COMSATS University Islamabad,
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SOFTWARE DESIGN DESCRIPTION

(SDD DOCUMENT)

for

EVENTIVO

Version 1.0

By

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Bachelor of Science in Software Engineering (2017-2021)

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Revision History

Name	Date	Reason for changes	Version

Application Evaluation History

Comments (by committee) *include the ones given at scope time both in doc and presentation	**Action taken**

Supervised by

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Co-Supervised by

Ms. Tahreem Saeed

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1. Introduction

We all know that every business is going to shifted on online platforms people like to deal with any person or company about anything or any product by just sitting at their home. Many people want to book the venue and other essentials will less or no effort these days, but people have to visit different banquets and marquees individually and collect the quotations. Some people becomes much lazy that they delay the booking process because manually booking consumes too much time and effort involved. People don't want to go out. People want easiness in their lives so we come up with the idea to ease the people and community. For the marriages and events, we must book marriage halls or marques or other lawn etc. and also need about all the essentials that are compulsory in the event like food, music band system, decoration, photography etc. so we designed a Place Booking application that provide all these services and our community will get benefit of it. The venue booking application provides user the searching facilities based on various factors. This android application will provide the functionality for searching wedding halls and marquees for the events. This application can be used to check the availability of venue on particular day, so we do not need to go and visit different places manually and just book our desired venue by sitting at home using our smartphone. User can compare two or more venues for his/her ease to get suggestions that which one is best for him/her. The system will give suggestions according to the budget and number of attendees. The user can also book other essentials for function like DJ (sound system), food, decoration etc. through this application. The application will save both the time and money of people to search for hall. Information of individual's booking is stored in database. Owner of the venue can insert his details from his account, he can edit his information and update if needed. The user can book all the function's essential without any effort. User can also give the feedback and rate about booking place that will help others to get views about that venue.

2. Scope

Through EVENTIVO application, the user can book all the function's essential without any effort by sitting at home or any location. User can be able to compare different venues by using this application. The system will give suggestions according to the budget and number of people so user can view them according to his needs. The seller will be able to get more customers by creating the venue's profile and can add all details about venue on profile.

3. Design methodology and software process model

Whenever a small or large project have started to develop, first thing all of programmers required is methodology. Methodology is a way of developing a project, in which all of the programmers

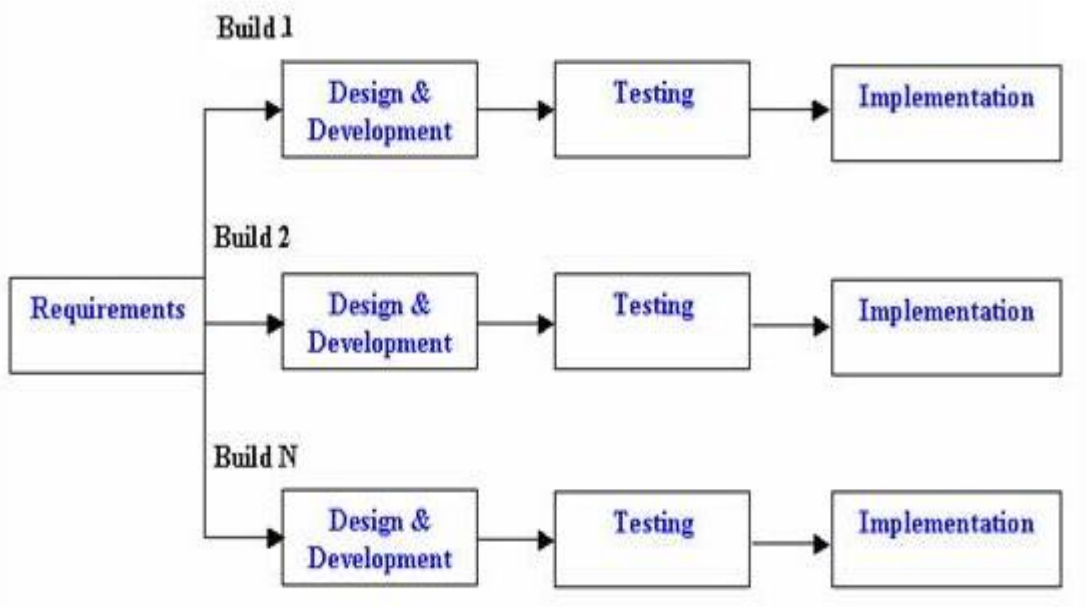
gather the user's requirements, design the project, implement it, and after all this testing and maintenance of the project, in a satisfaction of user and according to the project requirements. There are several existing methodologies that can be used to develop this application using software development processes like Waterfall Model, Agile Methodology, Spiral Model etc. But we use incremental methodology in our project

3.1. Adopted Methodology

Incremental model is used to develop this project, in which we divided our work in multiple modules. All these modules are further divided into more easily managed modules which made up the actual implementation of the requirements. To overcome the drawbacks of the waterfall model, incremental model is used. In incremental model, the product is developed in increments and partitioned into smaller pieces.

These smaller pieces, then built and delivered to client in increments. Quick response from clients. Each module is smaller than compare to whole module. The product is decomposed into a number of components, each of which are designed and built separately (termed as builds). Each component is delivered to the client when it is complete.

This allows partial utilization of product and avoids a long development time. It also creates a large initial capital outlay with the subsequent long wait avoided. This model of development also helps ease the traumatic effect of introducing completely new system all at once.



4. System overview

Many people want to book the venue and other essentials will less or no effort these days, but people have to visit different banquets and marquees individually and collect the quotations. Some people becomes much lazy that they delay the booking process because manually booking consumes too

much time and effort involved. It is also very difficult to compare two or more venues manually without having proper reviews of their previous clients. EVENTIVO is a much needed system in this busy world. Due to lack of time people face many difficulties in booking avenue and other essentials for a function. This system will provide a place for users to book their requirements of function online without much headache and less time consumption. As everything these days is being online so this system will be a fruitful and beneficial addition in this online world. The user can easily check the nearby and recommended venues in a defined budget

A venue booking system provides the searching facilities based on various factor. This android app will provide an interface for searching wedding halls and marquees. This application can be used to check the availability of venue on particular day, so we do not need to go and visit different places manually. User can compare two or more venues for his/her ease. The system will give suggestions according to the budget and number of attendees. The user can pay online with more security. The user can book other essentials for function like DJ, food etc. through this application. The user can save time and money to search for hall. Information of individual's booking is stored in database. Owner of the venue can insert his details from his account, he can edit his information and update if needed.

5. Architectural design

Our project is meant to be responsive management of functions which deals with tremendous information regarding the Venue Booking system. We'll use the Android studio for the android application and for the machine learning implementation we'll use pycharm and python Language Database that we'll use be the Firebase. For the marriages and events, we must book marriage halls or marques or other lawn etc. and also need about all the essentials that are compulsory in the event like food, music band system, decoration, photography etc. so we designed a Place Booking application that provide all these services and our community will get benefit of it. The venue booking application provides user the searching facilities based on various factors. This android application will provide the functionality for searching wedding halls and marquees for the events. The user has to create an account with proper authentication from email. Whenever user will open this application for the first time, he/she has to register their account themselves so that we can save their record on server side. This is the first interface of the application with which user can interact for the first time by opening application. If the user has already register on the application, he/she has to just enter the username and password. While the admins and the venue managers have to simply login the account.

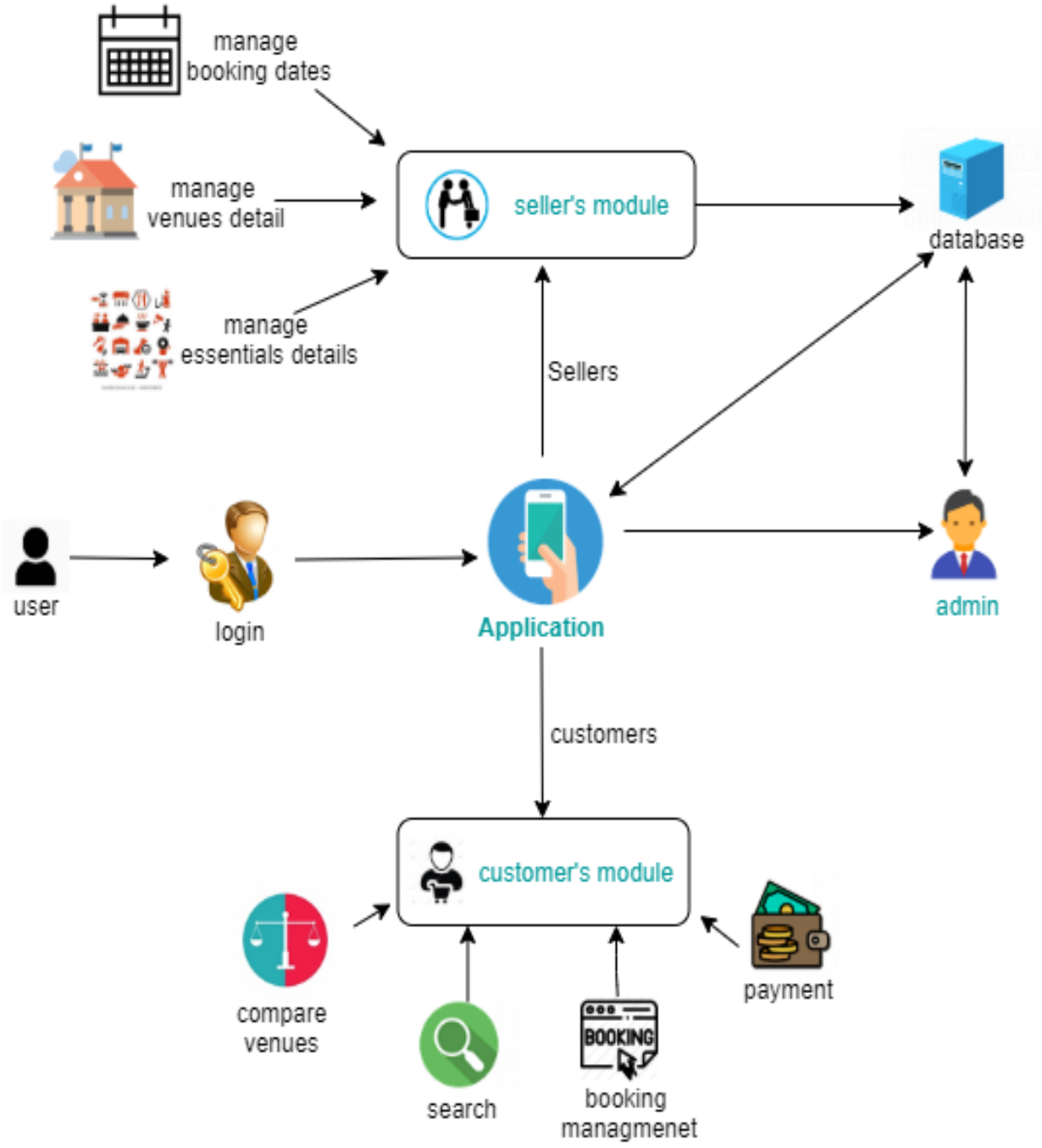


Figure 2: Architecture Diagram

6. Design models

6.1. Sequence Diagram

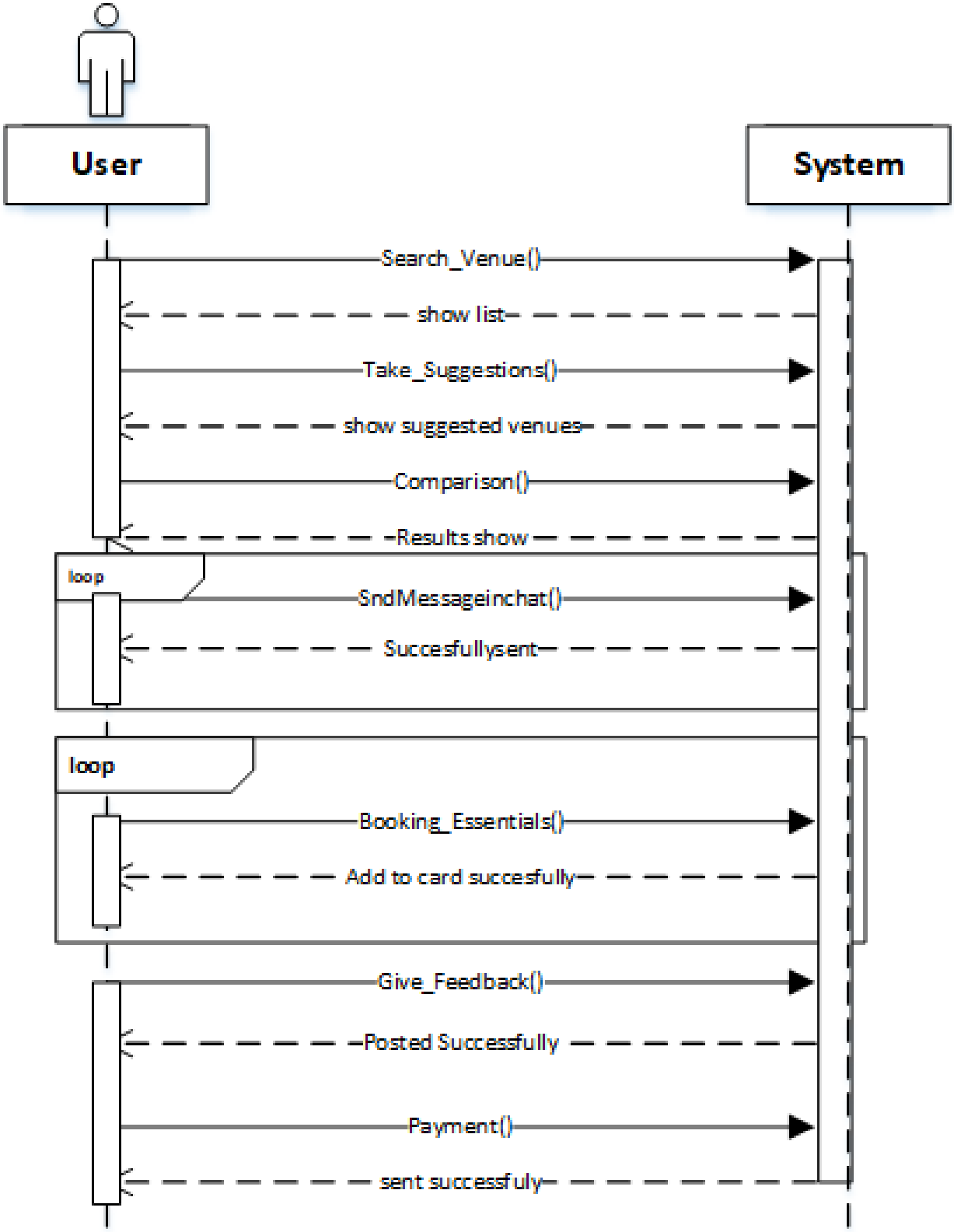


Figure 3: Sequence Diagram User

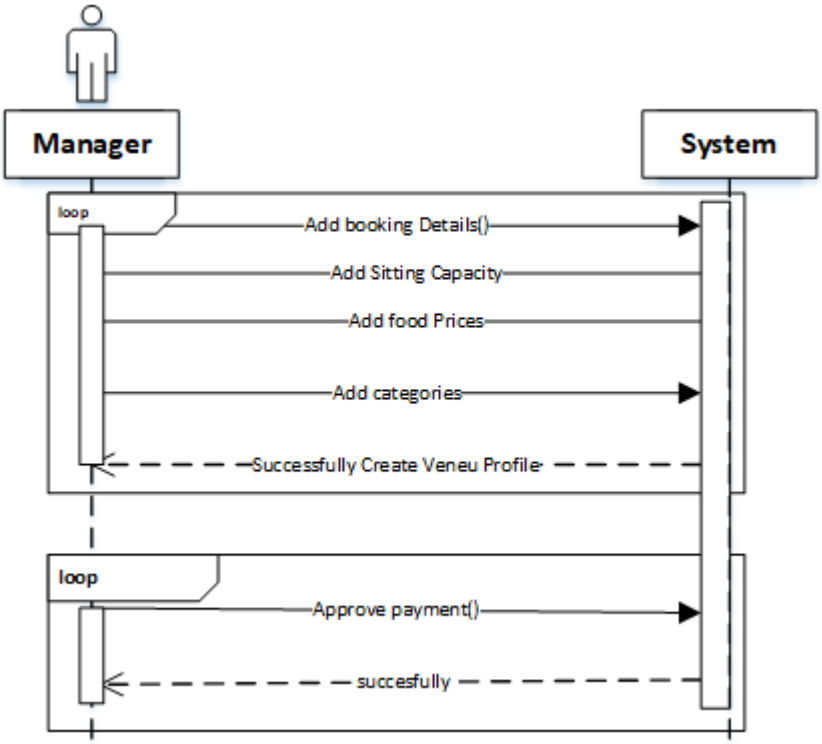


Figure 4: Sequence Diagram Manager

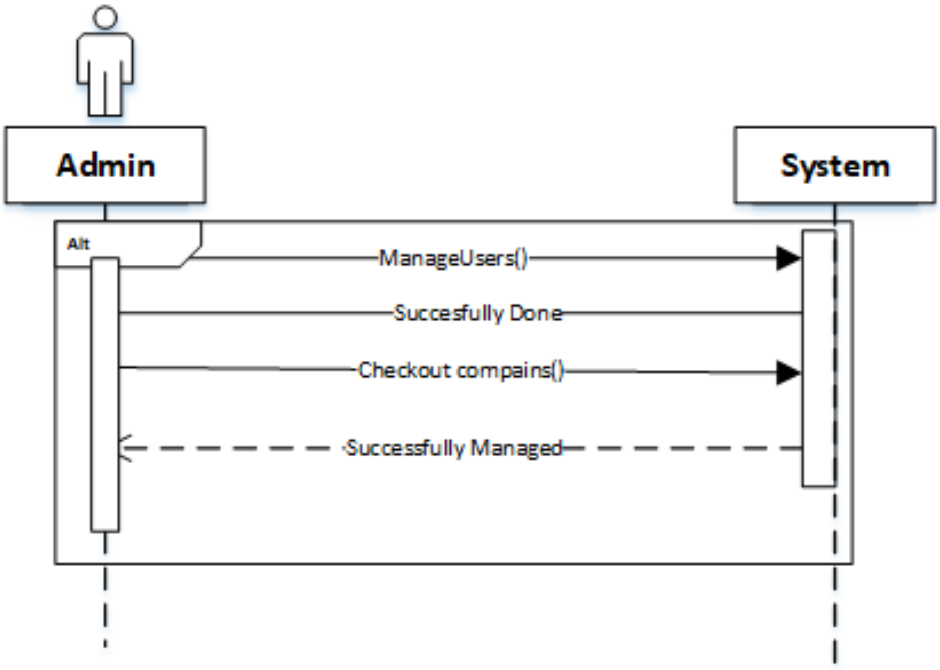


Figure 5: Sequence Diagram Admin

6.2. Activity Diagram

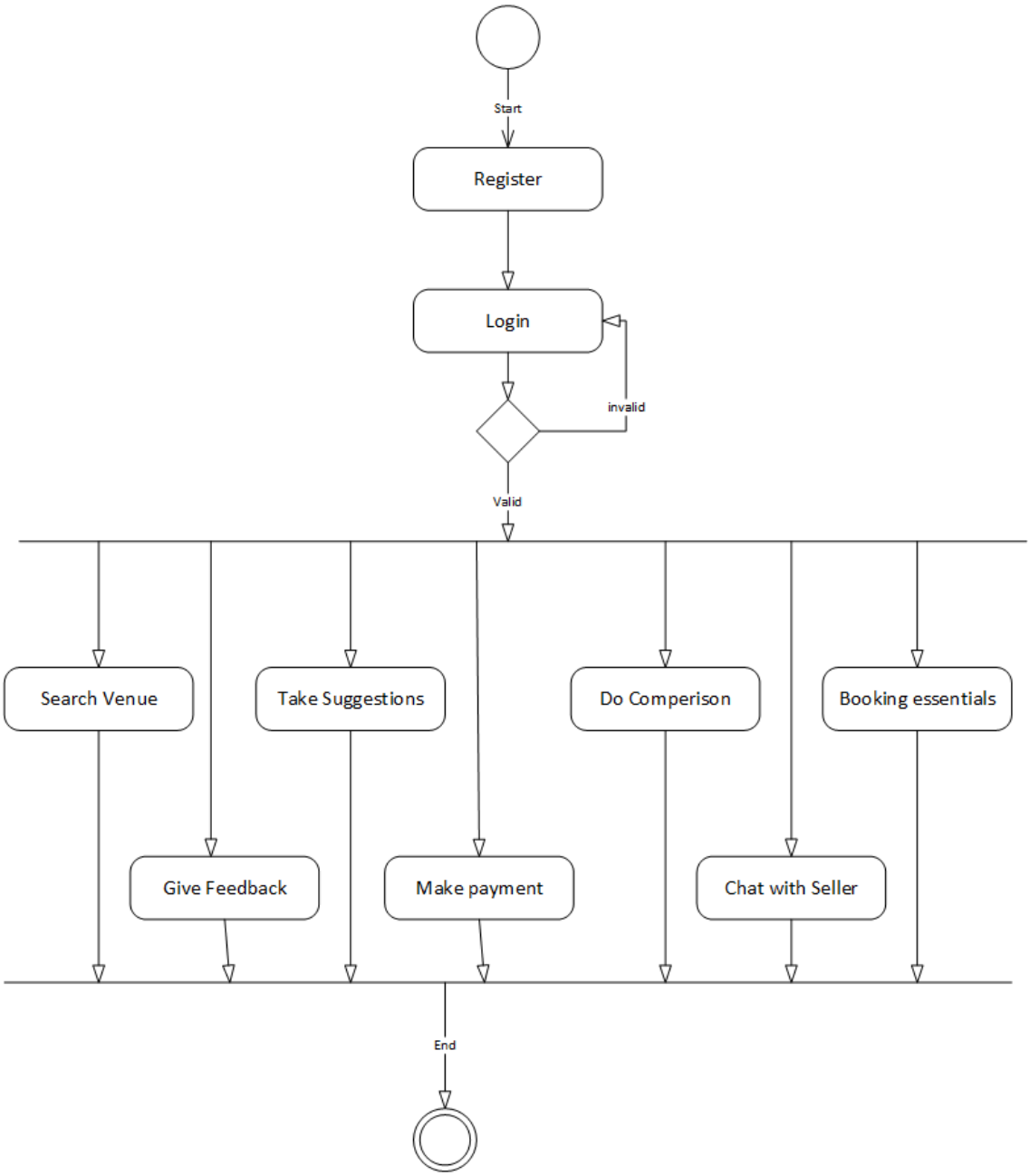


Figure 6: Activity Diagram User

Activity Diagram (Manager)

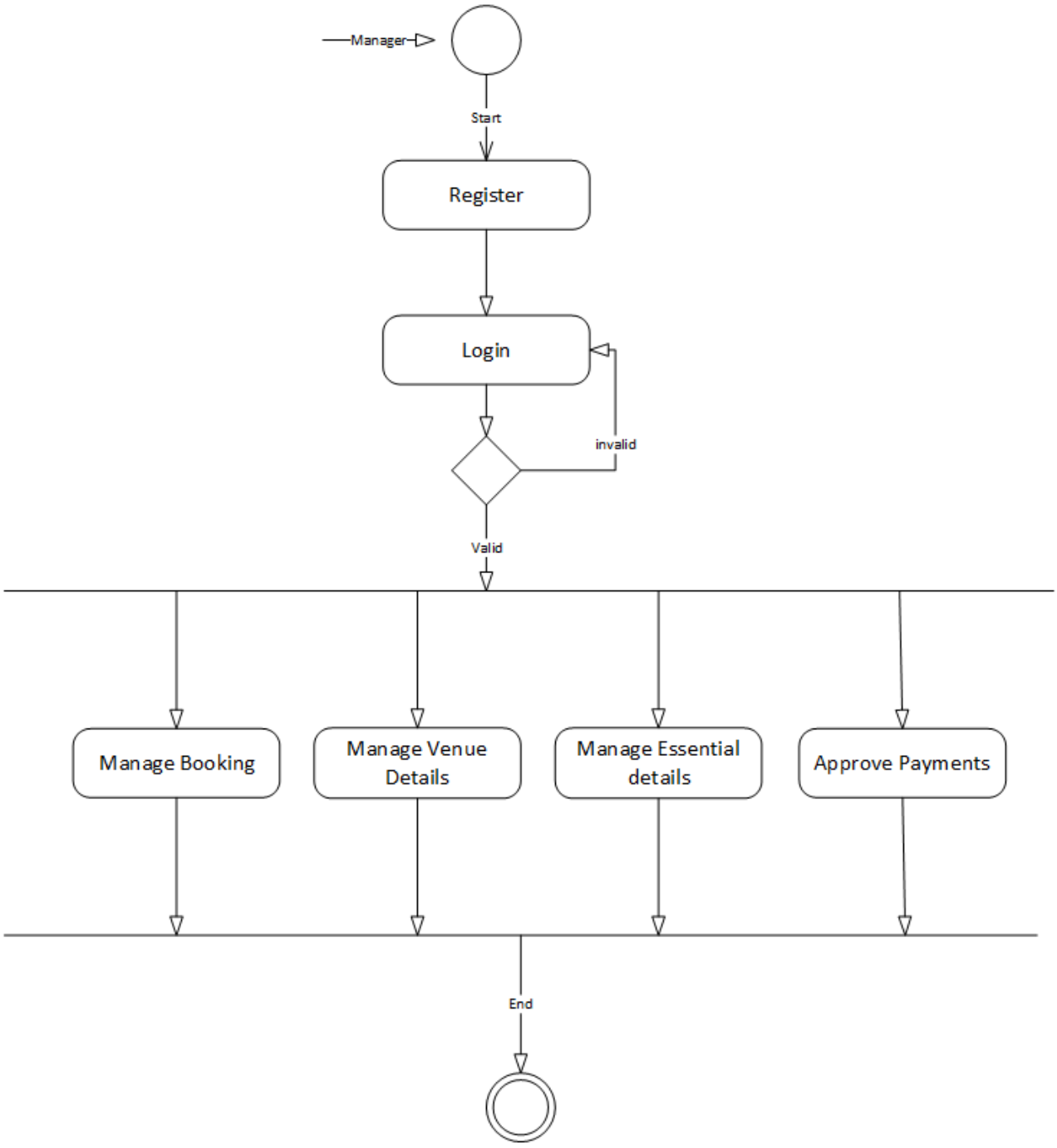


Figure 7: Activity Diagram Manager

6.3. Class Diagram

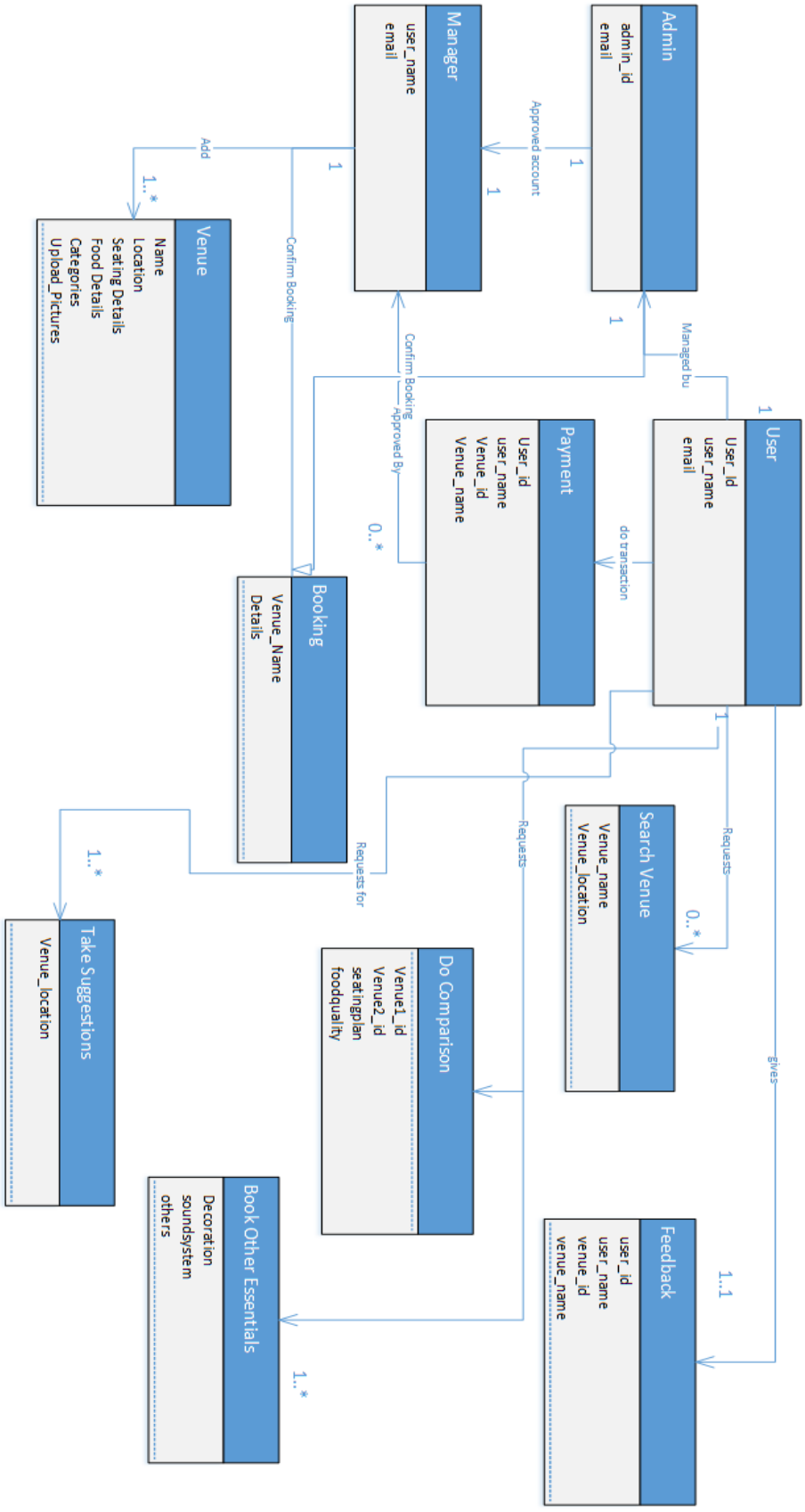


Figure 8: Class Diagram

6.4. Data Flow Diagram

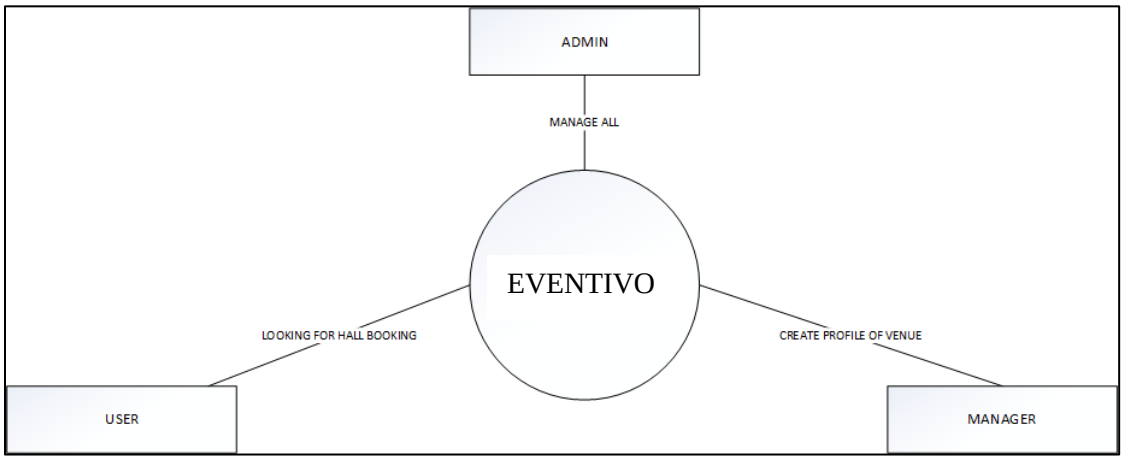


Figure 9: Dataflow Diagram Level 0

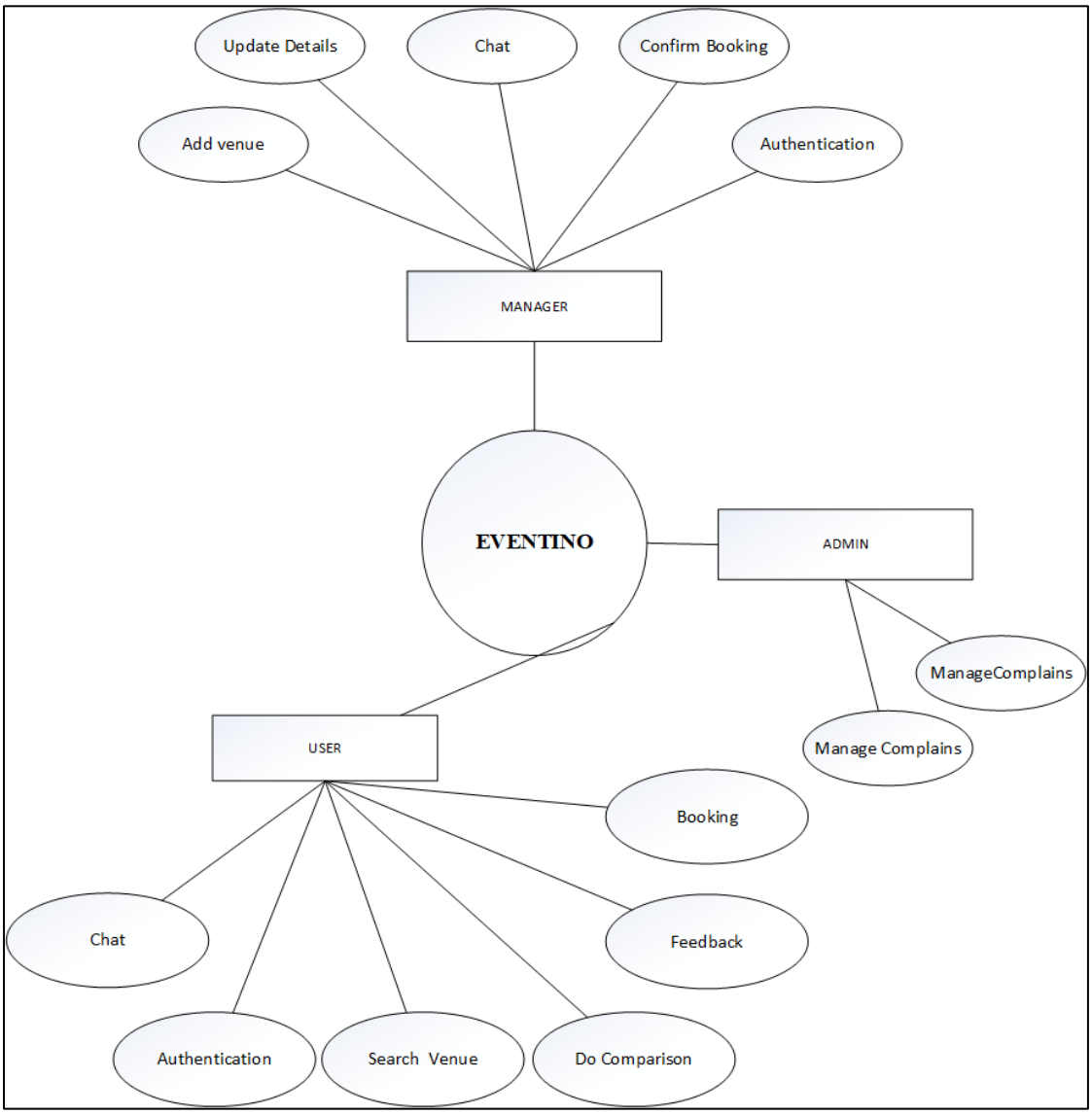


Figure 10: Dataflow Diagram Level 1

7. Data design

Some of the operating system and programming languages to be used in the App are a limitation for this software. The time allotted for this project will be limited to the end of 8th semester.Our project is meant to be responsive management of functions which deals with tremendous information regarding the Venue Booking system. We'll use the Android studio for the android application and for the machine learning implementation we'll use Pycharm and Python Language Database that we'll use be the Firebase.

8. Data dictionary

- Unified Modeling Language -UML
- Data Flow Diagram – DFD
- Entity Relationship Diagram – ERD
- Graphic User Interface -GUI

9. Algorithm & Implementation

- We can launch this project city wise.
- User must need to create account for booking.
- All users can access this application with high speed internet connection and with his/her email address and password.
- User can search and book the desired venue
- User can get suggestions about the venue
- User will do comparison about the venue that which venue is the best
- Manager will add and update the venue details
- Admin will manage the users and bookings
- We will do semantic analysis of the feedbacks to provide the suggestion about the venues.

10. Human interface design

There will be a user-friendly and responsive GUI. A user maybe a member or admin of the system. user have separate panel that is user view. A user can get access after login. The system shall allow the user to chat with the manager without sharing their personal details. the user will book all the function's essential without any effort. User will be able to compare different venues by this online system. The system will give suggestions according to the budget and number of people. The seller will be able to get more customers by creating the venue's profile.

10.1 Screen images

Application Interface

Splash Screen

Figure 11: Splash Screen

Sign Up Screen

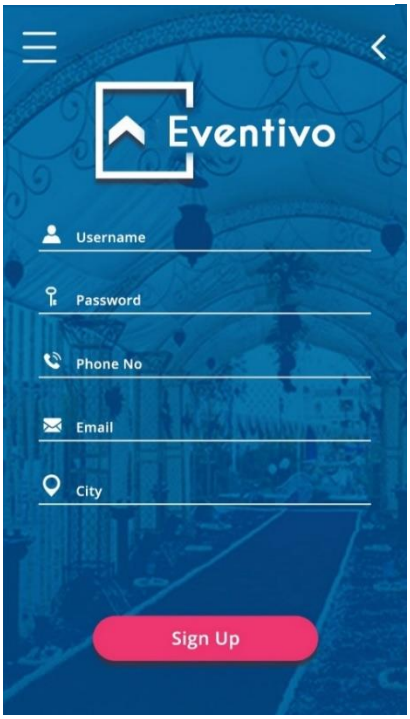


Figure 12: Sign Up Screen

Sign in Screen

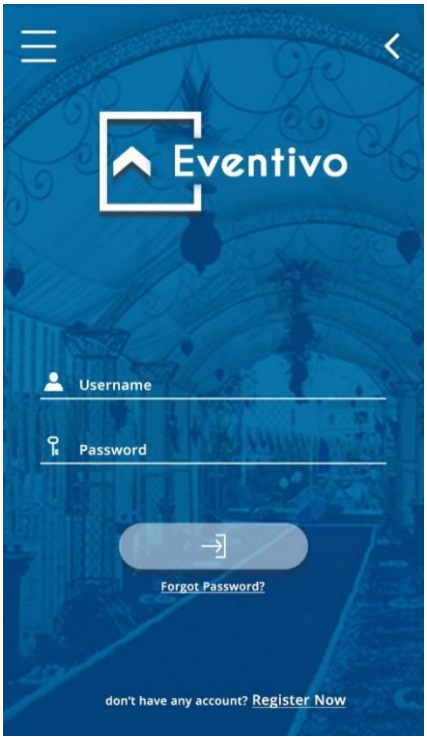


Figure 13: Sign in Screen

Home Screen

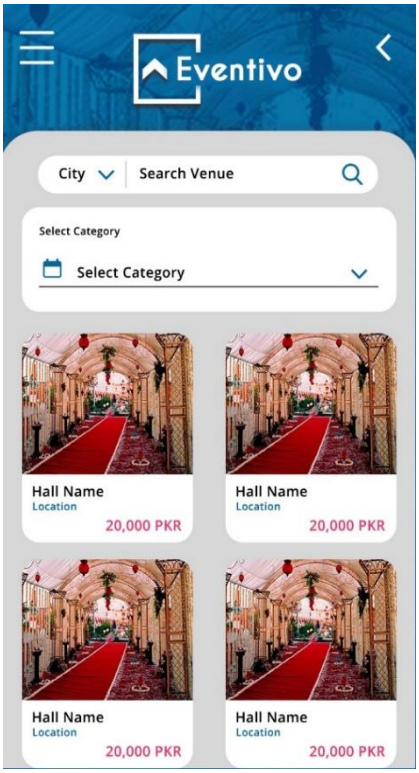


Figure 14: Home Screen

Appendix I

1. Soleh, O., Ariessanti, H. D., & Haryono, G. F. (2017, October). Wedding innovative application as a container to provide wedding preparation service: Development and application. In 2017 International Seminar on Application for Technology of Information and Communication (iSemantic) (pp. 121-125). IEEE.
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