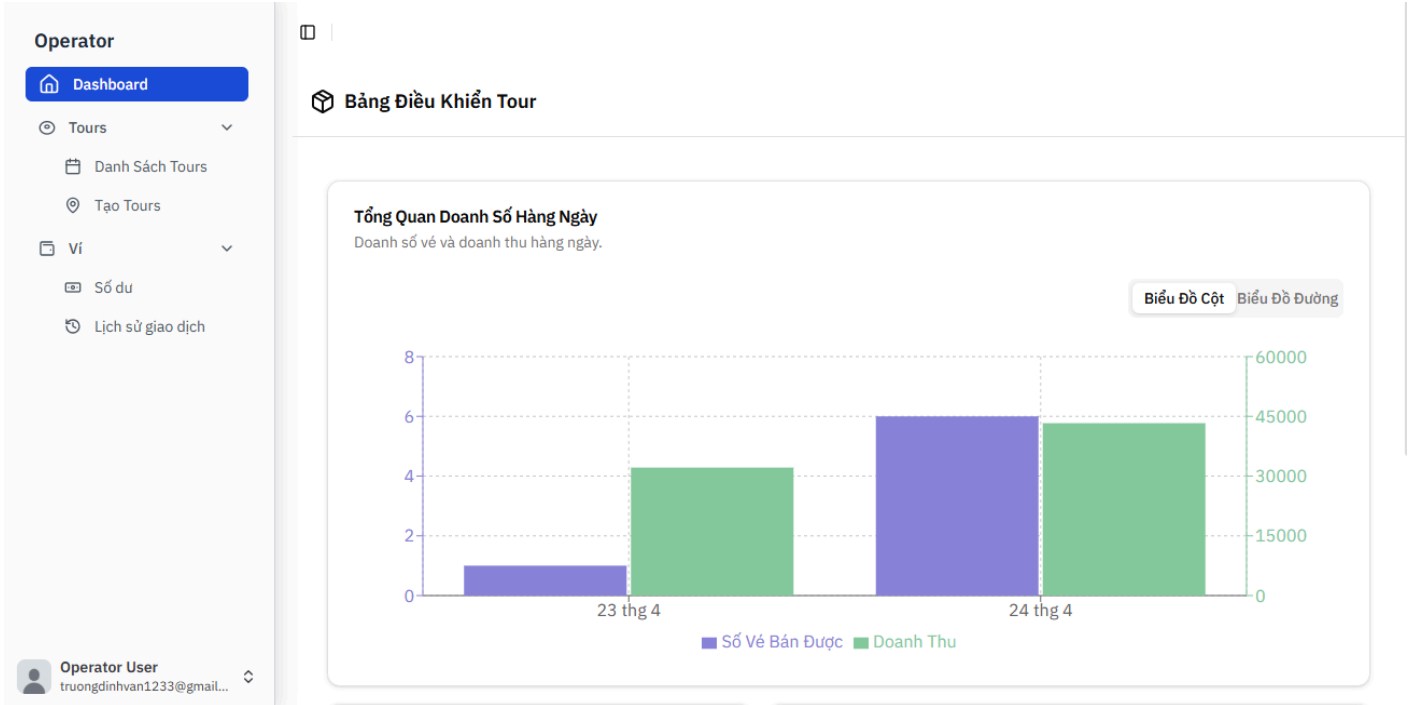
- Đăng nhập** (Login) - Title in bold blue text.
- Diễn tên người dùng hoặc email và mật khẩu để đăng nhập (Enter username or email and password to login) - Subtitle in gray text.
- Tên người dùng hoặc email** (Username or email) - Label in blue text above a white input field with the placeholder text "Nhập tên người dùng hoặc email".
- Mật khẩu** (Password) - Label in blue text above a white input field with the placeholder text "Nhập mật khẩu".
- Đăng nhập** (Login) - A teal button.
- [Đăng ký công ty](#) (Register company) - A link in gray text below the button.



admin dashboard



operator dashboard



- Admin - View List User**

Step 1: Click on `Quản lý người dùng` section on the left sidebar.

Admin

- Dashboard
- Quản lý người dùng**
- Quản lý loại tour
- Quản lý địa điểm
- Quản lý công ty
- Ví

Admin User
dtpAdmin@gmail.com

Quản lý người dùng

Làm mới Thêm người dùng

Tìm kiếm và lọc

Tìm theo tên người dùng hoặc email...

Vai trò: Tất cả vai trò
 Công ty: Tất cả công ty
 Số lượng danh mục mỗi trang: 10

Xóa bộ lọc

Hiển thị cột 6

Tên người dùng	Email	Công ty	Vai trò	Trạng thái	Thao tác
tiencookie2003	tiencookie2003@gmail.com	N/A	Tourist	Hoạt động	
pigob92848@f5url.com	pigob92848@f5url.com	Eê111111	Operator	Hoạt động	
truongdinhvan1233	truongdinhvan1233@gmail.com	123123	Operator	Hoạt động	

- **Admin - Create User**

Step 1: Click on `Thêm người dùng`

Admin

- Dashboard
- Quản lý người dùng**
- Quản lý loại tour
- Quản lý địa điểm
- Quản lý công ty
- Ví

Admin User
dtpAdmin@gmail.com

Quản lý người dùng

Làm mới **Thêm người dùng**

Tìm kiếm và lọc

Tìm theo tên người dùng hoặc email...

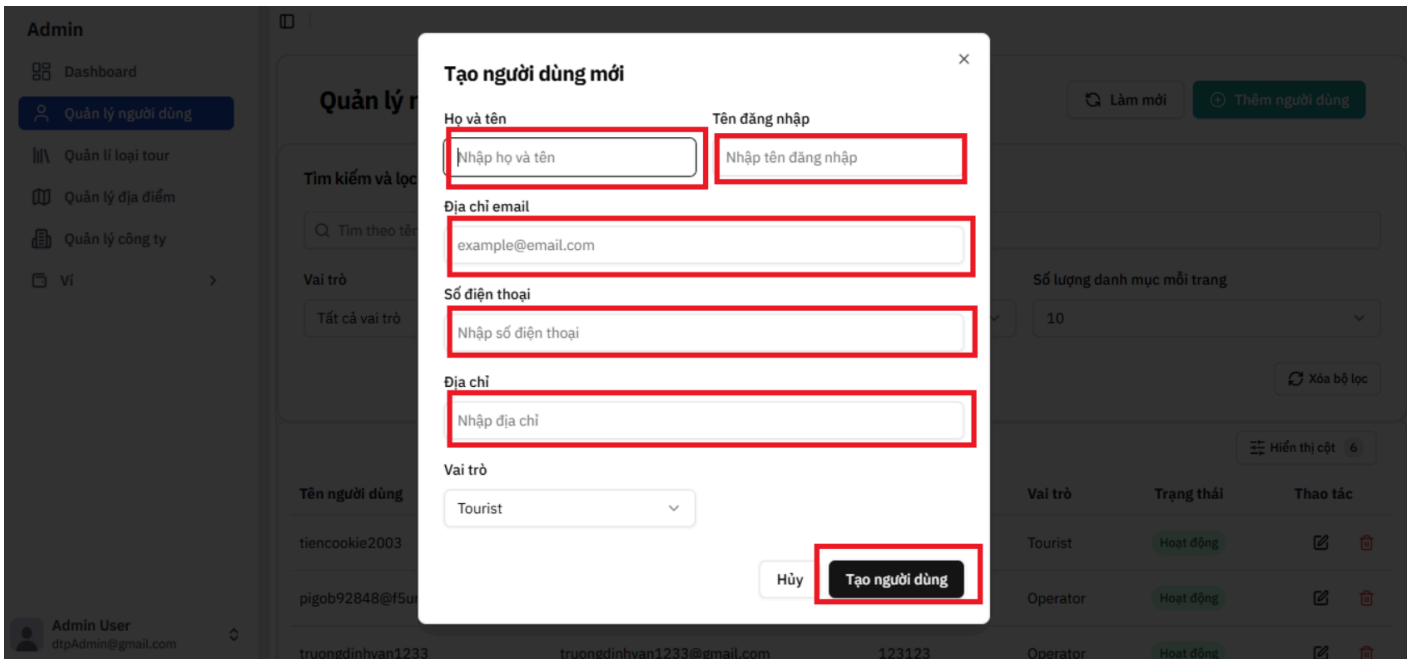
Vai trò: Tất cả vai trò
 Công ty: Tất cả công ty
 Số lượng danh mục mỗi trang: 10

Xóa bộ lọc

Hiển thị cột 6

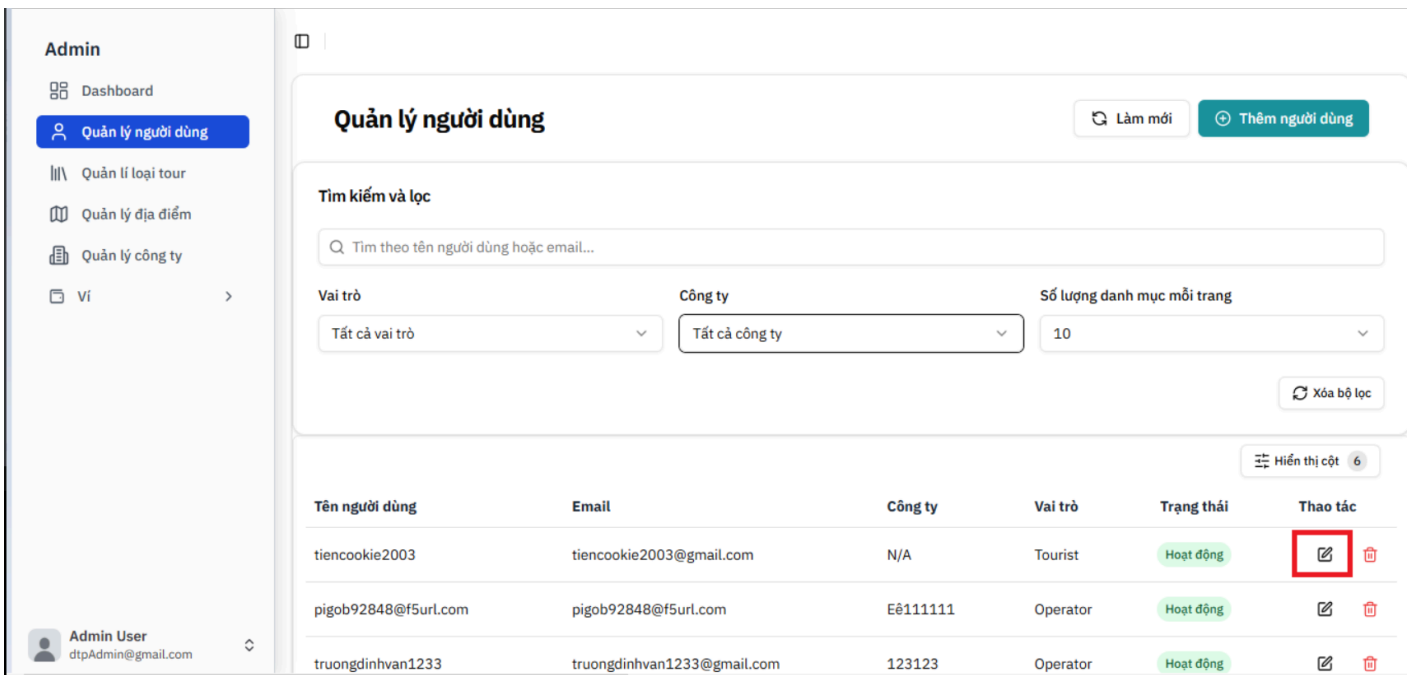
Tên người dùng	Email	Công ty	Vai trò	Trạng thái	Thao tác
tiencookie2003	tiencookie2003@gmail.com	N/A	Tourist	Hoạt động	
pigob92848@f5url.com	pigob92848@f5url.com	Eê111111	Operator	Hoạt động	
truongdinhvan1233	truongdinhvan1233@gmail.com	123123	Operator	Hoạt động	

Step 2: Fill in all the required user information fields, then click “Tạo người dùng”.

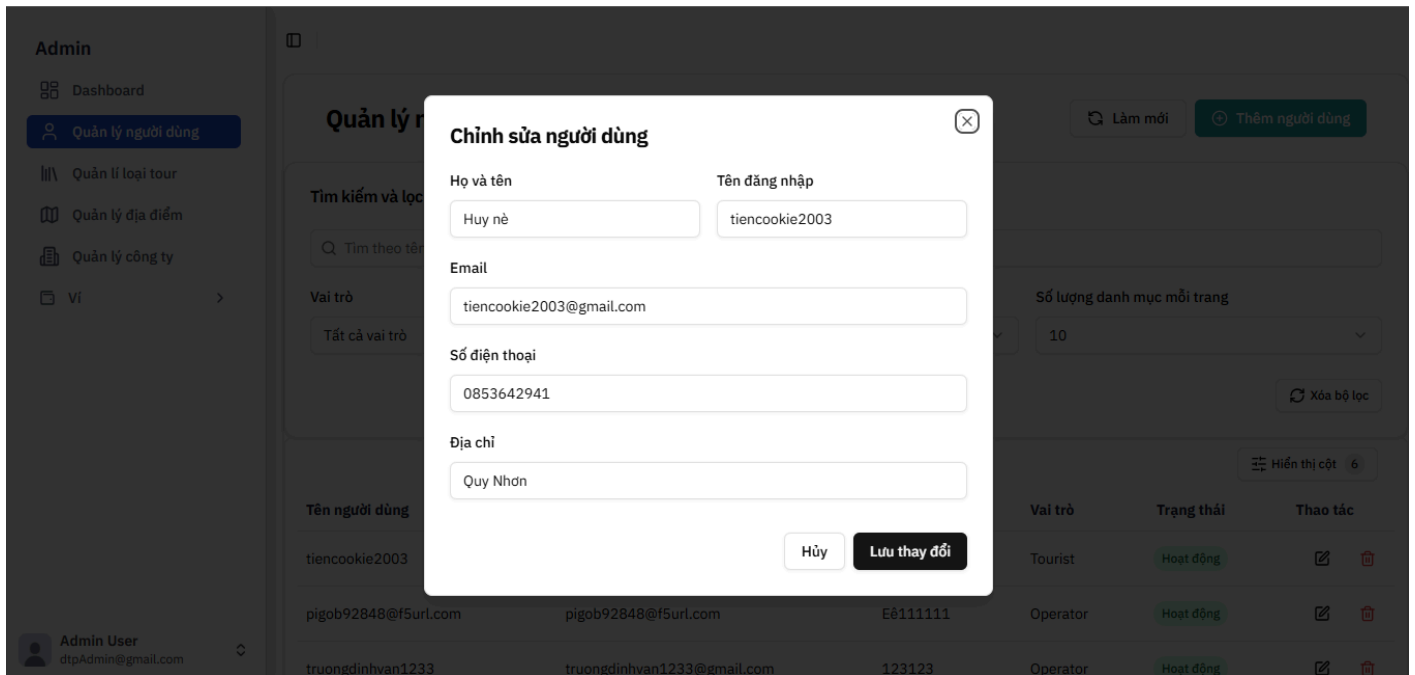


- **Admin - Edit User**

Step 1: In the user list, click on the icon 'Edit'. Then the dialog Edit user will appear.

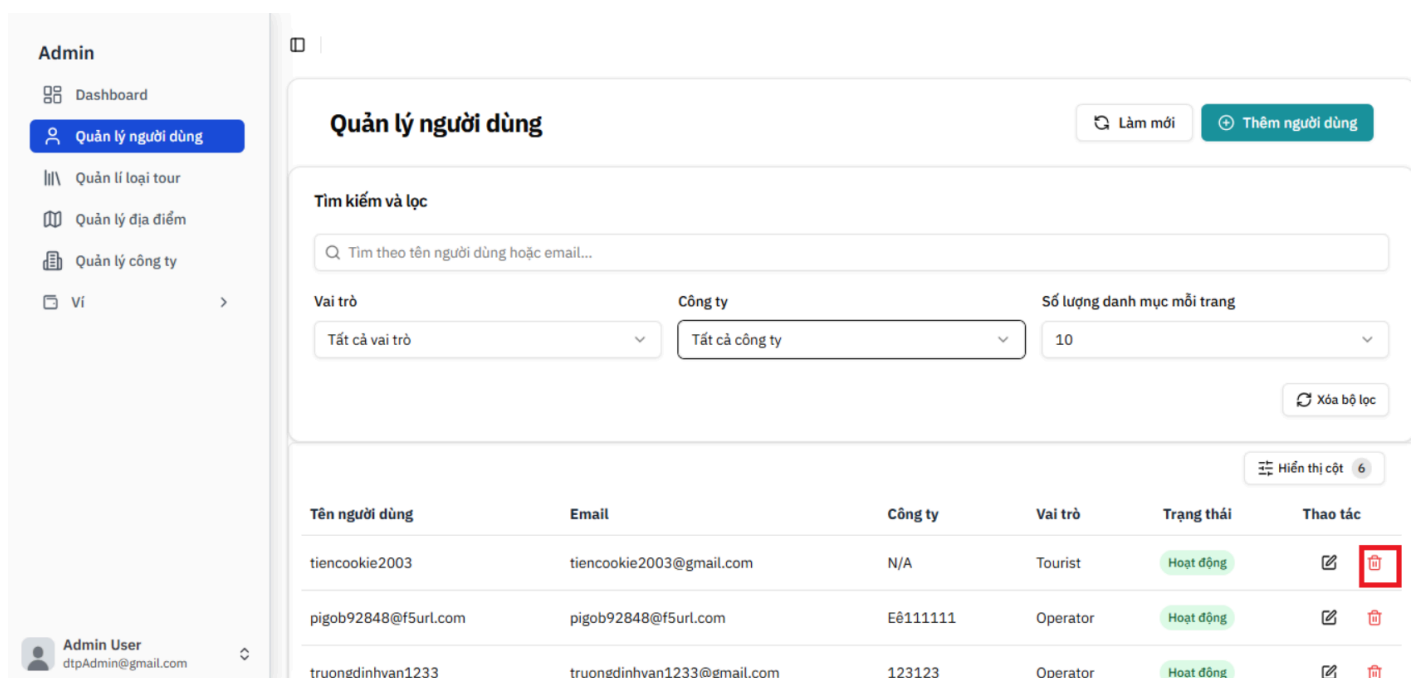


Step2: Edit the information you want to change, then click “Lưu thay đổi”.

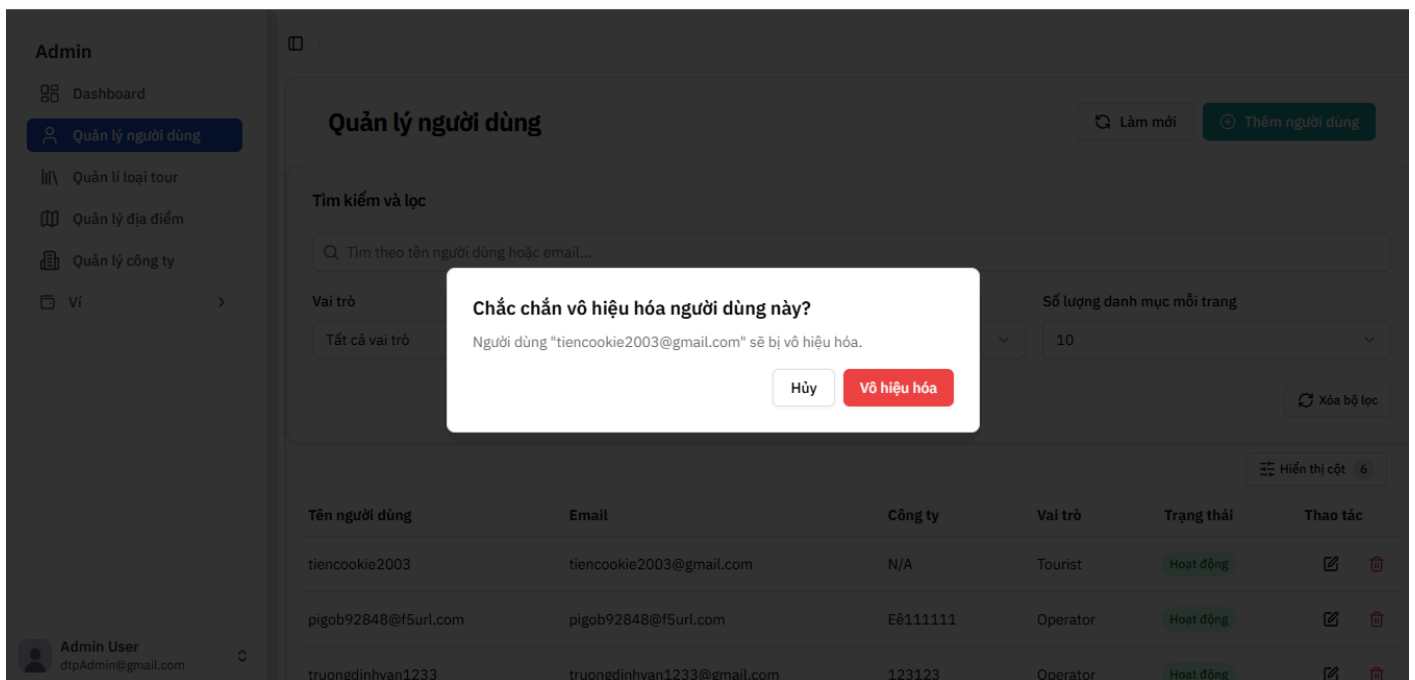


- **Admin - InActive user**

Step1: Click on 'Trash Icon'. Then InActive confirm dialog will appear.

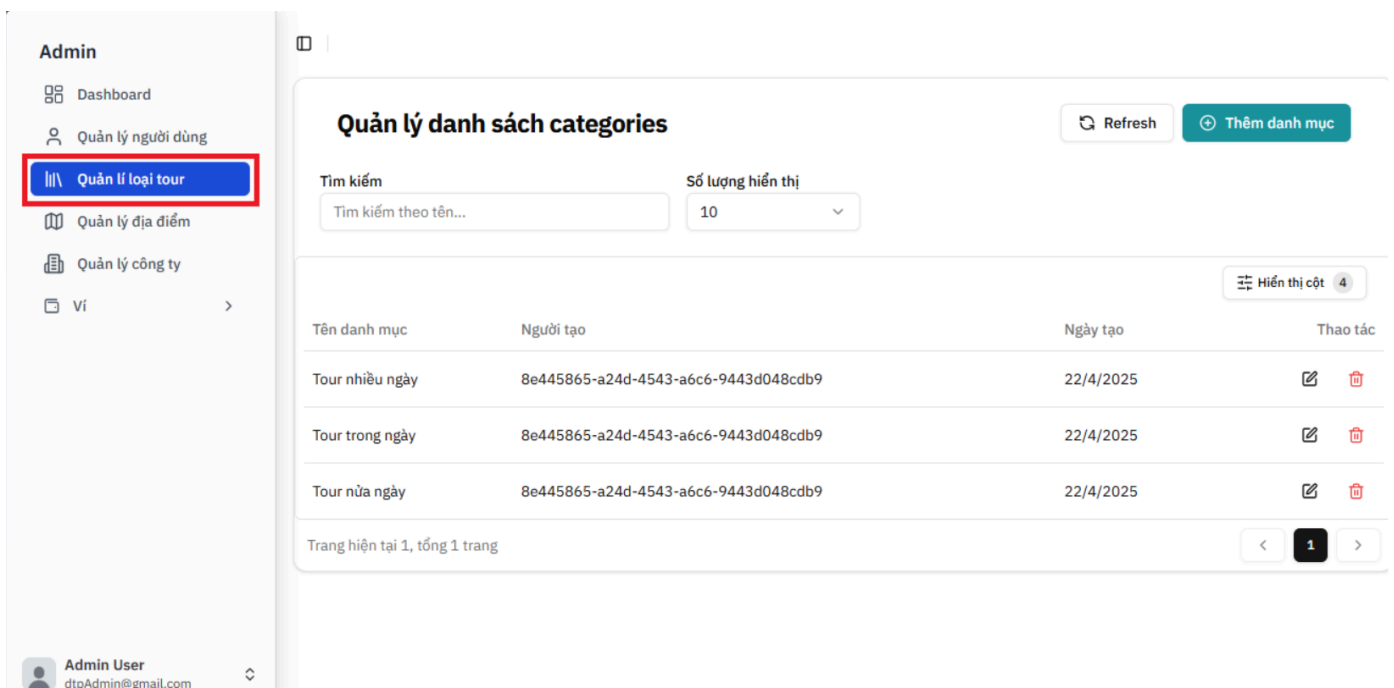


Step 2: Click on "Vô hiệu hóa" for InActive user.



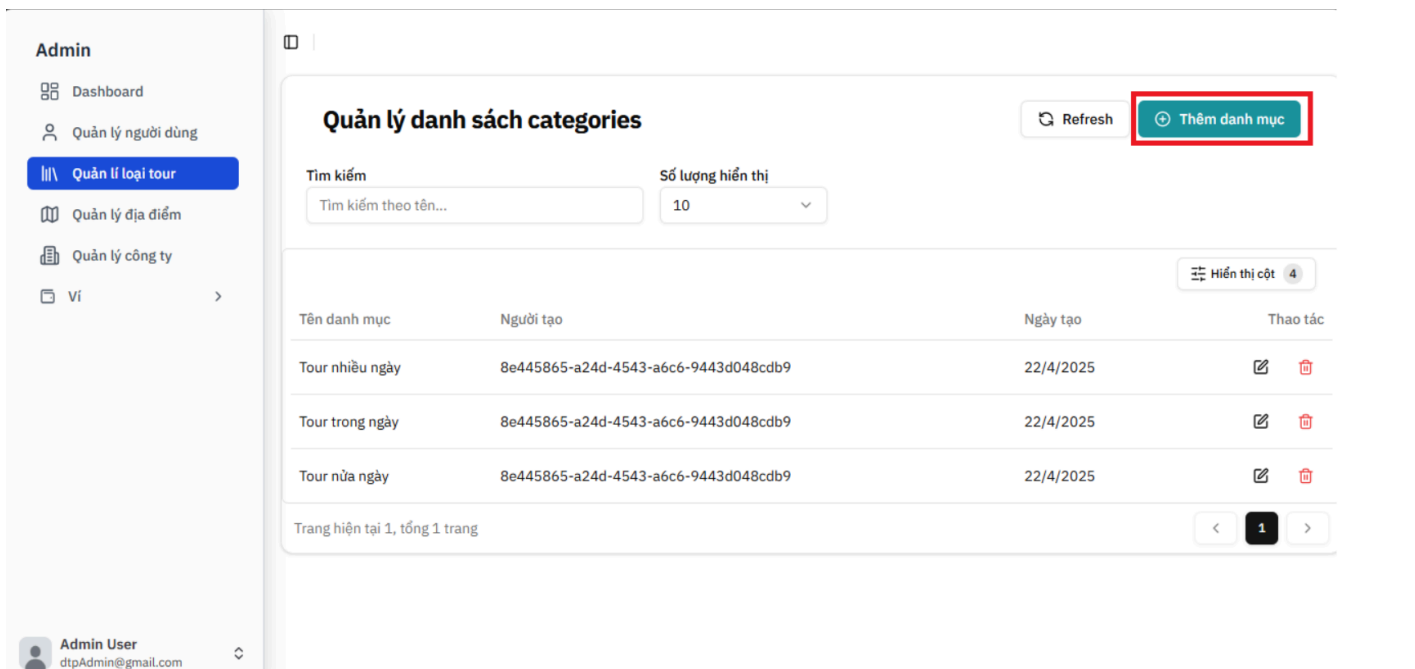
- **Admin - View List Category**

Step 1: Click on `Quản lý loại tour` section on the left sidebar.

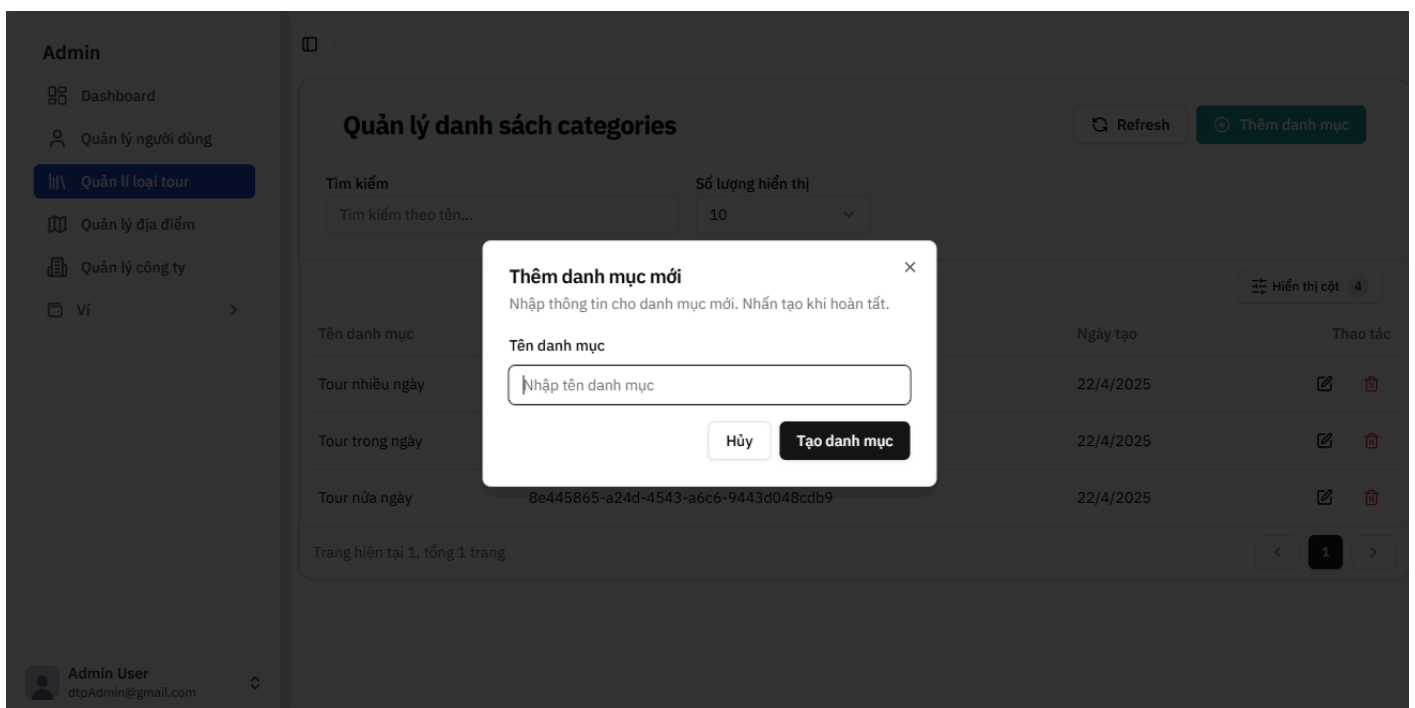


- **Admin - Create Category**

Step 1: Click on `Thêm danh mục`

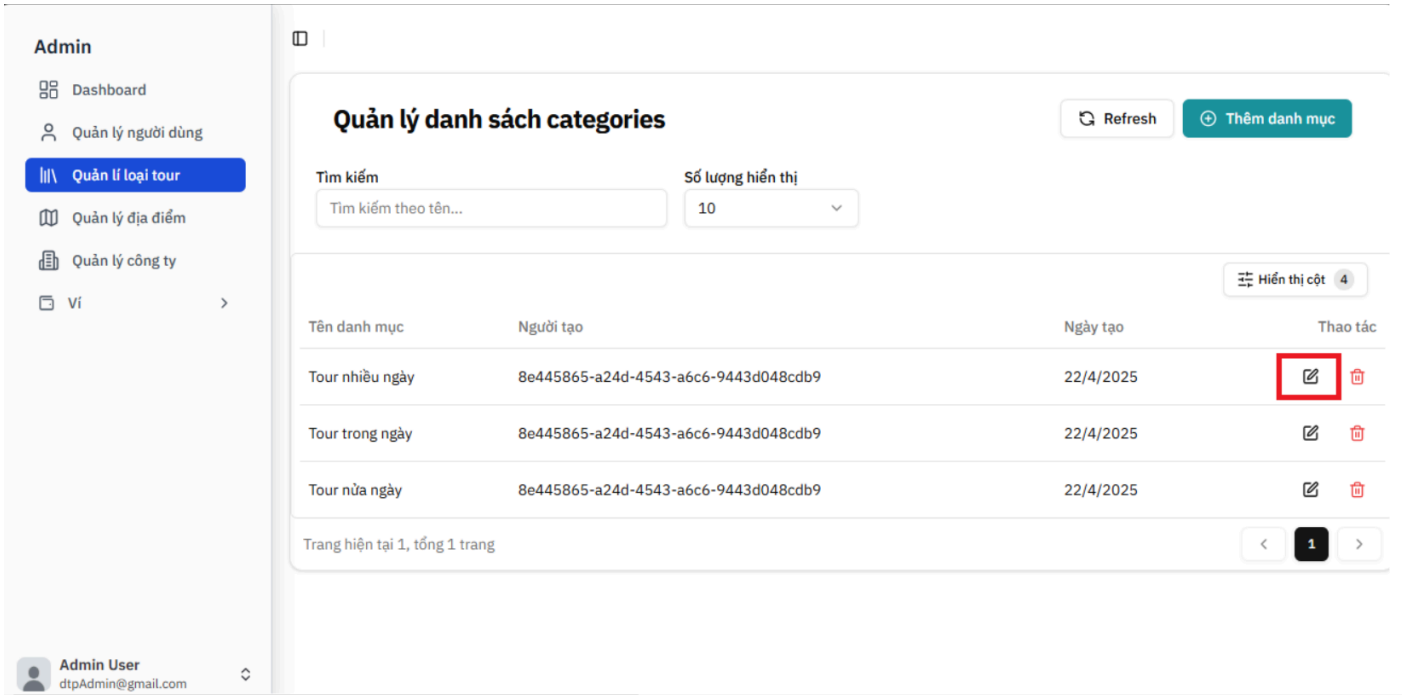


Step 2: Fill 'categories name' then click on 'Tạo danh mục'

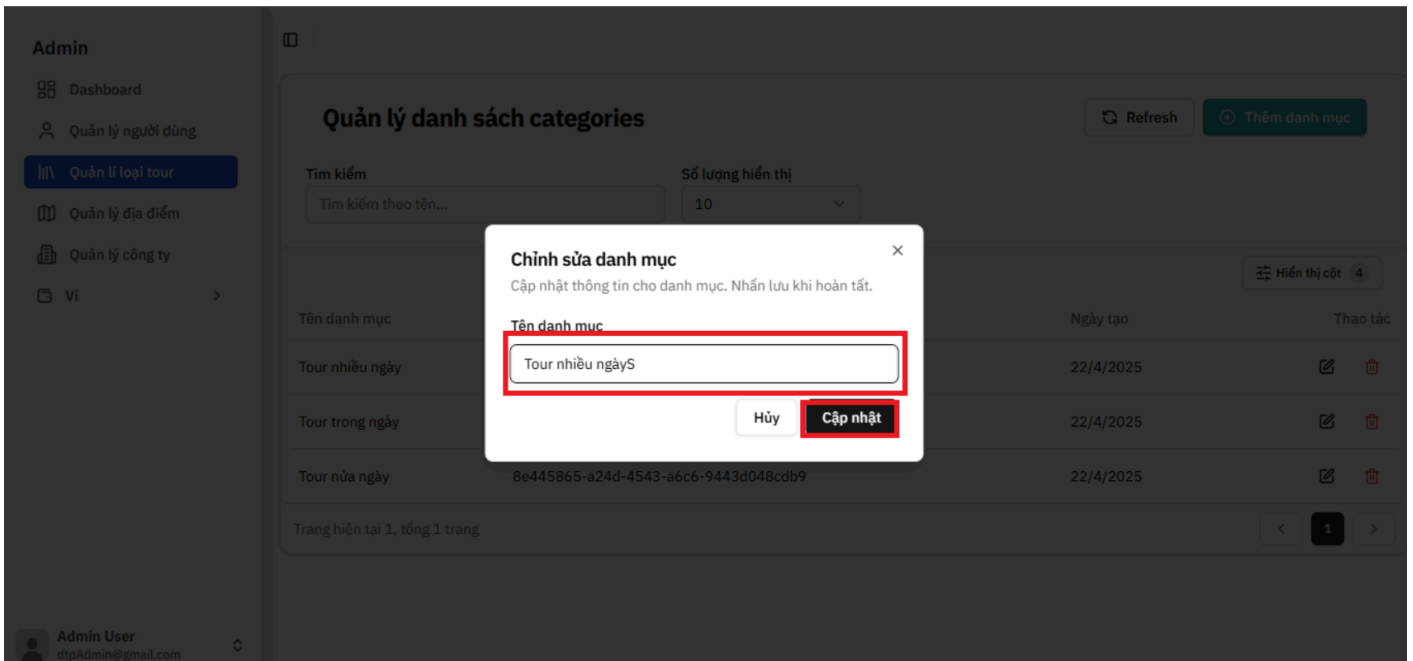


- **Admin - Edit Category**

Step 1: Click on button `Edit`

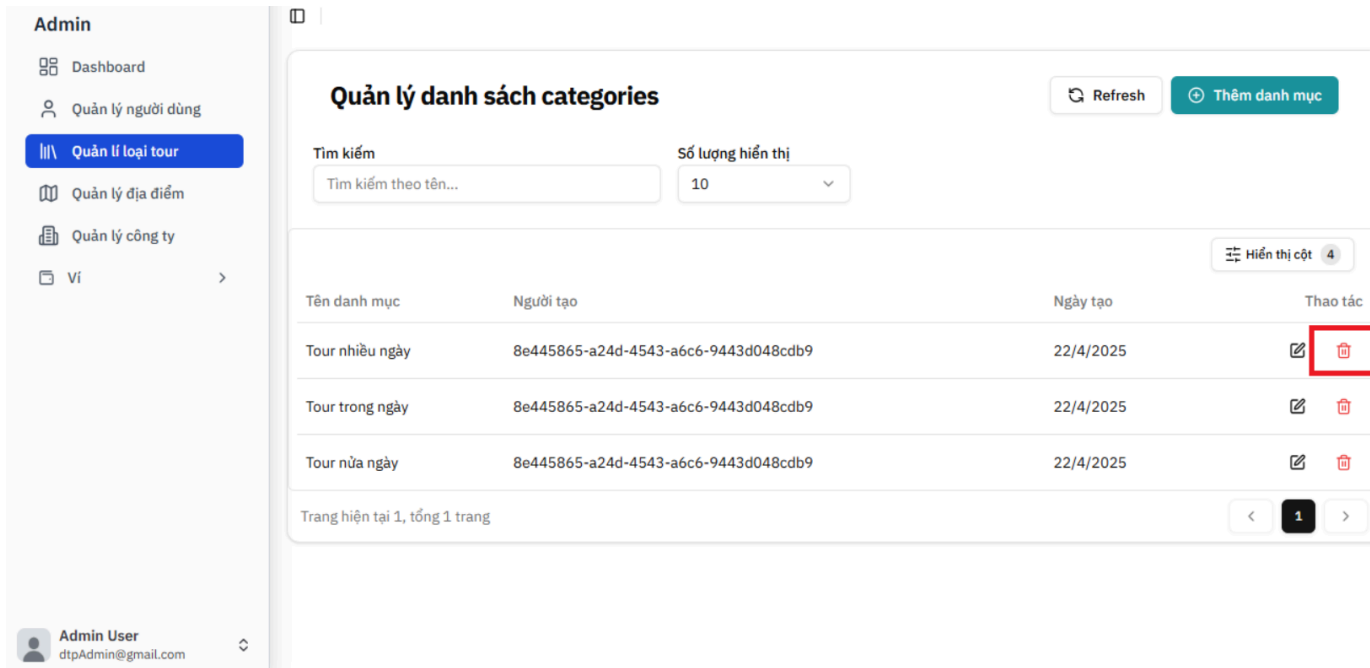


Step 2: Change categories you want and click 'Cập nhật'.

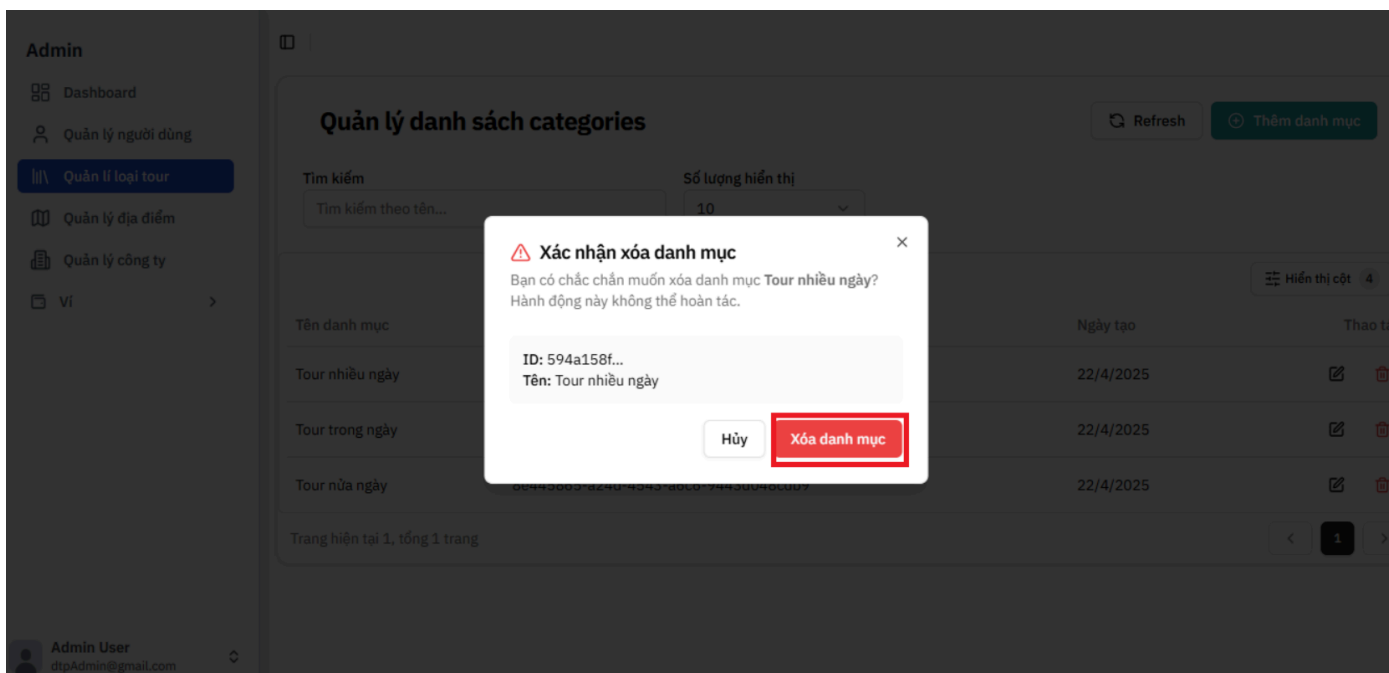


- **Admin - Delete Category**

Step 1: Click on 'Trash' button then dialog confirm dialog will appear.



Step 2: Click on 'Xóa danh mục' for delete.



- **Admin - View List Destination**

Step 1: Click on 'Quản lý địa điểm' section on the left sidebar. Then list destination will appear

Admin

- Dashboard
- Quản lý người dùng
- Quản lý loại tour
- Quản lý địa điểm**
- Quản lý công ty
- Ví

Admin User
dtpAdmin@gmail.com

Quản lý danh sách điểm đến

Refresh Thêm điểm đến

Tim kiếm Số lượng hiển thị

Tim kiếm theo tên... 10

Hiện thị cột 2

Tên điểm đến	Thao tác
Duong Long Champa 3 Towers	
Tháp Dôi	
Tháp Bánh Ít	
Nhà Thờ Mằng Lăng	
Gành Đá Đĩa	
Tháp Nghinh Phong	

- **Admin - Create Destination**

Step 1: Click on 'Thêm điểm đến' button then create dialog will appear.

Admin

- Dashboard
- Quản lý người dùng
- Quản lý loại tour
- Quản lý địa điểm**
- Quản lý công ty
- Ví

Admin User
dtpAdmin@gmail.com

Quản lý danh sách điểm đến

Refresh Thêm điểm đến

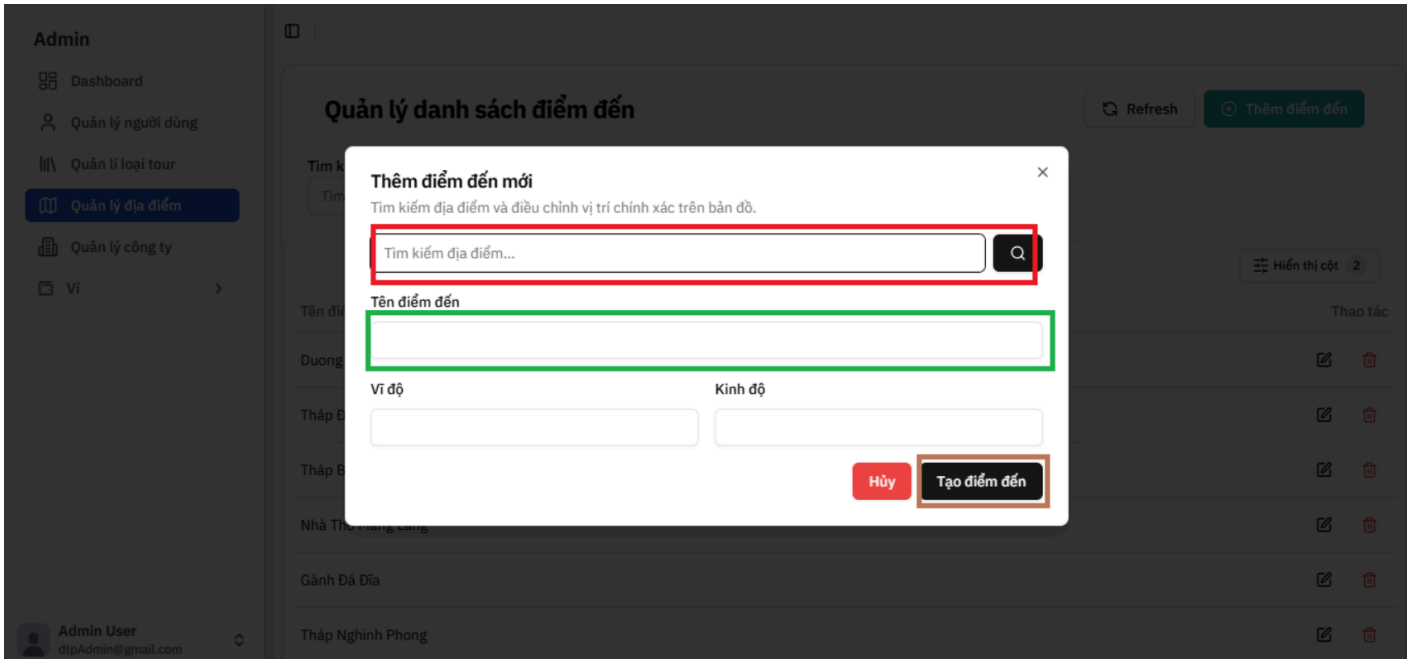
Tim kiếm Số lượng hiển thị

Tim kiếm theo tên... 10

Hiện thị cột 2

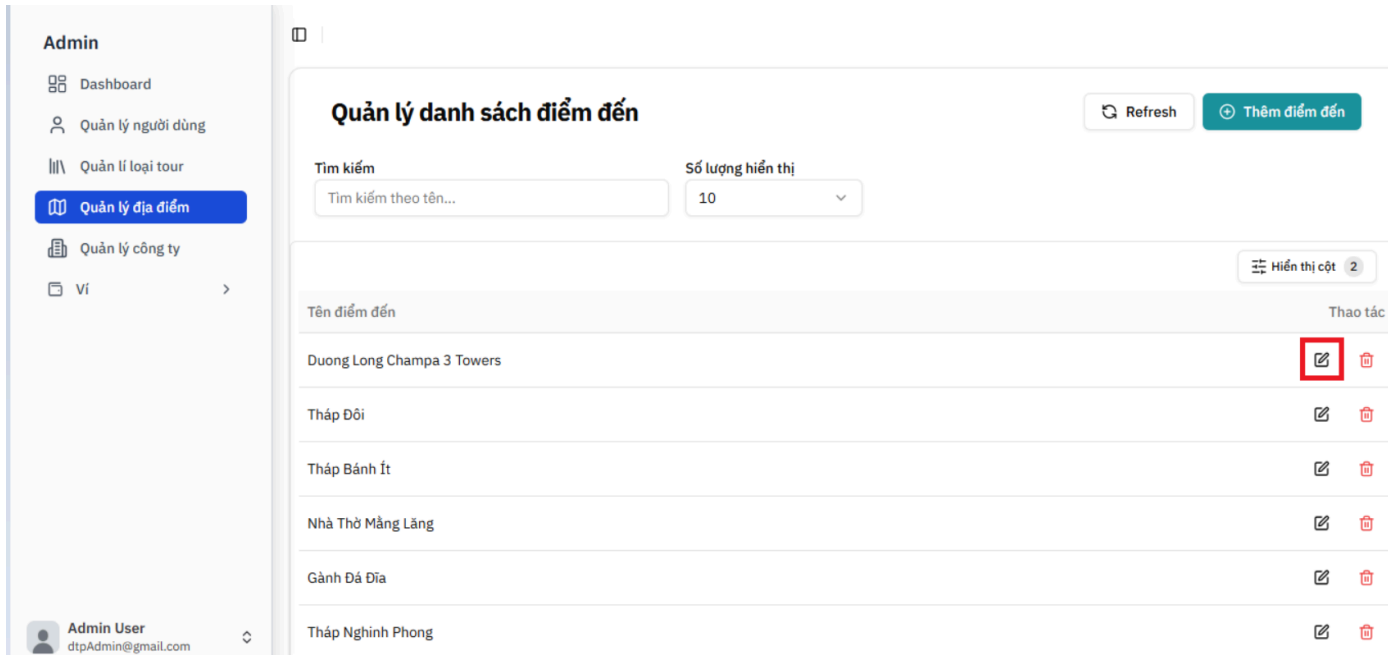
Tên điểm đến	Thao tác
Duong Long Champa 3 Towers	
Tháp Dôi	
Tháp Bánh Ít	
Nhà Thờ Mằng Lăng	
Gành Đá Đĩa	
Tháp Nghinh Phong	

Step 2: In the red box, you can find the destination with mapp and save it to the database or you can manually input the destination name in the green box. And after that click on 'Tạo điểm đến'.

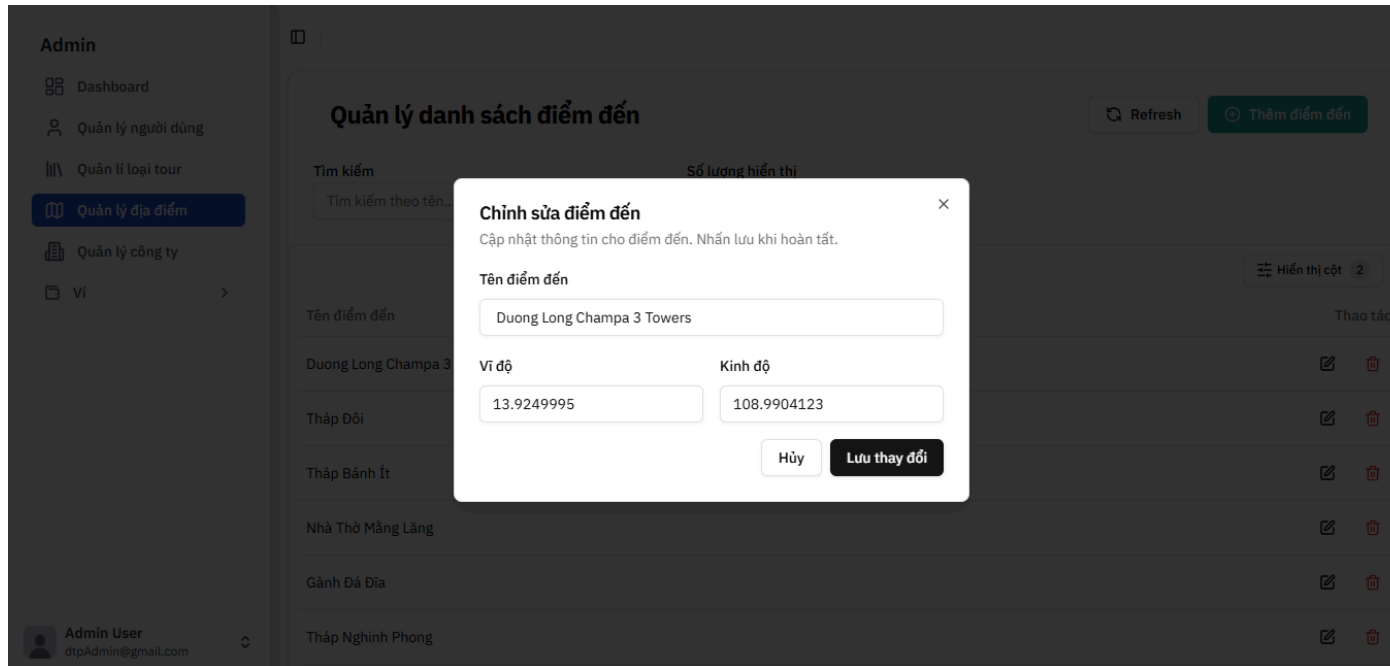


- **Admin - Edit Destination**

Step 1: Click on 'Edit' button then edit dialog will appear.

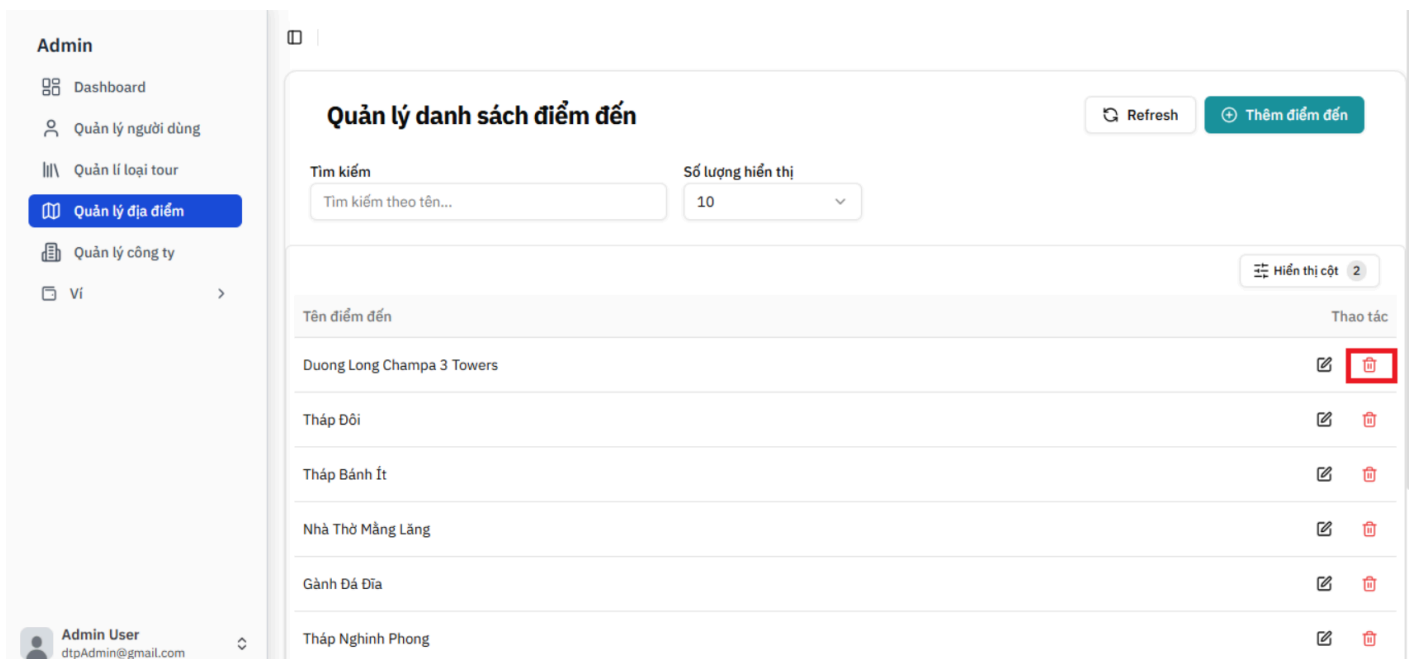


Step2: You can change destination name and more info. After that click 'Lưu thay đổi'.

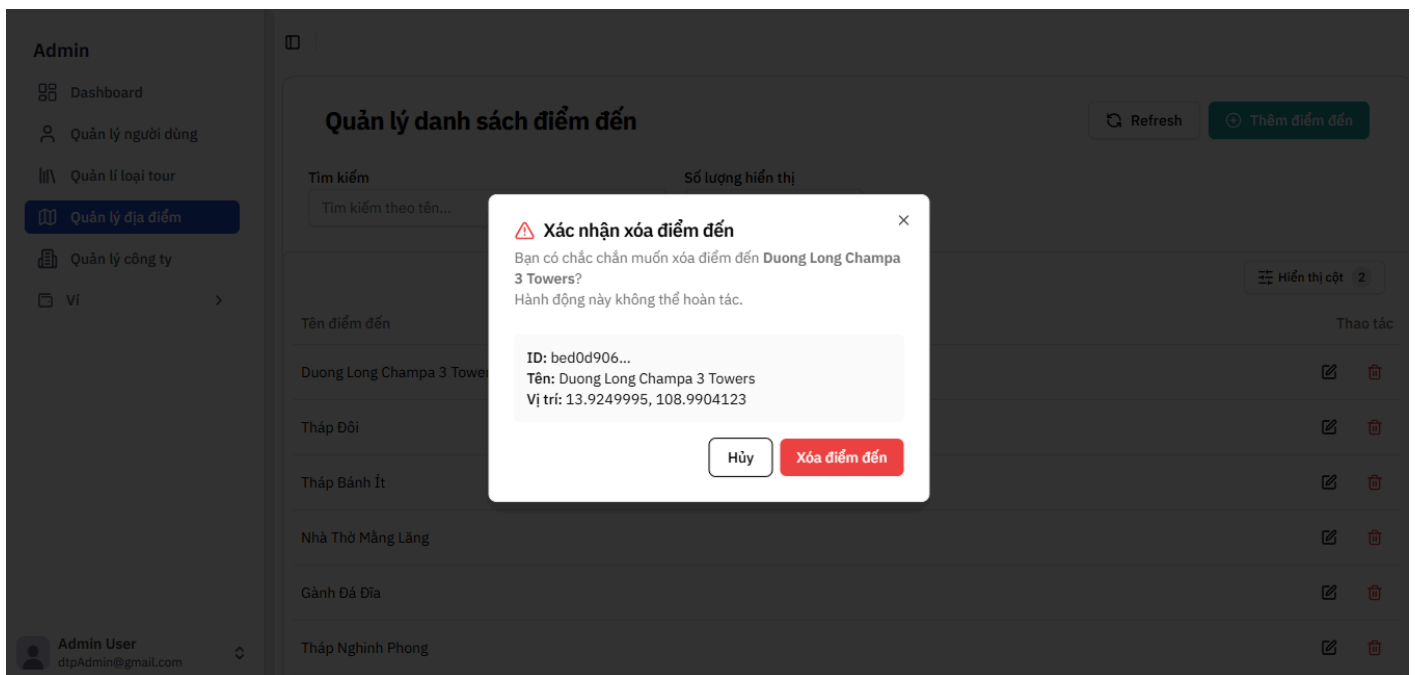


- Admin - Delete Destination

Step 1: Click on the "Trash" button then dialog confirms delete will appear.

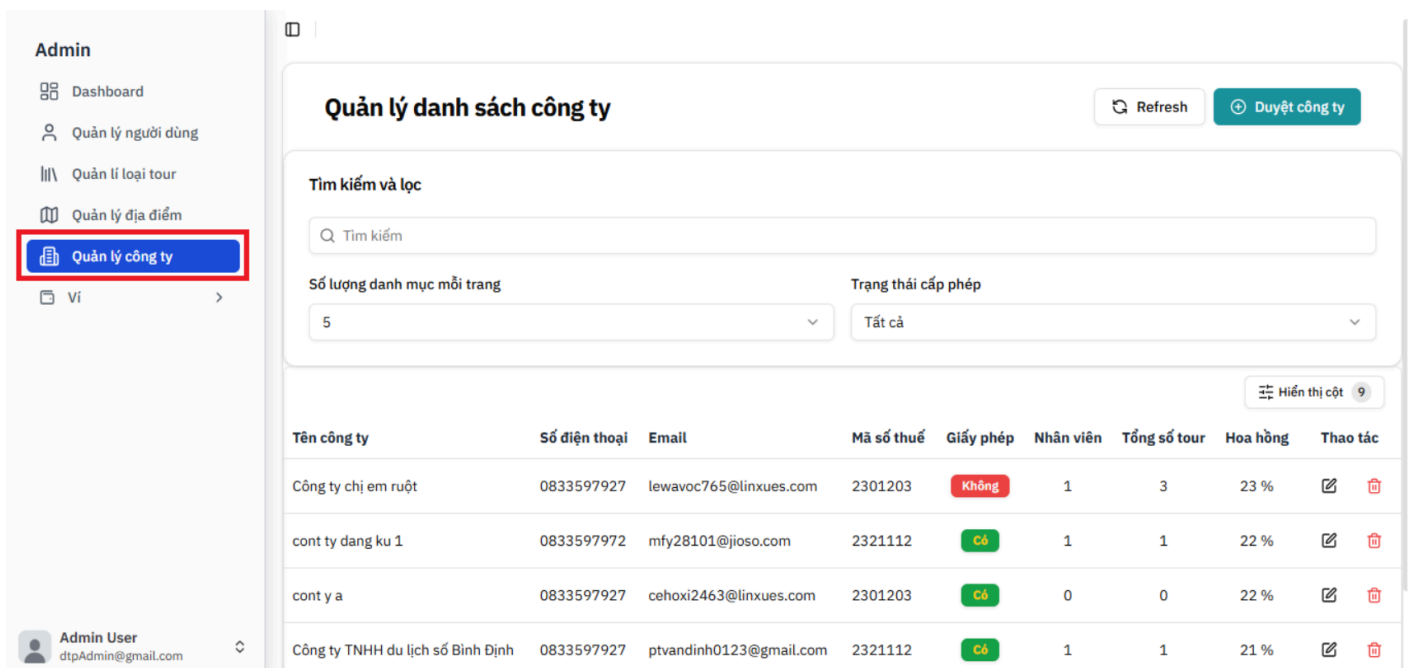


Step 2: Click on 'Xóa điểm đến'



- **Admin - View List Company**

Step 1: Click on “Quản lý công ty” section on left sidebar. Then a list company will appear.



- **Admin - Partner Registration and Approval List**

Step 1: Click on “Duyệt công ty” button.

Admin

- Dashboard
- Quản lý người dùng
- Quản lý loại tour
- Quản lý địa điểm
- Quản lý công ty**
- Ví

Admin User
dtpAdmin@gmail.com

Quản lý danh sách công ty

Refresh **Duyệt công ty**

Tìm kiếm và lọc

Tìm kiếm

Số lượng danh mục mỗi trang: 5 | Trạng thái cấp phép: Tất cả

Hiện thị cột 9

Tên công ty	Số điện thoại	Email	Mã số thuế	Giấy phép	Nhân viên	Tổng số tour	Hoa hồng	Thao tác
Công ty chị em ruột	0833597927	lewavoc765@linuxes.com	2301203	Không	1	3	23 %	
cont ty dang ku 1	0833597972	mfy28101@jioso.com	2321112	Có	1	1	22 %	
cont y a	0833597927	cehoxi2463@linuxes.com	2301203	Có	0	0	22 %	
Công ty TNHH du lịch số Bình Định	0833597927	ptvandinh0123@gmail.com	2321112	Có	1	1	21 %	

Then a list of companies currently registering to become partners will appear.

Step 2: Click on 'Duyệt' to approve the company request.

Admin

- Dashboard
- Quản lý người dùng
- Quản lý loại tour
- Quản lý địa điểm
- Quản lý công ty**
- Ví

Admin User
dtpAdmin@gmail.com

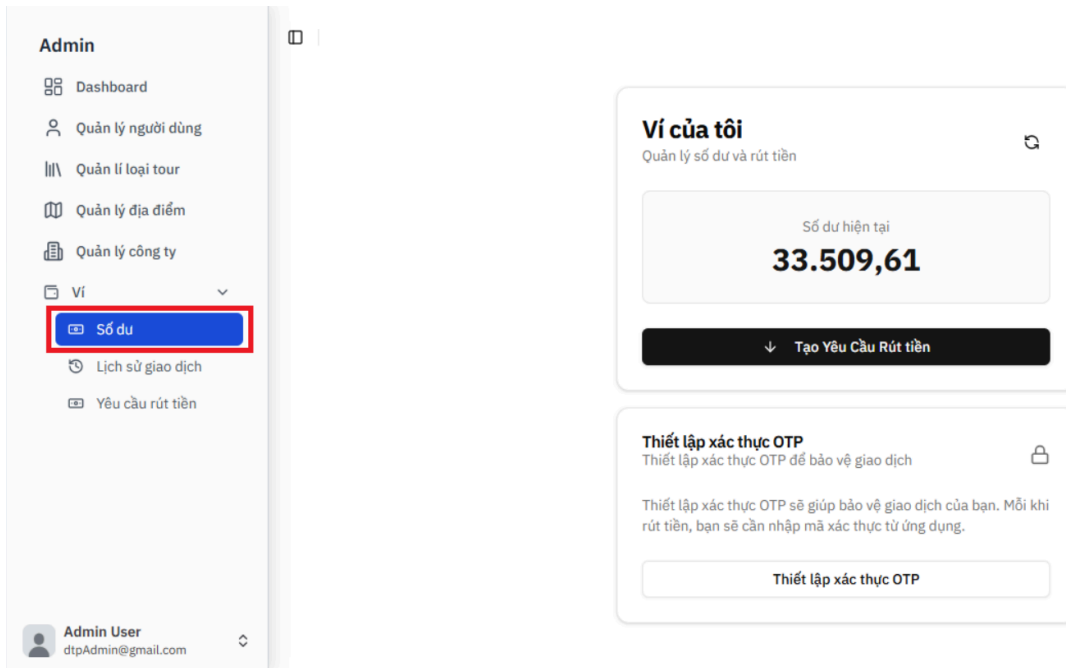
Duyệt đăng ký công ty

Refresh **Duyệt công ty**

Tên công ty	Email	Số điện thoại	Mã số thuế	Trạng thái	Hành động
Công ty chị em ruột	lewavoc765@linuxes.com	0833597927	2301203	Chờ duyệt	Duyệt
Công ty TNHH Mai Mai	sson0909090@gmail.com	+84972839374	12131312	Chờ duyệt	Duyệt

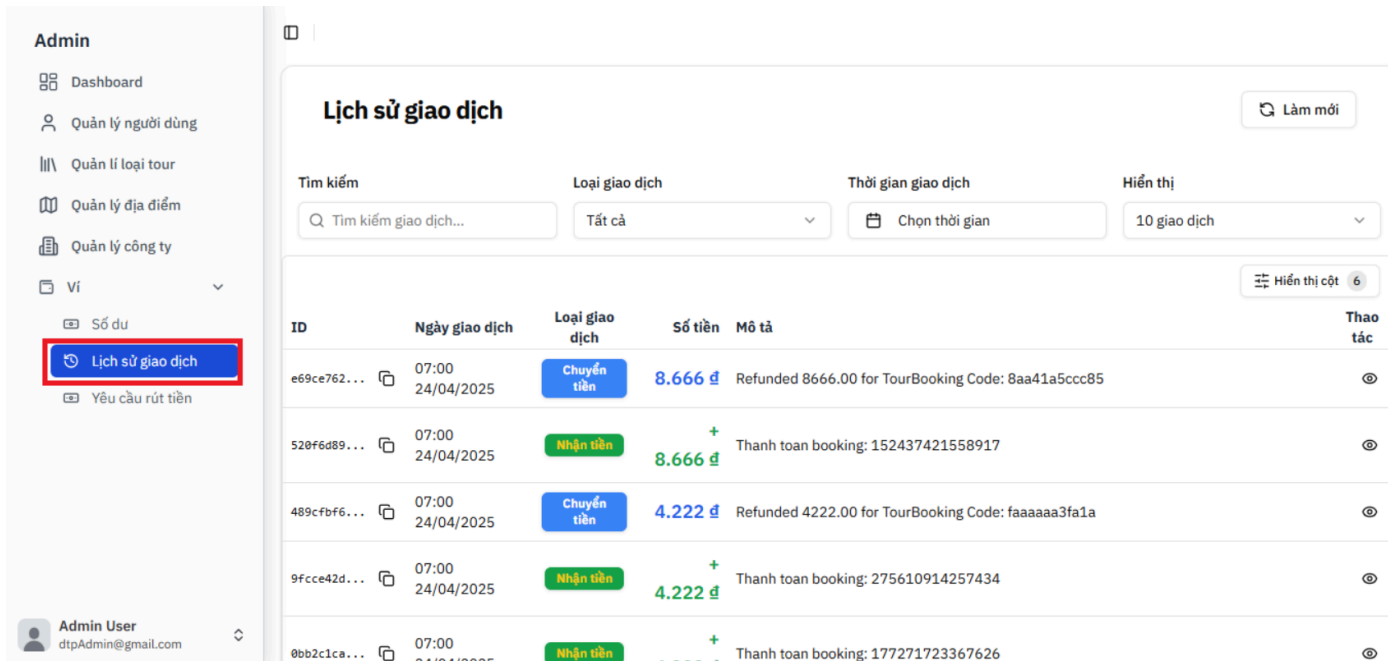
- **Admin - View Wallet**

Step 1: Click on 'Số dư' section on left sidebar.



- **Admin- View Transaction History**

Step 1: Click on 'Lịch sử giao dịch' section on left sidebar.



- **Admin - View Request Withdraw and accept withdraw**

Step 1: Click on 'Yêu cầu rút tiền' section on left sidebar.

Admin

- Dashboard
- Quản lý người dùng
- Quản lý loại tour
- Quản lý địa điểm
- Quản lý công ty
- Ví
 - Số dư
 - Lịch sử giao dịch
 - Yêu cầu rút tiền**

Yêu cầu rút tiền

Làm mới

Tìm kiếm:

Trạng thái:

Thời gian tạo:

Hiển thị:

Hiện thị cột: 8

ID	Ngày yêu cầu	Công ty	Mã yêu cầu	Trạng thái	Số tiền	Mô tả	Thao tác
36c022ee...	07:00 24/04/2025	Will Company	01e3732621356	Hoàn thành	- 100.000 đ	Withdraw 100000	
3cf54299...	07:00 23/04/2025	—	99048584099d7	Hoàn thành	- 100.000 đ	Withdraw 100000	
4e691da3...	07:00 23/04/2025	—	c97027240b742	Chờ xử lý	- 100.000 đ	Withdraw 100000	Duyệt
3d7c31c6...	07:00 23/04/2025	Công ty chị em ruột	82622429e9724	Hoàn thành	- 9.999.999 đ	Withdraw 9999999	
ac74024a...	07:00 23/04/2025	Công ty chị em ruột	5569595269426	Chờ xử lý	- 1.000.000 đ	Withdraw 1000000	Duyệt
d29eb820...	07:00 23/04/2025	Công ty chị em ruột	696982898e439	Chờ xử lý	- 10.000.000 đ	Withdraw 10000000	Duyệt
9e67d897...	07:00 23/04/2025	Công ty chị em ruột	2899795526552	Chờ xử lý	- 1.000.000 đ	Withdraw 1000000	Duyệt

Admin User
dtpAdmin@gmail.com

Step 2: Click on 'Duyệt' to accept withdrawal.

- Operator - View List Tour**

Step 1: Login Operator account. Click on "Danh sách tours" section on left sidebar.

Operator

- Dashboard
- Tours
 - Danh Sách Tours**
 - Tạo Tours
- Ví
 - Số dư
 - Lịch sử giao dịch

Quản lý tour

Refresh

Tìm kiếm và Lọc

Trạng thái:

Items per page:

Hiện thị 2 trong tổng số 2 tour

Hiện thị cột: 4

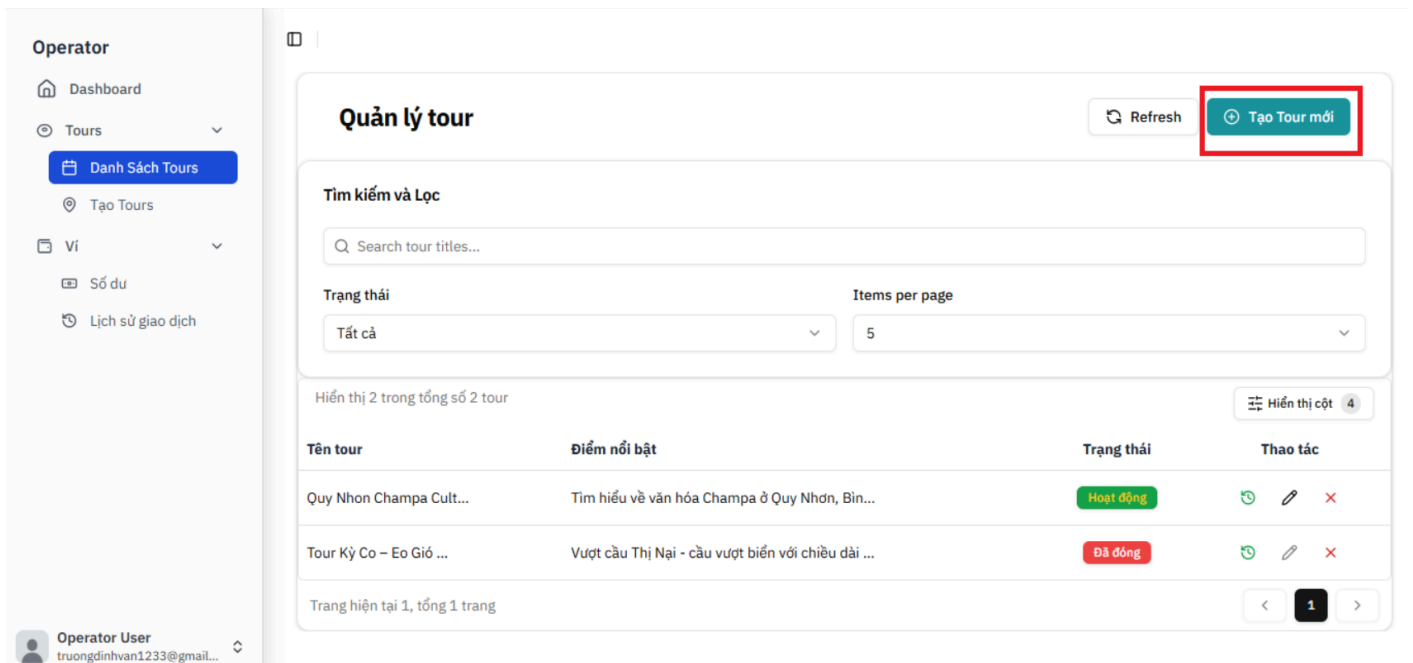
Tên tour	Điểm nổi bật	Trạng thái	Thao tác
Quy Nhơn Champa Cult...	Tim hiểu về văn hóa Champa ở Quy Nhơn, Bin...	Hoạt động	<input type="button" value="refresh"/> <input type="button" value="edit"/> <input type="button" value="delete"/>
Tour Kỳ Co – Eo Gió ...	Vượt cầu Thị Nại - cầu vượt biển với chiều dài ...	Đã đóng	<input type="button" value="refresh"/> <input type="button" value="edit"/> <input type="button" value="delete"/>

Trang hiện tại 1, tổng 1 trang

Operator User
truongdinhan1233@gmail.com

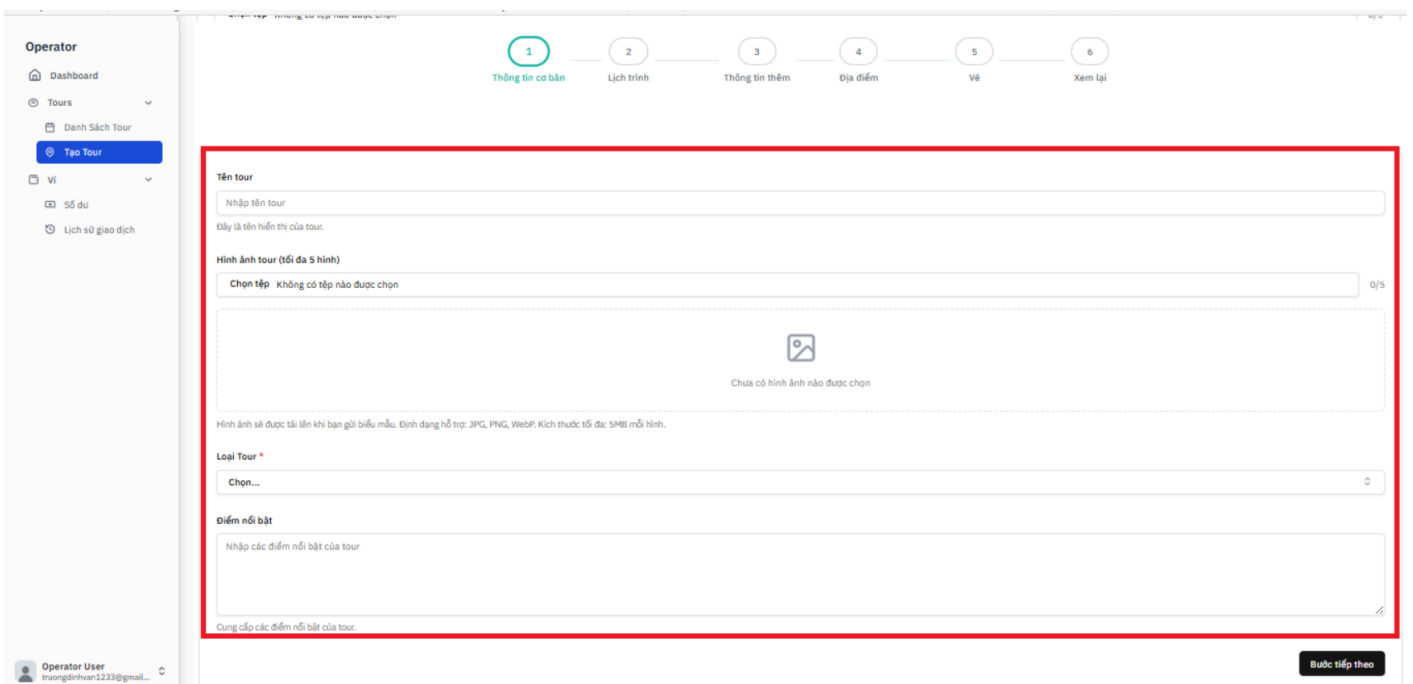
- Operator - Create Tour**

Step 1: Click on “Tạo Tour mới” button or “Tạo Tour” section on the left sidebar.



After clicking, a new tour form will appear.

Step 2: Input tour information like: “Tiêu đề”, “Ảnh Thumbnail cho Tour”, “Loại Tour”, “Chù kỳ tour”. “Ngày mở Tour”, “Ngày đóng Tour”, “Điểm nổi bật”, “Về dịch vụ này”, “Bao gồm những gì”, “Thông tin đón và gặp khách”. Then click “Tiếp theo: Lịch trình” button.



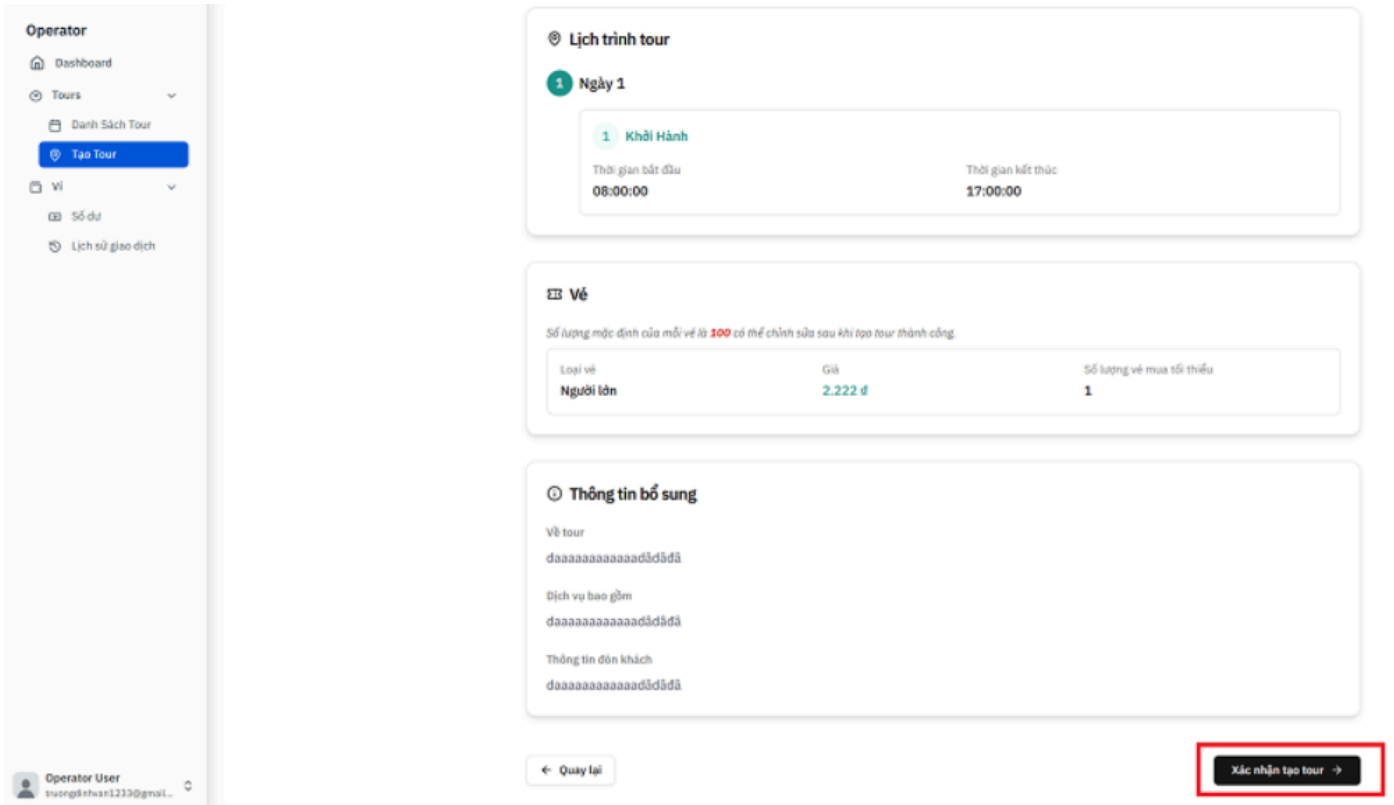
Step 3: Fill data for “Lịch trình” form.

Step 4: Fill data for “Thông tin thêm” form. This is additional information for the tour.

Step 5: Fill data for ‘Địa điểm’ form. Could you add the date, destination for each day, and specify the activity planned for each day?

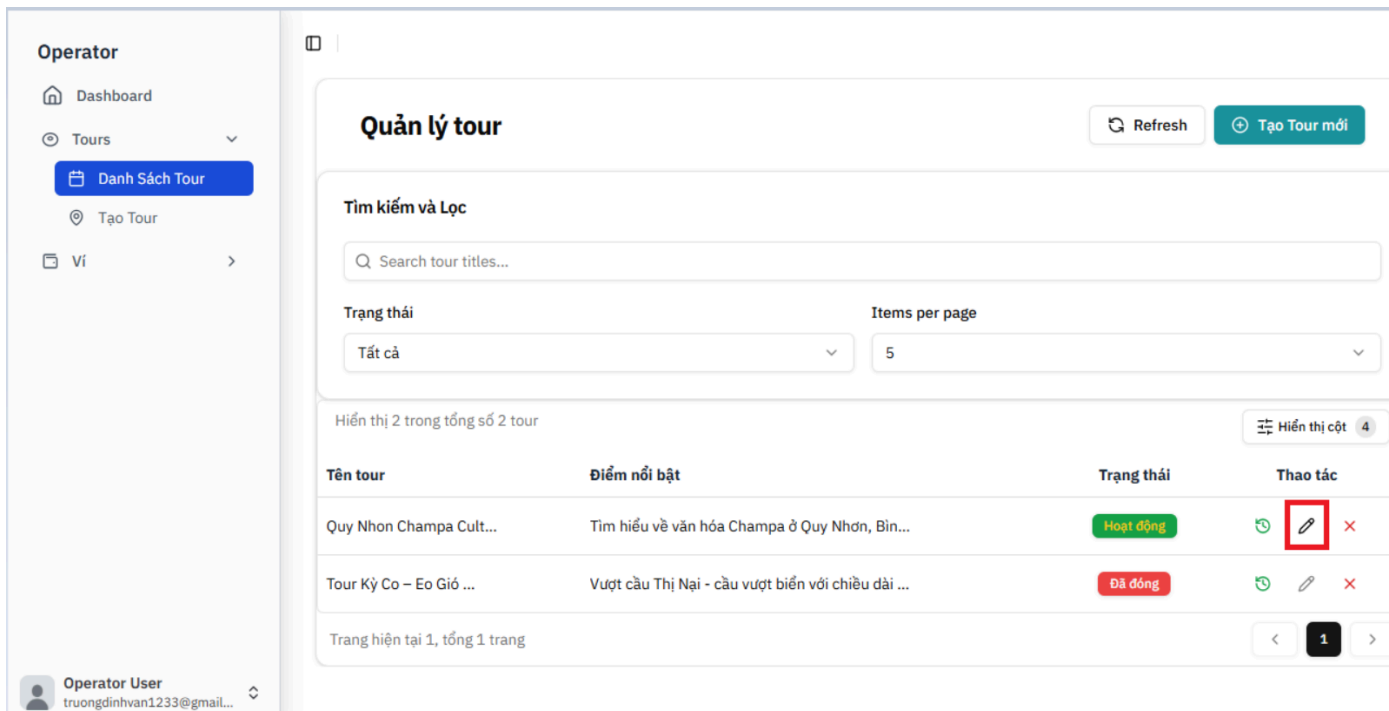
Step 6: Fill 'Vé' form. You can choose ticket type, input price, minimum purchase for each ticket.

Step 7: You can preview the tour after adding. And Click 'Xác nhận tạo tour'.



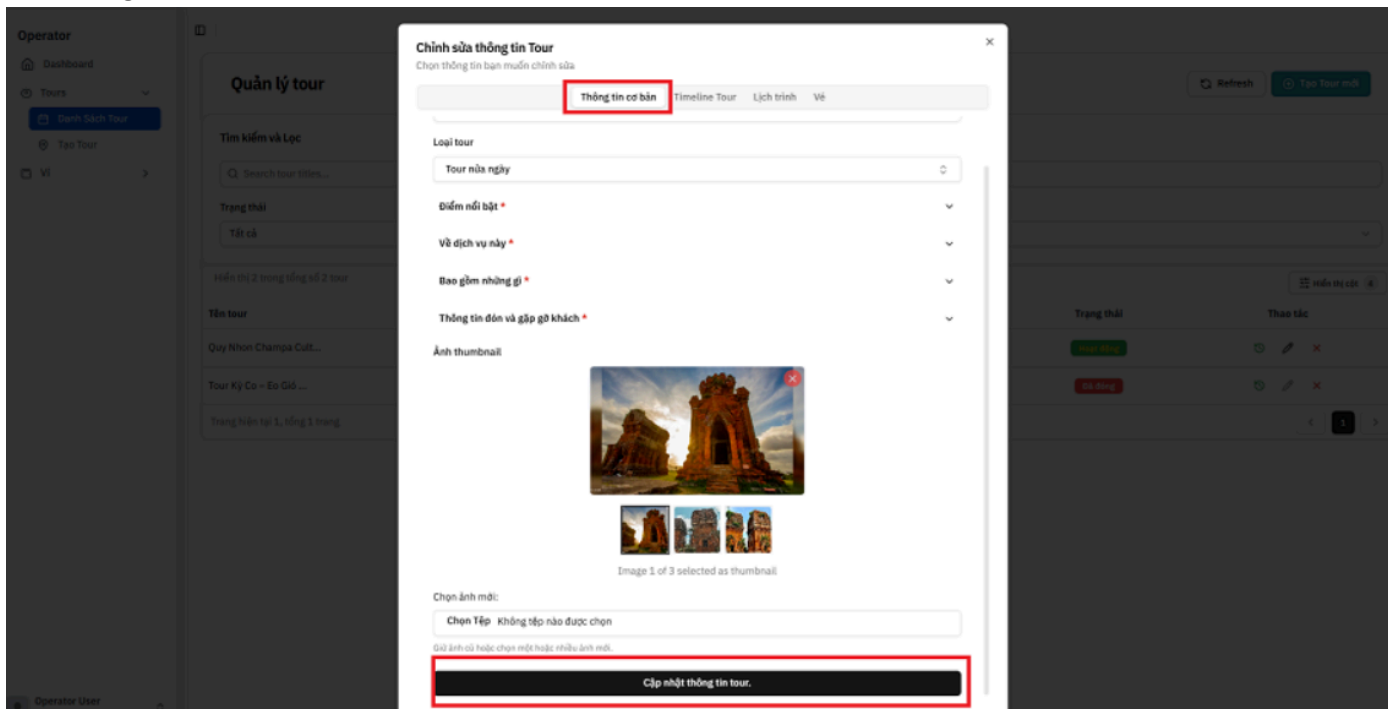
- Operator - Edit tour

Step 1: Click on 'Edit' button (Icon Pencil). Then dialog Edit tours dialog will appear



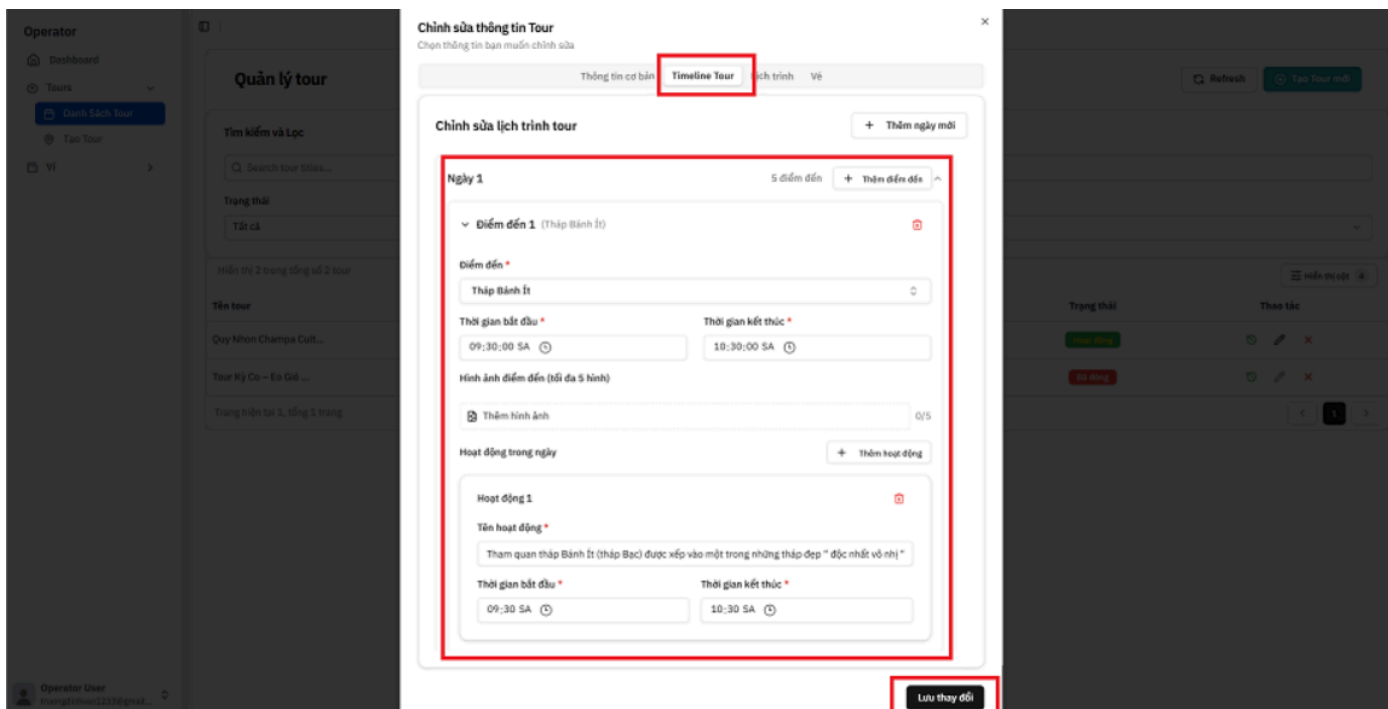
- Edit tours Info

Step : Click on 'Thông tin cơ bản' tab and choose information of tour you want to change. And then click 'Cập nhật thông tin tour'.



- **Edit tour destination**

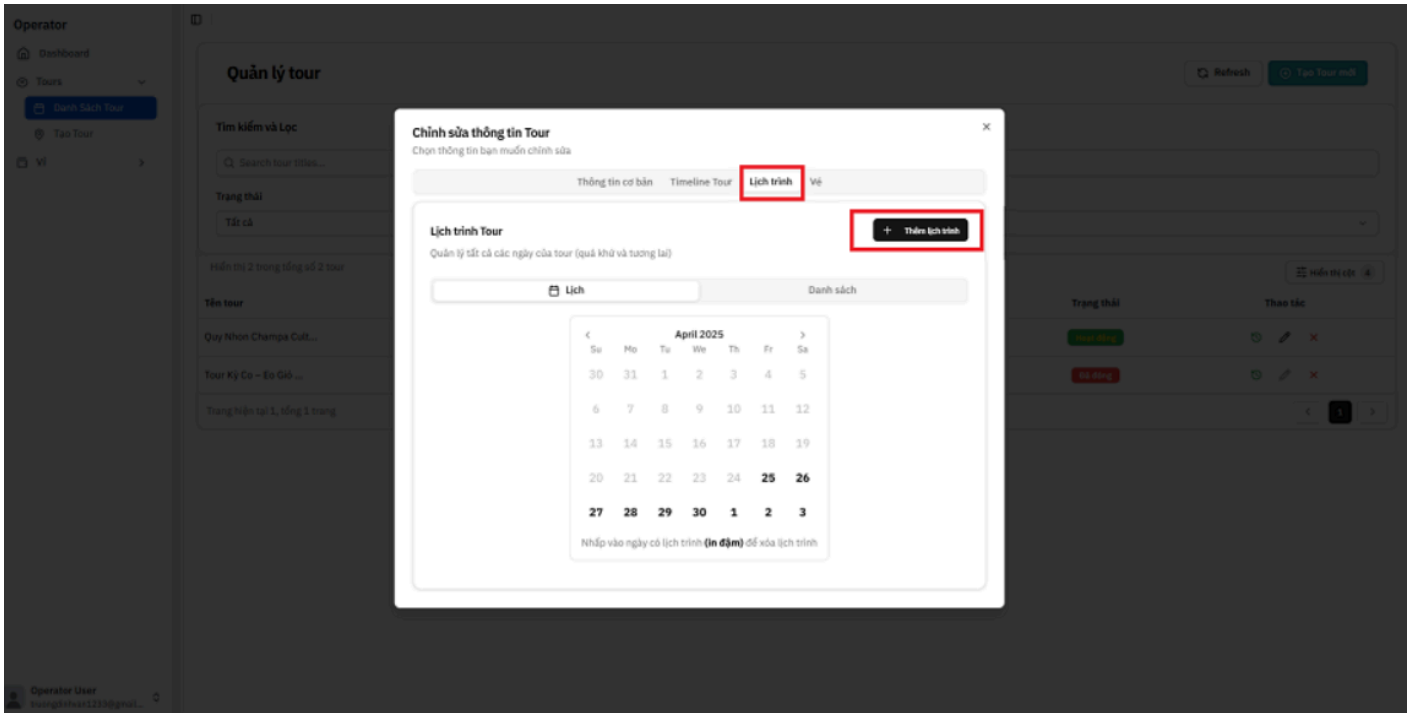
Step : Click on the 'Timeline tour' tab and choose the destination of the tour you want to change. And then click 'Lưu thay đổi'.



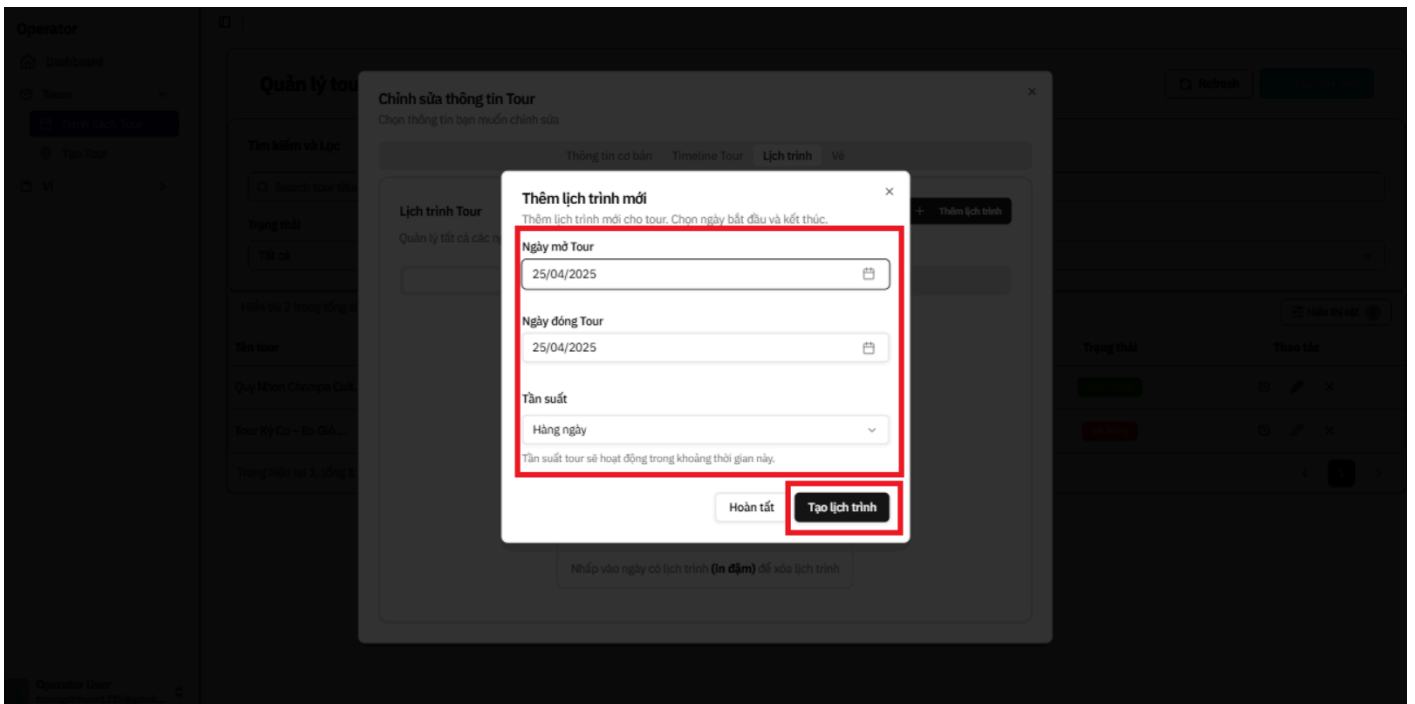
- **Edit tour schedule: Create new tour schedule, delete tour schedule**

Step 1: Click on 'Lịch trình' tab. Then the list schedule will appear.

Step 2: Click on 'Thêm lịch trình' to add new schedule

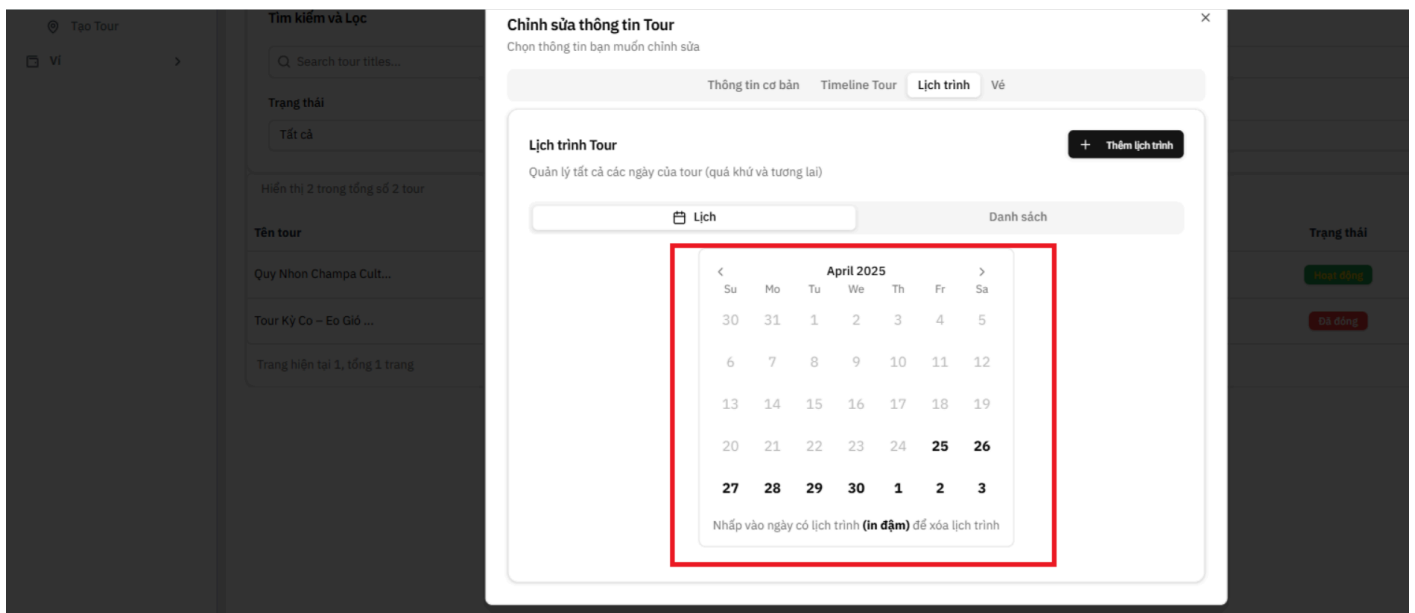


Step 3: Choose the day you want to create a schedule, frequency of schedule and click on 'Tạo lịch trình'.

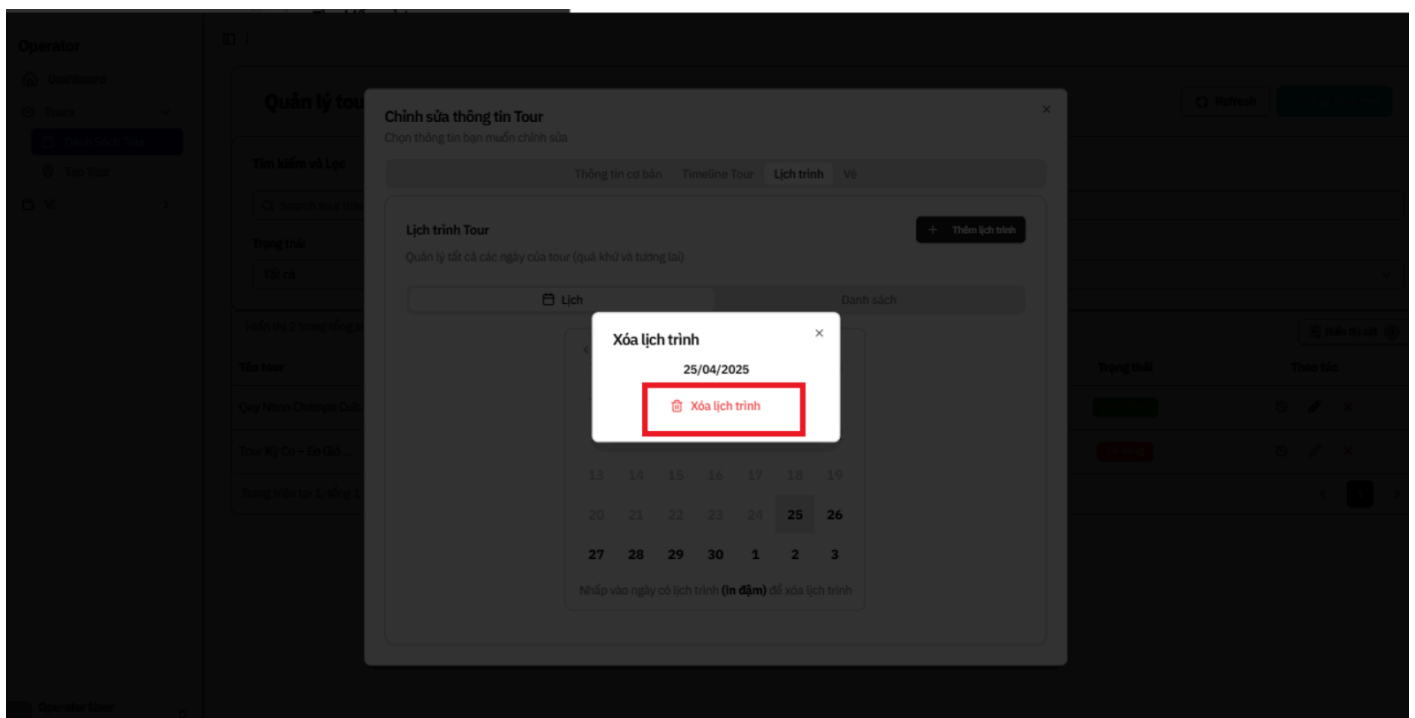


- **Delete Schedule**

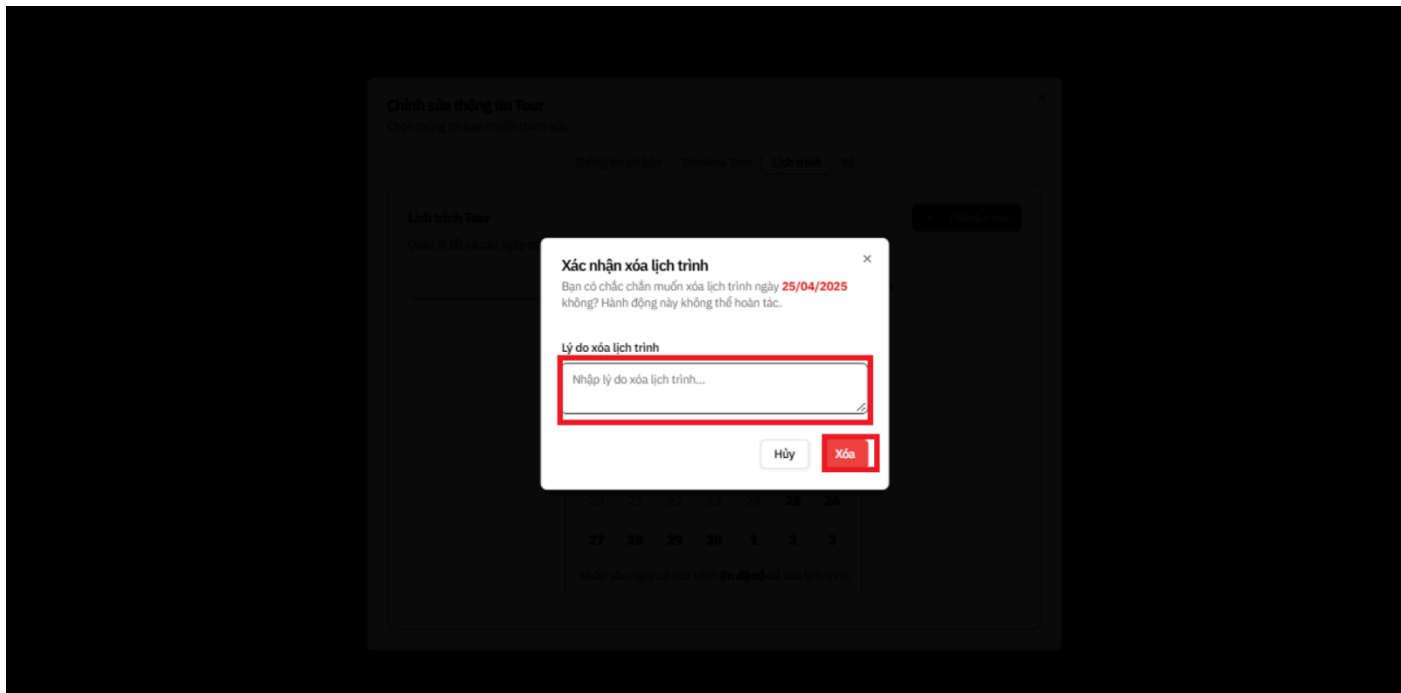
Step 1: Click on the date you want to delete the schedule. Then dialog delete will be appear.



Step 2: Click on ' Xóa lịch trình' then dialog confirm dialog will appear.

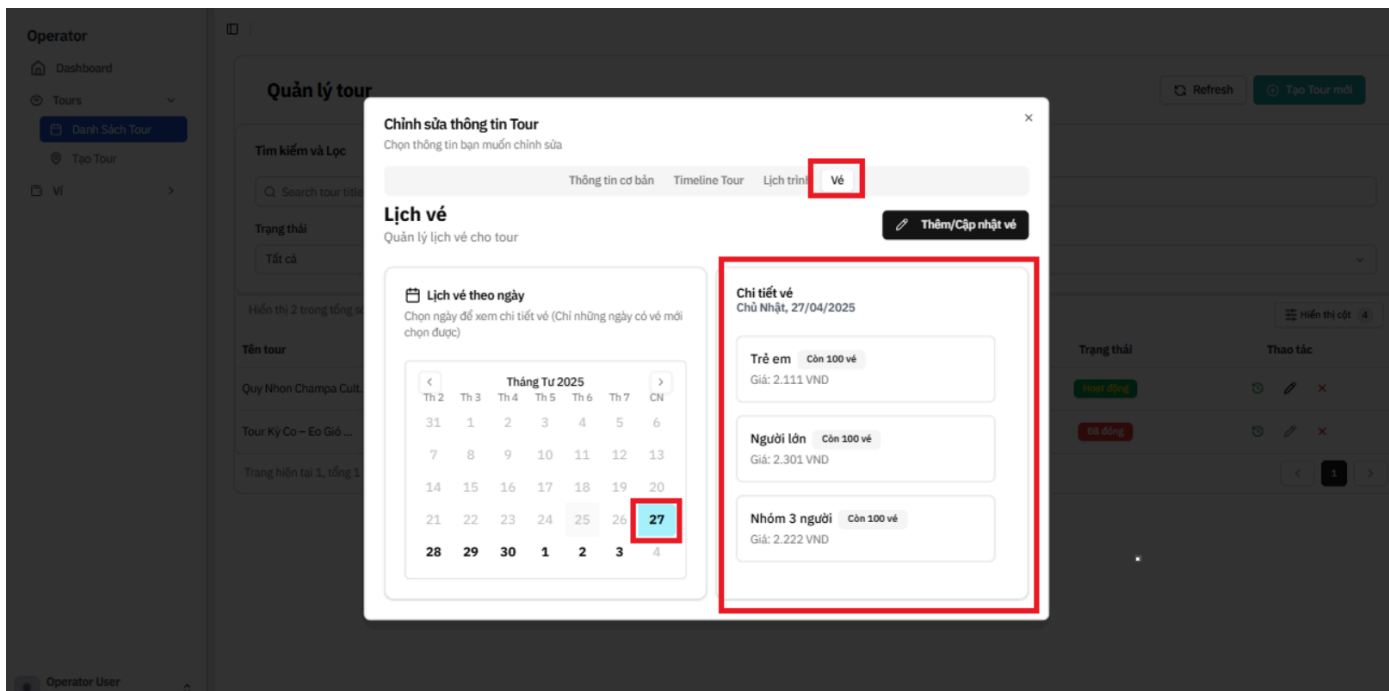


Step 3: Type the reason why you want to delete the schedule. And click 'Xóa'



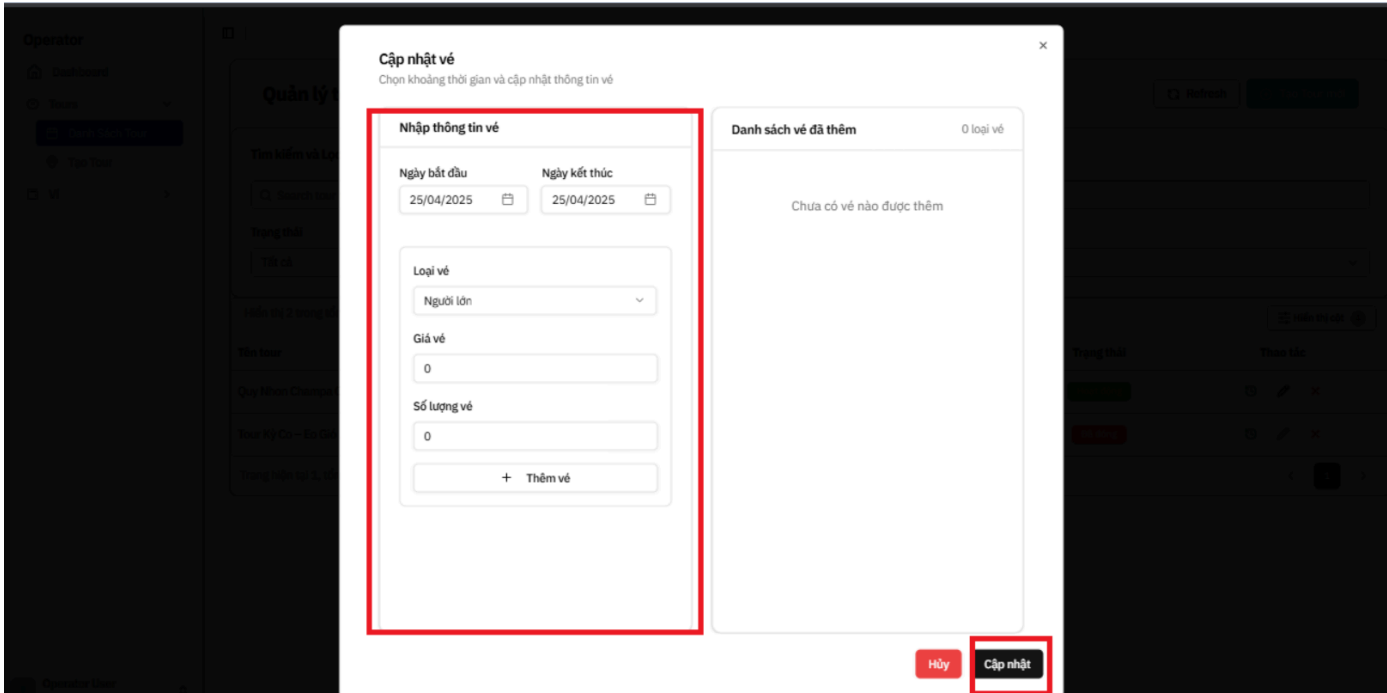
- **Operator - Edit ticket**

Step 1: Click on the 'Vé' button and choose date you want to show ticket.



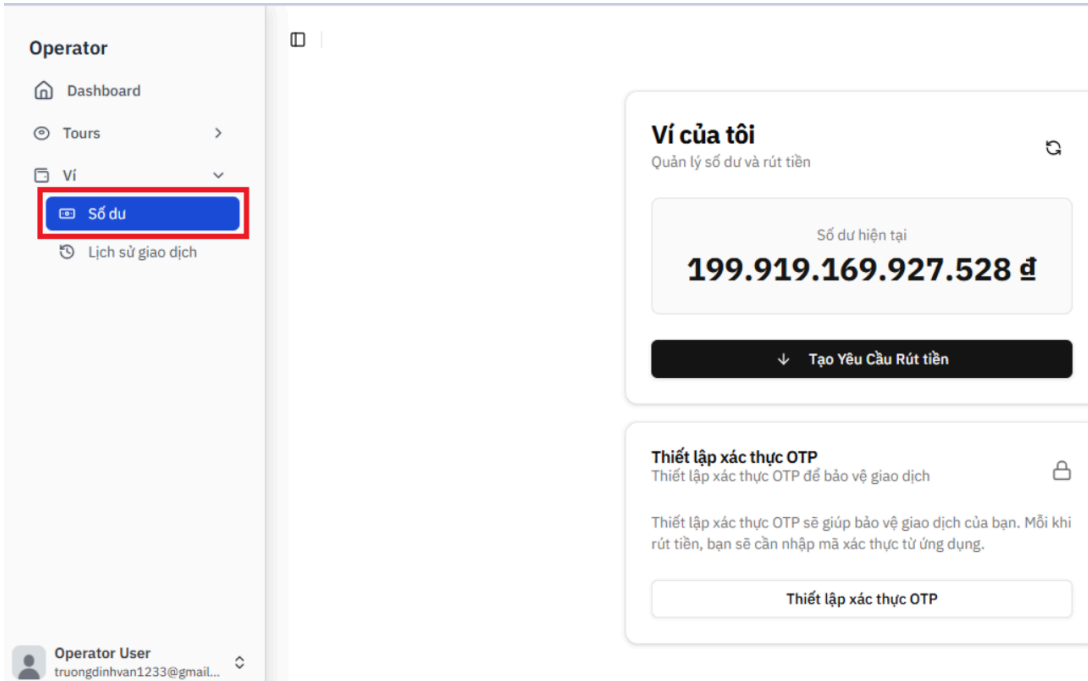
Step 2: Click on 'Thêm/ Cập nhật vé' for edit or create ticket for specific day.

Step 3: Choose the date you want to change or create a ticket. And click 'Cập nhật'



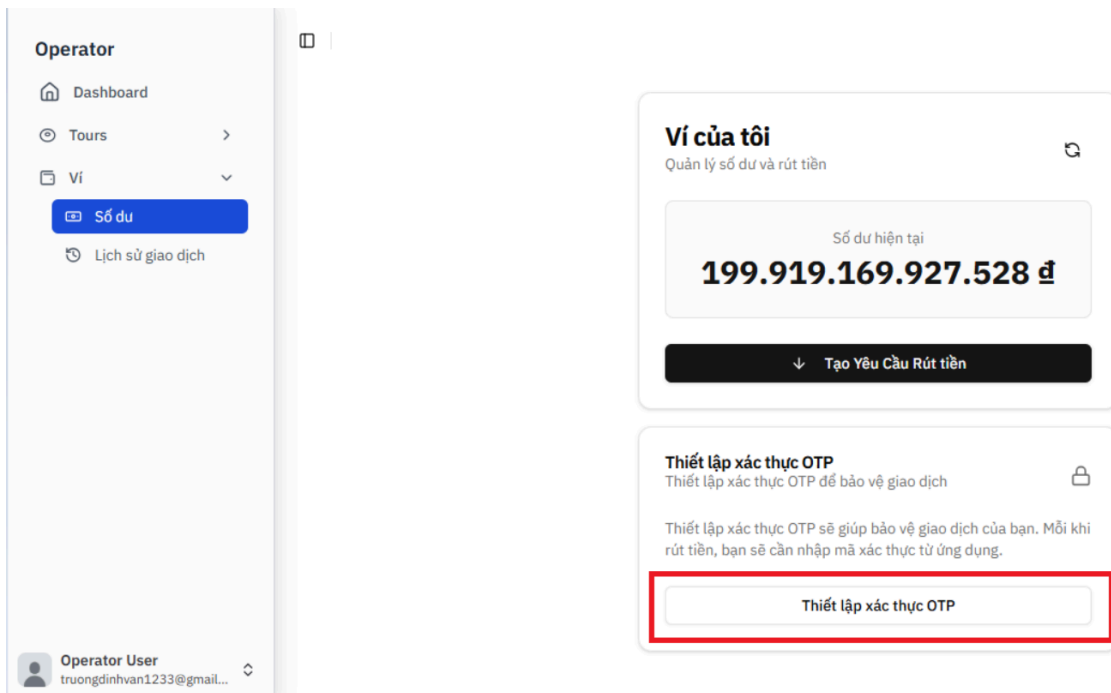
- Operator - View Wallet

Step 1: Click on “Số dư” section on the left sidebar.

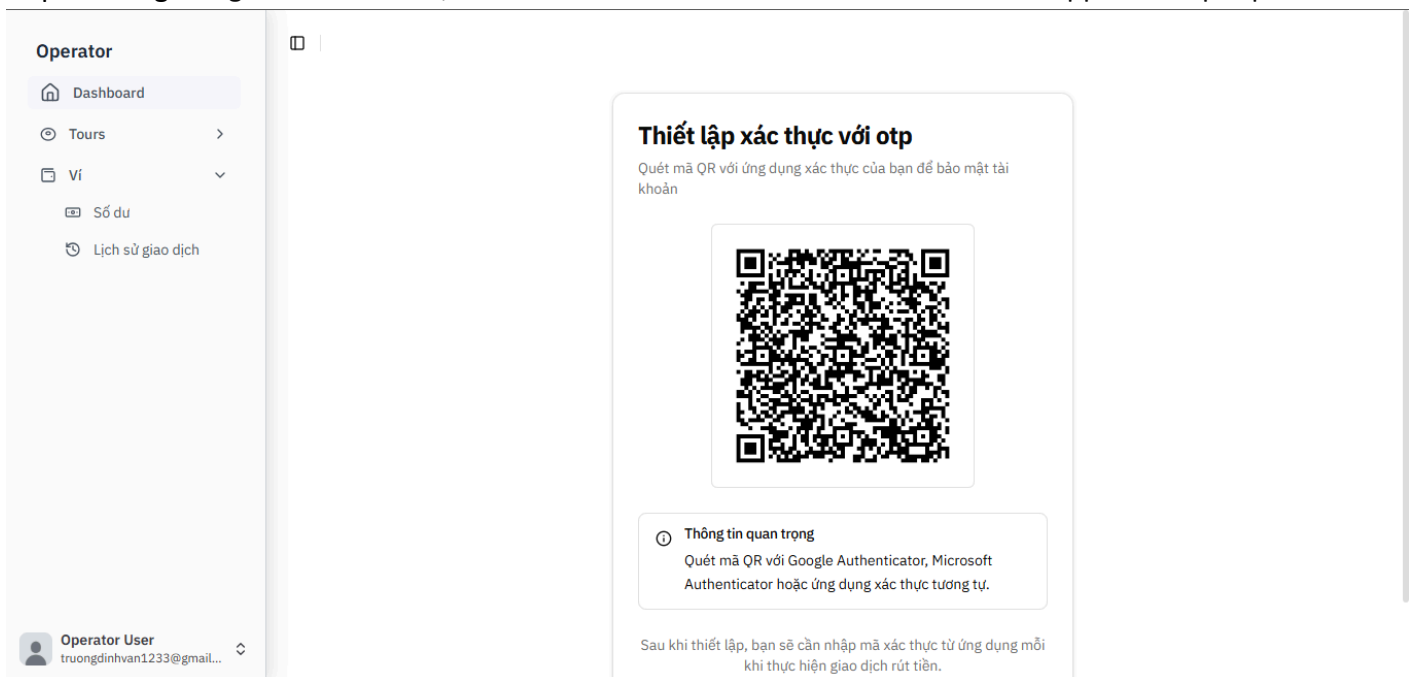


- Operator - Withdraw request

Step 1: Setup OTP before withdrawing. Click on 'Thiết lập xác thực OTP'. Then OTP set QR will appear.

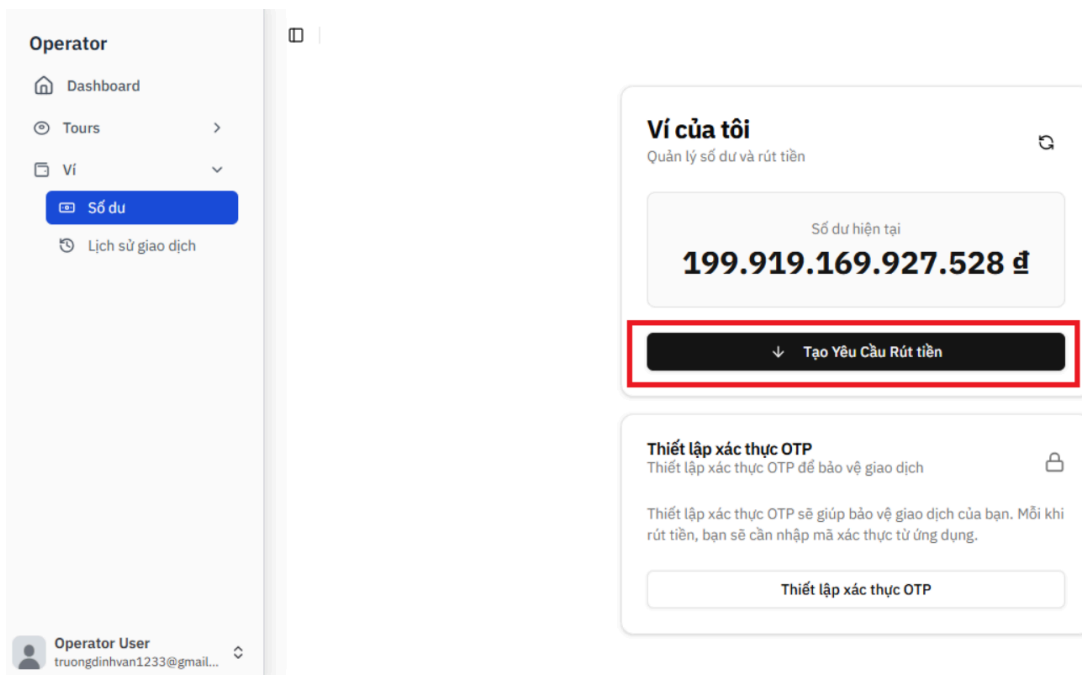


Step 2: Using Google Authenticator, Microsoft Authenticator or other Authenticator app for setup otp.

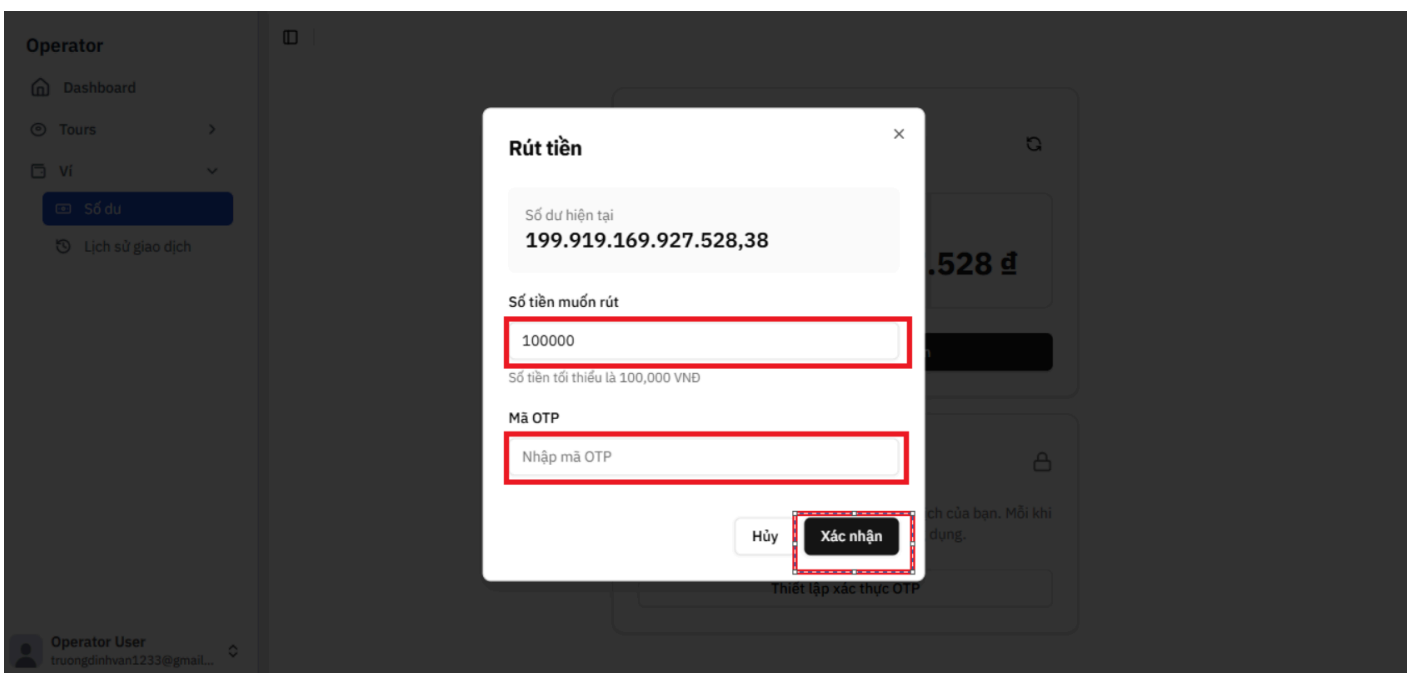


After setup success back to wallet page.

Step 3: Click on 'Tạo yêu cầu rút tiền'. After click withdraw request dialog will appear.



Step 4: Enter the amount you want to withdraw and the OTP code. And Click 'Xác Nhận'



- **Operator - View Transaction history**

Step 1: Click on 'Lịch sử giao dịch' to view transaction history.

Operator

- Dashboard
- Tours
- Ví
- Sổ dư
- Lịch sử giao dịch**

Operator User
truongdinhvan1233@gmail...

Lịch sử giao dịch

🔄 Làm mới

Tìm kiếm:
 Loại giao dịch:
 Thời gian giao dịch:
 Hiển thị:

⚙️ Hiển thị cột 6

ID	Ngày giao dịch	Loại giao dịch	Số tiền	Mô tả	Thao tác
306b5bf3...	07:00 24/04/2025	Nhận tiền	+ 513 đ	Tất toán tour ÔT20250003 ngày 04/30/2025 00:00:00 Touschedule Id : e3bff4db-555b-49a9-9c24-1543de97d2ec	🗑️
b9ff702d...	07:00 24/04/2025	Nhận tiền	+ 7.390 đ	Tất toán tour ÔT20250003 ngày 04/27/2025 00:00:00 Touschedule Id : df6b77c2-635e-40f4-b826-b7662d9e22a9	🗑️
9dcaa39e...	07:00 24/04/2025	Nhận tiền	+ 513 đ	Tất toán tour ÔT20250003 ngày 04/26/2025 00:00:00 Touschedule Id : 0b052f9c-48b2-42e6-9ec6-5010680ca914	🗑️
84385cce...	07:00 23/04/2025	Rút tiền	- 9.999.999 đ	-	🗑️
2162093a...	07:00 23/04/2025	Rút tiền	- 1.000.000 đ	-	🗑️