Oasis Spacebar

Jonreff Maxey Gamao

Luan Sebastian Jardin

Jess Luengas

Part 3.2 System Evaluation

Project Description

The project aims to develop a mobile application called Oasis SpaceBar to streamline the reservation process for luxury resort stays. This application will support tasks such as checking room availability, comparing different room options, making

secure online reservations, and managing bookings. The intended users are individuals and families planning luxury resort stays and travelers seeking a convenient and user-friendly booking experience.

Requirements Summary:

MINIMUM REQUIREMENTS	Processor	Single Core
	OS	Andoid/IOS/Windows
	RAM	2GB
RECOMMENDED REQUIREMENTS	Processor	QUAD Core
	OS	Andoid/IOS/Windows
	RAM	4GB

Oasis Spacebar is designed to be lightweight and efficient, requiring minimal system specifications to operate smoothly. Since the app's primary function is to facilitate reservations, it does not incorporate complex designs, heavy graphics, or intricate animations that could lead to performance issues or crashes. Focusing on a streamlined user experience ensures the app runs reliably on a wide range of devices, providing quick and easy access to reservations without demanding high processing power or memory. This makes Oasis Spacebar accessible and user-friendly for everyone, regardless of their device's capabilities.

Overview

Technique	**Description**
Heuristic Evaluation	The heuristic evaluation involved usability experts and students assessing the Oasis Spacebar Figma UI prototype against established usability heuristics, such as Nielsen's 10 Heuristics. This method aimed to identify fundamental usability issues and provide actionable recommendations for improving the interface's design.

User Testing with 5Es	User testing with benchmark tasks was conducted with a sample of participants selected from the target user population, including clients and randomly selected students. The evaluation followed the 5Es framework (Effectiveness, Efficiency, Engagement, Error Tolerance, Ease of Learning) to structure tasks and observations. Participants performed typical actions such as searching for rooms, making reservations, and managing bookings. The method included think-aloud protocols and task completion metrics to gather quantitative data (task success rates, time taken) and qualitative insights into user experience.
Survey Deployment	A structured survey was deployed using Google Forms to gather subjective feedback from a random sample of participants who completed the user testing sessions. The survey included questions covering various usability aspects, such as ease of navigation, clarity of information, satisfaction with visual design, and overall user experience. Open-ended questions allowed participants to provide detailed comments and suggestions for improvement based on their interactions with the prototype.

The combination of heuristic evaluation, user testing with benchmark tasks, and survey deployment comprehensively evaluated the Oasis Spacebar Figma UI prototype. Each method offered unique insights into usability strengths and areas for improvement. Findings from these evaluations will guide iterative design enhancements to meet user needs better and enhance overall usability in subsequent iterations of the prototype.

This approach ensures a holistic assessment of the prototype's usability, leveraging expert evaluation and direct user feedback to inform design decisions and drive continuous improvement.

Results

Heuristic Evaluation Findings

Heuristic	Description	Identified Issues	Recommendations
Visibility of system status	Users have not been informed about the current stage of their booking process.	Lack of progress indicators during booking.	Implement progress indicators (e.g., steps or percentage completion) to inform users about their progress.
Match between the system and the real world	The app's terminology does not match user expectations or real-world conventions.	Technical jargon is used in error messages and notifications.	Use language and terminology familiar to users; avoid technical jargon where possible.

User control and freedom	Users cannot easily undo actions or navigate back to previous steps.	N/A	N/A
Consistency and standards	Icons and buttons have inconsistent meanings across different screens.	N/A	N/A
Error prevention	Users can submit incomplete booking forms without warning.	No validation for the required fields on the booking form.	Implement form validation to prompt users to complete required fields before submission..
Recognition rather than recall	Users must remember their booking details without a summary page.	Lack of summary or confirmation page before final booking submission.	Provide a summary page displaying booking details before final confirmation to

			reduce user cognitive load.
Flexibility and efficiency of use	Experienced users find the app cumbersome due to a lack of shortcuts or advanced features.	No keyboard shortcuts or advanced search filters for power users.	Provide clear and specific error messages with instructions for resolving issues.
Aesthetic and minimalist design	Visual clutter and unnecessary elements distract from the booking process.	Overuse of decorative graphics and animations.	Simplify interface by removing unnecessary visual elements and focusing on essential booking functionalities.
Help users recognize, diagnose, and recover from errors	Error messages are generic and do not provide actionable guidance for users.	N/A	Provide clear and specific error messages with instructions for resolving issues.

Help and documentation	Users struggle to find help resources or documentation within the app.	**N/A**	Simplify the interface by removing unnecessary visual elements and focusing on essential booking functionalities.

- **Navigation Consistency:** Identified inconsistencies in navigation patterns across different app sections, which may confuse users.
- **Feedback Mechanisms:** Lack of real-time feedback during booking processes, potentially leading to user uncertainty.
- **Error Handling:** Insufficient error messages and guidance, causing frustration when users encounter issues.

User Testing Results

Evaluation Aspect	Criteria	Results	Insights and Comments
Effectiveness	Success Rate	85%	Users were generally successful in completing booking tasks, but encountered issues with modifying bookings.
	Accuracy	High	Room selection and reservation details were accurately processed.
Efficiency	Time Taken	2.5 min	Average time users spent to search for rooms and complete bookings.
	Steps/Clicks	Moderate	Users found the process slightly cumbersome due to multiple steps.
Engagement	Visual Appeal	4.0/5	Users appreciated the modern design but suggested more interactive elements.
	User Satisfaction	Positive	Generally satisfied with the interface and features.
Error Tolerance	Error Messages	3.5/5	Users appreciated error alerts but found some messages lacked clear guidance.
	Recovery	Moderate	Users could recover from errors with some effort.
Ease of Learning	Learning Curve	3.8/5	New users found the app relatively easy to navigate but suggested clearer instructions.
	Complexity	Moderate	Some features were perceived as complex for new users.

- **Effectiveness:** Most participants successfully completed booking tasks but struggled with account management functionalities.
- **Efficiency:** The average task completion time for booking a room was 2 minutes while managing bookings took longer due to navigation challenges.
- **Engagement:** Users showed high engagement during the booking process but became disengaged during account setup and profile management.

Survey Analysis

Question	Average Rating (1-5)	Comments and Insights
Overall Experience	3.8	Users found the app generally user-friendly but suggested improvements in navigation.
Navigation Clarity	3.5	Mixed feedback on ease of finding features; suggestions for clearer menu structure.
Visual Design	4.0	Positive responses to modern aesthetics and intuitive layout; desire for more customization options.
Booking Process	3.9	Generally smooth booking process; some users requested clearer instructions during certain steps.
Information Clarity	3.2	Some users found booking details straightforward, while others requested clearer explanations of terms and policies.
Error Handling	3.6	Users appreciated error messages but suggested more detailed explanations and solutions.
Suggestions for Improvement	-	Multiple suggestions for additional features and enhanced user guidance.

Conclusion

The heuristic evaluation highlighted crucial usability issues related to navigation consistency, feedback mechanisms, and error handling, suggesting improvements to enhance user experience. User testing confirmed the app's effectiveness in booking tasks but revealed challenges in efficiency and engagement during account management. Survey results provided valuable insights into user satisfaction with visual design and navigation and suggestions for improving information clarity and error messaging.

Addressing these findings will be crucial to refining the Oasis Spacebar app prototype. Future iterations will focus on enhancing navigation coherence, implementing real-time feedback mechanisms, and improving user engagement during all phases of interaction. By integrating user feedback and usability insights, we aim to deliver an optimized app experience that meets user expectations and fosters seamless booking and space management.

This evaluation underscores our commitment to iterative design and user-centered development, ensuring the Oasis Spacebar app evolves into a user-friendly platform that enhances user satisfaction and usability.