

System Proposal

Systems Analysis and Design
INFO 361-002

Date: **12/7/2021**

Developed by:

Team: **BACS**

Members: **Brinda Gopal, Angel Duong, Charles Bonsu,
Souleyemane Sangare**

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Project Description

The purpose of this project is to create a dynamic information system that allows Jasmine Willis to operate her art gallery virtually and efficiently until the pandemic is over and it is safe to operate in person again. To create this information system we built an interface design prototype that focuses on maximizing the user experience and meeting all of the user and system's requirements. As a result of implementing this new system the owner, Ms. Jasmine Willis, will find it easier to reach a broader audience to bring in more revenue to the gallery. The transfer of data, artworks, and interaction to an online atmosphere will decrease the risk of close contact due to COVID-19 and also make the gallery visible to viewers 24/7. Customers will be able to make their own profile which will allow for more customer friendliness, thus making it more accessible and more frequently used. Lastly, we have made it our mission to organize personal, gallery, and finance files to a secure web file that only Ms. Jasmine Willis and other authorized personnel can access. This will add to the overall efficiency of the business and also make the value of the gallery increase by making it more appealing to spectators wishing to purchase from the gallery.

System Request

Project Name: Willis Gallery Information System

Project Sponsor: Jasmine Willis, owner

Local art lover and entrepreneur, Jasmine Willis, recently established a gallery with a small performance space in the Richmond Arts District to promote both new and established artists from around the country. She started her business a few years ago by hiring a few part time employees so she could still attend art fairs and private auctions to build her collection as well as discover new talent and found herself quickly overwhelmed trying to juggle everything. After an initial period of struggling to learn about the business and trying to make a profit, things were just beginning to fall into place as the pandemic shut everything down. In the intermediate, she has been reading articles and researching alternative ways to engage her clientele until the gallery and performance space can fully reopen to the public and has determined that a suitable information system would allow her to better support both her business and the artists she represents. Jasmine had taken some information system courses in college and realized that she could move exhibitions and performances online and potentially expand her business by taking advantage of some of the newer technologies available. She has asked your team to help develop a system to meet her business needs.

Business Need: Recreate gallery/performance experience virtually, manage auction and employee schedules, transaction processing, financials and accounting, keep track of business contacts (artists, dealers) and clientele (for marketing/donor support).

Functionality: Facilitate and manage the business operations in order to:

- § Schedule and manage work requests/events
- § Establish a way to present exhibits/performances virtually
- § Manage employees
- § Manage financials and accounting
- § Keep track of inventory
- § Keep track of business contacts and customers
- § Manage advertising/web presence
- § Take advantage of newer technologies

Business Value: **Improve engagement/analytics to increase revenue, increase customer base,** improve efficiencies and maintain good relations with contacts and clientele

Special Issues and Constraints:

- Just purchased a laptop computer with an external HD webcam
- Currently uses only Microsoft Office software (Word, Excel)
- Knowledgeable about the internet and teleconferencing services
- Has a Facebook account for the business and know that many of her customers use Facebook, Instagram, Pinterest

Business Case:

Business Value:

1. The system will be able to reach a broader audience, bringing in more revenue.
2. The system will avoid the risks of close contact with others, since customers have the ability to view the art gallery from home.
3. The system will be customer friendly, including features such as remembering a customer's history, asking for locations to give information about delivery, and offering discounts
4. The system will give Jasmine the opportunity to work remotely, which allows for more efficiency.
5. The system will allow 24 hour access to her gallery, bringing in more revenue.
6. The system will have membership options - Customers can enroll in a membership program that keeps them up to date with the site and personalized emails will be sent. (ex. Holidays and birthdays)

Technical Feasibility Study:

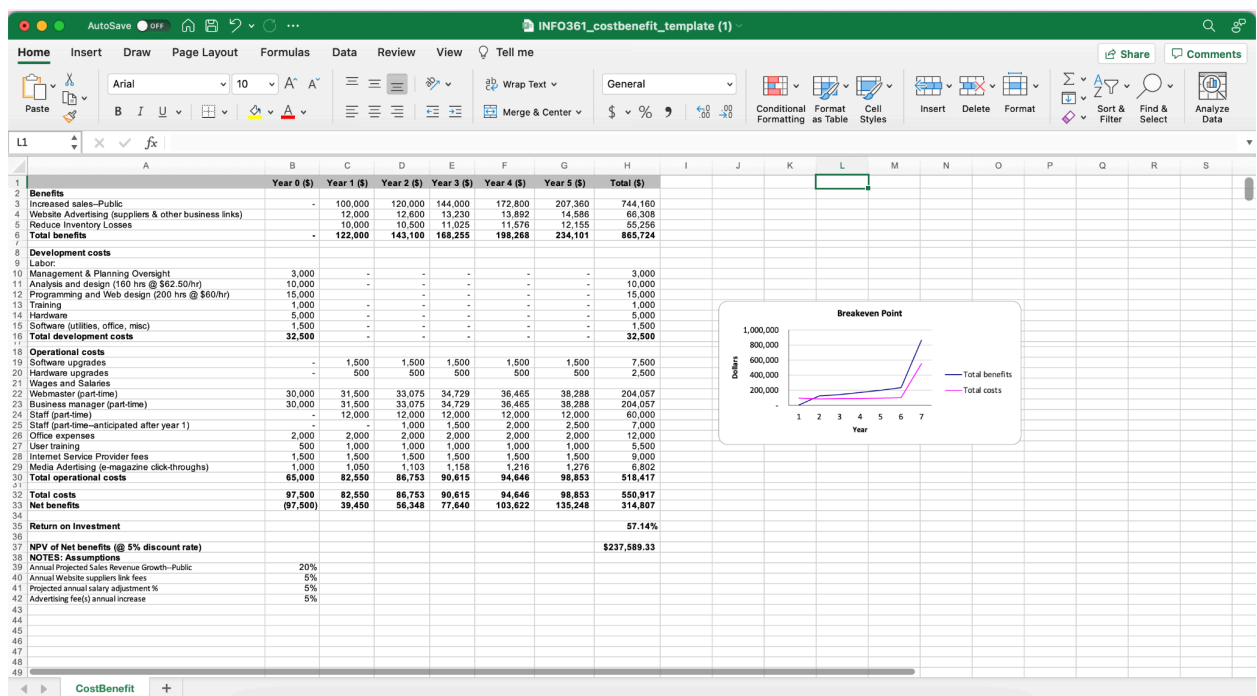
- ❖ Technical issues/challenges
 - Unable to upload pictures of art pieces or pictures look blurry
 - Allowing multiple users to access the site at the same time
 - Transactions do not go through
- ❖ Risks
 - High value products being delivered safely
 - **High impact:** Customers will be less likely to buy again if their art purchases are delivered damaged.
 - Solution:
 - Buying high quality safety packaging materials
 - Data Security
 - **High impact:** Our personal and customers' information could be stolen
 - Solutions:
 - Implementing a Firewall, Antivirus software, and backup and recovery
 - Private auctions with invite only
 - Illegal downloading and reselling of artwork
 - **High impact:** We could lose customers if other sites sell the same artwork.
 - Solution:
 - Watermark all pictures of artwork
- ❖ Familiarity with technology
 - Users do not have to be too familiar with technology, website will operate similar to known online shopping sites, like Amazon
 - Software/ website developer has to be familiar with creating websites and codes to perform all the business functions
 - However, it will be a major transition as galleries are not conventionally hosted on online platforms
 - Employees would have to adapt their day to day work to virtual surroundings
- ❖ Project size
 - Large, because attracting customers worldwide

- ❖ Compatibility
 - Online website that is computer and mobile friendly
 - Compatible with both Mac OS and Windows

Economic Feasibility Study:

- ❖ Development costs
 - The development costs come to **\$32,500**.
- ❖ Annual operating costs
 - Year 0 = \$65,000
 - Year 1 = \$82,550
 - Year 2 = \$86,753
 - Year 3 = \$90,615
 - Year 4 = \$94,646
 - Year 5 = \$98,853
 - Total operational costs = **\$518,417**
 - In our operational costs, we have included a Webmaster, business manager, and additional part-time staff because we believe that with the addition of these roles, the solution to the Willis Gallery System will be successful. These roles have the skills, knowledge, and experience in the online art industry that our system needs to prosper. Additionally, they will continually monitor and manage the System to ensure that it meets the user and system requirements each year.
- ❖ Annual benefits
 - Year 1 = \$122,000
 - Year 2 = \$143,100
 - Year 3 = \$168,255
 - Year 4 = \$198,268
 - Year 5 = \$234,101
 - Total benefits = **\$865,724**
- ❖ Intangible benefits
 - Brand awareness
 - Exposure for the artists Jasmine Willis is promoting
 - Improved customer loyalty, response, and satisfaction
 - Efficient and accurate access to information and data
- ❖ Return on Investment
 - **57.14%**
- ❖ Risks
 - Not generating enough revenue
 - **High impact:** Building and using a brand new site may not attract many customers
 - Solution:
 - Ensure that our site is advertised well and that our marketing team reaches out to our target audience.
 - Going over our budget for the system
 - **Medium impact:** We may need more materials than we have budgeted for.
 - Solution:
 - Keep track of all of the costs and reflect on whether a certain material is truly needed

- Having inventory supplies left over
 - **Medium impact:** Not having many shipping orders, resulting in leftover supplies and safety packaging materials
 - **Solution:**
 - Purchase only a reasonable amount of supplies in the beginning and increase the amount of packaging supplies when more orders come in.
- The system taking longer than expected to be created
 - **High impact:** Certain tasks and goals may take longer than we expected.
 - **Solution:**
 - Set realistic goals and deadlines and ensure the team stays determined and dedicated to creating the system



Organizational Feasibility Study:

❖ Strategic Alignment:

Jasmine requires an online platform that can effectively replace the in-person gallery experience in response to the current pandemic. The project does align with this need however it also aims to take this opportunity to increase the reach of the art gallery, essentially aiming to transform the local Richmond gallery to a global online platform that focuses on visual art. The project fulfils the system request however, due to the focus on expansion it is not entirely strategically aligned with Jasmine's business strategy, thus increasing risk. The reasoning behind the focus on expanding the reach of Jasmine's gallery is that even before the pandemic, the popularity of galleries has been waning, thus if a robust and dynamic online platform is created Jasmine can feel assured that her gallery will have a lasting presence.

❖ Risks

➤ Losing existing customers/clientele

■ Moderate risk

■ Solution:

- Be active on social media
- Invest in online marketing
- Focus on expanding reach to find new customers
- However, do not lose focus on local clientele/customers
- Can provide existing customers/clientele early access to the online platform

➤ Unable to recreate the atmosphere of in-person gallery experience

■ Moderate Risk

■ Solution:

- Focus on capturing the quality of the pieces
- Provide a virtual tour of the art gallery with adjustable pace
- Hold frequent virtual events including frequent live tours
- Use the online platform to debut artwork the gallery does not physically have

➤ Difficulties in transitioning from in-person operations to online

■ Low risk

■ Solution:

- The system will be easy to navigate with no technical skills needed from both the customers and the employees
- There is bound to be an adjustment period for all parties involved but as long as you have preliminary computer skills the system will be easy to navigate

❖ Senior management

- Supervision - Supervising each division
- Budgeting - Control finances to meet objectives effectively
- interviewing - Collect information about job seeking candidates
- Training - Training new recruits
- Market research - Identify opportunities and threats

❖ Users

- Browsers - Window shoppers would be planning to buy in the future
- Product focused - Goal oriented and know exactly what they want
- Bargain hunters - Wait for the best deal possible
- Researchers - Visit multiple stores collecting information before making a decision

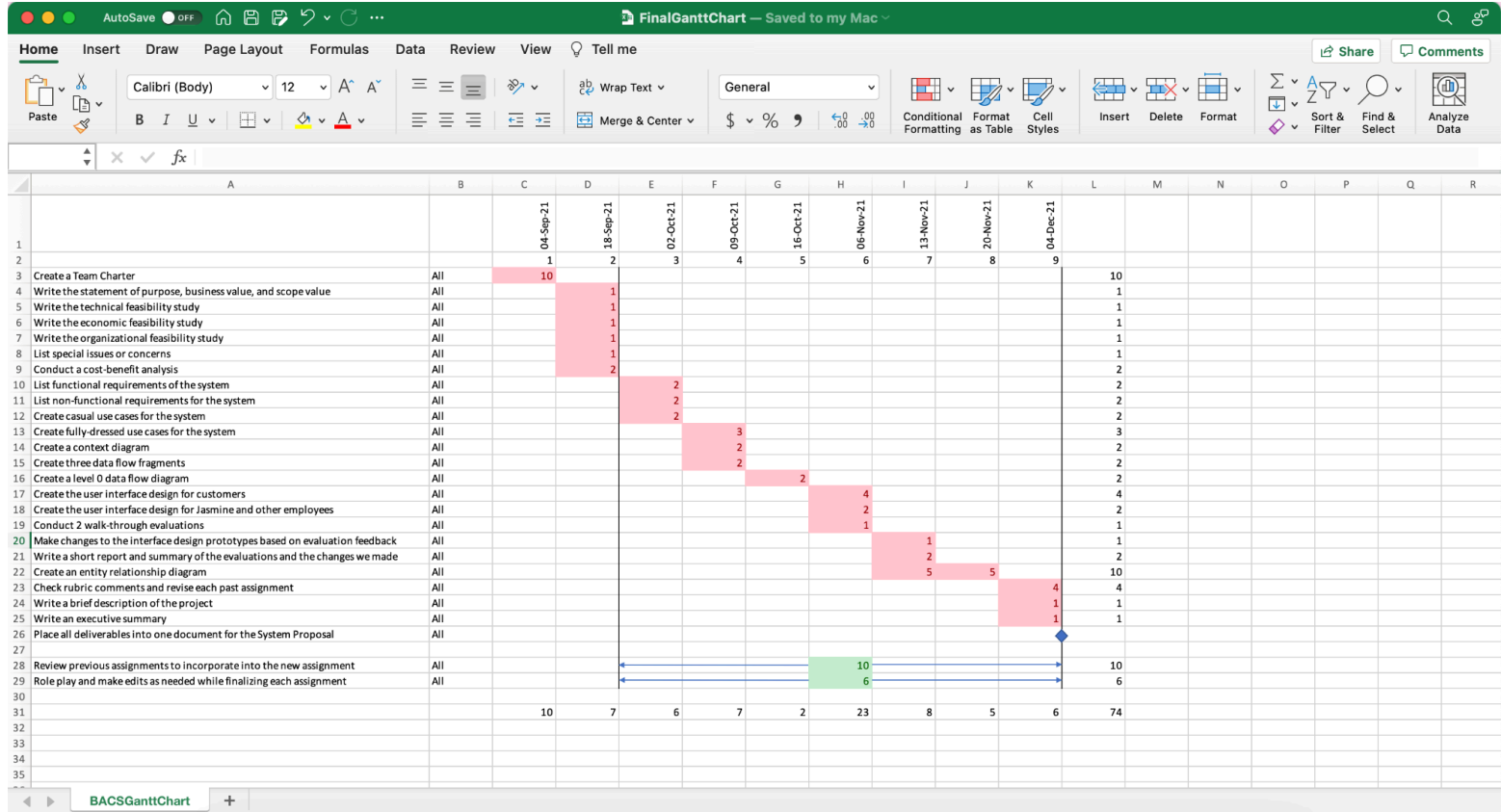
❖ Other stakeholders

- Government - Taxes
- Suppliers and vendors - Revenues
- Customers - Product/service quality and value
- Employees - Income

Special Issues/Concerns:

- ❖ Worldwide shipping, making sure things arrive safely
- ❖ Length of the pandemic

❖ Issues with supply chains

Work Plan/Gantt chart:

Requirements Definition

Functional Requirements

1. Artwork Sales Management

- 1.1 The system will allow customers to search Jasmine's art gallery.
- 1.2 The system will allow customers to select an artwork they want to purchase.
- 1.3 The system will determine if that selected artwork is in stock.
- 1.4 The system will display the different size options for the selected artwork.
- 1.5 The system will allow customers to choose the artwork in the preferred size.
- 1.6 The system will allow customers to purchase multiple artworks, including multiple of the same artwork
- 1.7 The system will display the price for that selected artwork based on the size.
- 1.8 The system will allow the user to add that artwork to their shopping cart.
- 1.9 The system will allow the user to enter payment information to pay for their order at checkout.
- 1.10 The system will process the customer payment.
- 1.11 The system will notify Jasmine and her staff to prepare the customer order.

2. Artwork Inventory Management

- 2.1 The system will allow Jasmine to upload pictures and provide descriptions of the artworks she wishes to sell.
- 2.2 The system will update the gallery and inventory stock everytime Jasmine adds a new artwork.
- 2.3 The system will update the inventory stock as customers make purchases.
- 2.4 The system will display when an artwork is out of stock.

3. Jasmine and Staff Management

- 3.1 The system will be able to file separate contacts and gallery information to assure that Jasmine can always have her information organized.
- 3.2 The system will be able to create a comprehensive online scheduling system that allows Jasmine and her employees to be aware of gallery events and payroll hours.
- 3.3 The system will create an employee payroll system that lays out times and pay rates for her employees in a simple layout.
- 3.4 The system will allow company accounting to be done only with authorization.
- 3.5 The system will allow Jasmine to view all the sales and cost expenses for the current year and past five years.
- 3.6 The system will allow employees to request shifts to work.
- 3.7 The system will allow employees to request time off.
- 3.8 The system will allow employees and managers to record expenses.
- 3.8 The system will continuously track the revenue earned.

4. Personal Profile Creation

- 4.1 The system will create and remember personal user profiles for returning customers.
- 4.2 The system will allow users to view their past purchases.
- 4.3 The system will provide a list of recommended art pieces based on their past purchases.
- 4.4 The system will be able to store and date customer information in a specified data folder.
- 4.5 The system will provide an online Subscription/Membership option for frequent users.

5. Gallery Tours and Auctions

- 5.1 The system will facilitate live auctions virtually for users to view the original artworks in Jasmine's gallery.
- 5.2 The system will automatically dispense invitations to auctions to returning customers.
- 5.3 The system will allow the user to purchase a ticket to attend the live auction.
- 5.4 The system will have the ability to have walk-through gallery tours for users.
- 5.5 The system will allow users to search the walk-through gallery for specific artists or artworks they are interested in.
- 5.6 The system will allow staff members to host gallery tours and auctions remotely

Non-Functional Requirements

1. Operational

- 1.1 Jasmine's gallery will be compatible with mobile devices as well as being accessible on PCs.
- 1.2 The system will function smoothly on all commonly used web browsers i.e. Safari, Explorer, Mozilla Firefox etc.
- 1.3 Jasmine's gallery's website and mobile application will be available worldwide.

2. Performance

- 2.1 The system will be accessible on any day and at all times (24 hours a day, 365 days of the year).
- 2.2 The gallery will respond fast to user actions in all instances.
- 2.3 The gallery will hold a maximum of 200 simultaneous users on auction days, and 100 simultaneous users on all other days.
- 2.4 The system should be updated with new customer orders and artwork inventory every 3 minutes.

3. Security

- 3.1** The system will have the ability to protect users against malware attacks and unauthorized access.
- 3.2** Only managers will have access to employee information.
- 3.3** The system will promote two-step verification to prevent hackers from accessing the user's account.
- 3.4** The system will lock an account after a certain number of login attempts.
- 3.5** The system will state the online policy, consisting of privacy, refunds, terms and conditions, ensuring all customers and employees are aware.

4. Cultural and Political

- 4.1** The system will specify the time zone for each scheduled event based on the user's location.
- 4.2** The system will detect foreign currencies from USD.
- 4.3** The system will allow the user to make delivery orders from outside the US.
- 4.4** The shipment orders will comply with the custom laws of the user's destination.
- 4.5** All personal data and information will be protected and will comply with the Data Protection Act.

Use Cases
Casual Use Cases

Use Case Name: Create an artwork order	ID: BACS-001	Priority: High
Actor: Customer		
Description: The customer selects an artwork they want to purchase		
Trigger: Customer wants to purchase an artwork		
Type: External		
Preconditions: 1. Customer has to be logged into their personal account 2. Artwork has to be available in the gallery for purchase		
Normal Course: 1. The customer searches the artwork gallery 2. The customer selects the artwork they want to purchase 3. The customer specifies criteria for the artwork (size) 4. The system will check the inventory for that artwork with those specific requests. a. If that artwork selection is out of stock, they can request to be notified when it is in stock again 5. The system will display the price of the artwork based on the size the user selects a. If the user is satisfied with that price, they can add that artwork to their cart b. If the user no longer wants that artwork, they can continue exploring other artworks and prices 6. The customer can view their shopping cart a. Customer can choose to checkout and enter payment information to confirm purchase b. Customer can choose to save artwork selection for later 7. The system will process the customer payment 8. Confirmed artwork orders are stored in the Confirmed Customer Order datastore 9. Selections saved for later are stored in the Unconfirmed Customer Order datastore 10. The system will notify Jasmine and her staff to prepare the customer order		
Postconditions: 1. Confirmed order is stored in the Confirmed Customer Order datastore 2. Unconfirmed order is stored in the Unconfirmed Customer Order datastore 3. Inventory system updated to current inventory levels after confirmed customer orders		

Use Case Name: Place Live auction order	ID: BACS-002	Priority: High
Actor: Customer		
Description: The customer bids for the artwork they want to purchase		
Trigger: Customer participates in auction		
Type: External		
Preconditions: 1. Customer has to be logged into their personal account 2. Live auction should be up and running		
Normal Course: 1.0 Make a bid 1. The participants join the live stream 2. The customer signs in to secure their place in the live auction 3. The system showcases each artwork one after the other 4. The system will provide the starting bid price and will then allow participants to start placing their bids a. If the customer places a bid and wins, the artwork gets processed and is sent out for approval b. If the customer places a bid and loses, the auction continues 5. The system will end live stream after all artworks have been presented and auctioned 6. Order informations are confirmed and stored in the database 7. Auction purchases are then accounted for and artwork are sent out for shipping		
Postconditions: 1. Confirmed auction order is stored in the Confirmed Customer Order datastore 2. Unconfirmed auction order is stored in the Unconfirmed Customer Order datastore 3. Processing and shipping estimates are emailed to customers		

Use Case Name: Profile Creation	ID: BACS-003	Priority: High
Actor: Customer		
Description: Customer creates an account to view personal data and receive monthly newsletters and updates about the gallery.		
Trigger: Customer is interested in gallery		
Type: External		

Preconditions: 1. Customer was informed about the gallery 2. System to create a profile is up and running
Normal Course: 1.0 Create a user profile 1. The customer finds out about the gallery from employees or external source 2. The system allows the customer to create a profile on the gallery site 3. The customer creates an account 4. The system will allow the customer to input personal information (name, email, phone number, address, etc.) 5. The system will allow the customer to finalize their profile 6. The account allows the customer to save artwork that interests them, bid for artwork, and enroll in a membership/subscription program 7. The system will automatically send customers with profiles newsletters and updates about the gallery
Postconditions: 1. Artworks customer saves to wishlist will be stored in the Customer Wishlist datastore 2. Newsletters and updates sent to customer profiles will be stored in the Newsletters datastore

Use Case Name: Manage weekly payroll	ID: BACS-004	Priority: High
Actor: Director of Art Gallery		
Description: The director uses the payroll system to pay their staff according to their role		
Trigger: Director wants to administer weekly pay to the gallery staff, in an accurate and convenient manner		
Type: Temporal		
Preconditions: 1. The Director has to be logged into their account 2. The system must store the employee contracts of each staff member, specifically whether they are salaried or are paid by the hour 3. The system must store the work schedule of each employee 4. The payroll system is ready for use		
Normal Course: 1.0 Administering weekly pay to staff 1. The director selects a staff member via the payroll system 2. The system displays the employee's salary/hourly wage and the employee's		

work schedule a. If necessary, the Director inputs the amount of hours the employee worked that week b. If necessary, the Director inputs the amount of overtime the employee worked that week 3. The system allows the Director to view weekly pay for the employee 4. The system outputs the amount of money the employee has earned that week 5. The system differentiates between gross and net pay 6. The director signs off on the final numbers displayed by the system 7. The system files the official record of the paycheck in the accounting data store 8. The system initiates the delivery of the paycheck to the employee via the employee's payment of choice e.g. direct deposit, mailed check etc.
Postconditions: 1. Official record of paycheck published in the Accounting datastore 2. Record of employee's paycheck accessible through their employee login 3. Paycheck is delivered to the employee

Use Case Name: Record an Expense	ID: BACS-005	Priority: High
Actor: Director		
Description: Director uses the system to record a business expense.		
Trigger: Director needs to keep track of business purchases.		
Type: External		
Preconditions: 1. Director should be logged into their account. 2. Director makes business purchases.		
Normal Course: 1.0 Record an Expense 1. The Director opens the accounting book 2. The Director provides a description of an expense 3. The Director inputs the price of the expense 4. The Director confirms the expense		
Postconditions: 1. The total amount of expenses in the accounting book are updated 2. The expense is published in the Accounting datastore		

Fully Dressed Use Cases

Use Case Name: Schedule an event	ID: BACS-006	Priority: High
Actor: Director of Art Gallery		
Description: The director wants to manage the gallery events		
Trigger: Director has an event they want to share with other employees		
Type: External		
Preconditions: 1. The director has to be logged into their account 2. The director has to know who is involved, when, where, and what time the event will take place 3. The scheduling system is already created and available online to use		
Normal Course: 1.0 Schedule an upcoming event 1. The director views the scheduling calendar and selects the preferred date 2. The director can name the event and add a description of what the event is for 3. The director can choose which staff members to share the event with 4. The system will display a preview of the calendar with the new event 5. The system will allow the Director to officially publish the event 6. The system will notify the staff members 7. The staff members can choose to accept or reply to the event invitation	Information for Steps ←Event date ←Event name and description ←Event staff contacts →Preview of calendar →Updated calendar →Event invitation notification ←Replies to event	
Alternative Courses: 1.1 The director must revise event details (occurs Step 5) 1. The director initiates a need to change event details 2. The director edits the event notification 3. The system will display a preview of updated notification 4. The system will allow the director to officially republish the event	→Current event details ←Updated event details →Preview of calendar →Updated calendar	

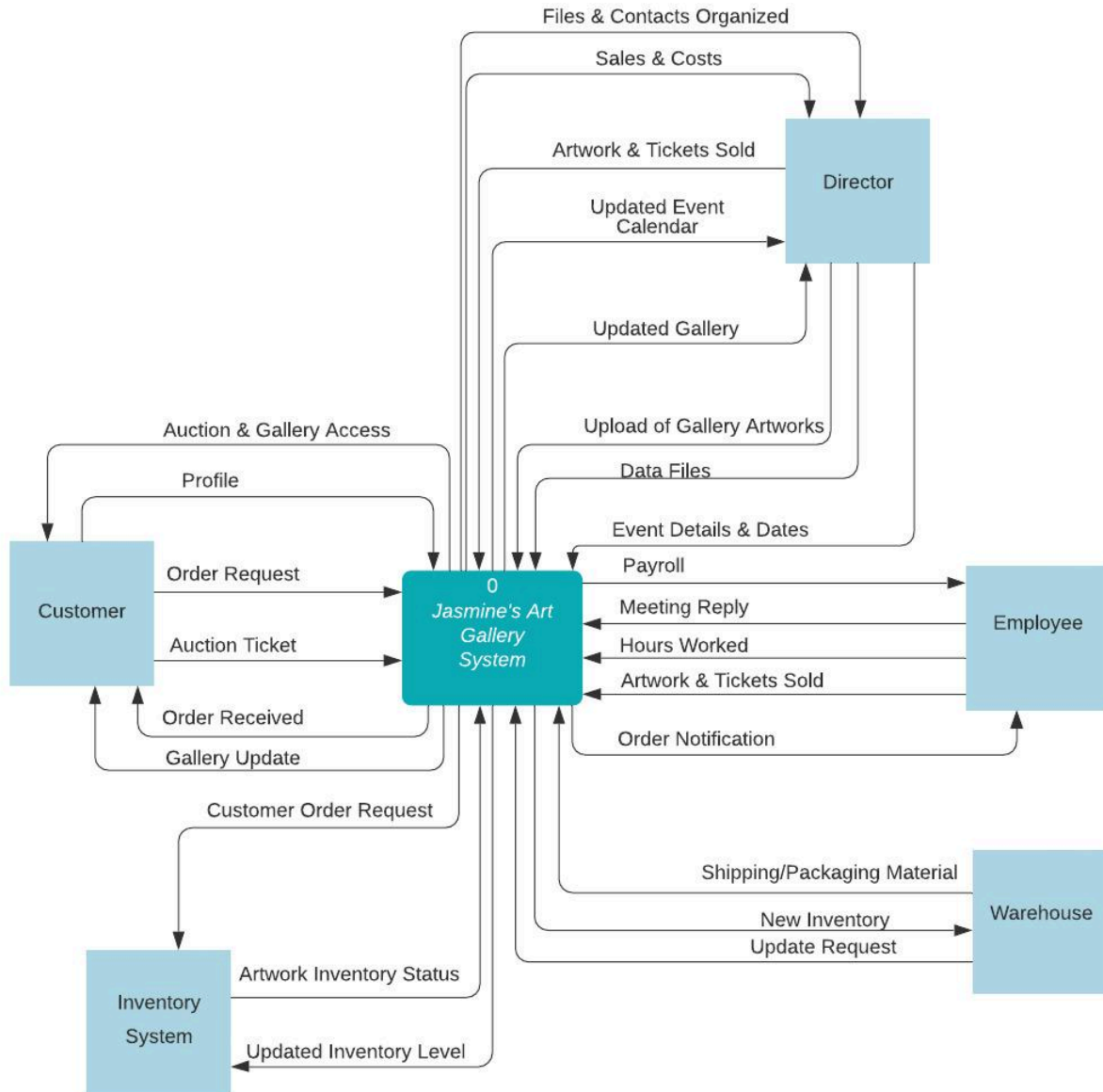
5. The system will send a new notification with the updated details to the staff members		→Event invitation notification	
6. The staff members can choose to accept or reply to the event invitation		←Replies to event	
Postconditions:			
1. Event drafts are stored in the Unpublished Events datastore.			
2. Published events are stored in the Published Events datastore			
3. Staff is notified for edited, published, and cancelled events			
Summary Inputs	Source	Summary Outputs	Destination
Director login username and password Event details Staff accepts/rejects	Director Director Staff	Updated Calendar Event notification Staff replies	All staff users All staff users Director

Use Case Name: Introduce new inventory	ID: BACS-007	Priority: High
Actor: Director		
Description: The director adds a new artwork for sale		
Trigger: Director wants to introduce new inventory to the existing gallery		
Type: External		
Preconditions: 1. The director has to be logged into their account 2. The director has to know what inventory item they are adding to the system 3. The inventory system is already created and available online to use		
Normal Course: 1.0 Add a new artwork for sale 1. The Director goes to the inventory system and selects the option to add a new artwork 2. The Director can list important details for the artwork (name of artwork, artist name, description, art type, price, and quantity available) 3. The Director can save the new inventory creation		Information for Steps ←Inventory Entry ←Artwork name, artist, description, art type, price, and quantity →New inventory level

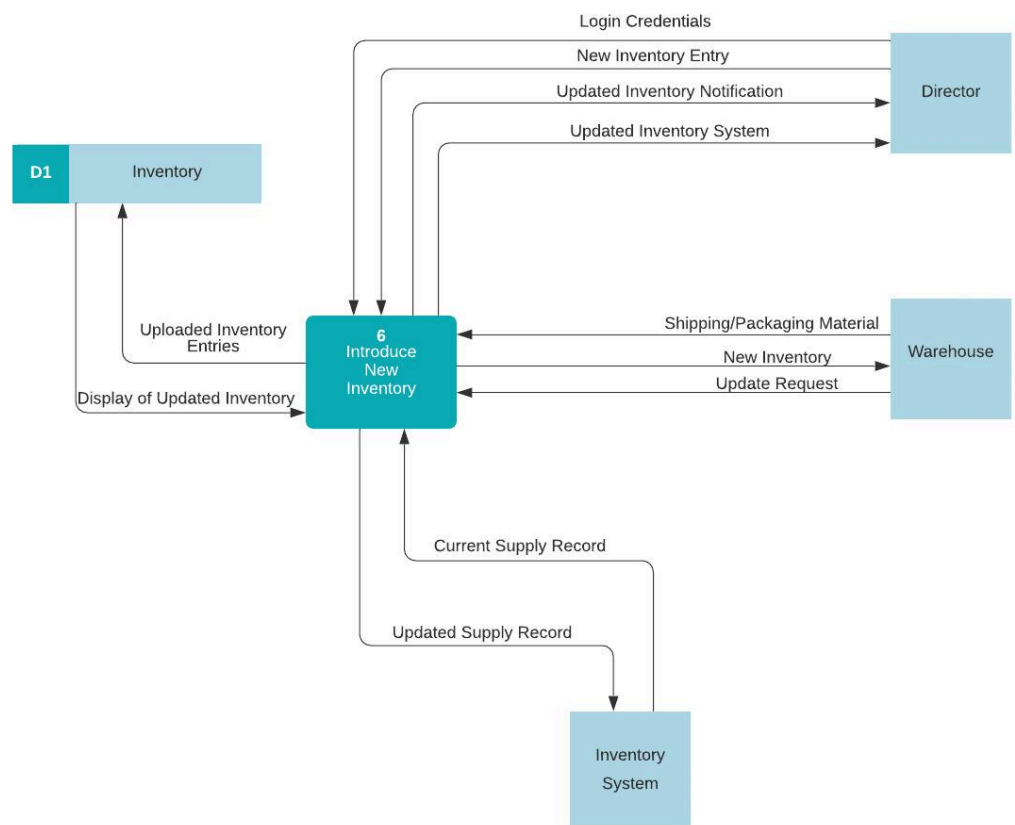
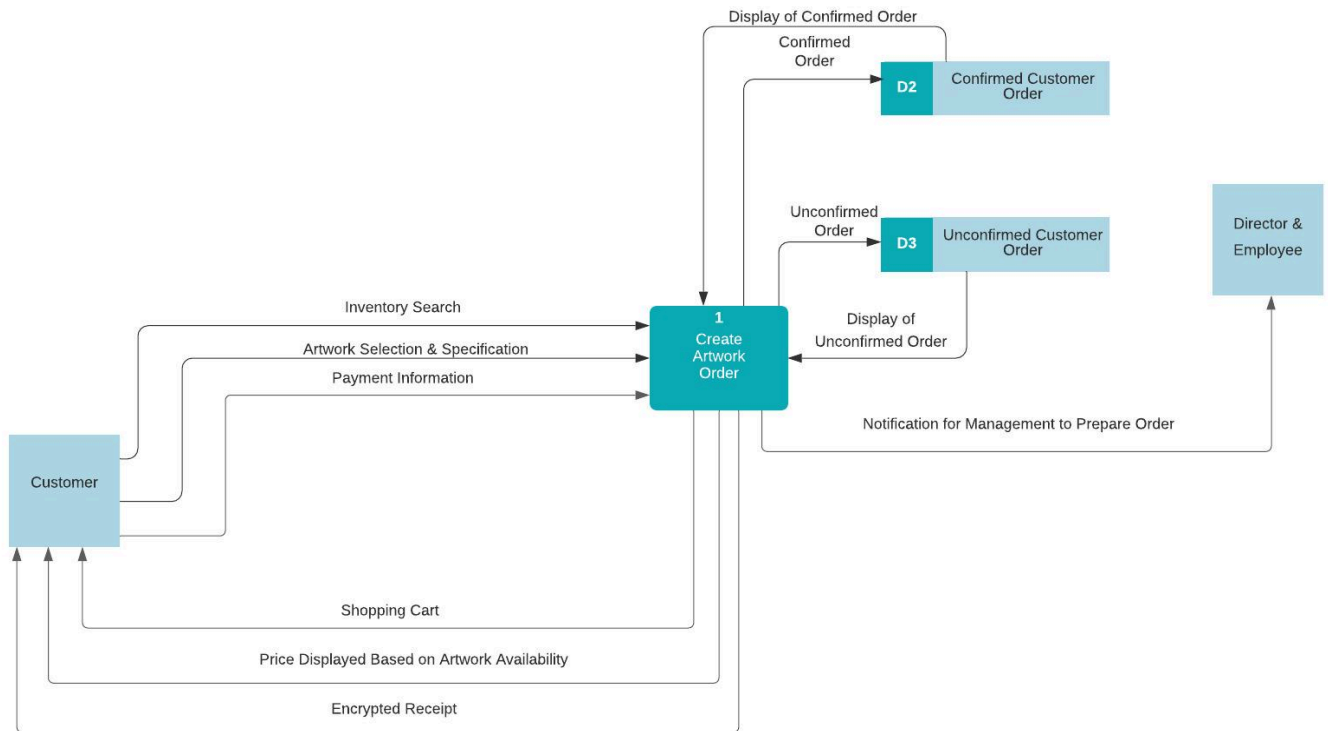
4. The inventory system will automatically update and display the current inventory levels		→Updated inventory system	
5. The system will notify the director that the inventory system has been updated		→Updated inventory notification	
Alternative Courses: 1.1 Director needs to edit inventory (occurs Step 3) 1. The director initiates a need to change an inventory entry		→Current details of inventory entry	
2. The director edits the inventory details		←Updated inventory details	
3. The system will allow the director to officially republish the inventory entry		→Updated inventory system	
4. The system will send a new notification with the updated inventory to the director		→Updated inventory notification	
Postconditions: 1. Director is notified when the inventory system is updated 2. Inventory entries are stored in the Inventory datastore			
Summary Inputs	Source	Summary Outputs	Destination
Director login username and password	Director	New inventory level	Director
Inventory details	Director	Updated inventory system	All staff users
		Inventory notification	Director

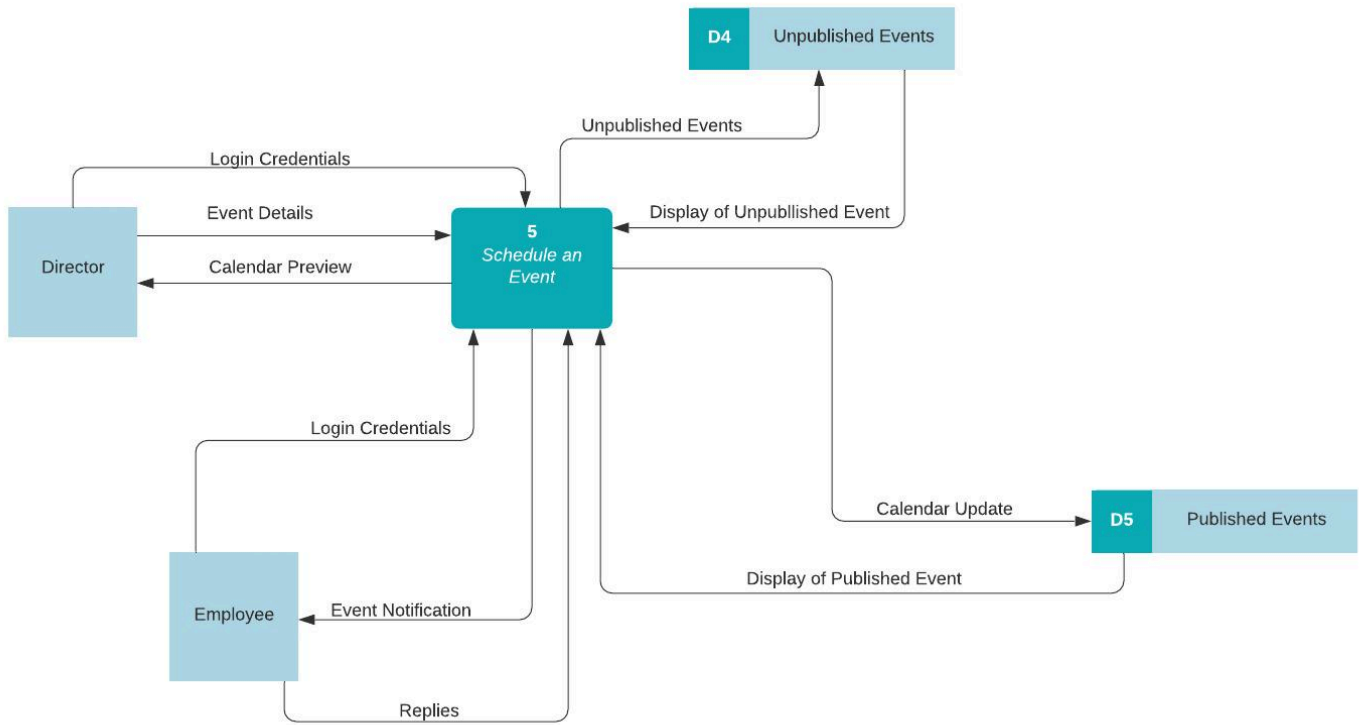
Data Flow Diagrams

Context Diagram

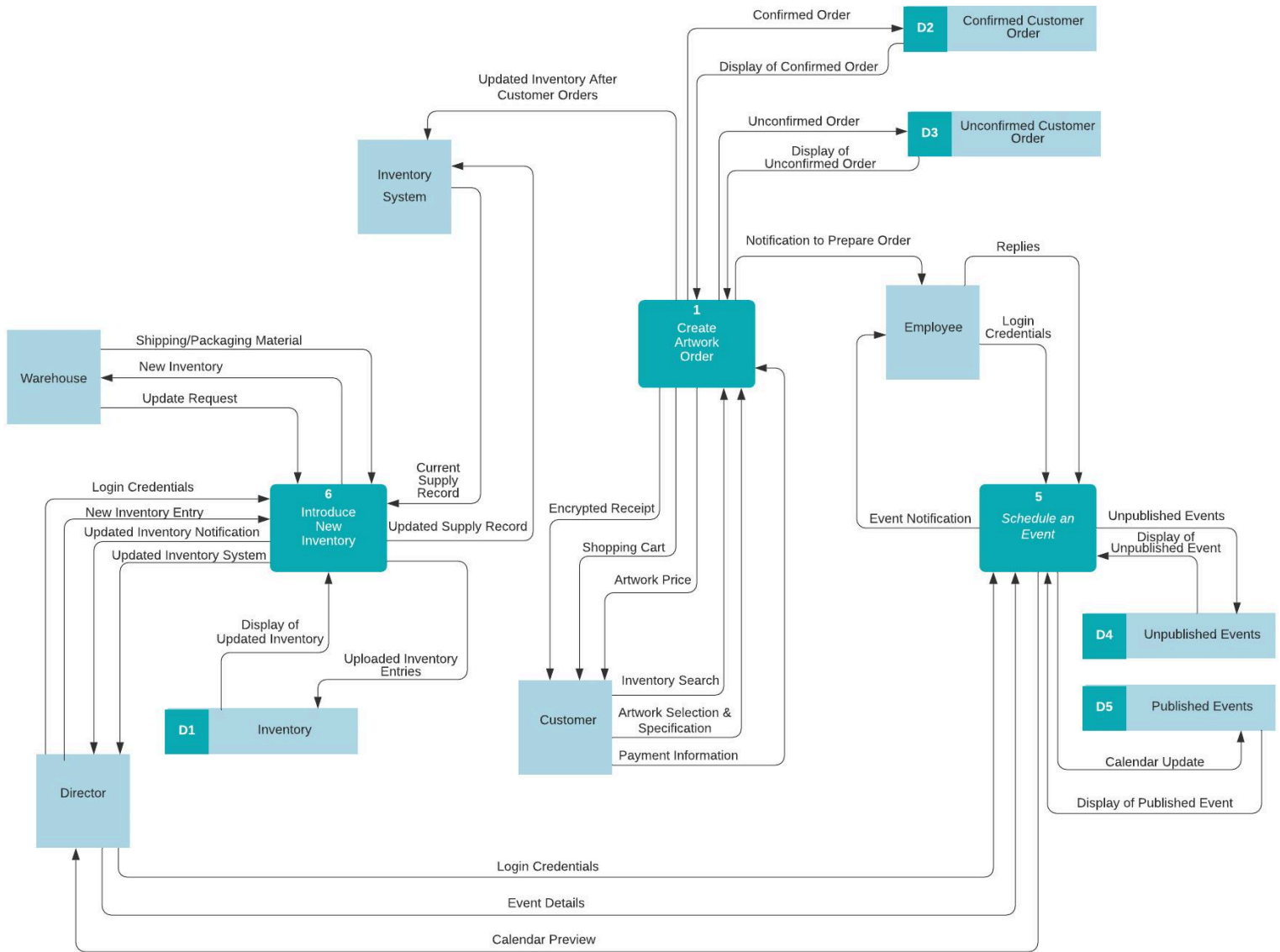


Data Flow Fragments

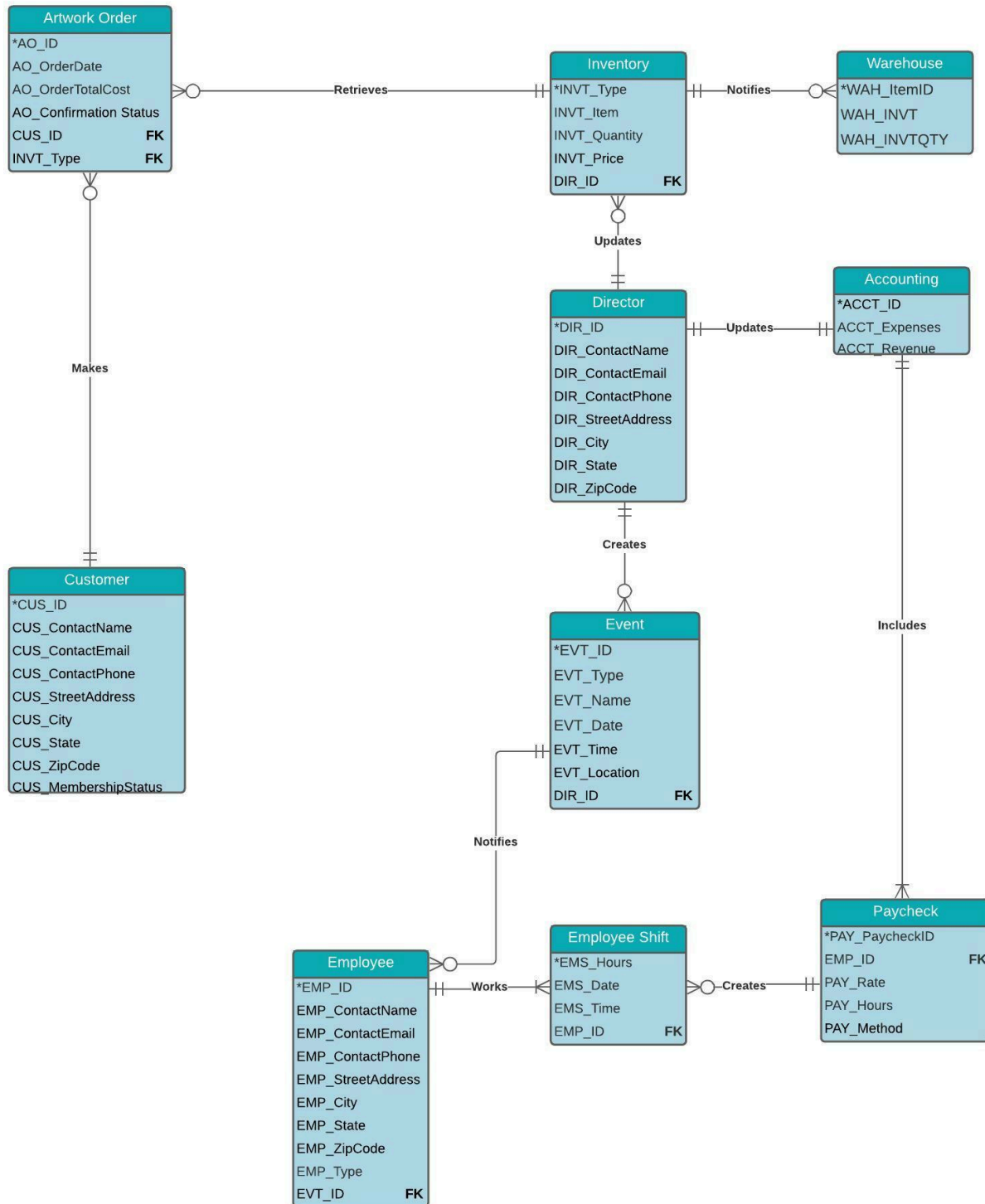




Level 0 DFD



Entity Relationship Diagram

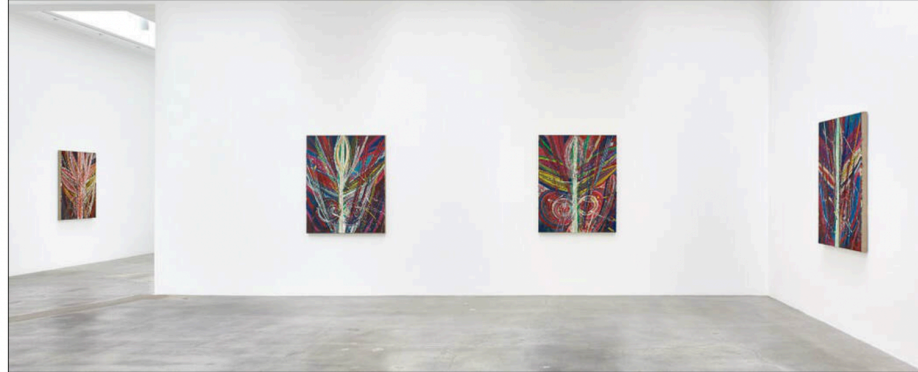


Interface Design Prototypes

Customer Home Page:

Willis Gallery

[home](#)
[login](#)
[shop](#)
[cart](#)
[auctions and tours](#)
[events](#)
[about](#)
[contact us](#)
[donation](#)



Welcome

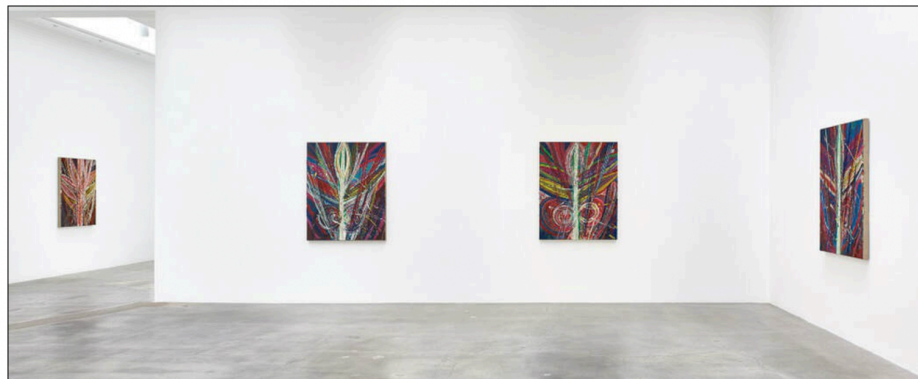
3129 Stuart Ave,
 Richmond VA, 23221
 (804) 941 - 1235

Willis Gallery is a Richmond based Art Gallery with a robust online platform! We offer a subscription service and live auctions and tours, we also sell various artworks and other merchandise on our online store.
 Explore and Enjoy!

Jasmine Willis & Employee Home Page:

Willis Gallery

[home](#)
[login](#)
[shop](#)
[cart](#)
[auctions and tours](#)
[events](#)
[about](#)
[contact us](#)
[donation](#)
[employee](#) ^
 business contacts and customers
 schedule an event
 inventory
 employee schedule
 payroll and accounting



Welcome

Willis Gallery is a Richmond based Art Gallery with a robust online platform! We offer a subscription service and live auctions and tours, we also sell various artworks and other merchandise on our online store.
 Explore and Enjoy!

Login Page:



- home
- login
- shop
- cart
- auctions and tours
- events
- about
- contact us
- donation

Login

Customer

** Indicates required field*

Email address *

Password *

[SIGN IN](#)

[Forgot Password?](#)

[Create Account](#)

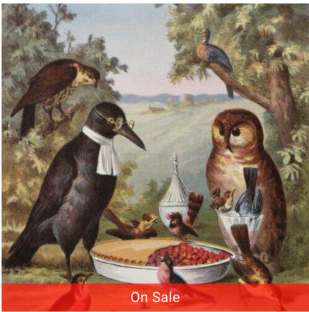
3129 Stuart Ave,
Richmond VA, 23221

(804) 941 - 1235

Shop Page:



- home
- login
- shop
- cart
- auctions and tours
- events
- about
- contact us
- donation



On Sale

"Who Killed Cock Robin"

~~\$140.00~~ - \$100.00

[Buy Now](#)



"Still Life with Flowers and Fruit"

\$200.00

[Buy Now](#)



"Alcazars Pain"

\$170.00

[Buy Now](#)

3129 Stuart Ave,
Richmond VA, 23221

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**Willis
Gallery**

home
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[shop](#)
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auctions and tours
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about
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donation

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~~\$140.00~~ \$100.00

Buy Now



On Sale

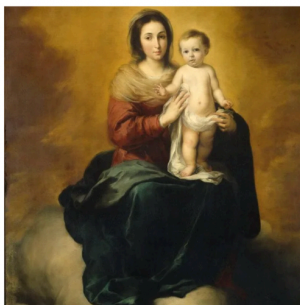
"Cat with Kittens"

~~\$150.00~~ \$125.00

Buy Now

\$200.00

Buy Now



"Virgin and Child"

\$300.00

Buy Now

\$170.00

Buy Now



On Sale

"The Travelling Companions"

~~\$150.00~~ \$125.00

Buy Now

Cart Page:

**Willis
Gallery**

home
login
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auctions and tours
events
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Shopping Cart

Below is a list of items that are requested to be purchased

1. Cart 2. Checkout 3. Review

Cart



VALGRIND GATE

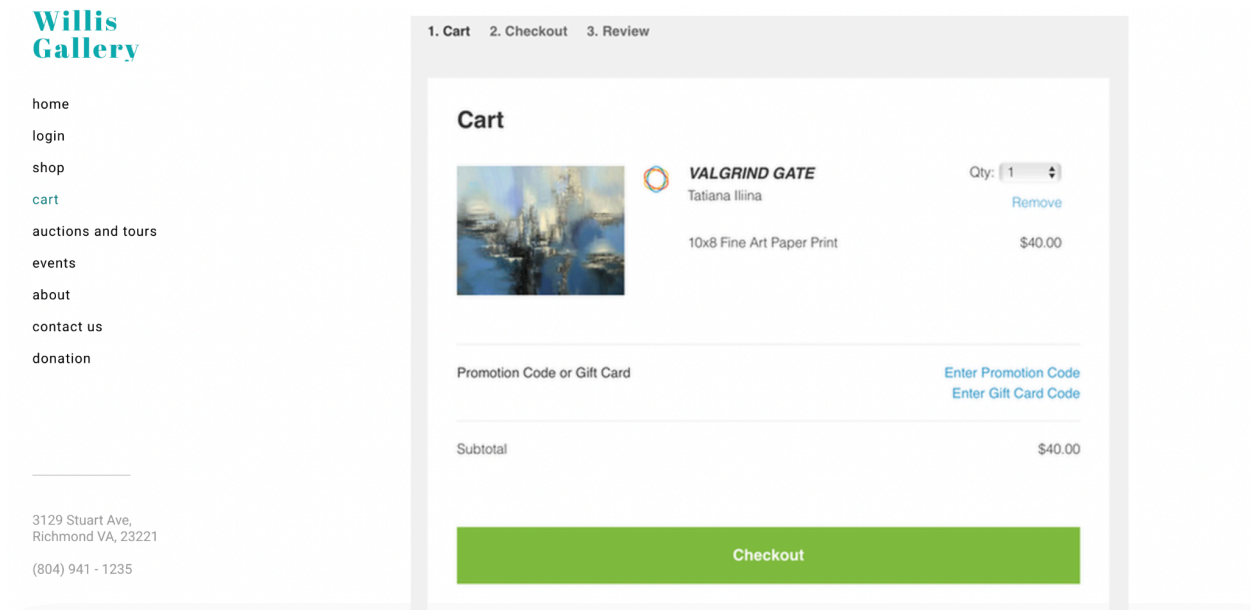
Tatiana Iliina

10x8 Fine Art Paper Print

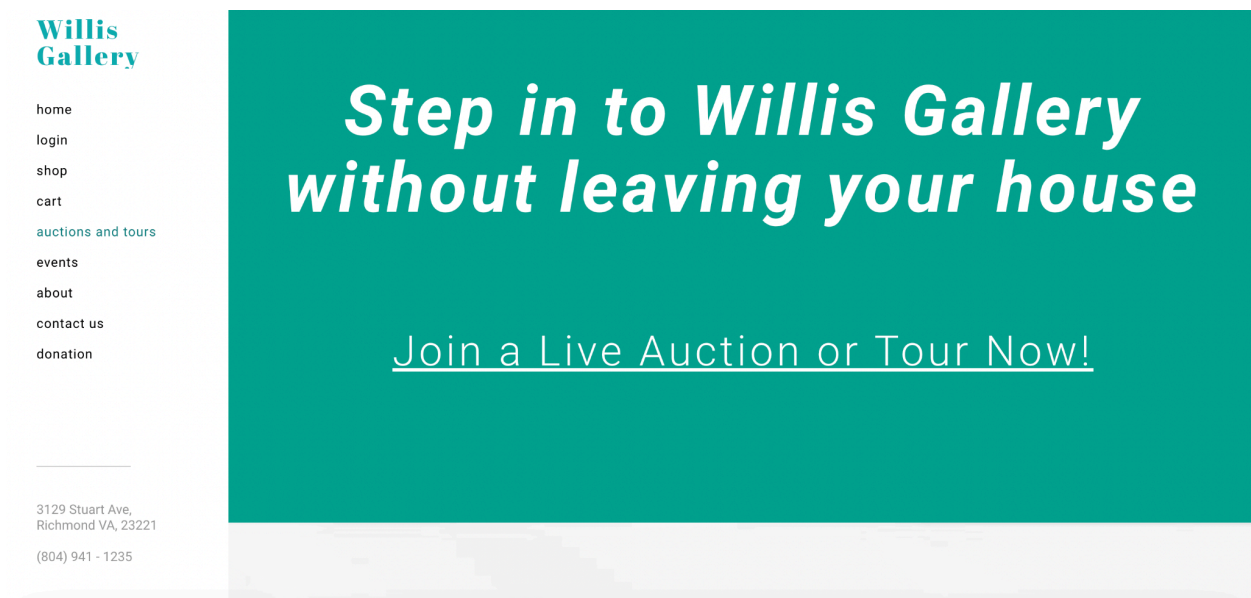
Qty: 1

[Remove](#)

\$40.00



Auctions and Tours Page:



Willis Gallery

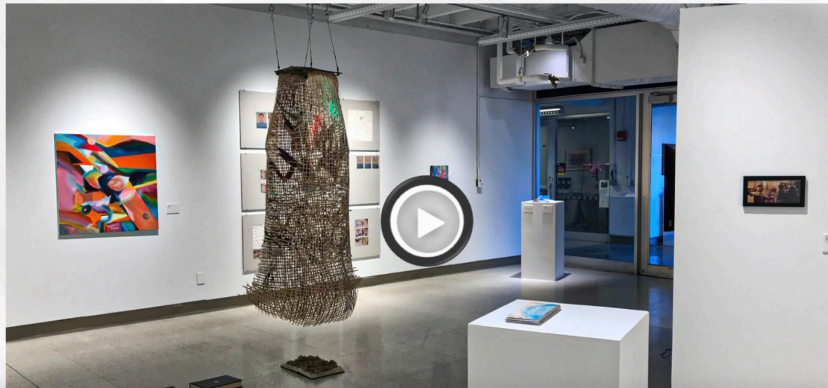
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Tours

Click on the Link Below and Peruse the Gallery

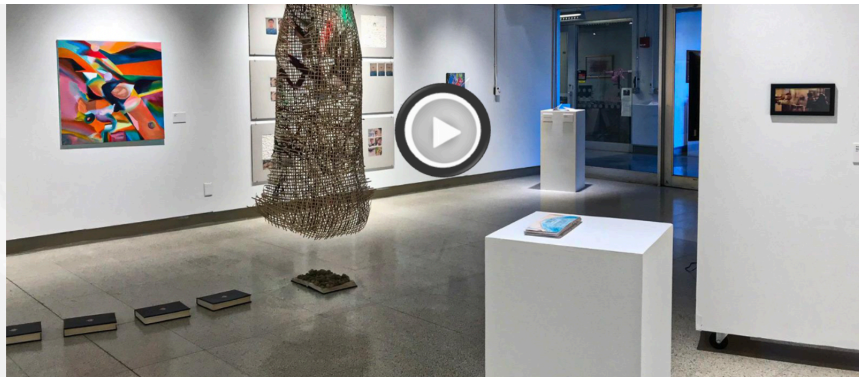
Remember to [login!](#)



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Our amazing tour guides walk you through all of the Willis Gallery exhibits, they provide a detailed and fascinating account of each of the most unique artworks on display. Online tours are held multiple times a day for an hour at a time, all you have to do is login and press play!

Willis Gallery

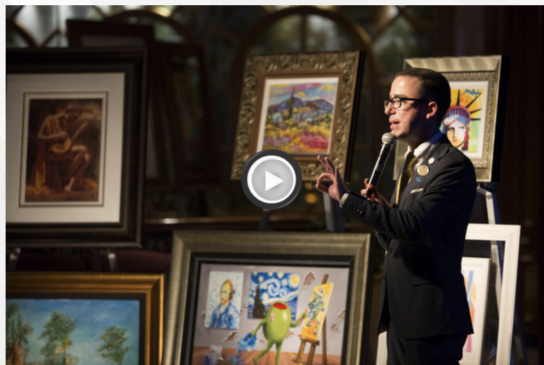
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AUCTIONS

Click on the Link Below and Begin Bidding

Remember to [login!](#)



Events Page:

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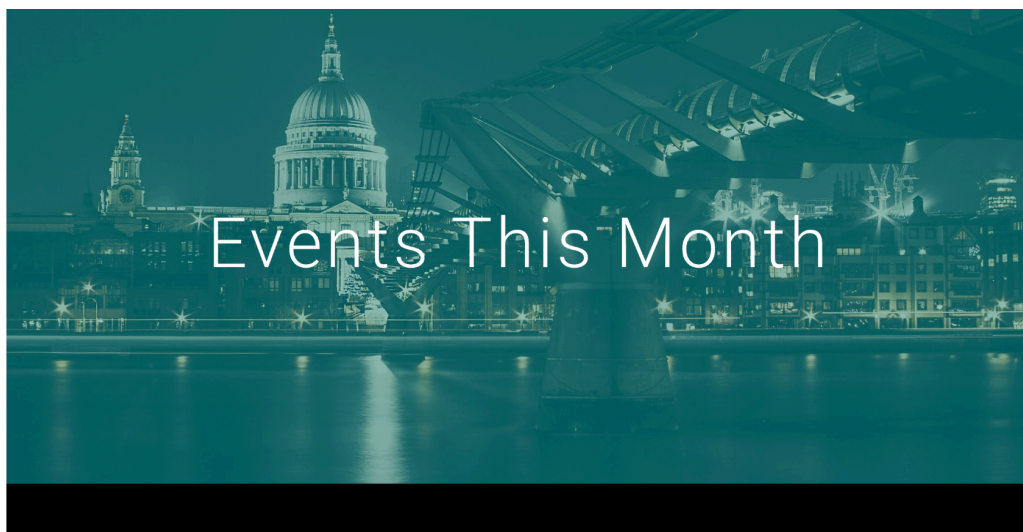
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Month of December

Gallery Events

December Culture Show - Join the Willis gallery in celebrating the cultural display our various different artiis have put together, 12/05

Holiday Festival Event - Come to the Willis gallery to enjoy our winter inspired artworks as well as our projected winter lights consisted of various different themes, 12/20

End of the Year Show - On the last day of the year we want to celebrate our community by giving artist from our city a chance to show off their skills. We ask you to join us in viewing our communities artwork. 12/31

Touring Events

Paris Art Show - Join us virtually in celebrating our french artists and their Parisian culture. We have invited guests from France to speak on behalf of their artworks and inspirations. 12/12



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End of the Year Show - On the last day of the year we want to celebrate our community by giving artist from our city a chance to show off their skills. We ask you to join us in viewing our communities artwork. 12/31



New Artist Previews

Hearing Artists' Speak

We have a talented group of new artist who love and are passionate with what they do. Visit the Willis Gallery virtually and hear these artist speak about their expeiences and inspirations for some of their very own artworks.

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New Artist Previews

Hearing Artists' Speak

We have a talented group of new artist who love and are passionate with what they do. Visit the Willis Gallery virtually and hear these artist speak about their expeiences and inspirations for some of their very own artworks.

December Dates

- 12/10 6pm
 - 12/20 6:30pm
 - 12/28 6pm

About Page:

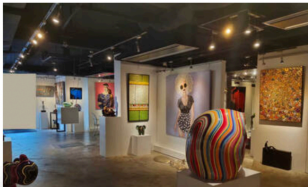
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About Us

Local art lover and entrepreneur, Jasmine Willis, recently established a gallery with a small performance space in the Richmond Arts District to promote both new and established artists from around the country. She started her business a few years ago by hiring a few part time employees so she could still attend art fairs and private auctions to build her collection as well as discover new talent. After an initial period of struggling to learn about the business and trying to make a profit, things were just beginning to fall into place as the pandemic shut everything down. So this is our new online store, the come back!

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Meet Jasmine

Jasmine Willis is a 35 year old art teacher and owner of this establishment. She has always had a love for arts and crafts and is extremely happy to be able to share this with you.

Hall of Art

2,000 square feet with art, emotion and a story at every corner.

Contact Us Page:

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Contact Us

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(804) 941 - 1235
info@willisgallery.com

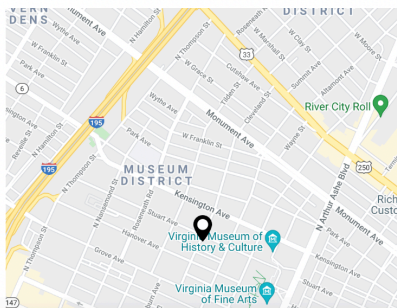
Get In Touch

Maybe you're interested in becoming a member. Maybe you want to exhibit your art here.
Maybe you just want to say hi!
Either way you should reach out! Fill out the form below, we will respond as soon as we can.

* Indicates required field

Name *

Email *



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Either way you should reach out! Fill out the form below, we will respond as soon as we can.

** Indicates required field*

Name *

Email *

Comment *

Submit

Donation Page:

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Make a Donation Today

The Willis Gallery appreciates your gift which helps ensure the gallery remains open for all.

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Make a Donation Today

The Willis Gallery appreciates your gift which helps ensure the gallery remains open for all.

** Indicates required field*

Name *

Email *

Phone Number *

Amount *

Donate

Business Contacts and Customers Page:



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- auctions and tours
- events
- about
- contact us
- donation
- employee ^
- business contacts and customers
- schedule an event
- inventory
- employee schedule
- payroll and accounting

Business Contacts and Customers

Artists

Katherine Miller (243) 832-3964
Devin Ross (501) 589-8452
Amy House (344) 726-8753
Martin Louis (472) 305-9715
Nancy Teller (553) 680-0324
Malvin Kim (804) 839-3792
Sophia Choi (573) 983-4821
Amy Patel (804) 782-3894

Customers

Julia Thomas (846) 805-9987
Skye Adams (804) 985-3473
Vincent Tran (804) 283-4738
Alex Park (532) 536-3558
Mary Liu (466) 380-6465
James Allen (804) 834-2731
Grace Johnson (874) 093-3474
Zack Barton (820) 374-2933

[Login to edit business contacts and view full list of customers](#)

Schedule an Event Page:



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Calendar

DECEMBER 2021						
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
			1 Martin Luther King Jr. Day	2	3 Idol Day of Presidents Day	4
5	6	7 National Pearl Harbor Remembrance Day	8	9	10 Veterans Day	11
12	13	14	15 New Year's Day	16	17 Martin Luther King Jr. Day	18
19	20	21	22	23	24 Christmas Day observed	25 New Year's Day
26	27	28	29	30	31 New Year's Day observed	

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26	27	28	29	30	31	New Year's Day observed

Schedule an Event:

* Indicates required field

Event Name *

Event Date *

Recipient(s) *

Event Details *

Send

Inventory Page:

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INVENTORY



On Sale

"Who Killed Cock Robin"

Quantity: 50 pieces



"Still Life with Flowers and Fruit"

Quantity: 60 pieces



"Alcazar's Pain"

Quantity: 20 Pieces



On Sale

"Cat with Kittens"

Quantity: 40 Pieces



"Virgin and Child"

Quantity: 35 Pieces



On Sale

"The Travelling Companions"

Quantity: 25 Pieces

[Upload New Inventory](#)

Upload New Inventory

* Indicates required field

Name of Artist *

Name of Artwork *

Quantity *

Price *

Art Description *

Submit

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Weekly Timesheet for Employee

Name:	Jay Adams
ORG:	Willis Gallery
Week Ending:	11/14/2021

Workweek	Date	Time In	Time out	Hours	Time In	Time out	Hours	Time In	Time out	Hours	Leave Taken	Holiday Hours	Total Daily Hours	Notes
Sunday	11/7/2021	12:00 PM	4:00 PM	4.00	-	-	-	-	-	-	-	-	4.00	
Monday	11/8/2021	12:00 PM	4:00 PM	4.00	-	-	-	-	-	-	-	-	4.00	
Tuesday	11/9/2021	8:00 AM	12:00 PM	4.00	-	-	-	-	-	-	-	-	4.00	
Wednesday	11/10/2021	-	-	-	-	-	-	-	-	-	-	-	-	
Thursday	11/11/2021	2:00 PM	4:00 PM	2.00	-	-	-	-	-	-	-	-	2.00	
Friday	11/12/2021	10:00 AM	12:00 PM	2.00	-	-	-	-	-	-	-	-	2.00	
Saturday	11/13/2021	-	-	-	-	-	-	-	-	-	-	-	-	
Weekly Hours Worked				16.00										
				Leave Hours										
				0.00										
				Holiday Hours										
				0.00										
				Total Hours										
				16.00										

Schedule

[Click here](#) to schedule vacation time or request for shift changes.

Payroll and Accounting Page:

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PAYROLL AND ACCOUNTING

Payroll Manager View

[Login to access and pay employees](#)

Employee information

Employee ID	Name	Hourly Wage	Tax Status	Federal Allowance (From W-4)	State Tax (Percentage)	Federal Income Tax (Percentage based on Federal Allowance)	Social Security Tax (Percentage)	Medicare Tax (Percentage)	Total Taxes Withheld (Percentage)	Insurance Deduction (Dollars)	Other Regular Deduction (Dollars)	Total Regular Deductions (Excluding taxes, in dollars)
1	Jay Adams	\$20.00	1	4	2.30%	28.00%	6.30%	1.45%	36.05%	\$20.00	\$40.00	\$60.00
2	Alle-James Tran	\$15.00	1	4	2.30%	28.00%	6.30%	1.45%	36.05%	\$20.00	\$40.00	\$60.00
3	Lochen Sheehan	\$15.00	1	4	2.30%	28.00%	6.30%	1.45%	36.05%	\$20.00	\$40.00	\$60.00
4	Renee Romero	\$15.00	1	4	2.30%	28.00%	6.30%	1.45%	36.05%	\$20.00	\$40.00	\$60.00

Enter Employee Information to Calculate Employee Payroll

Payroll Employee View

[Login](#) to access pay stubs

Willis Gallery

Period:	1/0/00	Employee Name	Jay Adams	Employee ID	1
Tax Status	1	Federal Allowance (From W-4)	4	Hours Worked	50
Hourly Rate	\$20.00	Overtime Rate	\$531.82	Sick Hours	1.2
Social Security Tax	\$44.62	Federal Income Tax	\$198.29	Vacation Hours	10
Medicare Tax	\$10.27	State Tax	\$16.29	Overtime Hours	1240
Insurance Deduction	\$20.00	Other Regular Deduction	\$40.00	Gross Pay	\$708.18
Total Taxes and Regular Deductions	\$329.46	Other Deduction	#REF!	Total Taxes and Deductions	#REF!
				Net Pay	#REF!

Download Employee Paystubs Above

Expenses

[Login](#) to add your business expenses

[illegible]

Usability Test Report

Walk-Through #1:

Our first subject was a Virginia Commonwealth University student outside of the class. The student opened the published Willis Gallery website and went through the different web pages by clicking on the different tabs on the navigation menu. The student thought the layout of the site was neat, and they were able to access the different web pages easily. The student was fond of the turquoise theme of the gallery website and felt that the images used on the webpages captured a calming and aesthetic of an art gallery. The student also mentioned that the fonts used for text on each webpage were consistent and easy to read. The student thought the information displayed on each webpage was useful. For example, the student mentioned how useful it was for the customer to be able to see the quantity left in stock for each art piece. Overall, the student thought the gallery website was fairly easy to use and the intention of the buttons and webpages were easy to understand. For example, the student was able to input information for the contact us page and was able to see the purpose of the submit button. One critique the student had was that some of our webpages had more empty space than the others. To fill in the empty spaces, we went to the events page and added more information and pictures.

Walk-Through #2:

Our second subject was a junior year student at Virginia Commonwealth University. They started with the home page and scrolled through each part of each other page, paying attention to all aspects of the website. They emphasized that the color scheme and proportionality was a great compliment to the neatness of the website. The second subject really enjoyed the layout and color scheme of the website which they again thought added to the neatness of the website. They did not have too many comments about the content information itself but they did mention that there were good brief descriptions on the webpages. Additionally, they did think the gallery website was easy to use. They got through the website pretty quickly without any confusion. The second subject had no negative critiques or comments about the website. Therefore, we did not have to make any new changes to the website based on their feedback.

User Testing Tasks

After taking in the feedback from our volunteers and other associates we did our best to modify the website to make it as easy to use as possible. After implementing the feedback received we made small but necessary adjustments to the website and called back the same volunteers and had them complete different tasks within the website. Below is a list of the tasks completed and their feeling of the ease of usability.

- 1) Find an artwork and add it to the cart: Believed it to be straightforward and the listing of products was very organized

- 2) Find information about donations: Very simple and stated that there was just enough information to conduct the following steps
- 3) Find contact information for the gallery: Extremely easy to find.

Executive Summary and Recommendations

Our feasibility analyses found that the system is not only very practical and easy to build but is also economically viable. Specifically, our technical feasibility report shows that Willis Gallery will easily achieve global reach and can also be navigated by any type of user regardless of experience with technology. The organizational feasibility analysis predicts a smooth transition from an in-person experience to a virtual experience. Furthermore, the economic feasibility analysis found that the Willis Gallery will have an impressive return of investment of 57.14%. Thus, from these results the Willis Gallery project is very worthwhile to proceed to analysis and design.

The Willis Gallery will allow customers to view an online art gallery at all times, to create personalized accounts, and to order artworks and tickets to gallery and auction events. The system will allow Jasmine's employees to access their payroll and work schedules. Jasmine will also be able to manage her accounting files and customer contacts.

To provide a tangible representation of the system, we created an interface prototype in the form of a website. We created a customer view as well as a management and staff view, we created the prototype with the user in mind ensuring the system was comprehensible to both customer and staff. After finalizing the prototype, two users tested the system and both were able to navigate the site easily and had positive feedback on the layout, appearance and functionality. One criticism we received from a test-user was that some pages on the site had more empty space than others, we amended that and subsequently reviewed the site with consistency in mind.

To enhance our system, we will conduct more walk-through evaluations to ensure that all of our user expectations and requirements are met. We will also plan to refine our website with the collaboration of our project sponsor. To proceed, we recommend creating a finalized website based on our interface design prototypes, and then monitor the response from new users once the finalized website has been published.