

Final Year Project

Wedding Venue booking mobile Application

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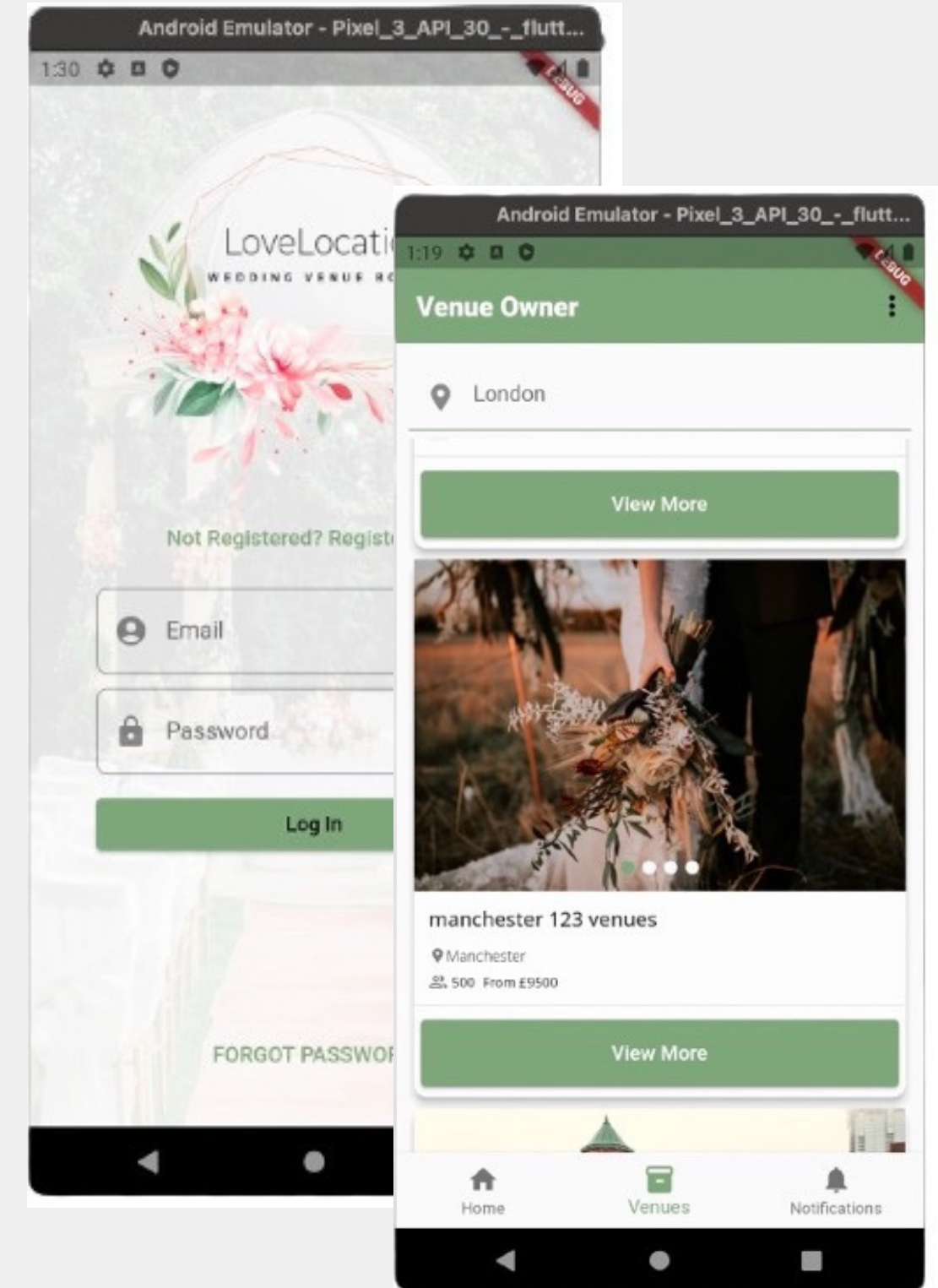
BSc (Hons) Software Engineering (Level 6)

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Wedding Venue booking mobile Application

What is it?

The wedding venue booking application is a software designed to make the process of listing and booking wedding venues quick and simple for users.



Aims and Objectives



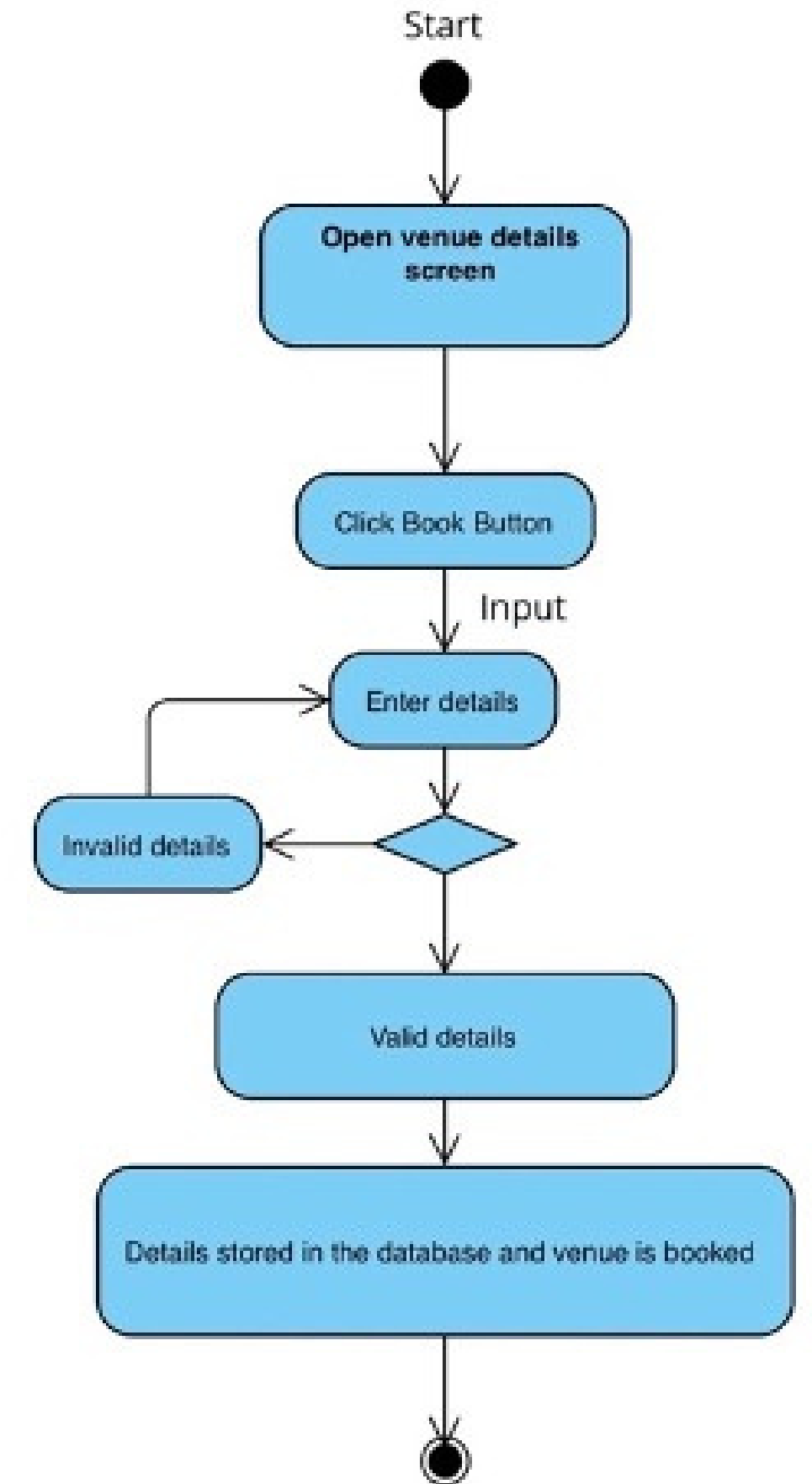
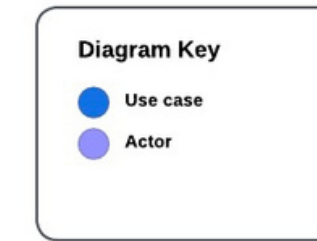
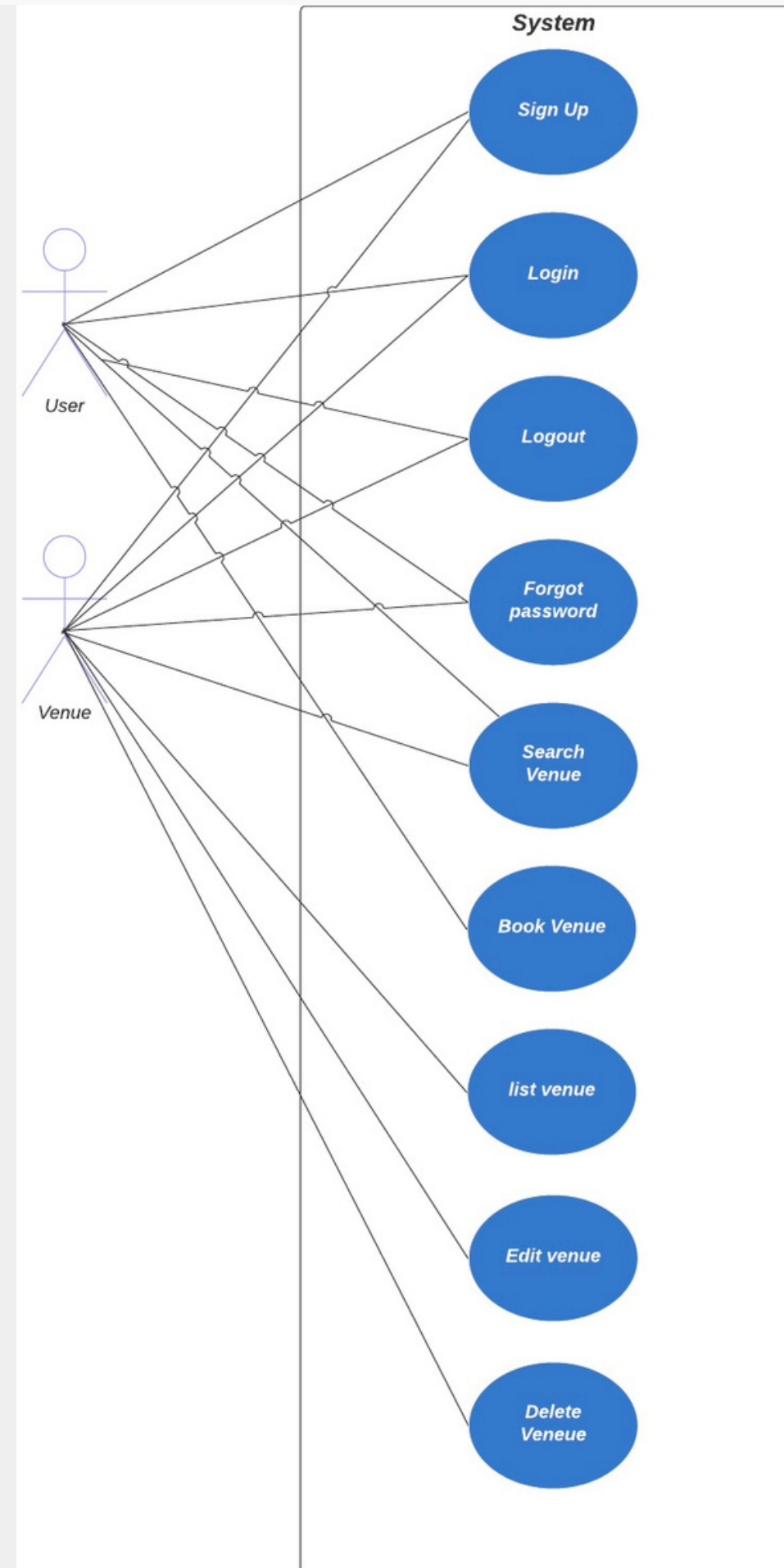
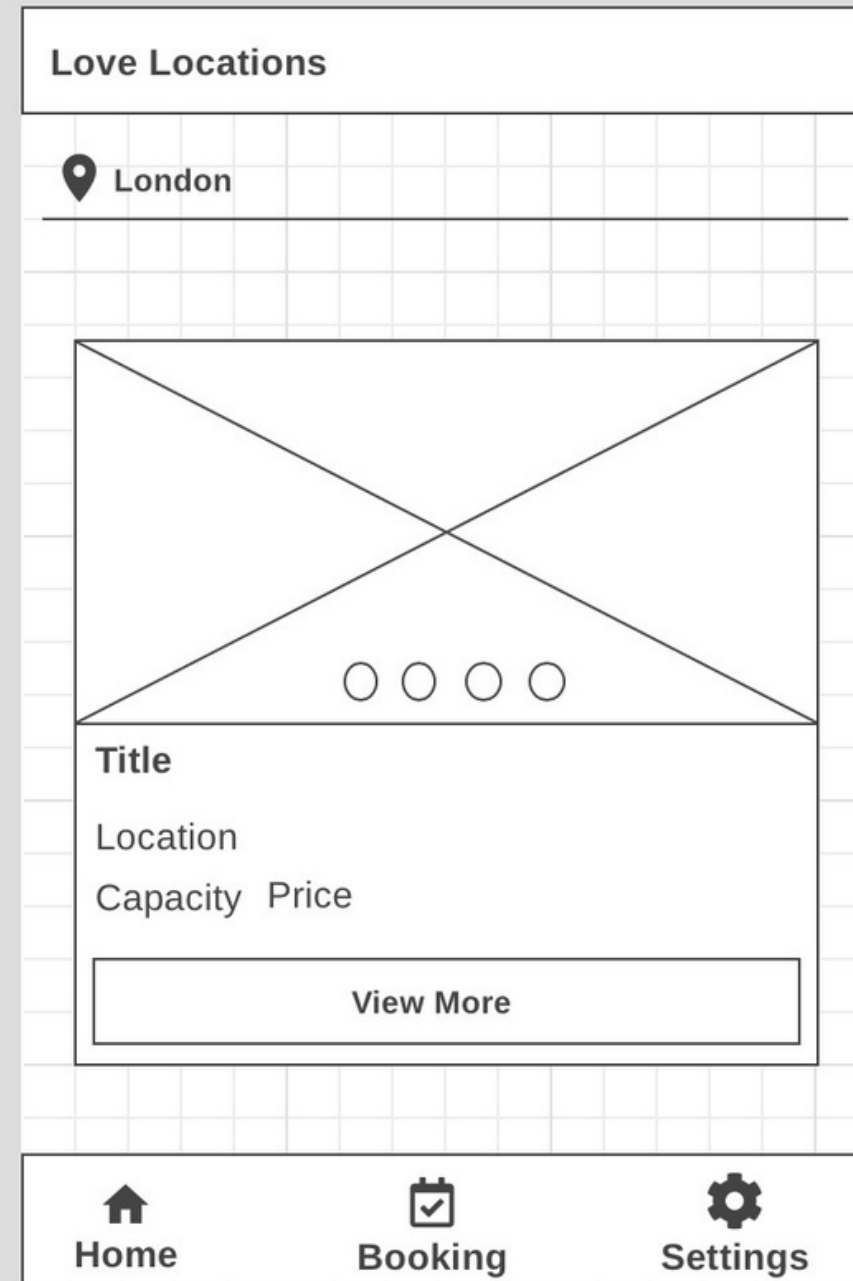
what was the aim?

The aim of the project was to create a mobile application for booking wedding venues that would allow venue owners list their available venues for booking and let users book venues for a wedding celebration.

- 01** To allow users (both normal customers and venues) to register and login into the application
- 02** To allow venues to list and update their available venues so that they can find customers interested in booking the venue for their weddings
- 03** To allow customers to book a wedding venue for their wedding



Design



Implementation



Flutter

Flutter was used to develop the UI of the app. Flutter is a popular open-source UI development toolkit created by Google. It allows developers to create high-performance, visually attractive mobile applications for both iOS and Android platforms using a single codebase.

Dart

The app was developed using dart. Dart is a programming language for developing mobile applications. It was created by Google and is used in the Flutter framework.

Firebase

Firebase was used for the backend of the app. Firebase is a mobile and web application development platform that offers a suite of tools and services to help developers build high-quality apps. The firebase tools used for this project are firebase real-time database, firebase storage and firebase authentication

libraries & packages

Flutter packages was used, such as Image Picker, to simplify tasks like image uploading. Packages are pre-built, reusable pieces of code that developers can integrate into their projects.



Database

users	
email	string
name	string
role	string

venues	
PanorImageURL	string
VenueAbout	string
VenueCapacity	string
VenueEmail	string
VenueFacilities	string
VenueLocation	string
VenueName	string
VenuePostCode	string
VenuePrice	string
VenueServices	string
VenueTel	string
VideoURL	string
▶ FoodAndDrinks	array
▶ ImageURLs	array
▶ VenueDates	array
▶ VenueFeatures	array

bookedvenues	
BookedDate	string
CustomerEmail	string
CustomerMessage	string
CustomerName	string
CustomerTelNum	string
PanorImageURL	string
VenueAbout	string
VenueCapacity	string
VenueEmail	string
VenueFacilities	string
VenueID	string
VenueLocation	string
VenueName	string
VenueOwner	string
VenuePostCode	string
VenuePrice	string
VenueServices	string
VenueTel	string
VideoURL	string
▶ FoodAndDrinks	array
▶ ImageURLs	array
▶ VenueDates	array
▶ VenueFeatures	array

- 01 Firebase Realtime Database is a cloud-hosted NoSQL database.
- 02 It supports real-time data synchronization, meaning that changes made by one client are immediately visible to all other connected clients
- 03 Firebase Realtime Database provides a powerful set of server-side rules for data validation and security.

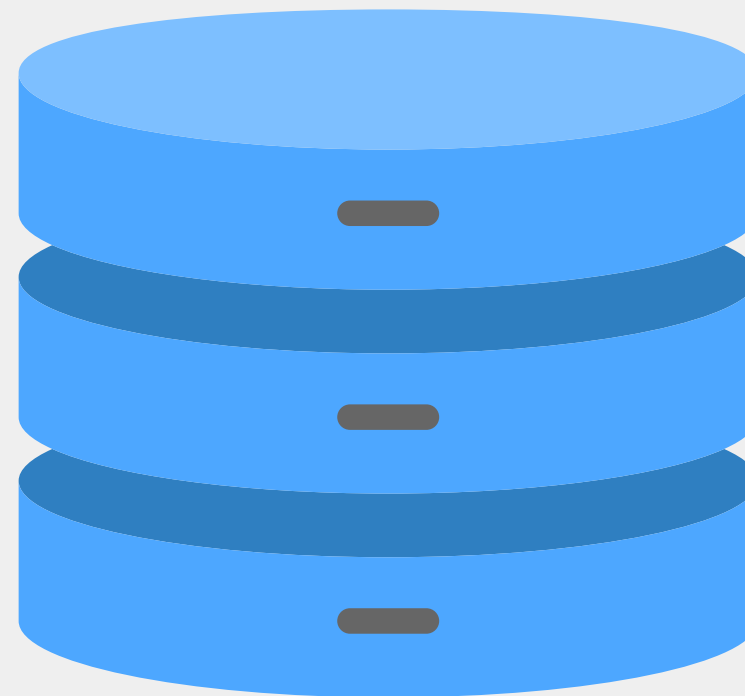
Security

01 Our app leverages Firebase Authentication to securely manage user sign-ups and logins



Firestore

02 Firestore stores user passwords as secure hashes, protecting them from unauthorised access and data breaches.



03 Our security rules also include data validation to ensure that only valid data is stored in the database, preventing the injection of malicious content.

We have implemented robust security rules to ensure that only authorised users have access to the appropriate data. These rules prevent unauthorized access and data manipulation by enforcing read and write permissions.



Testing



- 01 Widget testing:** . The goal was to make sure that all widgets were present and that validation errors were properly displayed
- 02 Integration testing** was carried out to make sure that individual widgets are combined and tested together to make sure they work as intended.
- 03 User acceptance** testing was conducted with users to confirm the app met their expectations, and their feedback was used to refine the app.
- 04 Usability Testing:** We assessed the app's user-friendliness by examining its user interface, navigation, and overall usefulness.

Conclusions

- I have achieved all the objectives except one optional objective

Lessons Learnt

- 01** One of the biggest things I learned from this project was how to manage my time effectively. Because I was developing the app on my own, I had to be very careful with my planning and organization to make sure I got everything done on time. This project taught me how to improve my time management skills and how to prioritize my work more efficiently.
- 02** This project has helped me grow both personally and professionally. I was able to take on tasks that went beyond the scope of my usual projects, teaching me the importance of persistence and perseverance in the face of challenges

Future work

- 01** New and advanced features, such as a payment gateway, message system, and rating system
- 02** Enhancements to existing features to improve user experience

