ADVANCE RESEARCH

Research Brief

"Optimizing Search and Filter Interaction for Enhanced Property Discovery"

1. Background Information	This project investigates user frustrations with search and filter experiences on property booking platforms like Airbnb, Trivago, and Hotel.com. Research highlights issues such as poorly categorized filters, lack of personalization, and repetitive search tasks that lead to abandoned searches. Users face cognitive overload and inefficiency, necessitating the development of a guided search model and smart filter system to improve the booking process.
2. Project Aims and Objectives	**Aims:** - Assess pain points in current search/filter systems on property platforms. - Evaluate the impact of guided search and smart filters on user engagement and satisfaction. - Develop solutions to enhance search intuitiveness and efficiency. - Prove that guided search reduces cognitive load and improves discoverability. **Key Questions:**

	- What challenges do users face when applying search filters? - How effective is guided search compared to traditional search bars? - Can smart filters increase personalization and reduce search time?
3. Audience Description	**Primary Audience:** - Frequent and business travelers who require efficient search tools. - Users conducting advanced searches with specific criteria (e.g., amenities, price range, location). - New users unfamiliar with platform interfaces. **Secondary Audience:** - Tech-savvy users demanding intuitive interfaces and fast recommendations. - Budget-conscious travelers relying heavily on price filters to find affordable stays.
4. Internal Stakeholders and Use of Findings	**Stakeholders:** - UX/UI design teams at property booking platforms. - Development teams implementing search and filter features. - Product managers focused on user experience improvements. **Use of Findings:** - Redesign filter interfaces to be more intuitive and personalized.

	- Integrate guided search prompts and smart filters to improve engagement and retention. - Develop data-driven recommendations based on user behavior analysis.
5. Methodology Guidance	**Bidders must propose methodologies aligning with:** - **DART Framework:** Discover, Assist, Refine, Tailor model applied to guided search development. - **"Understanding Users Behaviors when they use Search and filter Interaction"** **:** Users will perform guided search tasks on Booking.com and traditional searches on TripAdvisor to compare efficiency and satisfaction. - **Task-Based Observation:** Users will complete hotel search tasks within specific scenarios: (**Scenario A**: Guided Search (step-by-step interface). **BOOKING.COM** • **Task 1**: Open Booking .com and Find a hotel for a Trip in Las vegas which should be pet friendly and Budget $400. **Scenario B**: Type Search (traditional search bar). **TRIPADVISOR** • **Task 2**: Open TRIPADVISOR and Find a hotel for a Trip in Las vegas which should be pet friendly and Budget $400) - **Surveys and Interviews:** Quantitative analysis through surveys (user satisfaction, task completion time) and qualitative interviews (pain points, preferences).

6. Issues and Risks	**Risks:** - Limited user participation may skew results, User familiarity with specific platforms may introduce bias. - Implementation delays for guided search features. Challenges - Ensuring filter personalization without overwhelming users. - Data privacy considerations when collecting user interaction data.
7. Timeline and Deliverables	**Milestones Achieved:** - **Proposal Submission:** September 25, 2024 - **Preliminary Report (User Behavior Analysis):** October 9, 2024 - **Draft Report (Smart Filter Design Recommendations):** October 30, 2024 - **User Testing (Booking.com & TripAdvisor):** November 13, 2024 -**Analysing data and Finalysing:** December 4, 2024 - **Final Report Delivery:** December 19, 2024
8. Proposal Requirements	**Required Inclusions:** - Methodology breakdown (comparative testing, surveys, etc.). - Case studies of previous UX projects involving search/filter design.

	- Detailed cost breakdown by phase (testing, analysis, reporting). - Proposed timeline with key milestones. - Team bios and relevant expertise in UX research.
9. Project Management and Contact Details	**Project Lead**: Muskan Rathore **Advisor**: Prof. Christopher Lee **Contact:** Muskanrathorework4@gmail.com

Thank you.