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Programme: BSc (Hons) Computer Security

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Group work: please list all names of all participants formally associated with this work and state whether the work was undertaken alone or as part of a team. Please note you may be required to identify individual responsibility for component parts.

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Introduction

Overview of the Project

In the present fast-moving world, comfort rules. Enter BookKing, a progressive Multi-service Booking System intended to smooth out and raise your booking experience across a different scope of services. From arranging your dream vacation to tracking down the ideal freelancer for a task, BookKing offers a one-stop answer for all your service needs.

Purpose of the Project

The purpose of this project is to:

- **Enhance client convenience:** Give an easy-to-understand platform to clients to flawlessly book different services from the solace of their homes.
- **Optimize service provider efficiency:** Offer organizations an incorporated system to oversee appointments, arrangements, and client connections really.
- **Smooth out booking processes:** Work on the booking experience for both clients and service providers, decreasing regulatory weights and further developing productivity.

Justification of the Project

Business requirements:

- **Expanded Client Securing and Maintenance:** The platform gives a helpful and concentrated booking experience, possibly drawing in new clients and empowering rehash business.
- **Improved Functional Proficiency:** Smoothed out booking processes lessen authoritative above for specialist organizations, permitting them to zero in on center business exercises.
- **Enhanced Revenue Opportunities:** The platform can offer extra income streams through publicizing, premium postings, or exchange charges.
- **Information driven Experiences:** The system can gather important information on client inclinations and booking patterns, empowering service providers to tailor contributions and improve marketing strategies.

Social requirements:

- **Improved Accessibility:** The platform engages people with more straightforward admittance to different services, paying little mind to area or time imperatives.

- **Upgraded consumer decision and control:** Clients benefit from a more extensive scope of options and the capacity to helpfully look at contributions and costs.
- **Expanded Straightforwardness and Trust:** Constant accessibility and valuing data cultivates trust and informed decision-production for clients.
- **Potential for economic growth:** The platform can add to financial advancement by working with service transactions and possibly setting out new job opportunities.

Scope and Objectives

The objective is to foster a user-friendly multi-administration booking system that works on the most common way of booking different services from one platform. This involves offering an intuitive interface for easy routes and booking, alongside effective search and filter functionalities. The system expects to give a different scope of services spreading over multiple industries through organizations with service providers. Moreover, a feedback system will accumulate client surveys and evaluations to keep up with service quality and help independent direction. Eventually, the objective is to make a thorough asset that streamlines comfort, proficiency, and fulfillment for both clients and organizations the same.

Background

Literature Study

Lately, the coming of web-based booking systems has revolutionized the way users access and book different services, going from travel to freelance appointments. This literature review is intended to investigate the present status of project, trends, challenges, and advancements in multi-service booking systems, with an emphasis on understanding user requirements and improving the user experience.

Trends in Multi-Service Booking Systems:

The scene of multi-service booking systems has seen critical development, driven by headways in innovation and moving customer preferences. One striking trend is the intermingling of different services onto a solitary platform, offering users a consistent and coordinated experience. For example, platforms like Expedia and Airbnb empower users to book flights, facilities, and activities all in one spot (Xie et al., 2019). This trend mirrors users' longing for comfort and productivity in getting to multiple services through a brought together connection point.

Challenges in Multi-Service Booking Systems:

Regardless of the advantages, multi-service booking systems face several challenges that influence the user experience. One significant challenge is the intricacy of incorporating assorted services and systems from various suppliers. This intricacy frequently prompts irregularities in user interfaces, information organizations, and booking processes, bringing about a divided user experience (Xie et al., 2019).

Besides, guaranteeing personalization and customization in multi-service booking systems presents a huge challenge. Users expect personalized suggestions and custom fitted encounters based on their inclinations and past interactions. Nonetheless, accomplishing personalization at scale while regarding user protection and information security stays a challenge for some platforms (Liu et al., 2020).

Advancements in User-Centric Design:

To address these challenges, researchers and experts have focused in on taking on user-centric design methodologies to improve the user experience in multi-service booking systems. User-Centered Design (UCD) standards underscore understanding user needs, behaviors, and preferences through procedures, for example, user interviews, personas, and usability testing (Liu et al., 2020). By integrating UCD standards

into the design interaction, engineers can make interfaces that are natural, user-friendly, and aligned with user assumptions.

Besides, headways in innovation, like artificial intelligence (AI) and Machine Learning (ML), have empowered personalized proposals and prescient analytics in booking systems. By analyzing user information and ways of behaving, Artificial Intelligence fueled systems can present custom fitted thoughts, expect user needs, and give proactive help all through the booking system (Xie et al., 2019).

Conclusion:

All in all, multi-service booking systems assume a pivotal part in working with users' admittance to many services. Notwithstanding, challenges like system intricacy, personalization, and protection concerns keep on influencing the user experience. By taking on user-centric design methodologies and utilizing headways in innovation, engineers can improve the ease of use, personalization, and overall user experience of multi-service booking systems. Future exploration ought to zero in on addressing these challenges and investigating imaginative answers for additional further develop the user experience in multi-service booking systems.

Theoretical Framework for the Solution

The Booking Website draws upon a conjunction of theoretical systems to guarantee a user-centric, effective, and secure platform. This mix of design standards and technological methodologies establishes the groundwork for an effective booking experience.

User-Centered Design (UCD) structures the foundation of the task. By focusing on user needs and assumptions all through the improvement interaction, the website will be instinctive, simple to explore, and work with a consistent booking stream.

Service-Oriented Architecture (SOA) engages the platform to incorporate different services from different suppliers. This measured methodology encourages scalability and adaptability, allowing for the simple expansion of new contributions and consistent correspondence between various service suppliers. By utilizing SOA, the website can oblige many services without settling for less on execution or user experience.

Online Transaction Processing (OLTP) guarantees the website can handle high volumes of booking transactions productively. This means a responsive and dependable system, crucial for keeping up with user fulfillment and trust. By executing an OLTP data set system, the website ensures real-time booking affirmations, quick installment processing, and exact information refreshes.

User Authentication and Authorization shields user information and transactions. Powerful safety efforts are executed through secure user authentication protocols, access control systems, and data encryption. This layered methodology safeguards delicate data and cultivates a solid environment for users to direct their bookings with certainty.

The choice of these theoretical frameworks isn't inconsistent. Everyone straightforwardly addresses basic parts of the Multi-service Booking Website, guaranteeing a user-centric design, consistent service integration, proficient transaction processing, robust security. By really executing this multifaceted methodology, the project can accomplish its objective of giving a helpful, productive, and secure platform that reforms the manner in which users book and access different services.

User Requirement

Identification of users

1. Millennials and Gen Z:
 - These generations are bound to be carefully sharp and to favor the comfort of web-based booking.
2. Busy professionals:
 - Experts who have limited time to book services will see the value in the comfort of an all-in-one resource.
3. Families:
 - Families with multiple kids frequently need to book different services, like childcare, activities, and transportation.
4. Travelers:
 - Travelers frequently need to book different services, like flights, hotels, and activities.
5. Event planners:
 - Event planners often need to book a variety of services for events, such as venues, catering, and entertainment.
6. Freelancers and Independent Professionals:
 - Independent Service Providers: Freelancers in various industries such as personal trainers, therapists, consultants, and tutors looking for a platform to manage appointments and attract clients.

User Interviews/observations and Surveys

We created a survey from google forms and asked some questions that will help with our validation and verification.

The link for the form is given below and a screenshot of the form is shown below as well:

<https://forms.gle/dDLb7VBVW6k1Moqu9>

Survey For Multifunctional Booking System

BookKing, a progressive Multi-service Booking System intended to smooth out and raise your booking experience across a different scope of services. From arranging your dream vacation to tracking down the ideal freelancer for a task, BookKing offers a one-stop answer for all your service needs.

ashendul@gmail.com [Switch account](#)

Not shared

* Indicates required question

How familiar are you with the concept of multifunctional booking system ? *

1 2 3 4 5

Not familiar ☐ ☐ ☐ ☐ ☐ familiar

How often do you book a hotel online? *

☐ Once a month

☐ once a every few moths

☐ once a year

☐ rarely

☐ never

☐ Other: _____

Which services do you most frequently book using the system? (Select all that apply) *

☐ Hotels

☐ Flights

☐ Car rentals

☐ Events

☐ Other: _____

How satisfied are you with the ease of use of the booking system? *

1 2 3 4 5

Very dissatisfied ☐ ☐ ☐ ☐ ☐ Very satisfied

How satisfied are you with the range of services offered by the booking system? *

1 2 3 4 5

Very dissatisfied ☐ ☐ ☐ ☐ ☐ Very satisfied

How would you rate the reliability of the booking system in terms of availability and performance? *

1 2 3 4 5

Very poor ☐ ☐ ☐ ☐ ☐ Excellent

How likely are you to recommend the booking system to others? *

1 2 3 4 5

Very unlikely ☐ ☐ ☐ ☐ ☐ Very likely

What factors influence your decision when choosing a hotel? *

☐ Price

☐ Location

☐ Reviews

☐ Facilities

☐ Brand Reputation

What amenities do you look for in a hotel? *

☐ Free Wifi

☐ Breakfast Included

☐ Swimming Pool

☐ Gym

☐ Spa

How important is the hotel's rating to you? *

1 2 3 4 5

Not Important ☐ ☐ ☐ ☐ ☐ Extremely Important

What features or functionalities do you find most valuable in the booking system? * (Select all that apply)

☐ User-friendly interface

☐ Wide range of services

☐ Secure payment options

☐ Real-time availability updates

☐ Other: _____

What improvements would you like to see in the booking system? (Select all that apply) *

☐ Improved search functionality

☐ More personalized recommendations

☐ Faster booking process

☐ Better customer support

☐ Other: _____

How do you typically use the booking system? *

☐ Personal use

☐ Business travel

☐ Event planning

☐ Other: _____

Submit Page 1 of 1 [Clear form](#)

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Google Forms

Use Case Analysis

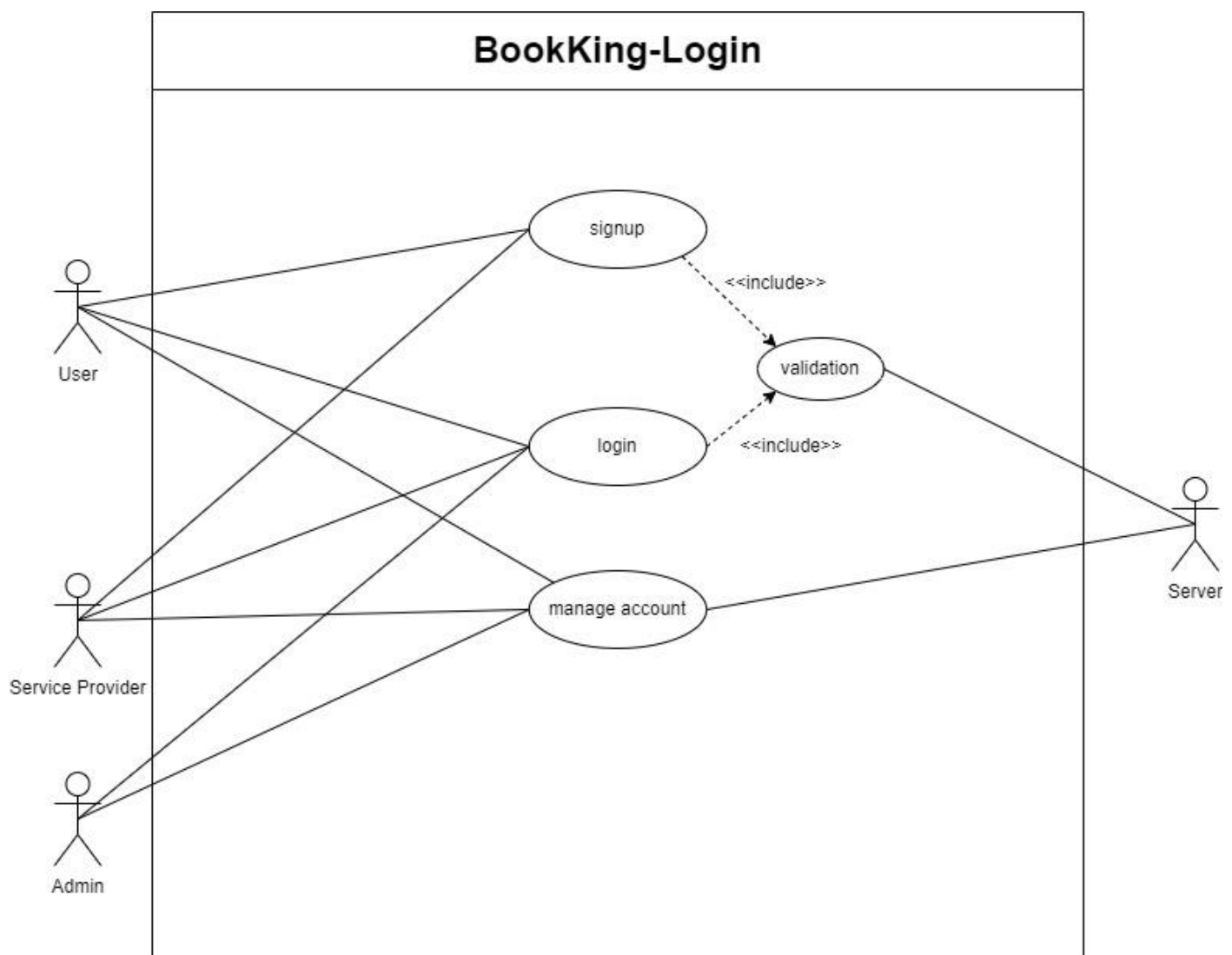
Search for a service: The user first searches for a service and selects the service they want to book (e.g., accommodation, spa treatments).

Login and signup: The user enters their personal details, such as name, contact information, to sign up and can login to website before booking a service.

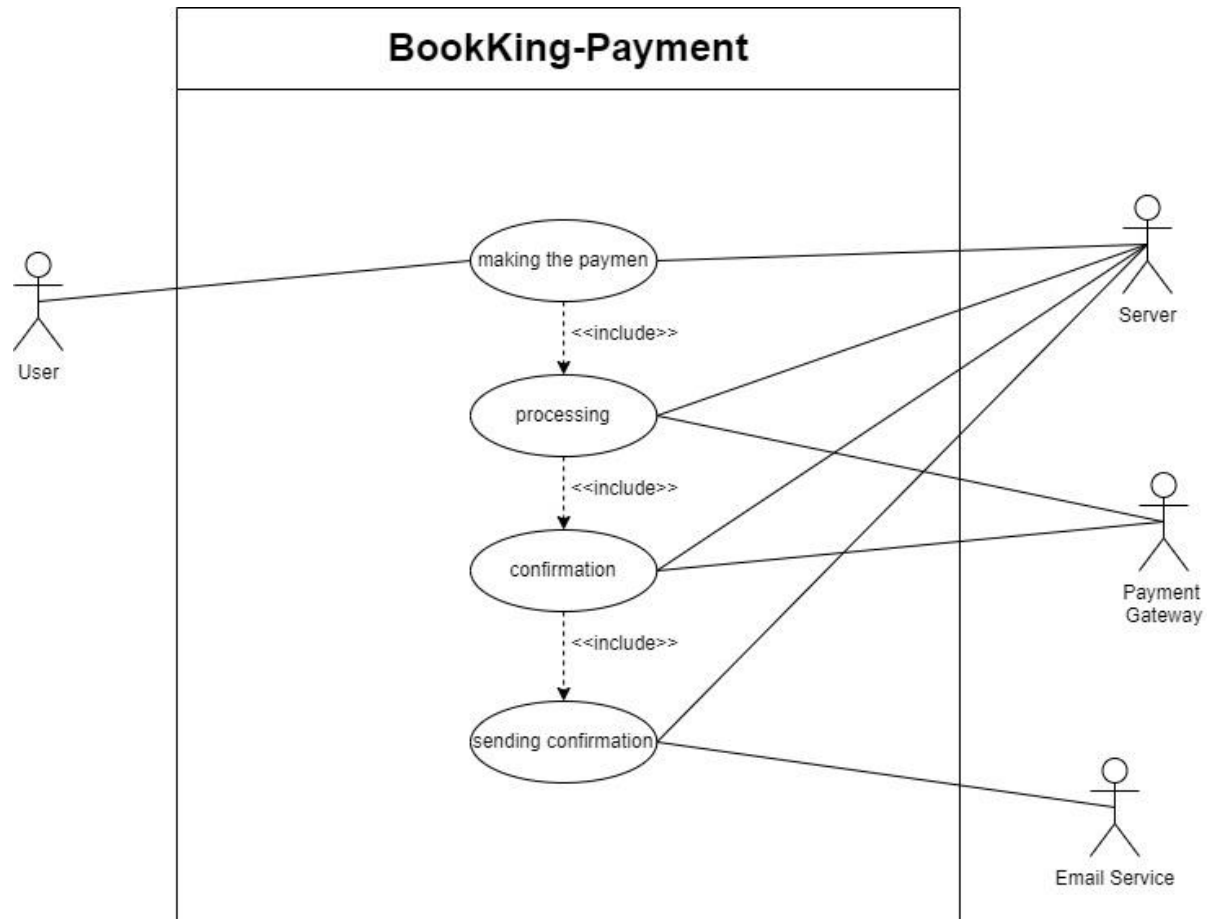
Review booking and confirm: The user reviews the booking details and confirms the booking.

View bookings: The user can view their bookings.

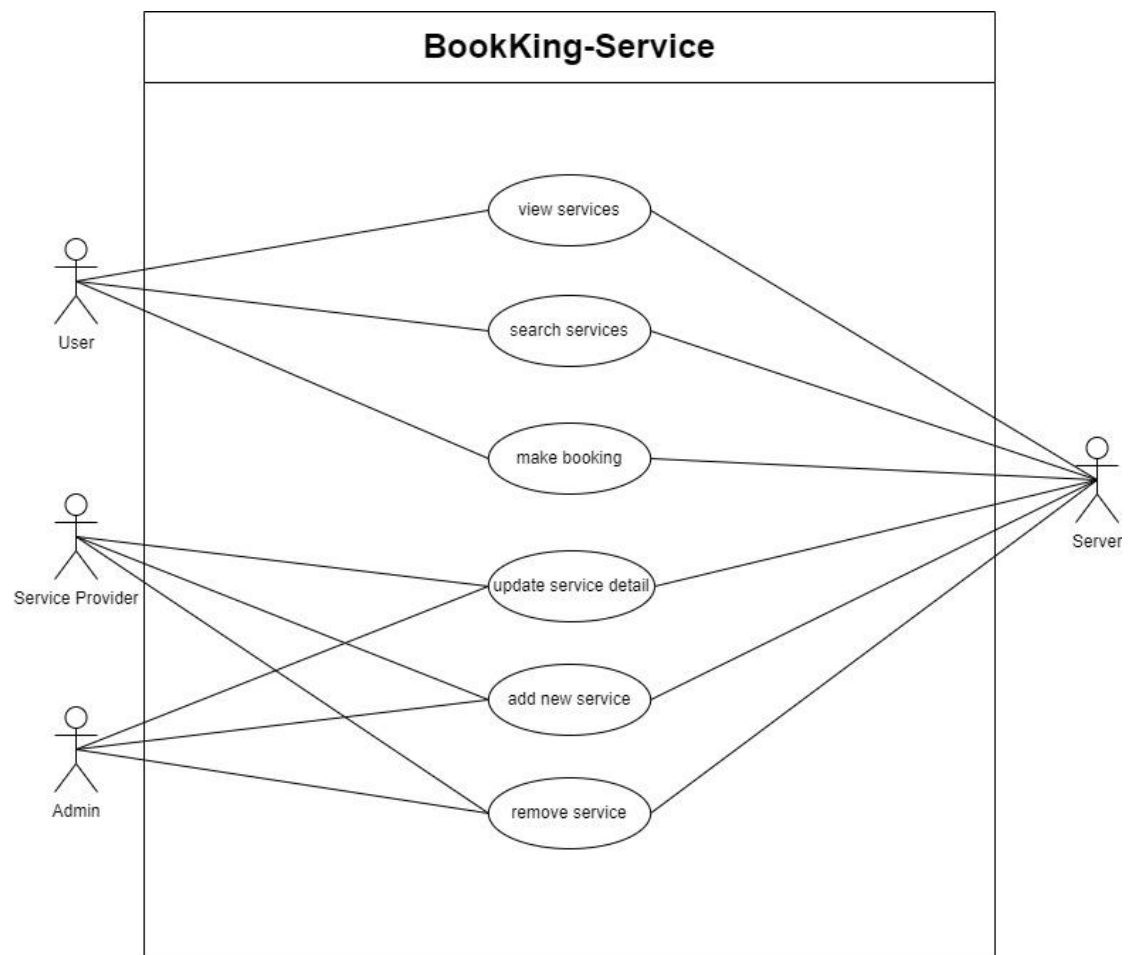
The login, payment and service use cases are shown below,



BookKing-Login Use Case



BookKing-Payment Use Case



BookKing-Service Use Case

Requirements Prioritization

General Requirements:

- Platform Accessibility: Open across different devices (web, mobile app) with user friendly interfaces.
- Search and Filter: Powerful search and filter functionalities to effectively find wanted services in view of area, budget, and so on.
- Booking Process: Consistent and secure booking process with clear advances, confirmation messages.
- Account Management: Secure user accounts for putting away private data, booking history, and inclinations.
- Payment Gateway: Integration with secure payment gateways for different monetary standards.
- User Reviews and Ratings: Capability to leave and read reviews/ratings for service suppliers.
- Client service: Multi-channel customer care for help and requests.

Specific User Requirements:

Individual Users:

- Hotels: Search by cost range. Look at hotels one next to the other. Access details, photographs, and reviews.
- Vehicle Rentals: Search by vehicle type, price.
- Tours and Activities: Peruse tours and activities in view of area, interests, spending plan, and accessibility. Read details, schedules, and reviews. Book individual or team tours/activities.
- Freelancers: Search for freelancers by abilities, experience, area, and budget. View profiles, portfolios, and reviews. Contact freelancers straightforwardly or start a project proposition.
- Venues and Events: Search for venues by area, type, View details, and accessibility. View details, photographs. Contact venues straightforwardly or demand statements.
- Activities: Peruse a wide assortment of activities considering area, interests, spending plan, and date/time. Read details, reviews, and book tickets/reservations.

Business Users:

- Hotels: Oversee property postings, availability, rates, and advancements. Get and oversee booking demands. Speak with visitors.
- Vehicle Rental Companies: Manage vehicles, accessibility, rates, and advancements. Process bookings and rentals. Speak with clients.

- Tour and Activity Operators: Make and oversee tours/activities, evaluating, and accessibility. Get and oversee bookings. Speak with clients.
- Freelancers: Make profiles displaying abilities, experience, and portfolio. Get and oversee project requests/recommendations. Speak with clients.
- Venues: Oversee venue postings, accessibility, estimating, and advancements. Get and oversee booking demands.

Functional/ non-Functional Requirements

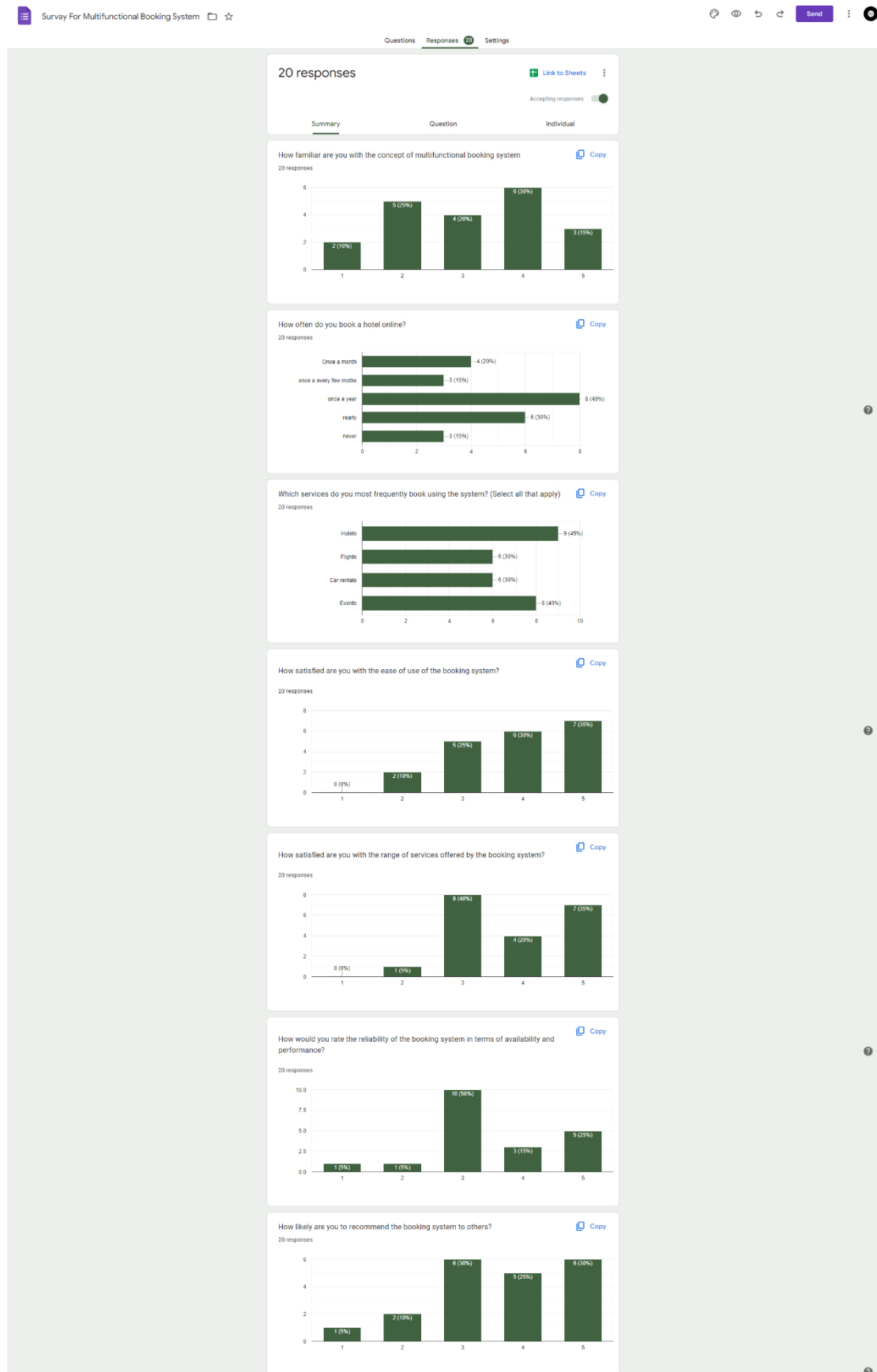
Functional Requirements:

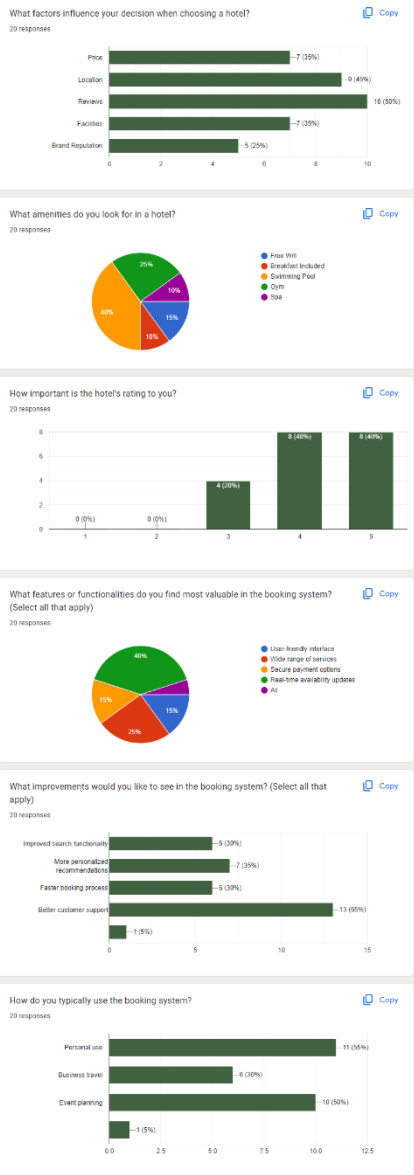
- Allow users to search for and book various services (e.g., accommodations, flights, activities).
- Provide a user-friendly interface for browsing and selecting options.
- Allow users to create accounts, manage bookings, and view booking history.
- Support multiple languages and currencies.
- Integrate payment gateways for secure transactions.
- Send booking confirmations and reminders via email or SMS.
- Provide customer support through chat, email, or phone.

Non-Functional Requirements:

- Performance: The website should load quickly and handle many simultaneous users.
- Reliability: The website should be available 24/7 with minimal downtime.
- Security: The website should use encryption to protect user data and transactions.
- Usability: The website should be easy to navigate and use, even for users with limited technical knowledge.
- Scalability: The website should be able to scale to accommodate increasing numbers of users and bookings.
- Compatibility: The website should work correctly on different browsers and devices.
- Regulatory: The website should comply with relevant laws and regulations, such as data protection laws.

Validation and Verification of the findings





Analytics from Google forms

Functional Specification

1. User Registration and Profile Management

- Requirement ID: FR-001
- Requirement Description: Users should be able to register on the platform by providing basic information and preferences. They should also have the ability to manage their profiles, update contact details, and set preferences for notifications.
- Dependencies: N/A
- Acceptance Criteria:
 - Users can successfully register with valid information.
 - Users can log in with their credentials after registration.
 - Users can update their profile information and preferences.
 - Changes made to the profile are reflected accurately.
- Priority: High

2. Service Search and Filters

- Requirement ID: FR-002
- Requirement Description: Users should be able to search for services based on location, category, availability, and price range. Advanced filters should allow for a more refined search experience.
- Dependencies: User Registration and Profile Management (FR-001)
- Acceptance Criteria:
 - Users can search for services using various filters.
 - Search results are accurate and relevant to the user's query.
 - Advanced filters work effectively to narrow down search results.
- Priority: High

3. Real-Time Availability and Booking

- Requirement ID: FR-003
- Requirement Description: Users should be able to view real-time availability of service providers and book services directly through the platform. Availability calendars and time slots should be displayed for easy selection.
- Dependencies: Service Search and Filters (FR-002)
- Acceptance Criteria:
 - Users can see real-time availability of service providers.
 - Booking process is smooth and intuitive.

- Users can select preferred time slots from available options.
- Priority: High

4. Geolocation Services

- Requirement ID: FR-004
- Requirement Description: The platform should utilize GPS to enable users to find nearby service providers, making it convenient for those seeking services in their immediate vicinity.
- Dependencies: N/A
- Acceptance Criteria:
 - Users can access geolocation services to find nearby service providers.
 - The accuracy of location services is reliable.
 - Users can easily navigate to selected service providers.
- Priority: Medium

5. Secure Payment Processing

- Requirement ID: FR-005
- Requirement Description: The platform should integrate a secure payment gateway, allowing users to make payments for services using various payment methods, ensuring the safety of their financial information.
- Dependencies: User Registration and Profile Management (FR-001)
- Acceptance Criteria:
 - Payment gateway is securely integrated with the platform.
 - Users can choose from multiple payment methods.
 - Financial information is encrypted and secure.
- Priority: High

6. Booking History and Management

- Requirement ID: FR-006
- Requirement Description: Users should be able to view and manage their booking history, including upcoming and past appointments. They should also have the ability to modify or cancel bookings if necessary.
- Dependencies: User Registration and Profile Management (FR-001)
- Acceptance Criteria:
 - Users can access their booking history from their profile.

- Upcoming and past appointments are displayed accurately.
- Users can modify or cancel bookings without issues.
- Priority: High

7. Review and Rating System

- Requirement ID: FR-007
- Requirement Description: After a completed service, users should have the option to leave reviews and ratings for the service provider. This feedback system helps maintain service quality.
- Dependencies: Booking History and Management (FR-006)
- Acceptance Criteria:
 - Users can leave reviews and ratings after completing a service.
 - Reviews are displayed accurately and prominently.
 - Service providers can view and respond to reviews.
- Priority: High

8. Service Provider Registration and Profile Management

- Requirement ID: FR-008
- Requirement Description: Service providers should be able to create accounts, providing details about the services they offer, availability, pricing, and location. They should also have the ability to manage their profiles and update information.
- Dependencies: User Registration and Profile Management (FR-001)
- Acceptance Criteria:
 - Service providers can register and create profiles with accurate information.
 - Profiles include details such as services offered, availability, and pricing.
 - Service providers can update their profiles as needed.
- Priority: High

9. Appointment Management for Service Providers

- Requirement ID: FR-009
- Requirement Description: Service providers should have a dashboard where they can view, confirm, and reschedule appointments. They should also be able to manage their availability and set working hours.
- Dependencies: Service Provider Registration and Profile Management (FR-008)
- Acceptance Criteria:

- Service providers can access a dashboard to manage appointments.
- They can confirm, reschedule, or cancel appointments as necessary.
- Availability and working hours are displayed accurately.
- Priority: High

10. Earnings Tracking for Service Providers

- Requirement ID: FR-010
- Requirement Description: Service providers should be able to track their earnings through the platform. They should have access to a detailed breakdown of their income from bookings.
- Dependencies: Appointment Management for Service Providers (FR-009)
- Acceptance Criteria:
 - Service providers can view their earnings within the platform.
 - Earnings are categorized and presented in a clear format.
 - Service providers can generate reports for specific time periods.
- Priority: Medium

11. Admin Dashboard

- Requirement ID: FR-011
- Requirement Description: Administrators should have access to a comprehensive dashboard where they can manage user accounts, review and moderate profiles, handle support requests, and monitor platform performance.
- Dependencies: User Registration and Profile Management (FR-001), Service Provider Registration and Profile Management (FR-008)
- Acceptance Criteria:
 - Admins can log in and access the admin dashboard.
 - They can manage user accounts, including adding, removing, or modifying user profiles.
 - Admins can review and moderate service provider profiles and listings.
 - Support requests can be addressed and resolved through the admin dashboard.
 - Platform performance metrics are available for monitoring.
- Priority: High

12. Analytics and Reporting

- Requirement ID: FR-012
- Requirement Description: The admin dashboard should provide detailed analytics and reporting tools, allowing administrators to track user behavior, monitor revenue, and gain insights for strategic decision-making.
- Dependencies: Admin Dashboard (FR-011)
- Acceptance Criteria:
 - Analytics tools provide data on user engagement, booking trends, and revenue generation.
 - Reports can be generated for specific time periods and metrics.
 - Data visualization tools are available to represent data in charts or graphs.
 - Admins can export reports for further analysis.
- Priority: High

13. Content Management

- Requirement ID: FR-013
- Requirement Description: Administrators should be able to manage categories, services, and other content on the platform, ensuring accurate and up-to-date information.
- Dependencies: Admin Dashboard (FR-011)
- Acceptance Criteria:
 - Admins can add, edit, or remove service categories and listings.
 - They can update information such as service descriptions, prices, and availability.
 - Changes made to content are reflected accurately on the platform.
- Priority: Medium

14. Mobile Responsiveness

- Requirement ID: FR-014
- Requirement Description: The platform should be designed to be fully responsive, ensuring a seamless experience on various devices including smartphones and tablets.
- Dependencies: N/A
- Acceptance Criteria:
 - The platform functions properly and displays correctly on devices of different screen sizes.
 - Users can navigate and use the platform efficiently on mobile devices.
 - All features are accessible and user-friendly on mobile.
- Priority: High

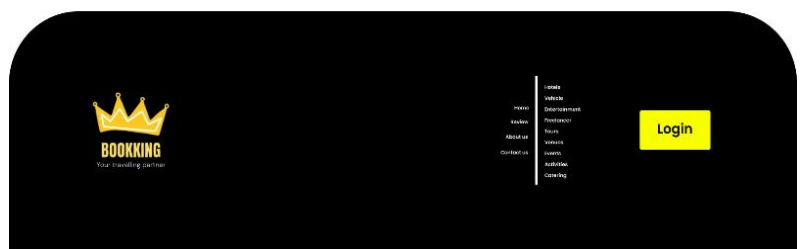
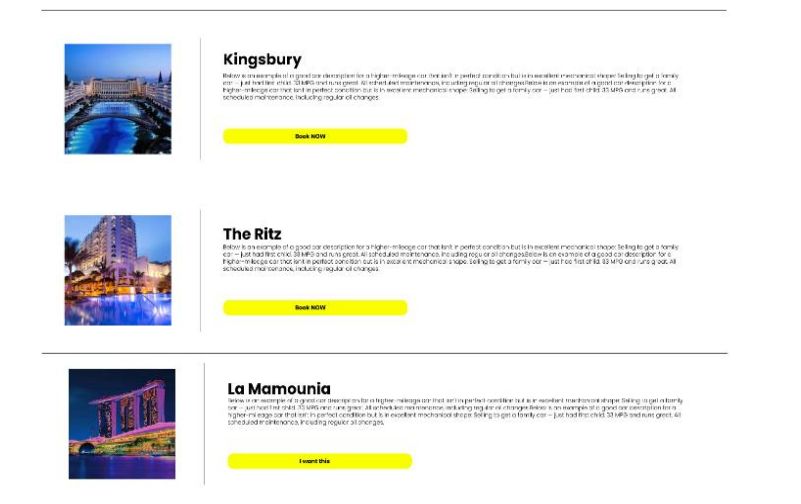
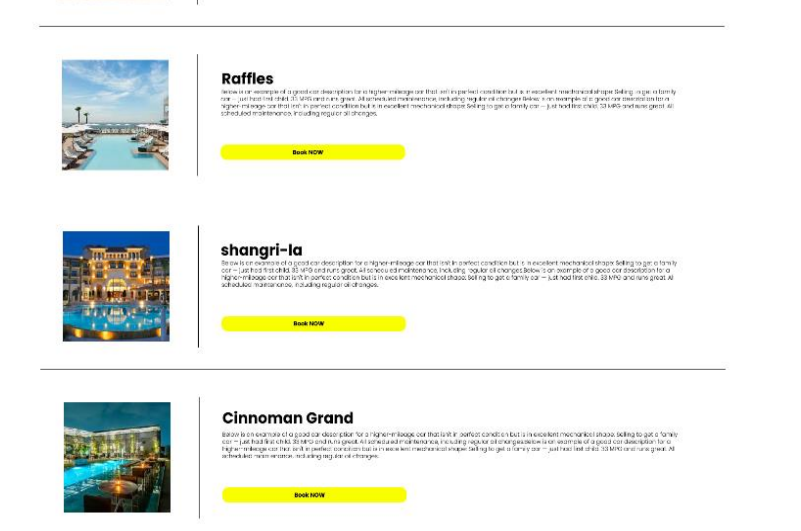
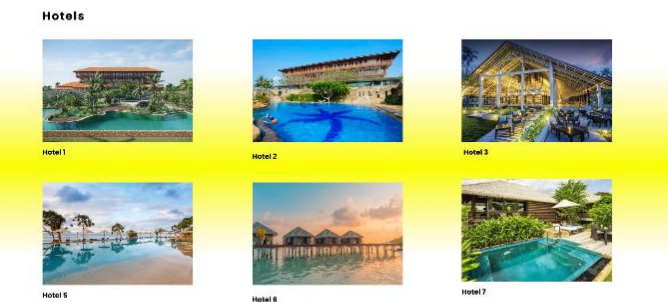
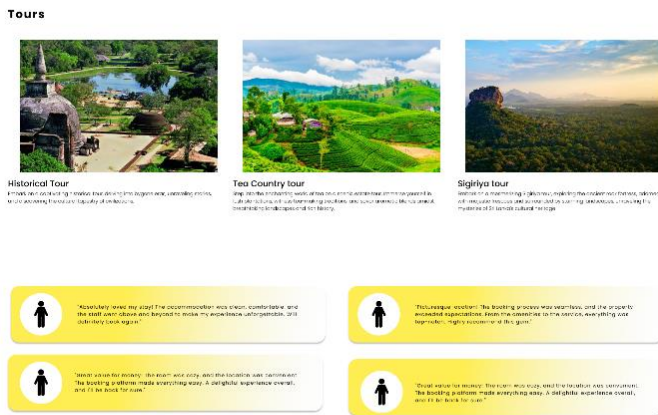
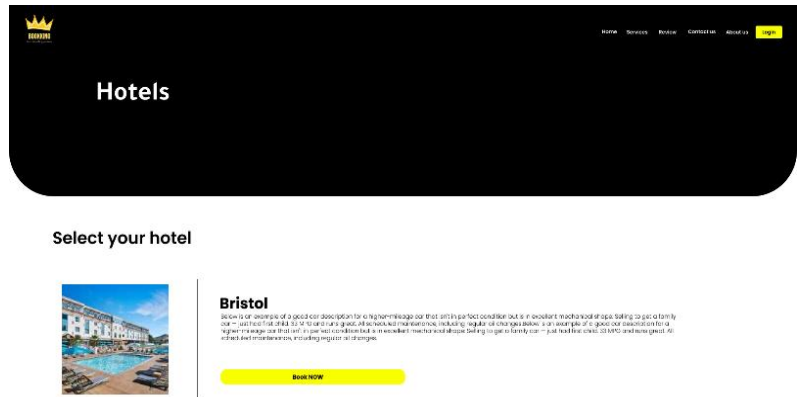
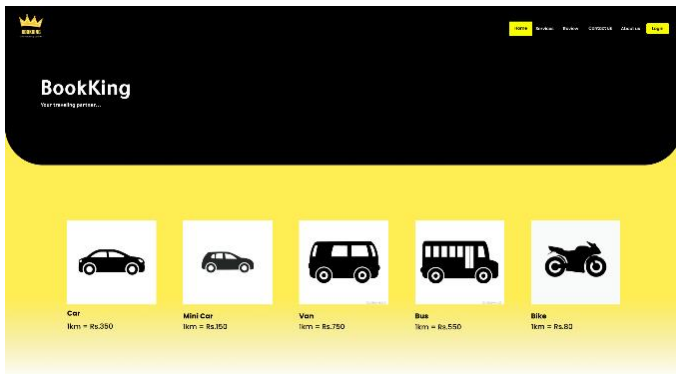
15. Notification System

- Requirement ID: FR-015
- Requirement Description: Users and service providers should receive timely notifications for booking confirmations, reminders, and updates, enhancing communication and reducing the likelihood of missed appointments.
- Dependencies: N/A
- Acceptance Criteria:
 - Users receive notifications for booking confirmations, reminders, and updates via email or in-app notifications.
 - Notifications are sent in a timely manner.
 - Users can manage notification preferences (e.g., opting in/out of certain types of notifications).
- Priority: High

Technical Specification

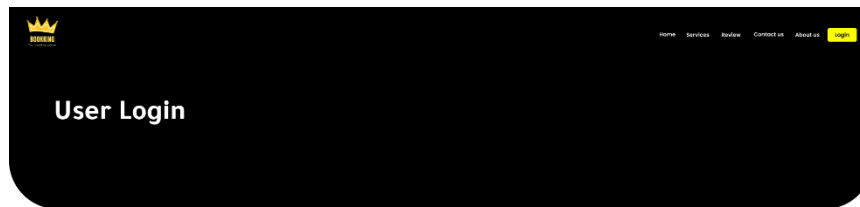
User Interface Design- UI and UX

Below images are some examples of our UI.



Home Page UI

Hotel List Page UI



Email

Password

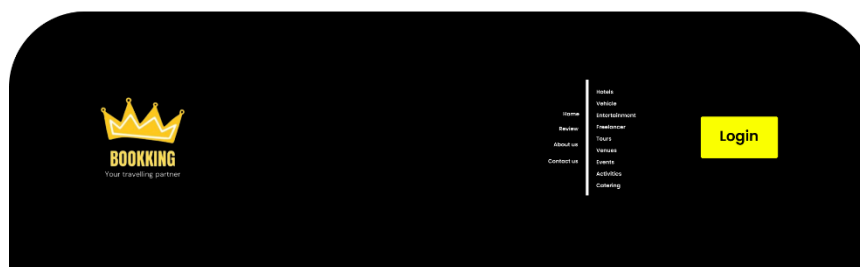
[Forgot Password](#)

[Login](#)

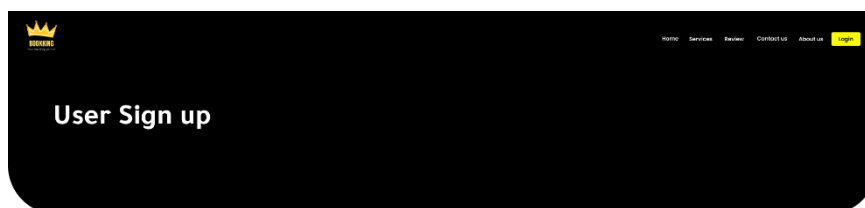


[You dont have an account?](#)

[Service Provider Login](#)



User Login Page UI



Name

Email

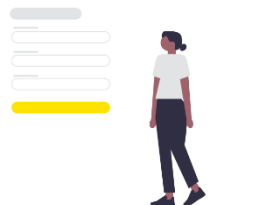
Password

Password confirm

Phone number

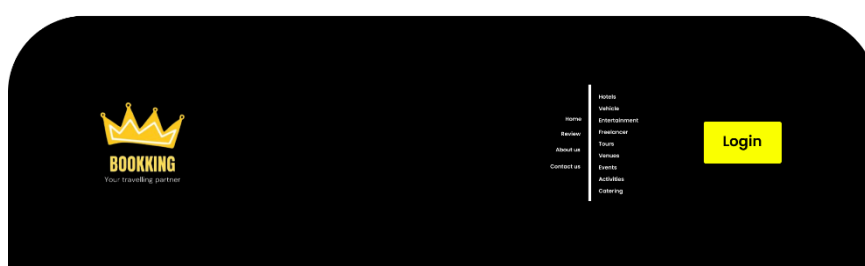
Address

[Register](#)



[Already have an account?](#)

[Are you a Service Provider?](#)

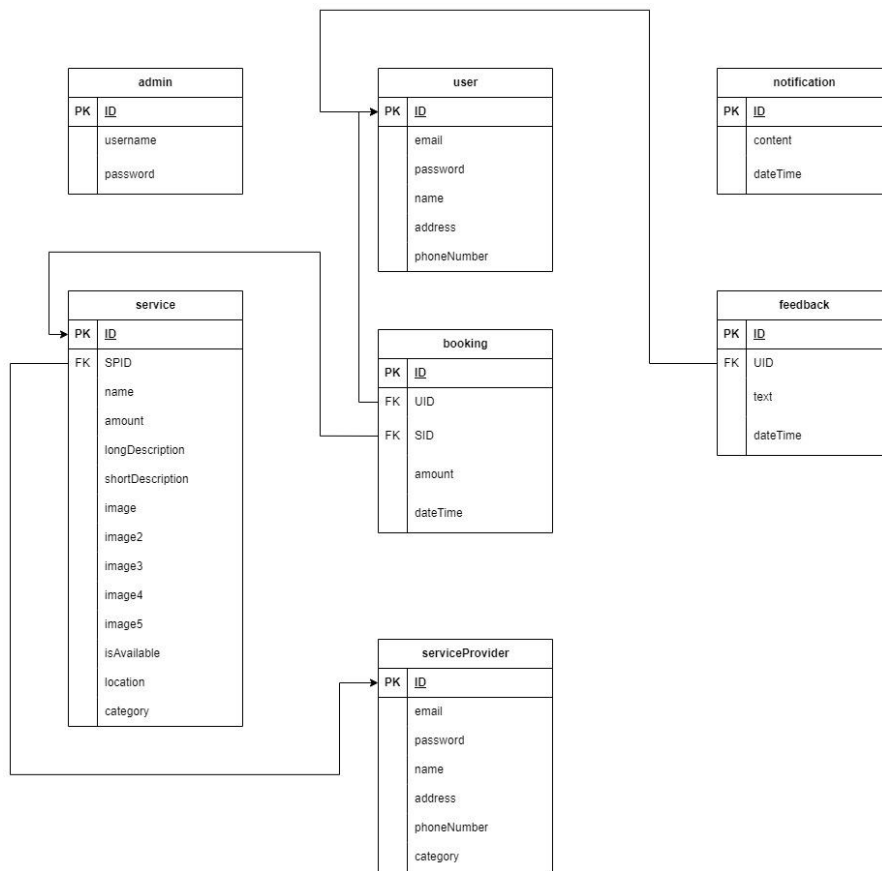


User Sign Up Page UI

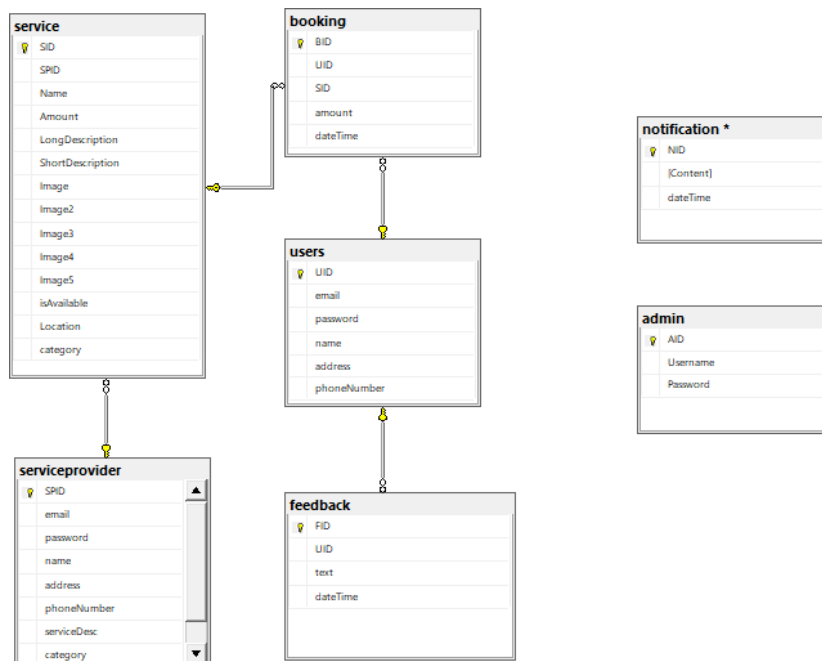
Data Model-DFD/DB Design

Database Design

Below is the relational schema and the database design diagram.

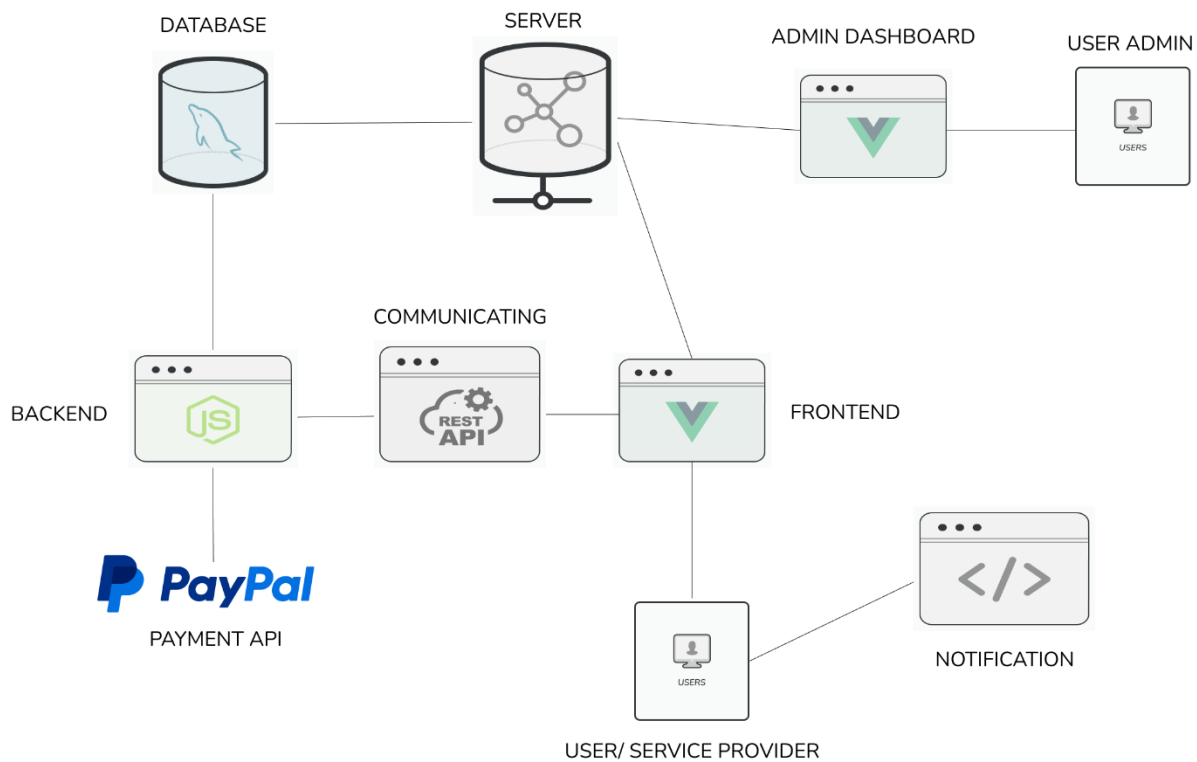


Relational Schema



Database Design

System Architecture



Deployment and Infrastructure

- Deploy the application on cloud infrastructure providers such as AWS, Azure, or Google Cloud Platform for scalability and reliability.
- Utilize services like Amazon RDS or Azure Database for MySQL for managed database solutions.

Testing Strategy

- Adopt a combination of manual testing approaches to ensure quality.
- Perform unit tests for individual components using testing frameworks like Jest for Node.js.
- Conduct integration tests to verify interactions between different modules and APIs.
- Implement end-to-end (E2E) tests to validate critical user journeys and functionalities.
- Use tools like Selenium or Cypress for E2E testing of the frontend.
- Incorporate performance testing to assess system scalability, response times.

Dependencies

- Node.js: JavaScript runtime for backend development.
- Vue.js: JavaScript framework for building the frontend UI.
- Express.js: Web application framework for Node.js to handle routing and middleware.
- MySQL: Relational database management system for data storage.
- PayPal API: Integration for secure payment processing.
- AWS/Azure/GCP: Cloud infrastructure providers for deployment.
- Docker: Containerization platform for packaging and deploying applications.
- NPM: Package managers for managing project dependencies.

Work Breakdown/ Project Timeline

Project Timeline, Task Breakdown, Task Duration, Critical Path, and Total Time

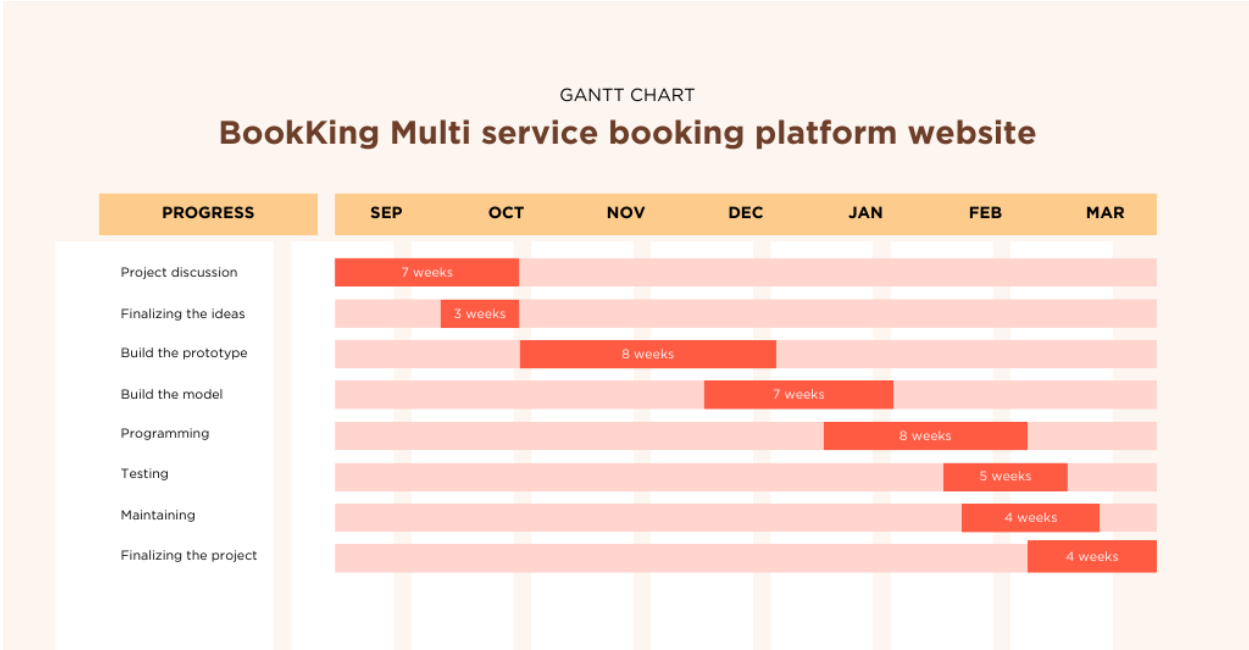
- Initiation: Project discussion
 - Discussing new ideas for our project to achieve it's greatest potential.
 - Total allocated time duration: 7 weeks

- Planning: Finalizing the ideas
 - Finalizing the doable ideas to begin building the product of our project after doing a research about the markets need and present technologies.
 - Total allocated time duration: 3 weeks

- Execution: Build the prototype, Build the model, Programming, Testing, Maintaining
 - In this phase we have started to build our product, an online booking platform called "BooKKing". And have been testing its capabilities with test data inputs, solving and improving with errors and issues we are getting along the way. Maintaining the platforms stability before we release it to the market.
 - Total allocated time duration: 19 weeks
 - Build the prototype: 8 weeks.
 - Build the model: 7 weeks.
 - Programming: 8 weeks
 - Testing: 5 weeks
 - Maintaining: 4 weeks

- Closure: Finalizing the project
 - We are yet to step into this step which is the final step of our project. Which is to release a functioning online booking platform to the users.
 - Total allocated time duration: 4 weeks

Gantt Chart



Gantt Chart

Resource Allocation

Name	Student ID (Plymouth ID)	Resource Allocation
Ashen Abeysekara	10899221	Backend Development, Database Development, Diagrams Designing,
Mudalige Gunawardana	10899269	Frontend Development, UI/UX Designing
Nethindu Wijewardana	10899214	Frontend Development, UI/UX Designing
Senanayake Senanayake	10899364	Frontend Development, UI/UX Designing
Galbada Dharmadasa	10899249	Frontend Development, UI/UX Designing
Lakindu Bandara	10899200	Frontend Development, UI/UX Designing

Current Status

Project Timeline highlighting the status

We are done with around 80% of our frontend and around 55-60% of the backend. We are currently building and testing at the same time according to our time plan from the gantt chart.

Progress Update

The website is yet to be fully functional. We are targeting to complete the website within next two weeks and start doing testing and hosting the website and maintaining it.

Key Achievements

- **UI Design:** The user interface design has been completed, incorporating modern design principles to ensure an intuitive and visually appealing experience for our users.
- **Survey Development:** A survey has been created to gather feedback from potential users. This will help us understand user preferences and refine our platform to better meet their needs.
- **Diagrams:** ER Diagram, Relational Schema, 3 scenarios of use cases, and the Database design.
- **Frontend Development:** we have created almost all of the front-end pages with Vue.js.
- **Backend Development:** Significant progress has been made on the backend development, with key functionalities such as database setup and user authentication already implemented using Node.js.

Work Completed

- Completed UI design based on user-centred design principles.
- Developed a survey to gather user feedback and improve user experience.
- Created around 80% of Front-end pages using Vue.js.
- Implemented basic backend functionalities, including database setup and user authentication using Node.js. Around 55-60% is done.

Work in Progress

- Further refining the UI based on initial feedback and usability testing.
- Enhancing backend functionalities to support advanced features such as booking management and user profiles.

Current Issues, Risks & mitigation strategy

- Issue: Limited resources for backend development.
- Risk: Delays in implementing advanced features and meeting project deadlines.
- Mitigation Strategy: Prioritizing tasks and focusing on core functionalities to ensure essential features are completed on schedule.

Next steps and resource allocation for them

- Complete remaining backend development tasks, focusing on essential features.
- Conduct usability testing with the survey to gather feedback and make iterative improvements to the UI.
- Allocate additional resources as needed to ensure timely completion of the project.

Conclusion/ Summary

Reiterate key points and emphasize the importance

The multi-service booking System is designed to revise the way guests' access and book colourful services by furnishing a flawless and effective platform for reserving multiple services from a single source. It aims to offer convenience, effectiveness, and a different range of services across different diligence similar as travel, events, vehicle, hotel, freelance, transportation, and more.

Recommendations and Suggestions for any deviations

Security and sequestration, given that the platform deals with sensitive stoner data and fiscal deals, prioritize enforcing robust security measures to cover stoner information and insure secure payment processing. Regular security checkups and updates should be conducted to identify and address any vulnerabilities. Service Provider Onboarding, Streamline the process for service providers to onboard onto the platform. give clear guidelines and support coffers to help them produce biographies, list their services, and manage their bookings effectively. Offering impulses or promotional offers for early adopters can also help attract a different range of service providers. client Support and backing, establish a devoted client support platoon or help office to help druggies with any inquiries, issues, or specialized difficulties they may encounter while using the platform. furnishing timely and effective client support will enhance stoner satisfaction and trust in the platform. Localized and Globalized Approach, depending on the target request and stoner demographics, consider customizing the platform to support multiple languages, currencies, and indigenous preferences. This will broaden the platform's appeal and availability to druggies across different regions and societies.

Recommendations and Suggestions

Scalability and Performance, Design the platform with scalability in mind to accommodate a growing stoner base and adding sale volumes. Use scalable armature and technologies that can handle high loads efficiently, icing optimal performance indeed during peak operation ages. Data sequestration and Security, Prioritize data sequestration and security by enforcing robust measures to cover stoner data and insure compliance with applicable regulations similar as GDPR (General Data Protection Regulation). Encrypt sensitive information, regularly inspection security protocols, and give druggies with transparent information about how their data is used and defended. adaption to Market Trends, stay informed about evolving request trends and stoner preferences in the booking assiduity, and be prepared to acclimatize the platform consequently. Examiner challengers, conduct request exploration, and be nimble in responding to changing stoner requirements and technological advancements to stay competitive in the request.

Lessoned learned

Comprehensive Service Offering, a different range of services feeding to colourful diligence and stoner demographics is crucial to attracting a wide follower ship and furnishing value to druggies. Understanding the requirements and preferences of different stoner parts allows for a more customized and comprehensive service immolation. Effective Communication, establishing harmonious and effective communication channels, both between druggies and service providers and within the platform administration, is essential for icing smooth operations, addressing stoner inquiries, and furnishing timely updates and announcements. Security and Trust, Prioritizing data security and sequestration measures, as well as icing secure payment processing, is pivotal for erecting trust with druggies and maintaining the integrity of the platform. enforcing robust security protocols and transparent data handling practices instils confidence in druggies and protects their sensitive information.

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Contribution

Contribution of the interim 1 report

Name	Student ID (Plymouth ID)	Contribution
Ashen Abeysekara	10899221	Functional Requirements, Technical Specification, Making the report
Nethindu Wijewardana	10899214	Introduction, Background
Mudalige Gunawardana	10899269	Work Breakdown/ Project Timeline
Senanayake Senanayake	10899364	User Requirements, Current Status
Galbada Dharmadasa	10899249	Conclusion
Lakindu Bandara	10899200	-