LA GRANDEE INTERNATIONAL COLLEGE

Simalchaur, Pokhara, Nepal

FINAL DEFENSE ON

VENUE MATCH

Submitted to:

La Grandee International College

Bachelor of Computer Application (BCA) Program

In partial fulfillment of the requirements for the degree of BCA under

Pokhara University

S. N	Name	Program, Semester	PU registration no:
1	Narvasha Adhikari	BCA 8th Sem	2018-1-53-0117
2	Samjhana Poudel	BCA 8th Sem	2018-1-53-0126

Date (Sept-5, 2023)

ACKNOWLEDGEMENT

I express my sincere regard to my project supervisor Sunil Sapkota, for his valuable time, guidance, encouragement, support and cooperation throughout the duration of our project. I would sincerely like to thank BCA Department for giving me the opportunity to work on enhancing my technical skills while undergoing this project. This project helped in understanding the various parameters which are involved in the development of a mobile application and the working and integration of frontend along with the backend to create a fully functional mobile application. We would like to express our gratitude to Pokhara University for developing a highly valuable curriculum and enabling us to undertake this project. Furthermore, we extend our sincere appreciation to La Grandee International College, whose assistance has been instrumental in making our project a reality. Without their support, our project would have been unattainable.

With Regards,

Narvasha Adhikari (Registration No: 2018-1-53-0117)

Samjhana Poudel (Registration No: 2018-1-53-0126)

Student's Declaration

We hereby declare that we are the only authors of this work and that no sources other than the listed here have been used in this work.

Name: Narvasha Adhikari

Exam Roll No:19530117

Semester: BCA 8th SEM

P.U Registration No: 2018-1-53-0117

Signature: _____

Name: Samjhana Poudel

Exam Roll No: 19530126

Semester: BCA 8h SEM

P.U Registration No: 2018-1-53-0126

Signature: _____

Supervisor's Declaration

I hereby recommend that this project entitled " VENUE MATCH " is done under my supervision by Narvasha Adhikari, Samjhana Poudel during 8th semester in partial fulfillment of the requirement for the degree of Bachelor of Computer Application (BCA) under Pokhara University is completed to my satisfaction and be processed for final evaluation.

Sunil Sapkota

Letter of Approval

We certify that we have examined this report VENUE MATCH ", and are satisfied with the proposal defense. In our opinion it is satisfactory in the scope and qualify as project in partial fulfillment of the requirements for the degree of BCA under Pokhara University.

Project Supervisor	**External Invigilator**	**Principal**
Er. Sunil Sapkota		**Er. Kiran K.C**

Abstract

This report is submitted to the Department of Computer Application at LA Grandee International College as part of the BCA 8th Semester Project. The project, titled "Venue Match App", it serves as an introductory overview of the Venue Match App project, showcasing its potential to revolutionize the event planning and venue selection process.

In a world where hosting events and gatherings is an integral part of human social life, the demand for the perfect venue has never been greater. The Venue Match App aims to address this fundamental need by leveraging advanced technology to simplify the process of discovering, evaluating, and booking event venues.

The primary objective of this project is to develop a user-centric application that enhances the event planning routine. Users, whether individuals or businesses, will have the ability to create accounts, explore an extensive database of venues, and conveniently select the ideal space for their specific requirements. The Venue Match App will serve as a comprehensive repository of venues, offering real-time availability data and detailed venue profile.

The Venue Match App offers venues categorized by event types such as birthdays, engagements, weddings, corporate meetings, and more. This categorization simplifies the search process, allowing users to quickly find venues tailored to their specific event needs.

In addition to simplifying venue selection, the Venue Match App also streamlines the payment process, allowing users to securely make payments through the app, further enhancing the convenience of event planning.

The Venue Match App is poised to make a lasting impact on the event planning industry, much like the way technological advancements have transformed the other business. By offering an efficient and user-friendly solution for venue selection, this project seeks to empower event planners and organizers while ensuring that every event held is in the perfect venue, ultimately enhancing the overall event experience.

Contents

List of Figures

List of Tables

List of abbreviation

DFD- Data Flow Diagram

MySQL- My Structured Query Language

ER- Entity Relationship

1. Introduction

In the fast-paced world of event planning, finding the perfect venue can be a daunting task. Event organizers often struggle with limited options, lack of information, and time-consuming coordination. To address these challenges and revolutionize the way venues are discovered and booked, we present our innovative Venue Match App.

The Venue Match App is a comprehensive platform designed to simplify the process of finding, comparing, and booking venues for various events. It provides event organizers with a user friendly interface and a vast database of venues, complete with detailed information on availability, capacity, amenities, pricing, and location.

Our app aims to enhance the user experience by offering a personalized journey. With features such as recommendations, saved searches, and customized notifications, users can easily discover venues that align with their specific needs and preferences. Whether it's a corporate conference, wedding reception, or social gathering, the Venue Planner App streamlines the entire venue selection process.

Not only does the app benefit event organizers, but it also empowers venue managers. Our platform includes tools for efficient venue management, such as automated booking confirmation, availability calendars, and online payment processing. This enables venue managers to streamline operations, optimize bookings, and provide a seamless experience for event planners.

Furthermore, the Venue Match App boosts venue exposure by integrating social media platforms, implementing search engine optimization techniques, and offering targeted advertising options. The app provides analytics and insights on venue performance, allowing venues to make data-driven decisions and optimize their listings for maximum exposure.

We understand the importance of fostering positive relationships between event planners and venues. Our app facilitates communication channels, rating and review systems, and feedback mechanisms to ensure transparency, trust, and collaboration.

In conclusion, the Venue Planner App revolutionizes the venue selection process by offering a comprehensive platform for event organizers and venue managers. With its user-friendly interface, personalized recommendations, efficient venue management tools, increased exposure opportunities, and emphasis on positive relationships, our app is set to become the goto resource for seamless and successful event planning.

2. Problem Statement

The current state of venue applications presents several challenges and limitations

- Selecting Venues manually is a complex and time-consuming process.
- Tracking guest lists and managing budgets can be difficult.
- Coordinating with vendors and ensuring seamless communication is a challenge.
- Venues may struggle to reach a wider audience and efficiently manage bookings.
- There is a need for a comprehensive and user-friendly event planner app.
- The app should simplify the planning process and enhance the user experience.
- There is a need for a platform that fosters positive relationships between event planners and venues.

3. Objectives

Venue match app can vary depending on the specific goals of the project and the target audience. However, here are some common objectives that we are focusing while developing a venue match app:

1. Simplify venue booking with detailed venue information and availability.
2. Enhance user experience with easy venue searching and booking.
3. Improve venue management with efficient tools for booking, calendars, and integrating payment methods
4. Provide value to event planners with tools for budget, guest, and vendor management.
5. Foster positive relationships with rating systems and communication channels.
6. Provide detailed venue information and overviews to help users make informed decisions.

4.Background Study

Background study is an essential step in understanding the market, user needs, and potential competitors. Here's a structured approach that we conducted a study for:

1. Market Research:
    - Market Size and Growth: Determine the size and growth potential of the venue management industry. Look for statistics and trends that highlight the demand for such apps and websites.
    - Target Audience: Identified our target audience within the venue management sector. This include event planners, venue owners, or even individual users looking to book venues.
    - Competitor Analysis: Research existing venue management apps. Analyze their features, user reviews, pricing models, and market share. Identify gaps in their offerings that your app can fill.
    - Regulations and Compliance: Understand any legal or regulatory requirements related to venue management, such as permits, safety standards, or licensing.

2. User Research:
    - User personality: Create detailed user personality representing different segments of your target audience. Understand their pain points, needs, and preferences.
    - Surveys and Interviews: Conducted surveys or interviews with potential users to gather insights into their challenges and expectations when it comes to venue management.
    - User Journeys: Mapped out the typical user journeys involved in venue management, from searching for a venue to booking and managing events.

3. Technology and Infrastructure:
    - App Platforms: Decide whether our app will be available on iOS, Android, or both. Consider whether it will also have a web version.

- Technical Feasibility: Assess the technical feasibility of building the app, including the required infrastructure, development tools, and potential integrations with other systems.

4. Feature Set:
   - Core Features: Defined the essential features our app must have, such as venue search, booking, scheduling, payment processing, and event management.
   - Differentiators: Identified unique features or innovations that will set your app apart from competitors. This could include AI-driven recommendations, real-time availability updates, or seamless communication tools.

5. Monetization Strategy:
   - Revenue Models: Explored different revenue models
   - Pricing Strategy: Determine the pricing structure that aligns with your target audience's willingness to pay and the value your app provides.

6. Timeline and Milestones:
   - Project Timeline: Created a timeline that outlined key development milestones.
   - Development Phases: Divide the app development process into phases, such as design, development, testing, and deployment.

7. Risk Assessment:
   - Identify Risks: Listed potential risks and challenges that could affect the development and success of our app. Develop mitigation strategies for each.
8. Feedback and Iteration:
   - Planned for collecting user feedback and incorporating it into future updates to continuously improve the app.

By conducting a comprehensive background study, we are prepared to develop a venue management app that meets the needs of your target audience and stands out in the market.

5. Methodology

For the development of VENUE MATCH application, we use the iterative model. Iterative model is one of the popular models for development of projects. Iterative model starts with a simple implementation of a subset of the software requirements and iteratively enhances the evolving versions until the full system in implemented.

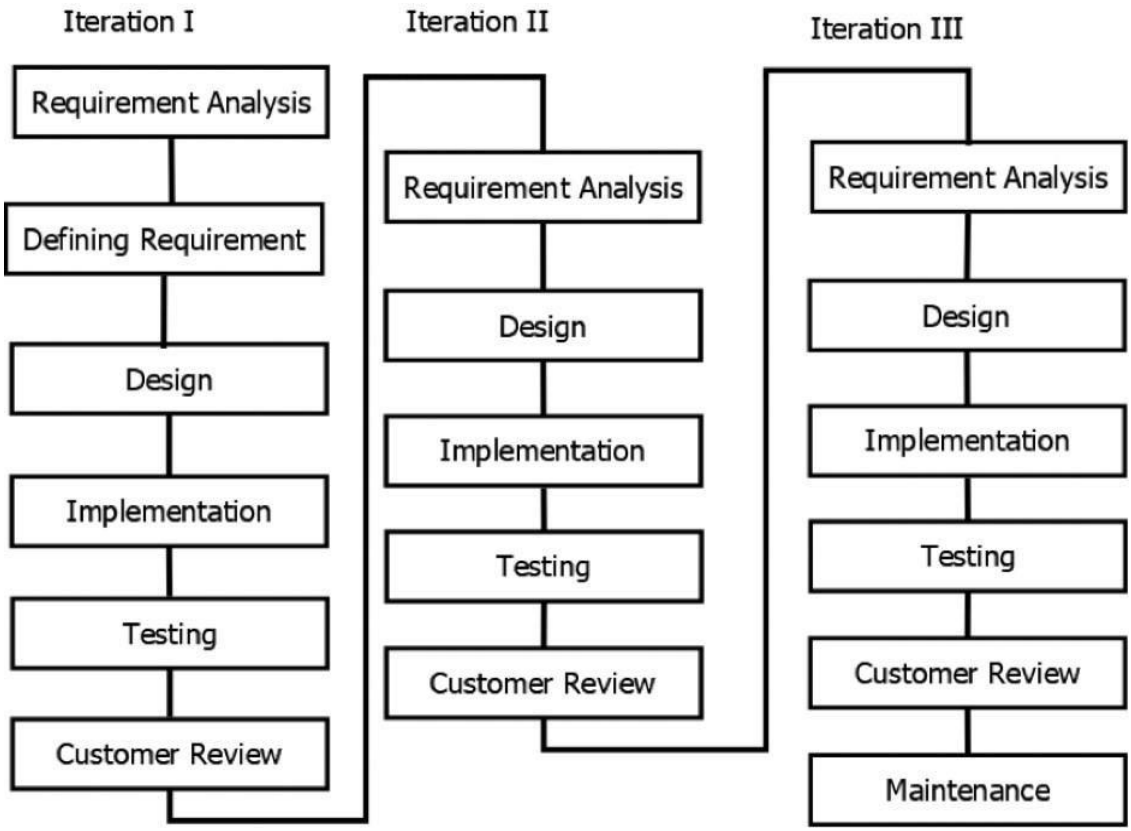

FIGURE 1: ITERATION MODEL

5.1 Requirement Analysis

To successfully develop a venue match app, conducting a comprehensive requirement analysis is paramount for understanding the needs and expectations of our target audience. We have gathered valuable insights from various operating venues in Pokhara, such as Pokhara Grandee, who emphasized the significance of customer satisfaction. Their recommendations underscored the importance of implementing a user-friendly interface to quickly engage users. Effective requirements analysis is pivotal in determining the success or failure of a software project. These requirements must be documented, actionable, measurable, testable, traceable, and directly aligned with identified business needs or opportunities, detailing them to a level suitable for system design. In every project, gathering essential requirements from diverse sources is crucial to align our efforts with project objectives. Our research has led us to the conclusion that developing a venue match app necessitates identifying core functionalities and features. These encompass defining user roles, implementing robust user authentication and authorization mechanisms, integrating location-based services for venue search, ensuring an intuitive interface for venue comparison, enabling real-time communication and booking capabilities, ensuring robust data security and privacy measures, and incorporating feedback mechanisms for user reviews and ratings.

5.2. Problem Analysis:

The problem analysis for a venue match application reveals several key areas of concern. These include limited venue options, inaccurate or outdated information, insufficient filtering and search options, a lack of user reviews and ratings, complex booking processes, limited integration with other services, and technical glitches and performance issues. Understanding and addressing these challenges will be crucial in developing a successful and user-friendly app that provides a seamless experience for users looking to find the perfect venue for their events or occasions. We also analyzed them and found that, while choosing venues many people prefer to use manual way of booking venues because they are not familiar with the advanced system of VENUE MATCH system.

5.3 Verification and Validation:

In the development of the Venue Match App, verification and validation were pivotal processes to ensure that the software system met its specifications and fulfilled its intended purpose. As part of our validation process, we implemented measures to verify the authenticity of users and validate the data entered into the system. This meticulous verification and validation process were crucial in maintaining the integrity of our database, ensuring that only genuine users interacted with the platform and that the data remained accurate and reliable.

5.4 Development Plan:

The development plan for the Venue Match App was a collaborative effort within our team. We addressed critical questions, such as designing the project to be user-friendly and accommodating to a wide range of users. We also considered time constraints, recognizing the importance of delivering the project within specified timelines. Our development plan encompassed every aspect of the project, ensuring that we could provide users with a seamless, efficient, and timely venue selection experience.

5.5 Testing:

Testing played a crucial role in the development of the Venue Match App, following the principles of the spiral model. Throughout the development cycle, we conducted multiple rounds of manual testing to identify and rectify errors. Online communities such as Stack Overflow and Quora served as valuable resources for troubleshooting and resolving issues promptly. Our commitment to software testing was grounded in the goal of delivering a defect-free application that consistently met users' expectations. We utilized various testing methodologies, tailoring our approach to the specific requirements of the project.

5.6 Documentation:

Documentation emerged as a vital aspect of the Venue Match App project. Every aspect of our development process was meticulously recorded in softcopy format. This comprehensive documentation not only served as a reference point but also facilitated a better understanding of the program's flow. It will prove invaluable for future enhancements and additional feature integrations. In cases where unforeseen problems

arise during further development, this documentation will serve as a valuable resource, enabling us to maintain and improve the application's interactivity effectively.

6. Requirement document

6.1. Tools and software requirements

Flutter SDK: This open-source framework, developed by Google, is essential for building cross-platform mobile apps. Install the Flutter SDK, which includes the Flutter framework, Dart programming language, and command-line tools.

Integrated Development Environment (IDE): Several IDE options are available for Flutter app development. Popular choices include: Visual Studio Code (VS Code): A lightweight and free IDE with excellent Flutter support through extensions. Android Studio: A full-featured IDE developed by Google, which includes built-in support for Flutter.

Dart programming language: Flutter apps are built using the Dart programming language.

State management: Effective state management is vital for a smooth ecommerce experience. Flutter offers various options like Provider, River pod, Redux, or Mob for handling app state.

UI/UX design tools: You can design your app's user interface (UI) and user experience (UX) using tools like Figma, which allows collaborative design work among team members.

Version control: Employing version control is a good practice for tracking code changes and collaborating with other developers. GitHub, GitLab, or Bitbucket are platforms that can host your code repositories.

Third-party packages: Flutter boasts a vast ecosystem of third-party packages that provide ready-made solutions for various app functionalities.

6.2. Functional Requirements

1. User Registration and Authentication: - Enable users to register and create accounts. - Implement secure authentication methods like email/password, social media login, or OAuth. - Provide password reset and account recovery options.

2. Venue Catalog - Display a list of products with details such as title, description, price, and images. - Implement categories and filters to help users browse and search for specific products. - Allow users to view product details and read reviews.

3. Booking Management: - Provide users with booking history. - Allow users to view and manage their booking, including cancellation.

4. User Profile and Settings:- Enable users to view and update their profile information.

5. Backend Integration: - Connect the app with a backend system to handle data storage, product management, order processing, and other business logic.

6.3 Requirement Matrix:

SN	requirement, modules, system and features	Description for the modules	Priority (high, medium, low)
1.	Login and security system	Login can be done on the basis of their levels	high
2.	Data entry	Data entry of the major details of the users	high
3.	Venue Detail	The venue owner and admin can place the venue details	high
4.	Checking of Booked and un booked venues	User must procced during testing of system	high
5.	Performance Checkout	System must be able to satisfy the customer in user friendly manner	high
6.	Booked venue	User must be simple able to retrieve the booked venue	high

Table 1: Requirement Matrix

7. System Analysis and Design:

7.1 ER-Diagram

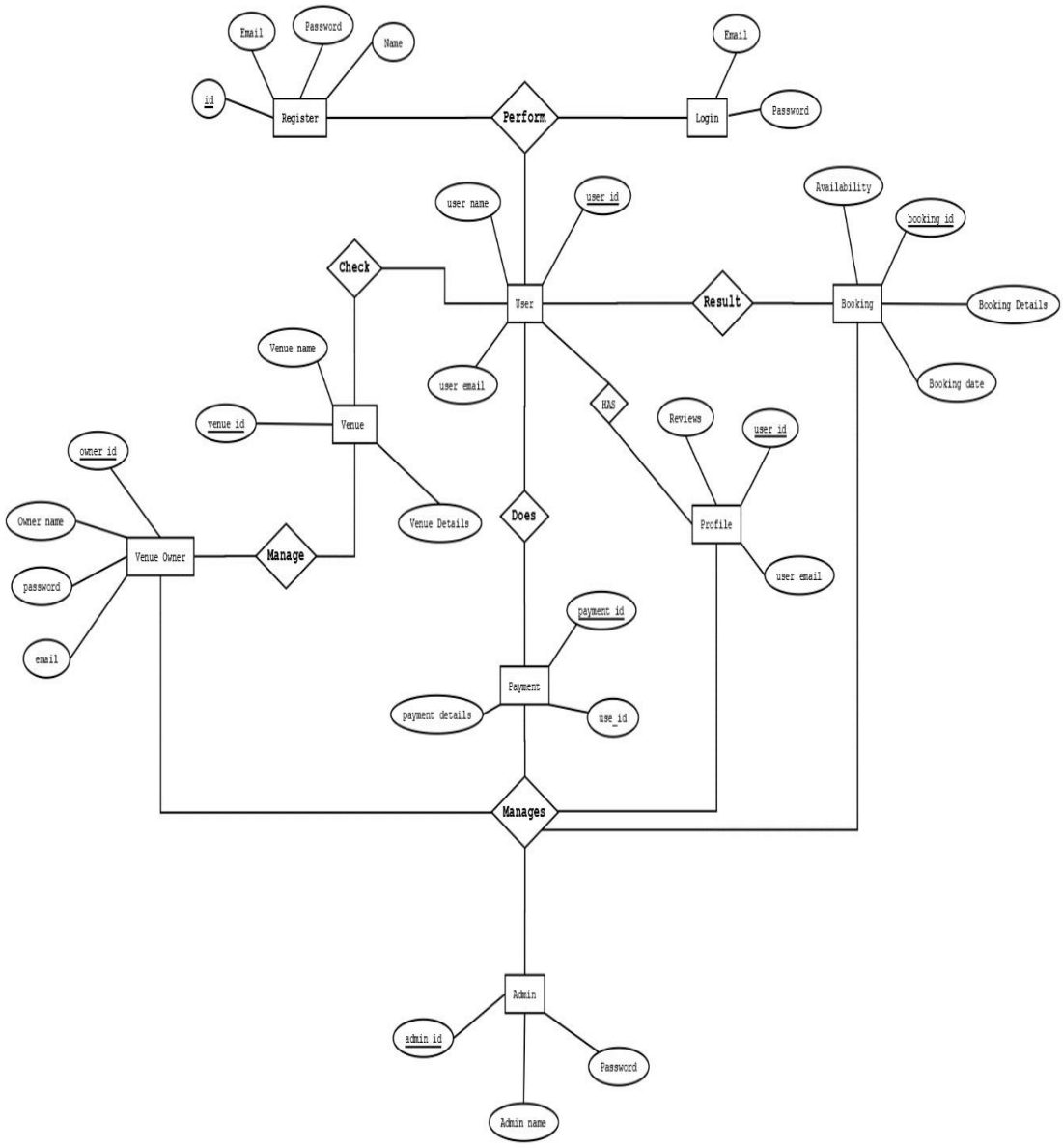

FIGURE 2:ER-DIAGRAM

7.2 Class-Diagram

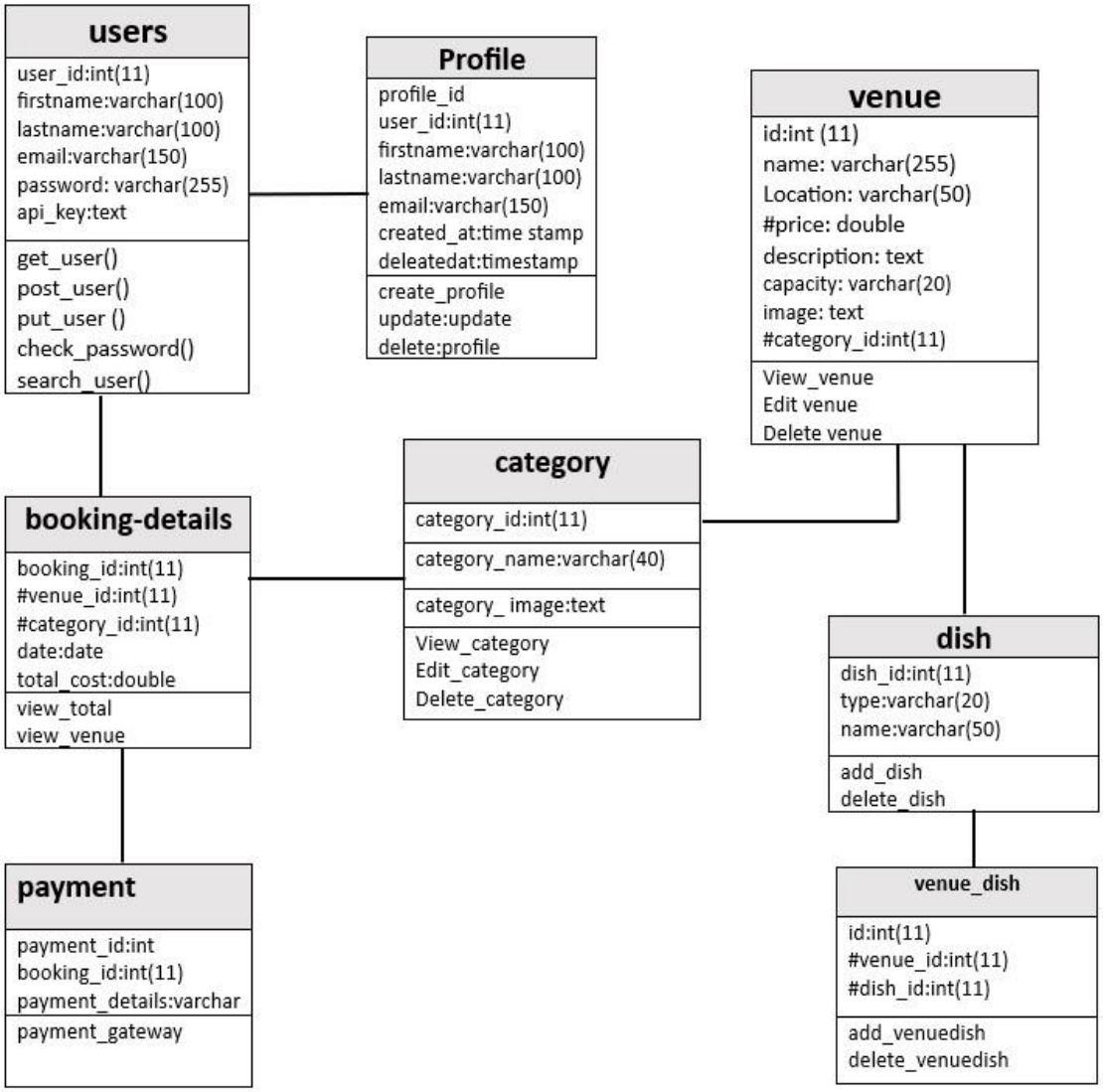

FIGURE 3 CLASS-DIAGRAM

7.3 DFD (Data Flow Diagram)

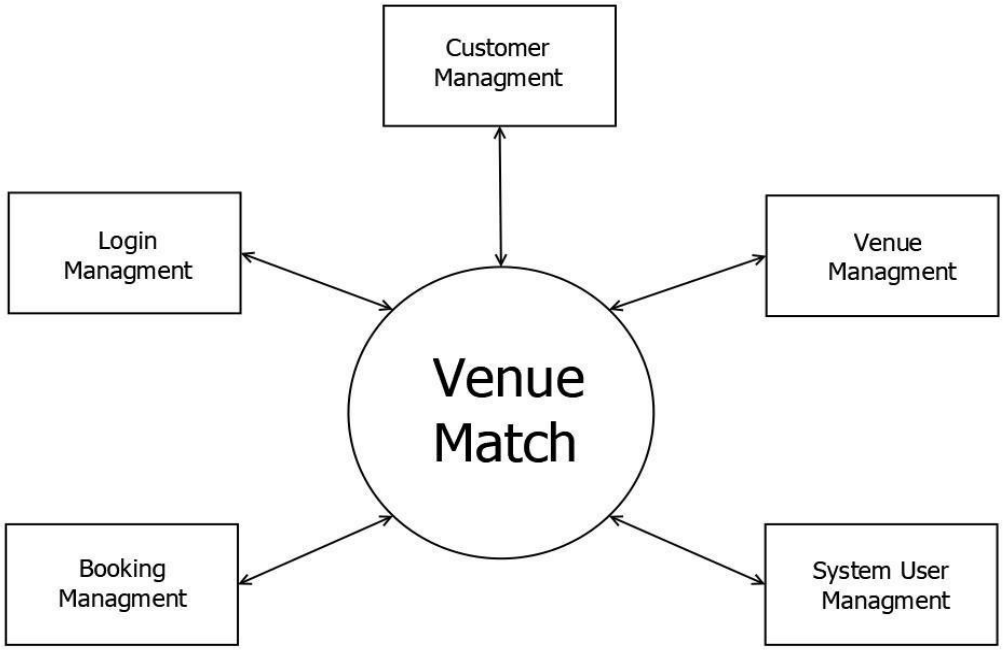

FIGURE 4: DFD LEVEL-0

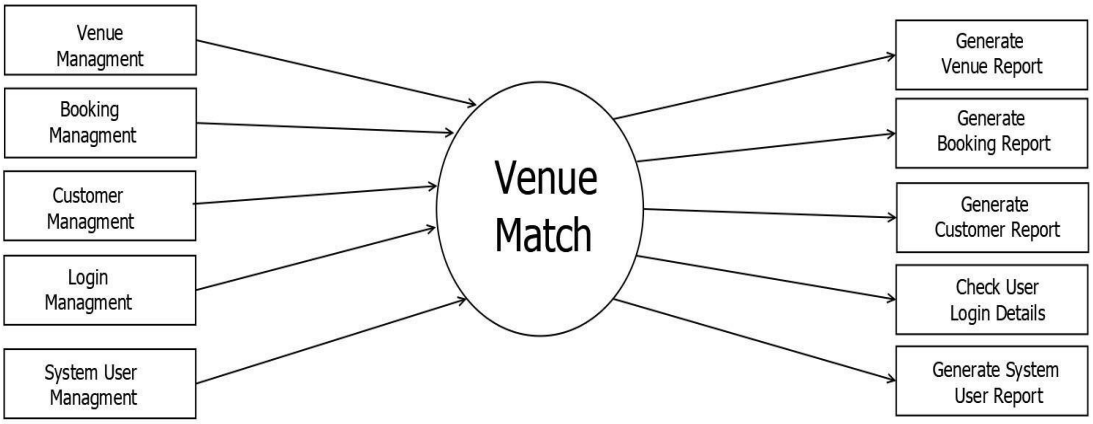

FIGURE 5: DFD LEVEL 1

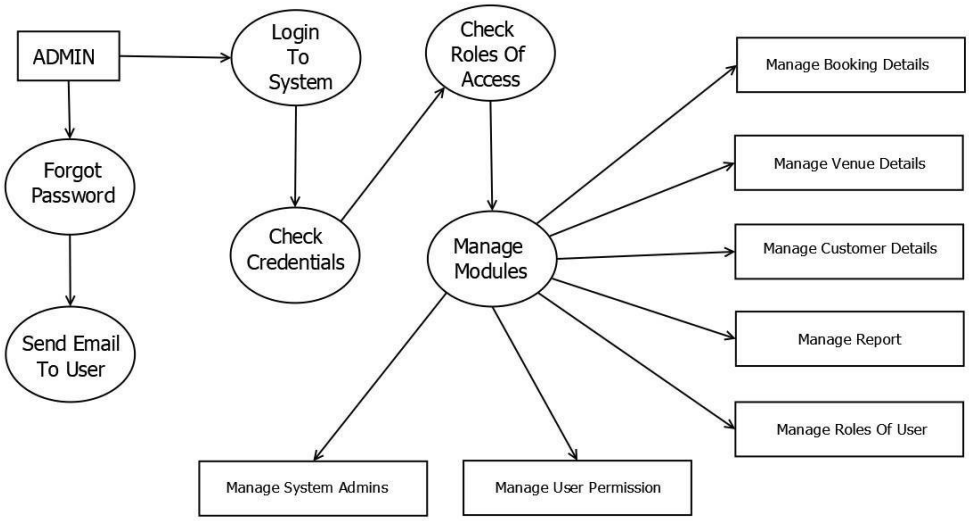

FIGURE 6: DFD LEVEL 2

8. Development

The Venue Match App development commenced with the adoption of the "Iterative Model". The Iterative Model is a software development approach that focuses on incremental and iterative progress throughout a project's lifecycle. In this model, the development process is divided into small cycles or iterations, each of which involves a subset of the project's requirements. The model begins with an initial planning phase where the project's objectives, requirements, and scope are defined. Following this, the first iteration is executed, typically involving design, development, and testing activities.

What sets the Iterative Model apart is that it doesn't attempt to define all project requirements upfront. Instead, it allows for flexibility, enabling developers and stakeholders to adapt and refine requirements as the project progresses. Each iteration results in a partially completed version of the software, and feedback from users and stakeholders is gathered and incorporated into the subsequent iterations.

This iterative process continues until the software reaches a state where it meets the desired level of functionality, quality, and user satisfaction. The advantage of the Iterative Model lies in its ability to accommodate changing requirements, respond to user feedback, and reduce the risk of late-stage project failures by addressing issues early in the development process.

As we know the process of planning, organizing, coordinating, and controlling resources to achieve specific goals is also referred to as development. Software engineers have created more sophisticated tools known as IDE (Integrated Development Environment) to accommodate the evolution of software development. We have used Visual studio IDE which has features that integrate flawlessly with flutter frameworks. Likewise, for effective and worthwhile documentation, many inhouse office products like Ms-excel, MS-word, and PowerPoint were used. For the charts and diagrams, DIA tool is used. PHP is a backend tools used in the system. We have used Discord, Git and Microsoft Teams for our collaborative platform to discuss with the problems and task division among the members with our project supervision among the team members in teamwork manner. Our system must store information about the

booking, venue details, Reservations, and so on. As a result, we've identified the major tables that will be implemented on the chosen RDBMS. So here is the database schema for our project "Venue Match".

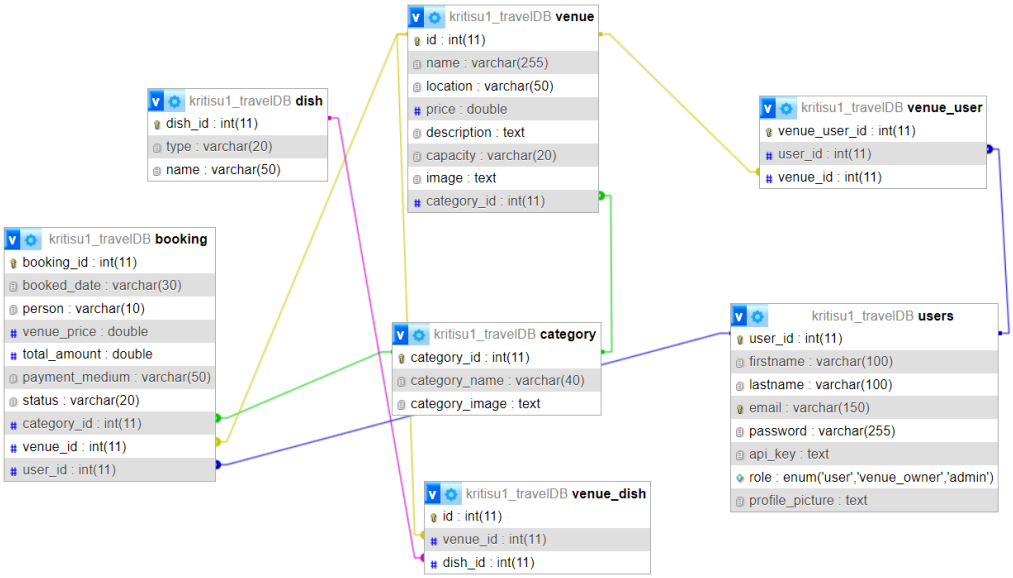

FIGURE 7: DATABASE SCHEME

The illustrated database visually represents the organization and relationships among the tables within the Venue Match database. This database schema serves as the structured, language-supported description of the database's architecture within a Database Management System (DBMS). The figure above provides a comprehensive list of tables and their associated entities involved in the development of Venue Match.

Specifically, the depicted database schema outlines the organization and interconnections of tables within a database named "kritisu1_travelDB." Notable tables within the Venue Match database include "kritisu1_travelDB_user," "kritisu1_travelDB_booking," "kritisu1_travelDB_venue_user," among others. These tables are integral components of the system.

To establish relationships and maintain data integrity, numerous foreign keys are employed throughout the database. A foreign key is a pivotal database constraint that establishes a connection between two tables within a relational database. This constraint

actively enforces referential integrity by guaranteeing that the values within a column of one table correspond to the values within a column of another table.

In essence, foreign keys play a vital role in ensuring the coherence and reliability of data across different tables, thus facilitating robust relationships and enabling efficient data retrieval within the Venue Match database.

S. N	Name of student	Work Assigned
1.	Narvasha Adhikari	○ Documentation ○ Proposal Planning ○ Problem Identification ○ Design (system design) ○ Coding (mostly website and some parts of mobile app) ○ Testing
2.	Samjhana Poudel	○ Documentation ○ Requirement Analysis ○ Design (support in system design) ○ Coding (mostly mobile app and some parts of website) ○ Backend ○ Testing

Table 2: Task Division

9. TESTING

A test case comprises a set of conditions or variables employed by a tester to ascertain if a system being evaluated fulfills prescribed requirements or functions correctly. The process of creating test cases can also aid in revealing potential shortcomings within an application's requirements or design. The Software Testing Life Cycle (STLC) serves as a testing methodology that contributes to the attainment of software quality standards with greater efficiency.

Throughout the entirety of the design and development stages, we have executed unit tests on each individual component, confirming their proper functionality before their integration into the larger system.

Given that we adopted the iterative model for our project's development. The iterative model testing process is an integral component of the iterative development methodology, where software is built and refined incrementally through a series of repetitive cycles. These cycles involve designing, developing, and testing small portions of the software in each iteration. The testing process within the iterative model is dynamic and evolves over the course of multiple iterations.

9.1. Test cases

Test Case -No.1
Test Case Id: TC001, TC002, TC003, TC004, TC005, TC006
Test priority (low/medium/high): med
Module name: Login module of Venue Match
Test title: verification of user login
Description: test the login page for valid entry
Test executed by: Narvasha Adhikari
Test reviewed by: Kreeti Subedi
Pre-conditions: user has valid username and password

Test Steps: Navigate to the login panel in the project's executable file. Enter random characters, zero or null values, capitalized strings, functions inside of functions, and then check to see if the page redirects to the appropriate section.

Step	Test case id	Test cases	Test steps	Expected results	Test data	Actual result	Status (Pass/Fail)
1	TC001	verification	Navigate to login page	System displays homepage	User= narvasha@gmail.com Password= narvasha@123	User is navigated to dashboard with successful login	pass
2	TC002	Valid username wrong password	Click on login button enter valid username and password	Displays error message login failed	User= user@gmail.com Password= user@123	Error in successful login	pass
3	TC003	Wrong username valid password	Click on login button enter valid userna	Displays error message login failed	User= user@gmail.com Password= user@123	Error in successful login	pass

			me and password				
4	TC004	Button click test	Click on login button	Successful click and further result	Navigated to welcome screen	success	pass
4	TC005	Verify login without registration test	Try to login without providing necessary credentials	error	Click on login	error	pass
4	TC006	Forgot password test	Provide valid user name and password before clicking forgot password	Authenticate the user and change the new password	User=empty Password=empty	Retrieve for user accounts	pass

Table 3: Test case for verification of user login

Test Case -No.2
Test Case Id: TC001, TC002, TC003, TC004, TC005, TC006
Test priority (low/medium/high): med
Module name: Login module of Venue Match
Test title: verification of admin login on website
Description: test the login page for valid entry
Test executed by: Narvasha Adhikari
Test reviewed by: Kreeti Subedi
Pre-conditions: user has valid username and password
Test Steps: Navigate to the login panel in the project's executable file. Enter random characters, zero or null values, capitalized strings, functions inside of functions, and then check to see if the page redirects to the appropriate section.

Step	Test case id	Test cases	Test steps	Expected results	Test data	Actual result	Status (Pass/Fail)
1	TC001	verification	Navigate to login page	System displays homepage	User= admin@gmail.com Password= admin@123	User is navigated to dashboard with successful login	pass
2	TC002	Valid username wrong password	Click on login button enter valid	Displays error message login failed	User= admin@gmail.com Password= admin@123	Error in successful login	pass

			username and password				
3	TC003	Wrong username valid password	Click on login button enter valid username and password	Displays error message login failed	User= admin@gmail.com Password= admin@123	Error in successful login	pass
4	TC004	Button click test	Click on login button	Successful click and further result	Navigated to dashboard	success	pass
4	TC005	Verify login without registration test	Try to login without providing necessary credentials	error	Click on login	error	pass
4	TC006	Forgot password test	Provide valid user name	Authenticate the user and change	User=empty Password=empty	Retrieve for user	pass

			and password before clicking forgot password	the new password		accounts	

Table 4 : Test case for verification of admin login

Test Case -No.3
Test Case Id: TC001, TC002, TC003, TC004, TC005, TC006
Test priority (low/medium/high): med
Module name: Login module of Venue Match
Test title: verification of venue owner login on website
Description: test the login page for valid entry
Test executed by: Narvasha Adhikari
Test reviewed by: Kreeti Subedi
Pre-conditions: user has valid username and password
Test Steps: Navigate to the login panel in the project's executable file. Enter random characters, zero or null values, capitalized strings, functions inside of functions, and then check to see if the page redirects to the appropriate section.

Step	Test case id	Test cases	Test steps	Expected results	Test data	Actual result	Status (Pass/Fail)

1	TC001	verification	Navigate to login page	System displays dashboard	User= owner@gmail.com Password= owner@123	User is navigated to dashboard with successful login	pass
2	TC002	Valid username wrong password	Click on login button enter valid username and password	Displays error message login failed	User= owner@gmail.com Password= owner@123	Error in successful login	pass
3	TC003	Wrong username valid password	Click on login button enter valid username and password	Displays error message login failed	User= owner@gmail.com Password= owner@123	Error in successful login	pass
4	TC004	Button click test	Click on login button	Successful click and further result	Navigated to dashboard	success	pass

4	TC005	Verify login without registration test	Try to login without providing necessary credentials	error	Click on login	error	pass
4	TC006	Forgot password test	Provide valid user name and password before clicking forgot password	Authenticate the user and change the new password	User=empty Password=empty	Retrieve for user accounts	pass

Table 5: Test case for verification of venue owner login

Test Case -No.4
Test Case Id: TC001, TC002, TC003, TC004, TC005, TC006
Test priority (low/medium/high): med
Module name: Registration
Test title: test of registration
Description: registration of new user
Test executed by: Narvasha Adhikari

Test reviewed by: Kreeti Subedi
Pre-conditions: user has valid username and password; email id must not be used before registration to the system i.e., is unique email id for each user
Test Steps: click on register button and fill with correct data

Step	Test case id	Test cases	Test steps	Expected results	Test data	Actual result	Status (Pass/Fail)
1	TC001	Registration of new user	Click on register button and fill fields of forms i.e. email id contact number, address	All the required fields are filled and processed to verification of details	email= narvasha@gmail.com Password= narvasha@123 Contact: 9806669990 Address: Lakeside, Pokhara	As expected,	pass
2	TC002	Valid username wrong password	Click on login button enter valid username and password	Displays error message login failed	email= narvasha@gmail.com Password= narvasha@123 Contact: 9806669990 Address:	Error in successful login	pass

					Lakeside, Pokhara		
3	TC003	Wrong username valid password	Click on login button enter valid username and password	Displays error message login failed	User= owner@gmail.com Password= owner@123	Error in successful login	pass
4	TC004	Button click test	Click on login button	Successful click and further result	Navigated to dashboard	success	pass
4	TC005	Verify login without registration test	Try to login without providing necessary credentials	error	Click on login	error	pass
4	TC006	Forgot password test	Provide valid user name and	Authenticate the user and change	User=empty Password=empty	Retrieve for user	pass

			password before clicking forgot password	the new password		accounts	

Table 6: Test case for verification of registration

Test case No-5
Test case ID – TC001, TC002
Test Priority (Low/Medium/High): Medium
Module Name: Booking venue
Test Title: Booking testing
Description: User successfully books Venue A, is able to select their preferred date and time for the test, reviews the booking details, confirms the booking, and ensures that the confirmation is accurate.
Test Executed by: Samjhana Poudel
Test Reviewed by : Suman Poudel
Pre-condition: User must be logged in.
Test Steps : Select the desired venue and navigate to booking screen and select date, total guests

Step 1	Test Case Id	Test Cases	Test Steps	Expected Results	Test Data	Actual Results	Status (Pass/Fail)
1	TC001	User Should be logged in	Select the desired venue	Navigate to booking screen	Venue id Category id	As expected	Pass

			Click on book now				
2	TC002	User should navigate to the booking screen	User should select the date and total guests	Display the total details and total amount for booking venue	Total Amount	As expected	Pass
3	TC003	User should navigate to payment screen	Click on book now	Navigate to payment screen		As expected	Pass

Table 7: Test case for booking venue

Test case No-6
Test case ID – TC001
Test Priority (Low/Medium/High): Medium
Module Name: Payment integration
Test Title: Payment testing
Description: A user should have the capability to successfully initiate a payment and successfully finalize the booking procedure.
Test Executed by: Samjhana Poudel
Test Reviewed by: Suman Poudel
Pre-condition: The user needs to have an active login session, choose their preferred venue, and complete all the necessary information on the booking screen.

Step 1	Test Case Id	Test Cases	Test Steps	Expected Results	Test Data	Actual Results	Status (Pass/Fail)
1	TC001	Payment process	Navigate to payment page. Enter user's payment information. Click on "Pay Now" button.	Venue booked	Phone no and password	As expected	Pass

Table 8: Test case for payment

10. Time schedule

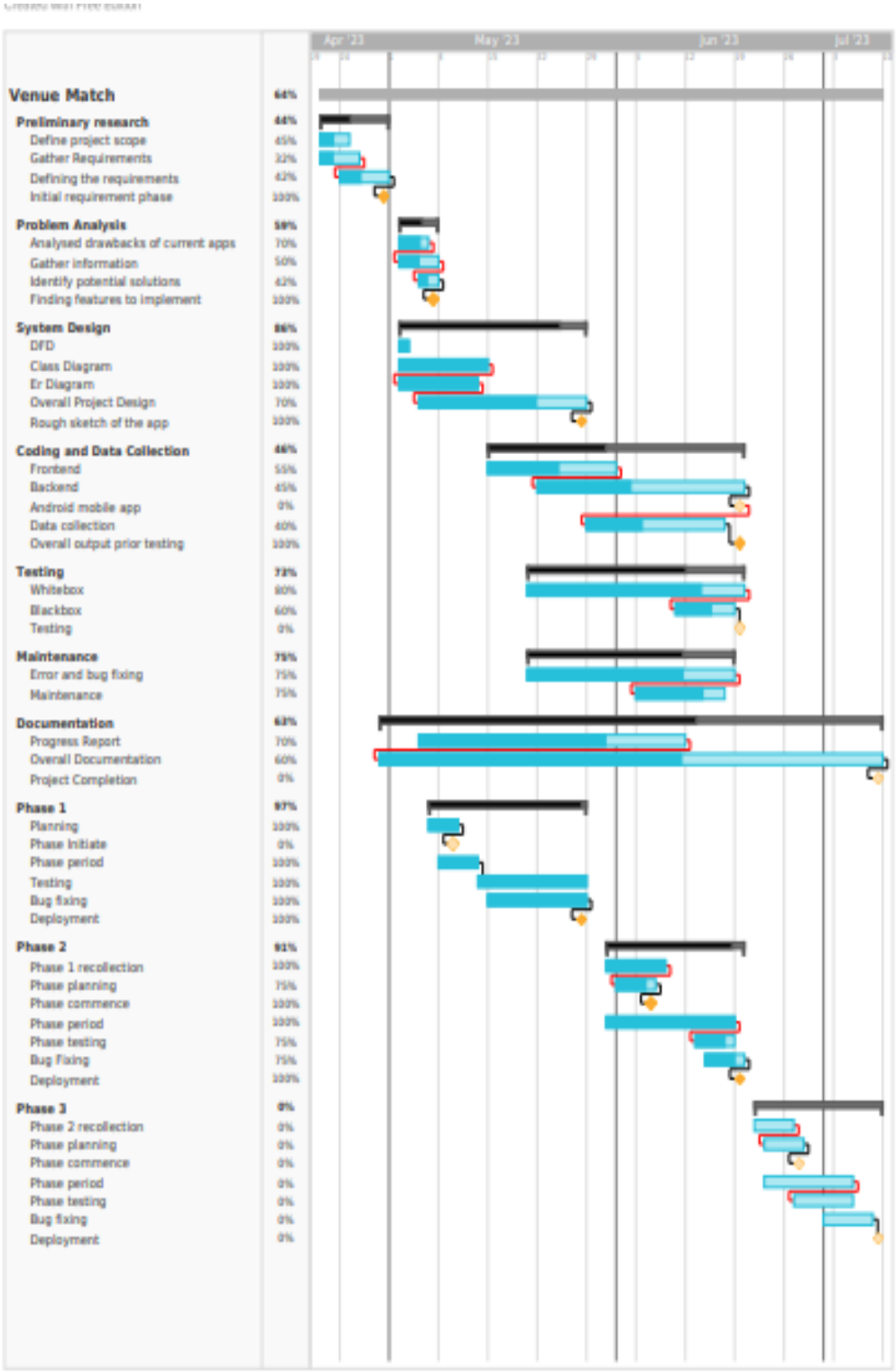

FIGURE 8 GANTT CHART

11. Project Results:

Venue Match App the Venue Match App was developed with the objective of providing users with a convenient platform to find suitable venues for their events and gatherings. After thorough development and testing, the app achieved the following results:

User-Friendly Interface: The Venue Match App boasts an intuitive and user-friendly interface, allowing users to easily navigate through the app's features and functionalities. The design incorporates a clean layout, making it simple for users to search, filter, and view venue options.

Accurate Venue Recommendations: The venue matching algorithm implemented in the app delivers accurate and relevant recommendations based on user preferences, such as location, capacity, amenities, and event type. Users can quickly find venues that align with their specific requirements.

Efficient Search and Filtering: The search and filtering mechanisms are efficient and responsive, enabling users to explore various venues and narrow down options quickly. Filters for price range, event type, and available dates enhance the search experience.

Seamless Booking Process: The app provides a seamless booking process, allowing users to reserve their chosen venues directly within the app. This streamlined process eliminates the need for manual bookings and reduces potential user frustrations.

Real-time Availability Tracking: Venue owners can update venue availability in real-time, ensuring that users receive up-to-date information about available dates and times.

Reliable and Secure Authentication: Robust authentication and authorization mechanisms ensure the security of user accounts and personal information. Users can confidently create accounts and log in using secure methods like email/password, social media login, or OAuth.

Scalable Architecture: The app was built using a scalable architecture, allowing it to handle increasing user traffic and growing venue listings without compromising performance.

Responsive Design: The Venue Match App's responsive design guarantees a consistent user experience across various devices and screen sizes, including smartphones, tablets, and web browsers.

Error Handling and Feedback: The app incorporates comprehensive error handling and provides meaningful feedback to users in case of errors or unsuccessful operations, enhancing the overall user experience. Extensibility and Maintainability: The project was developed with a focus on extensibility and maintainability. The codebase follows best practices and design patterns, making it easier to add new features and conduct future updates.

12.Future Enhancement

As the Venue Match App evolves and aims to provide an even better experience for its users, several future enhancements can be considered:

- Offer real-time availability updates and instant booking confirmation for users to access the latest information and secure reservations quickly.
- Enhance the app with event planning features: guest lists, and customization for seamless event management.
- Add venue comparison with user reviews and ratings for easy evaluation of different venues based on specific criteria.
- Implement social media integration to enable users to easily share their booked venues and event details, fostering social engagement by spreading the word among friends and family.
- Email verification and validation to ensure that an email address is both deliverable and genuine.
- Venue owner verification through documentation review (Proof of Identity), Legal Agreements, Background Checks, Site visit.
- Introduce virtual 360-degree venue tours for immersive exploration, enhancing user understanding of venue spaces.
- Creating a smooth integration between the two platforms (app and website) so that users can transition between them effortlessly with just a single action, typically a button or link.

13.Conclusion

The Venue Management System serves as a comprehensive and efficient solution, streamlining various facets of venue management. Notably, it enhances venue operations by simplifying event scheduling, bookings, resource allocation, and communication between stakeholders, markedly improving operational efficiency. Additionally, it fosters an improved customer experience, offering user-friendly interfaces for seamless venue browsing, availability checks, and reservations. This optimizes resource allocation by managing event calendars, bookings, and staff/equipment assignments, providing real-time visibility into resource availability, boosting productivity, and reducing costs. Effective communication is facilitated through various channels, minimizing misunderstandings and enhancing overall efficiency. Moreover, the system generates comprehensive reports and analytics, offering valuable insights into venue utilization, revenue generation, and customer preferences, empowering informed decision-making. Designed for scalability and customization, it adapts to diverse venue requirements, ensuring adaptability and easy expansion. In summary, the Venue Management System is a robust tool that significantly enhances venue management, resulting in increased efficiency, customer satisfaction, and business success upon implementation.

14. References

1. Adler, T. (2007, March). *Scribd*. Retrieved from Event Management System: https://www.scribd.com

2. Alejandro and Pablo Blanes, J. C. (2010). *FLATICON*. Retrieved from Icons: https://www.flaticon.com/

3. *Code Projects*. (2017). Retrieved from Event management Project : https://code-projects.org

4. Flutter. (n.d.). *flutter* . Retrieved from https://flutter.dev/

5. *FreeProjectz*. (2014, November 7). Retrieved from event managment: https://www.freeprojectz.com

6. Jain, S. (n.d.). *GeeksforGeeks*. Retrieved from Flutter – Row and Column Widgets: https://www.geeksforgeeks.org

7. Maxim Melamedov, L. G. (n.d.). *Techopedia*. Retrieved from Tech: https://www.techopedia.com/

8. OpenAI. (2022, November 30). *ChatGPT*. Retrieved from https://chat.openai.com/

9. Prosus. (2008, September 15). *StackOverflow*. Retrieved from SafeArea in Flutter: https://stackoverflow.com

10. shoutem. (n.d.). *shoutem*. Retrieved from app-ideas: https://shoutem.com/blog/app-ideas-for-beginners/?

11. wiki. (n.d.). *wikipedia*. Retrieved from wikipedia.org: https://en.wikipedia.org/wiki/

12. wikijsegfug. (n.d.). *flutterhuiewgf*. Retrieved from wiki fulutter: www.wiki.com

13. Zack Onisko, D. C. (2009, July 9). *Dribbble*. Retrieved from design: https://dribbble.com/

Annexure

During the development of our project we have faced unfamiliar errors while developing various services and we have come across to solve the problem within the given time period of time. So we are finally able to deliver the website and mobile application that will satisfy the customers. Here are some screenshots of our system

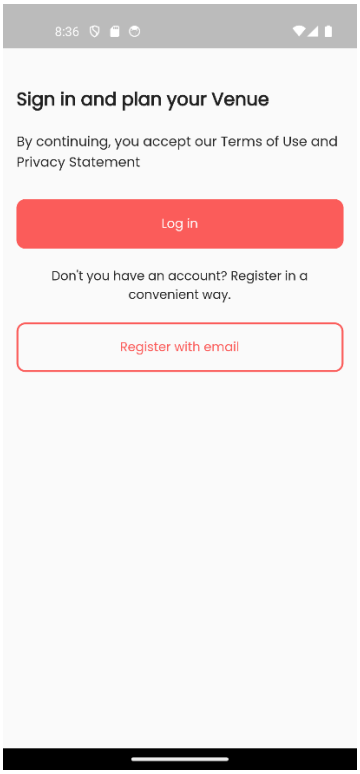

FIG: WELCOME SCREEN

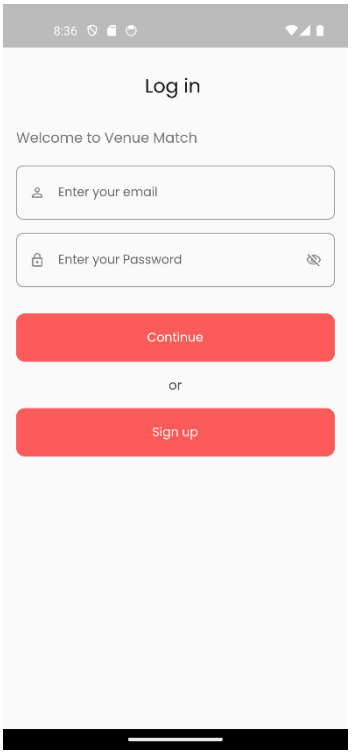

FIG: LOGIN SCREEN

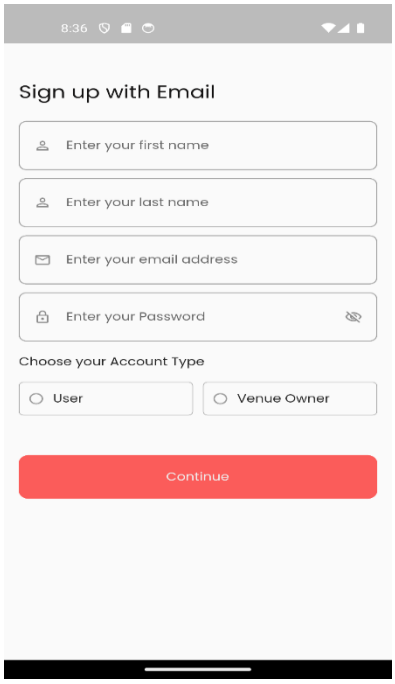

FIG: SIGNUP SCREEN

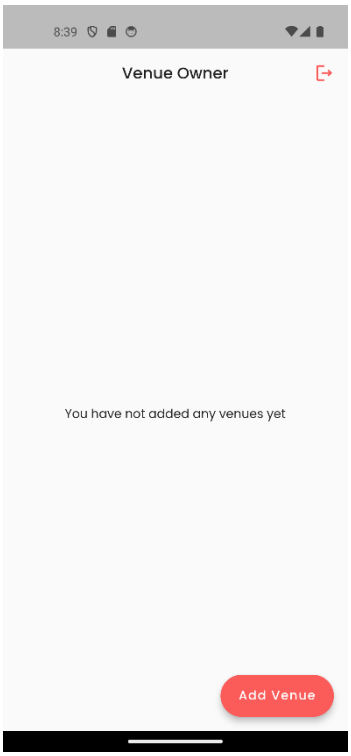

FIG: VENUE OWNER PAGE

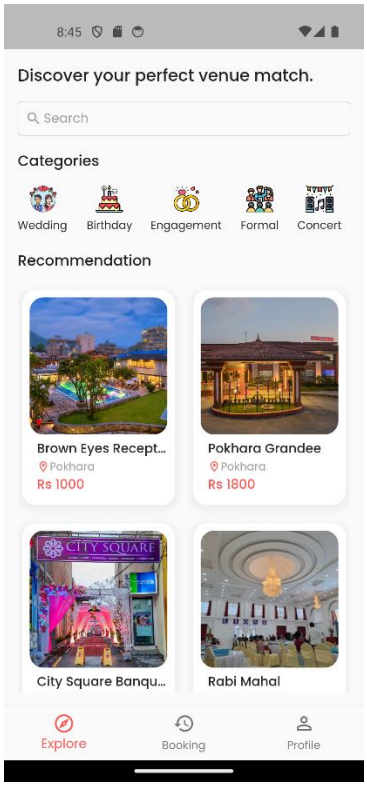

FIG: EXPLORE SCREEN

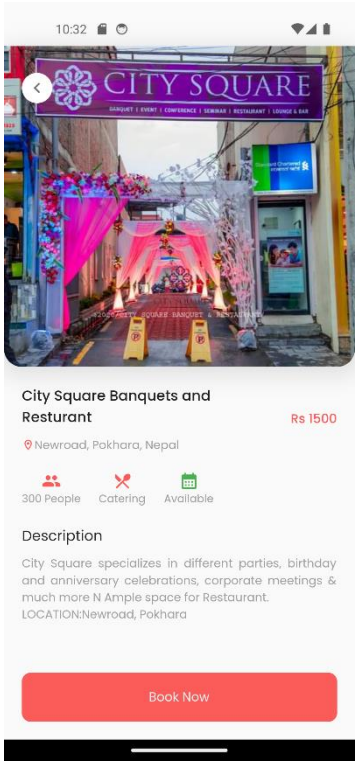

FIG: DETAIL SCREEN

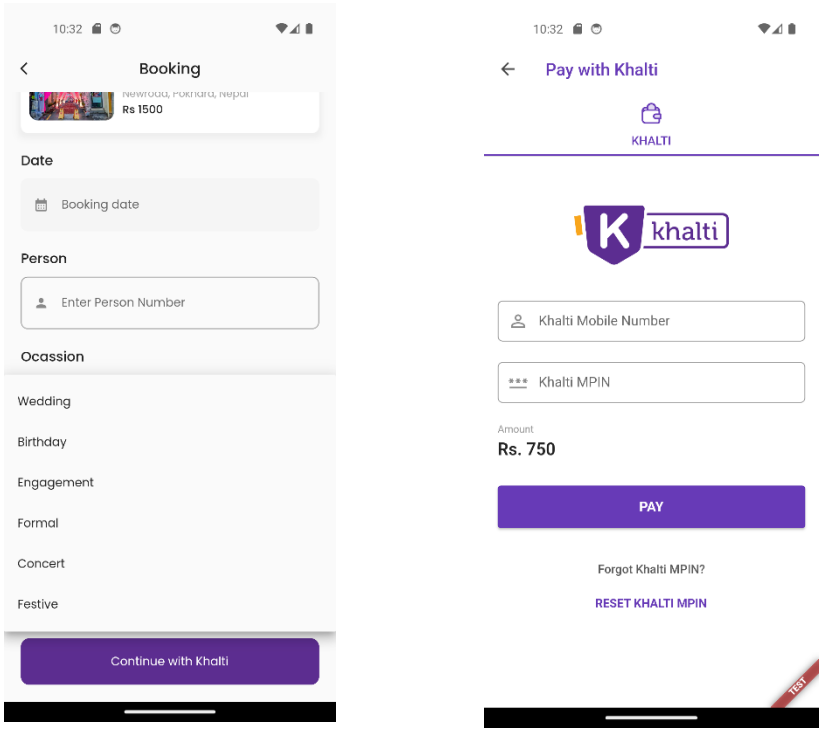

FIG: BOOKING AND PAYMENT SCREEN

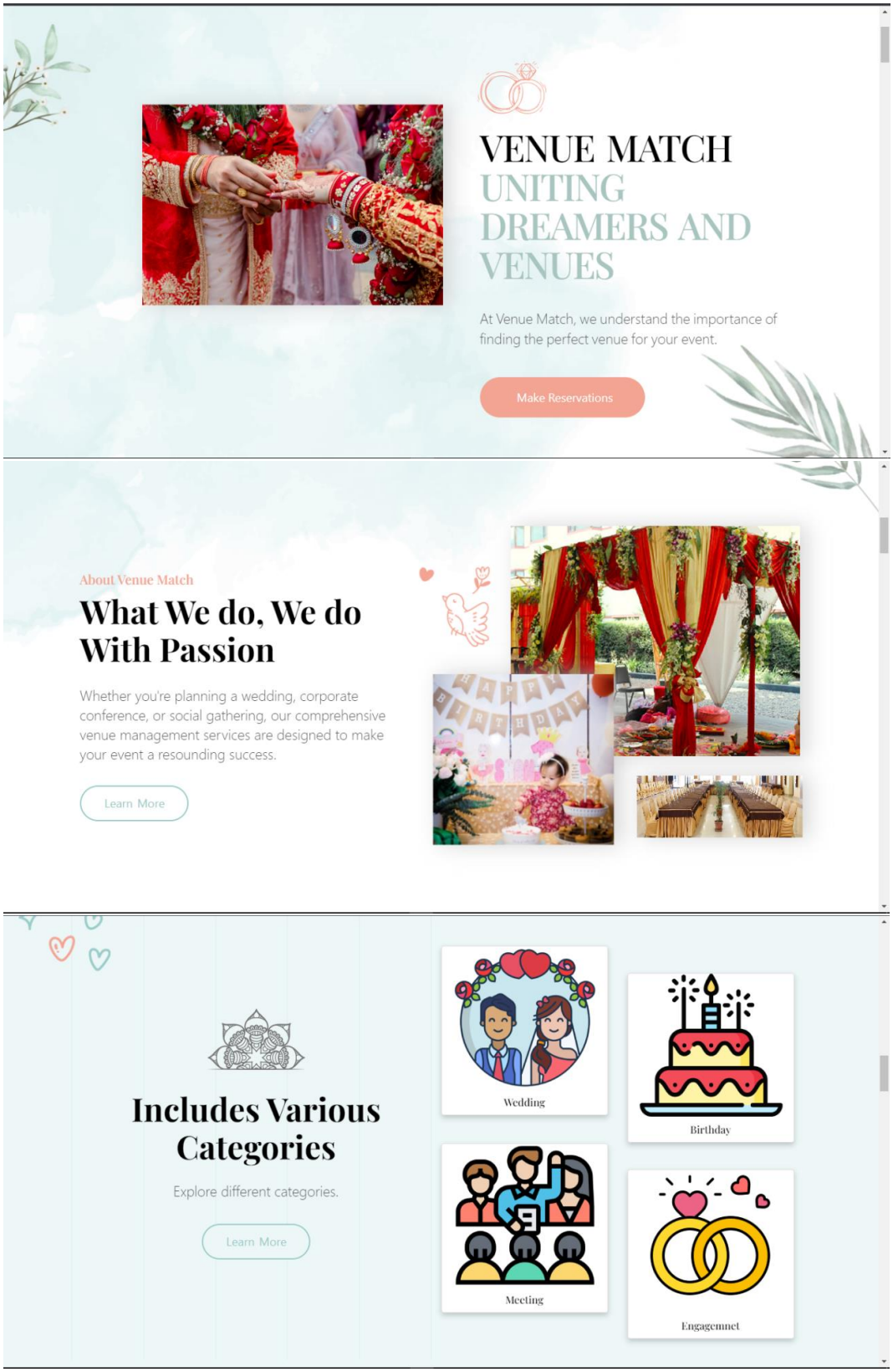

FIG: WEBSITE LANDING PAGE

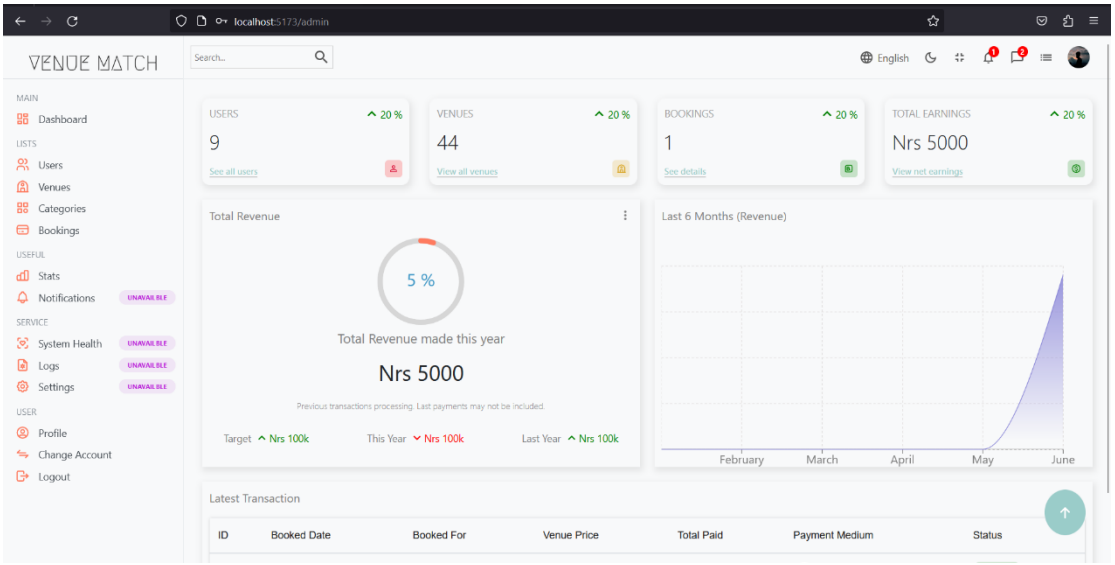

FIG: ADMIN DASHBOARD