

**EVENTSHIP – AN ONLINE EVENT TRACKING APP**

**By**

**SABBIR AHMED**

**ID: 151-15-5185**

**KAMRUL ISLAM**

**ID: 152-15-6084**

**AMENA AKTER**

**ID:151-15-5189**

This Report Presented in Partial Fulfilment of the Requirements for the Degree of  
Bachelor of Science in Computer Science and Engineering

Supervised By

**Md. Sadekur Rahman**

Assistant Professor

Department of CSE

Daffodil International University

Co-Supervised By

**Raja Tariqul Hasan Tusher**

Senior Lecturer

Department of CSE

Daffodil International University



**DAFFODIL INTERNATIONAL UNIVERSITY**

**DHAKA, BANGLADESH**

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## **APPROVAL**

This Project titled “**Eventship – An Online Event Tracking App**” submitted by Sabbir Ahmed ID: 151-15-5185, Kamrul Islam ID: 152-15-6084 and AmenaAkteer ID: 151-15-5189 to the Department of Computer Science and Engineering, Daffodil International University, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on .....

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**Md. Zahid Hasan**  
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Daffodil International University

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## DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Md. Sadekur Rahman, Assistant Professor, Department of CSE, Daffodil International University**. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree.

Supervised by:



**Md. Sadekur Rahman**

Assistant Professor

Department of CSE

Daffodil International University

Submitted by:

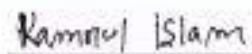
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**Sabbir Ahmed**

ID: 151-15-5185

Department of CSE

Daffodil International University

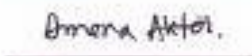


**Kamrul Islam**

ID: 152-15-6084

Department of CSE

Daffodil International University



**Amena Akter**

ID: 151-15-5189

Department of CSE

Daffodil International University

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## **ABSTRACT**

This report is about information of all events are occur in city. We know there are many events are held every day. There is no way to know this event because of proper information. This android application shows all the event and their notification. All this can be accessed by the user and admin. All user and admin must be register for add event and access to attend event. In this app we add category of various types of event and user are also choosing their favorite one. By using this application, we can find our desirable event in a short time. This application will also allow the user to find authenticate events. This applications main users are students. It will help all the students to find educational events in a simple way. Event organizer can be benefitted by this application. They can easily promote their events to targeted peoples. By using this application, we can easily reduce false events. All types of events can be popularized by this application. User can use their free times attending those events. In the end we can say that it is a good app in terms of events related topic.

# TABLE OF CONTENTS

<b>CONTENT</b>	<b>PAGE NO</b>
Board of examiners	i
Declaration	ii
Acknowledgements	iii
Abstract	iv
Content	v
List of tables	
List of Figs	viii

<b>CHAPTER</b>	<b>PAGE NO</b>
<b>CHAPTER 01: INTRODUCTION</b>	<b>1-2</b>
1.1 Introduction	01
1.2 Motivation	01
1.3 Objectives	01
1.4 Expected Outcome	02
1.5 Report Layout	02
<b>CHAPTER 02: BACKGROUND</b>	<b>3-4</b>
2.1 Introduction	03
2.2 Related Works	03
2.3 Comparative Studies	03
2.4 Scope of the Problem	04
2.5 Challenges	04
<b>CHAPTER 03: REQUIREMENT SPECIFICATION</b>	<b>5-17</b>
3.1 Business Process Modeling	05
3.2 Requirement Collection and Analysis	06
3.3 Use Case Modeling and Description	06
3.4 Logical Data Model	16

3.5 Design Requirements	17
<b>CHAPTER 04: DESIGN SPECIFICATION</b>	<b>18-23</b>
4.1 Front-end Design	18
4.2 Back-end Design	18
4.3 Interaction Design and UX	21
4.4 Implementation Requirements	23
<b>CHAPTER 05: IMPLEMENTATION AND TESTING</b>	<b>24-35</b>
5.1 Implementation of Database	24
5.2 Implementation of Front-end Design	26
5.3 Implementation of Interactions	34
5.4 Testing Implementation	34
5.5 Test Results and Reports	34
<b>CHAPTER 6: CONCLUSION AND FUTURE SCOPE</b>	<b>36</b>
6.1 Conclusion	36
6.2Future Scope	36
<b>REFERENCES</b>	<b>37</b>
<b>APPENDIX</b>	<b>38</b>

## **LIST OF TABLES**

<b>TABLES</b>	<b>PAGE NO</b>
Table 2.1: Time Scheduling	03
Table 4.1: Activity List of the Front-End Design	04



## **LIST OF FIGURES**

<b>FIGURES</b>	<b>PAGE NO</b>
Fig 3.1: Business Process Model of Client Side.	05
Fig 3.2: Business Process Model of Client Side	05
Fig 3.3: Use Case Diagram of System	07
Fig 3.4: ER-Diagram of System	10
Fig 3.5: Depicts the client and admin module	11
Fig4.1: Shown Authentication for sign-in-method Systems DB	12
Fig 4.2: Authentication for sign-in-method table	13
Fig 4.3: The 7 Factors that Influence User Experience	13
Fig5.1: Authentication Choice	15
Fig5.2: Database Creation	16

# CHAPTER 1

## Introduction

### 1.1 Introduction:

our project is location-based event tracking mobile app. This app allows its user to track down each and every event happening nearby its user. This app also allows its user to search individual event. This app will provide all the events by its category. We saw in Facebook there are lots of event but they are not organized and Facebook also overcrowded. This app will solve this problem. User can save their valuable time by used this app.

### 1.2 Motivation:

In freshman year I and my friends are faced this problem to find out events which are need for us. We discuss about this problem each other and find out we can solve this problem. We tried to solve this problem by using Facebook but it could solve our entire problem. We need to find a specific thing to find events. We research and find out there are a good amount of work done in other parts of world but unfortunately not in Bangladesh, so we decide to do something in our country. There are also some facts work to do this app. I found out sometimes event organizer face the problem to promote their event. There are not any specific media to target the specific audience to promote their event. This app also can solve this problem because this app knows the target users. This app also provide huge amount of information about event.

### 1.3 Objectives:

- To help user attend those event.
- To provide all type of event.
- To easily promote an event.
- To gather information related to the event.
- To get notified about every event.
- To reduce fake events.

### 1.4 Expected outcome

- This app will show the proper event for user.
- By using this app user and event organizer can do more than previous.

### 1.5 Report layout

This report is divided into five chapter. Those chapter deals with different aspects of EventShip. Every chapter has their own parts with explanation.

- **Chapter 1: Introduction**

This chapter will be discussed about the fundamental important of this project. It will discuss why we are doing this as well as what's the important of this project.

- **Chapter 2: Background**  
This chapter will be discussed about the description of project, its features and functionalities, analysis of the project according software and other technology used in making this app.
- **Chapter 3: Requirement specification**  
This chapter will be discussed about BPM (Business Process Modeling), use case modeling and description as well as logical data model and design.
- **Chapter 4: Design Specification**  
This chapter will be discussed about the design we make that include front-end design, back-end design.
- **Chapter 5: implementation and testing**  
This chapter will be discussed about using of database, design that include front-end and back-end. The previous result of testing results and reports.
- **Chapter 6: Conclusion and Future scope**  
This chapter will be discussed about the summary of this project and what we will do in future.

# CHAPTER 2

## Background

### 2.1 introduction

This event ship app will provide all types of event. This platform will help all user to search and find every event in the city. this app will provide all the description about event and using less time user will find maximum result.

### 2.2 related works

In Bangladesh there are no high future app available. There are some apps available in outside our country. some similar apps are 10 times events finder, all events in city. events near me etc. those apps are showing some of our local events but not huge amount of event. Our focus will be a bit more different than those app. We also promote our local events.

### 2.3 comparative studies

We search in web app store, play store. We find some amount of app that are good. But there is major problem for those app. Not a single app is our local app. That is why there are far less local events are available in there. We saw some potential of making this app. Those apps have very good future. But we can use those in our app to make more affective for our users. The available apps are not best for Bangladesh people.

### 2.4 scoop of the problem

We worked on this app development previous one year. We collect all the data we need. We gather information as much as we can. We learn new language and what we know we have learn more to do this app. it takes months to do this project including pencil sketch to design in computer. Event ship planning and time management schedule is given below.

#### 2.4.1 Time scheduling

The time scheduling of this project is given below:

Table 2.1: time scheduling

planning	1.5 month
Design and analysis	2 weeks
Coding	6 months
Testing and implementation	4 months
total	12 months

### **2.4.2 target of our project**

The target of our project is finding new event as much as possible. To make this app as much as user friendly as we can. To promote small and large event. Save time for user to search the best event for him/her. Organize all the event in a single platform and make easy access to user.

### **2.5 challenges**

The most challenging part of making this app is work properly. The synchronization with database and app in a real time. Categories all the event in a single platform. Making easy UI for user and collecting all the data. Working in a real time is one big challenge.

## CHAPTER 3

### Requirement specification

#### 3.1 Business process modeling:

Business process modeling in business process management and systems engineering is the activity of representing processes of an enterprise, so that the current process may be analyzed, improved, and automated [1]. BPM of Digital micro banking system shown in Fig 3.1

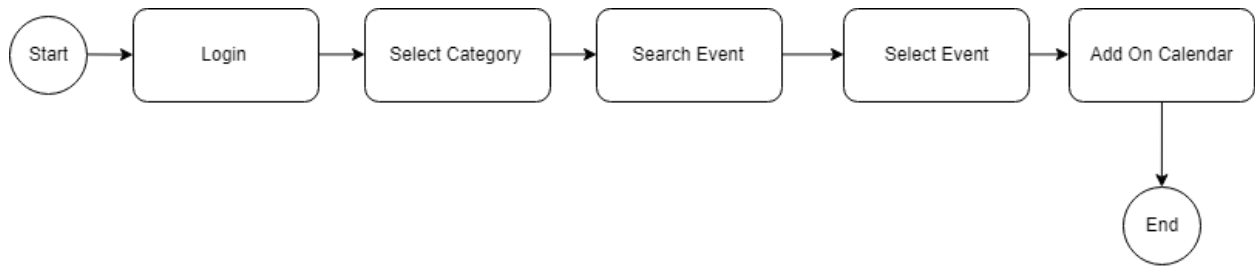


Fig 3.1: Business Process Model of client side.

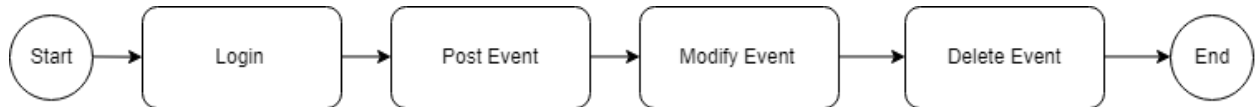


Fig 3.2: Business Process Model of admin side.

#### 3.2 Requirement Collection and Analysis

##### 3.2.1 Software Requirements

To develop this application, we used following Software Requirements:

- Operating System: Android, Windows 8.1, Windows 10.
- Language: Java
- Database: MySQL
- Host: Google Cloud
- Tools: Android Studio
- Internet Browsers: Microsoft Edge, Firefox, Chrome.

Software Requirements, for running the application:

- Operating System: Android
- Network: Wi-Fi or Cellular Network

### **3.3 Use case modeling and description:**

#### **3.3.1 System Model**

- User model
- Admin Model

#### **User Model**

Members can perform the below operation in this android application.

**i. Login**

By using phone number and password members can login into the system.

**ii. View Profile**

After login to the system member view his/her own profile detail.

**iii. Registration**

After getting all information user can be registered.

**iv. View Events**

After registration user can view all the events in this app.

**v. Select Events**

User can select events what they like.

**vi. Add Events**

User can add events in their calendar or google calendar.

#### **Admin Model:**

Admin can perform the below operation in this android application.

**i. Login**

By using phone number and password members can login into the system.

**ii. View Profile**

After login to the system member view his/her own profile detail.

**iii. Registration**

After getting all information user can be registered.

**iv. View Events**

After registration user can view all the events in this app.

**v. Select Events**

User can select events what they like.

**vi. Add Events**

User can add events in their calendar or google calendar.

**vii. Post Events**

Admin can post events in this app and can also provide all the information about event.

**viii. Edit Events**

Admin can edit events when it is necessary.

**ix. Delete Events**

Admin can delete events when the events are invalid.

### 3.3.2 Use Case Diagram and Description

A use case diagram is a graphic depiction of the interactions among the elements of a system [2].

Fig 3.3 shown PayMan system use case diagram.

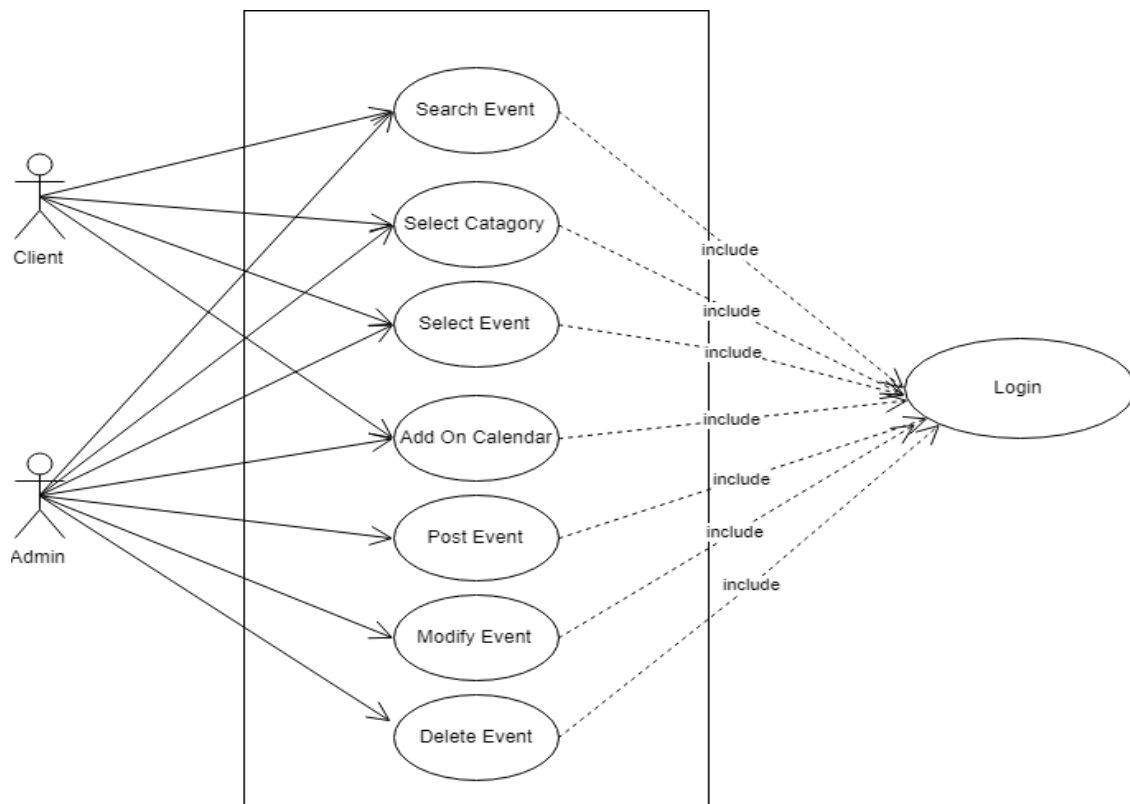


Fig 3.3: Use Case Diagram of System



## **Actor Client**

Flow of steps

- a) This Use case starts when a client enters the system.
- b) Client can edit profile, select category, search events, select events, and add reminder on calendar.

### **i. Signup**

Brief Description: Client can register the system through the authority

Actor: Client

Flow of steps

- a) This use case start when a client registered the system.

### **ii. Select Category**

Brief Description: Client can select events category.

Actor: Client

Flow of steps

- a) This use case start when a client login to the system.
- b) Client sees different events category option and can choose between them.

### **iii. Search Events**

Brief Description: Client can search their desired events.

Actor: Client

Flow of steps

- a) This use case start when a client login to the system.
- b) Client can search events from the search bar.

### **iv. Select Events**

Brief Description: Client can select their desired events.

Actor: Client

Flow of steps

- a) This use case start when a client login to the system.
- b) Client can find and select their desired events to view additional information.

### **v. Add Reminder On Calendar**

Brief Description: Client can add reminder on calendar.

Actor: Client

Flow of steps

- a) This use case start when a client login to the system.
- b) A client can select an event and can save the event date to their device calendar.

### **vii. Update Profile**

Brief Description: Client can request to update their profile information.

Actor: Client

Flow of steps

- a) This use case start when a client login to the system.
- b) Client can update their profile information through the setting menu.

### **Actor Admin**

Flow of steps

- a) This Use case starts when anadmin enters the system.
- b) Admin can do whatever the user can and additionally they can post, modify and delete events.

### **i. Post Events**

Brief Description: Admin can post events.

Actor: Admin

Flow of steps

- a) This use case start when anadmin login to the system.
- b) An Admin can post new events from that option.

### **ii. Modify Events**

Brief Description: Admin can modify existing events.

Actor: Admin

Flow of steps

- a) This use case start when anadmin login to the system.
- b) Admin can modify any existing events as needed.

### **iii. Delete Events**

Brief Description: Admin can delete events.

Actor: Admin

Flow of steps

- a) This use case start when an admin login to the system.
- b) An Admin can delete any existing events from that option.

### 3.4 Logical data model:

Our project logical data model has relational table named admin, user information. Here we can describe how these entities are connected with each other. The total relational model has shown on the following Fig 3.3

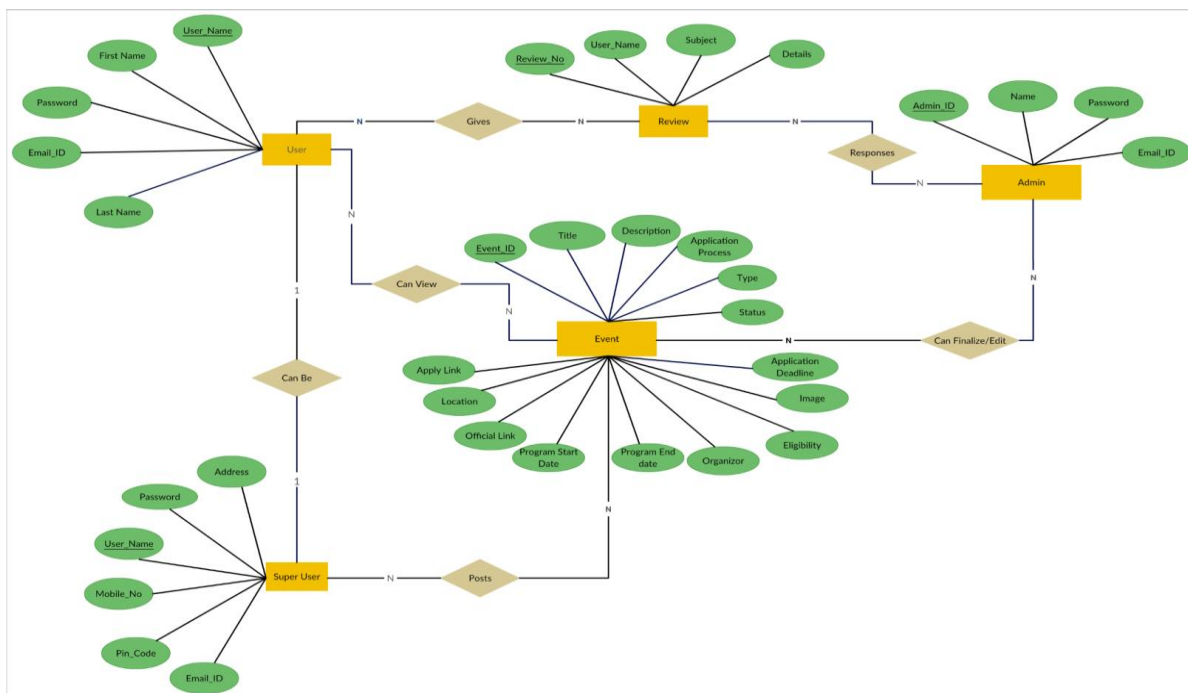


Fig 3.4: ER-Diagram of System

### 3.5 Design requirement:

A well design android app is pleasure to use. Design requirement are the functional requirements, objective of the materials selection process, constraints imposed by the requirements of the application, plus the free variable, which is usually one of the geometric dimensions of the product/component, such as thickness, which enables the constraints to be satisfied and the objective function to be maximized or minimized, depending on the application. The following Fig 3.5 and 3.6 is the flow chart of how client and admin interact with the system.

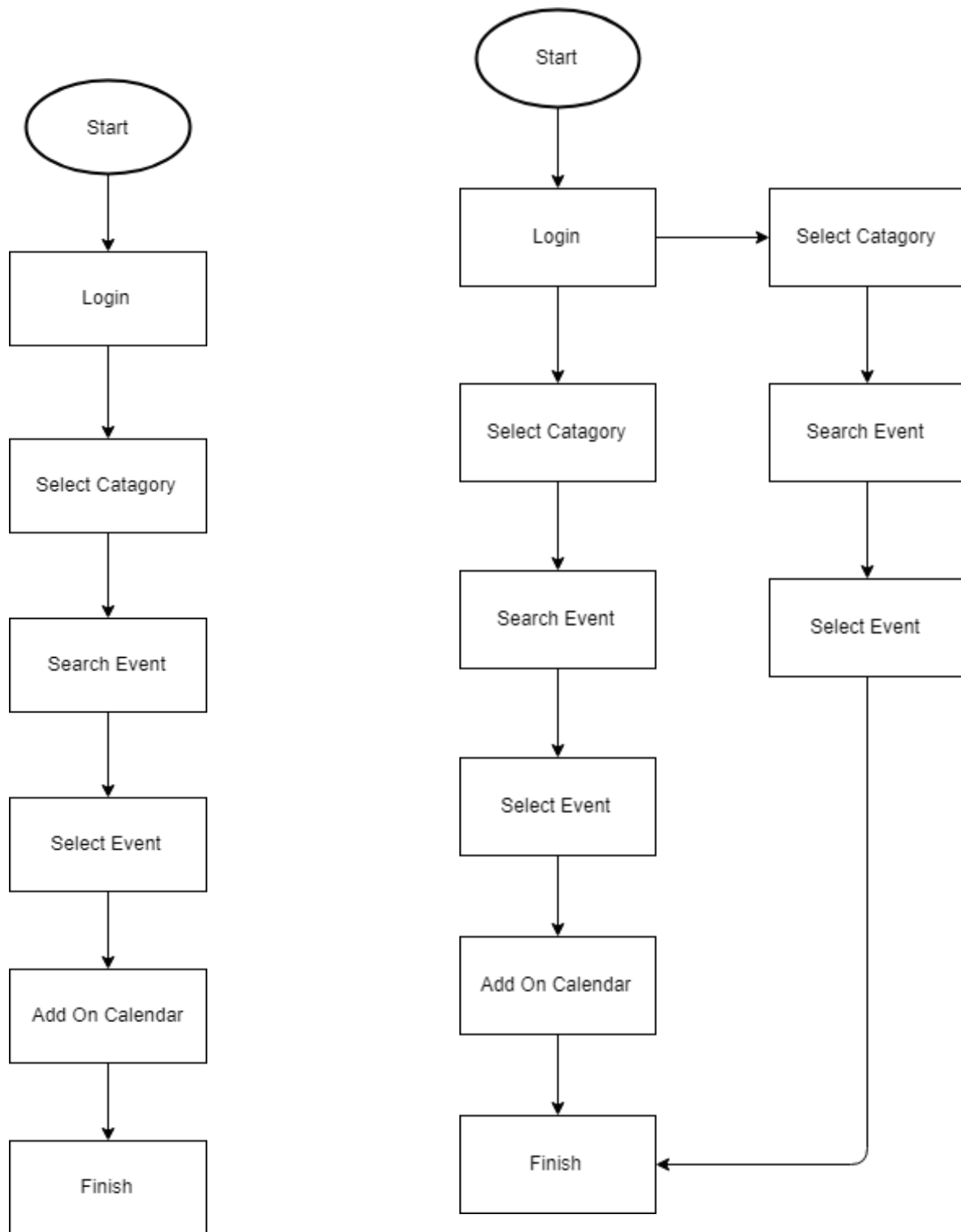


Fig 3.5: Depicts the client and admin module

# CHAPTER 4

## Design Specification

### 4.1 Front-end Design

Front-end Design is the primary attraction of an application. It also should be user-friendly. Our application we designed a glorious front-end Design. We also try to design user-friendly. In front-end design, our Application has following screen shown in Table 4.1.

Table 4.1: Activity list of the front-end Design

1. Login Screen
2. User Home Screen
3. User Login List Screen
4. Admin Home Screen
5. Member Registration Screen
6. Admin Dashboard
7. User Dashboard
8. Admin registration screen

### 4.2 Back-end Design

This app is Dynamic this function works by using the internet. In back-end, design used database. The internet is a most important role in our application. The user has none access to Back-End Design. Only admin can access this

The following Fig 4.1, 4.2 shows how user get output form back-end database.

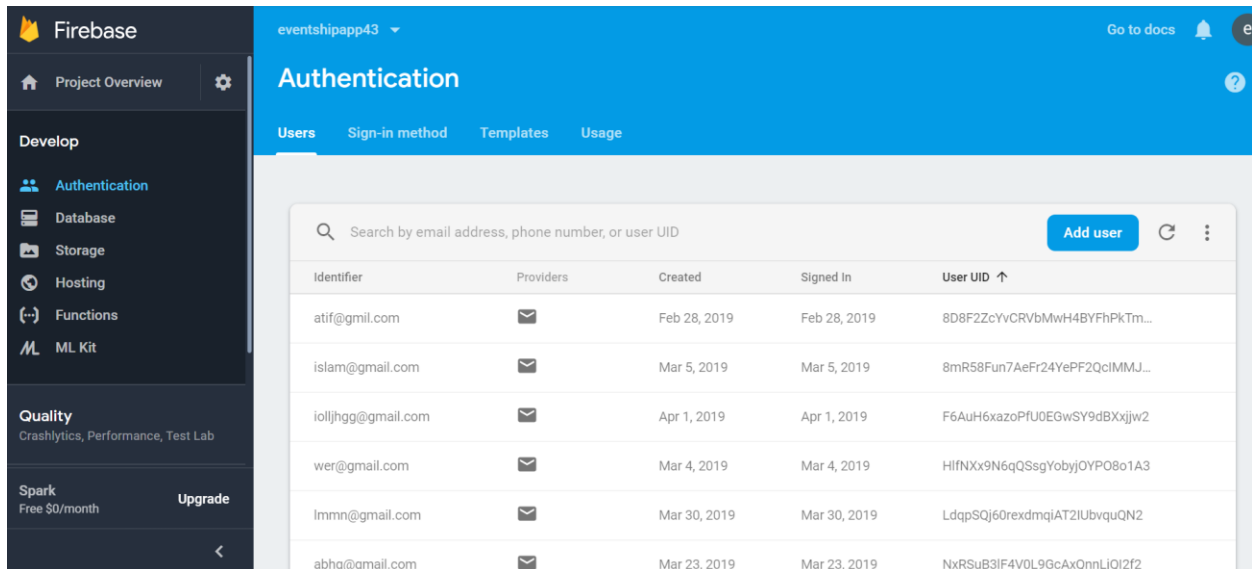


Fig 4.1: Shown Authentication for sign-in-method Systems DB

eventshipapp43 Go to docs

## Authentication

Users **Sign-in method** Templates Usage

Sign-in providers

Provider	Status
Email/Password	Enabled
Phone	Disabled
Google	Disabled
Play Games	Disabled
Game Center <span style="border: 1px solid gray; border-radius: 10px; padding: 2px;">Beta</span>	Disabled

Fig 4.2: Authentication for sign-in-method table

### 4.3 Interaction Design and UX

User Experience (UX) is critical to the success or failure of a product in the market. Interaction Design is most important part of User Experience (UX) design. An application fruition depends on User satisfaction. How an application is more attractive to the user is depends on interaction and Design part. In our android application, we used the useful model of Interactive design. The following Fig 4.7 [5] shows There are 7 factors that describe user experience, according to Peter Morville.

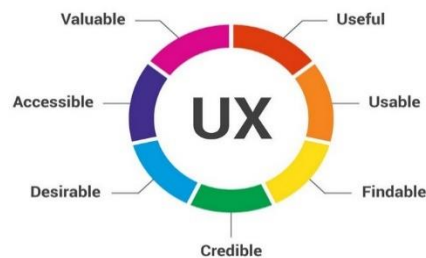


Fig 4.3: The 7 Factors that Influence User Experience [3].

### **Home Screen Interaction Design and UX:**

We have designed our Home Screen which is linked with login page and registration page. When the application is open to the user they show home page. User are two types in our system user and admin. If the user has phone number and password, he/she can easily login into the system by click on the Login button. Is user don't have id or password they must registration in the system as an admin or member.

### **Dashboard Screen Interaction Design and UX:**

We design dashboard screen for every user. In member dashboard, they can see their profile, add event log-in and logout.

In admin dashboard, admin can see the full system statistics, create executives, add event, post event, logout and only admin can post Categories event.

### **4.4 Implementation Requirements:**

Implementation Requirement is given below:

Apps Development:

1. Language: Java
2. Tools: Android Studio
3. UI: Default

API Development:

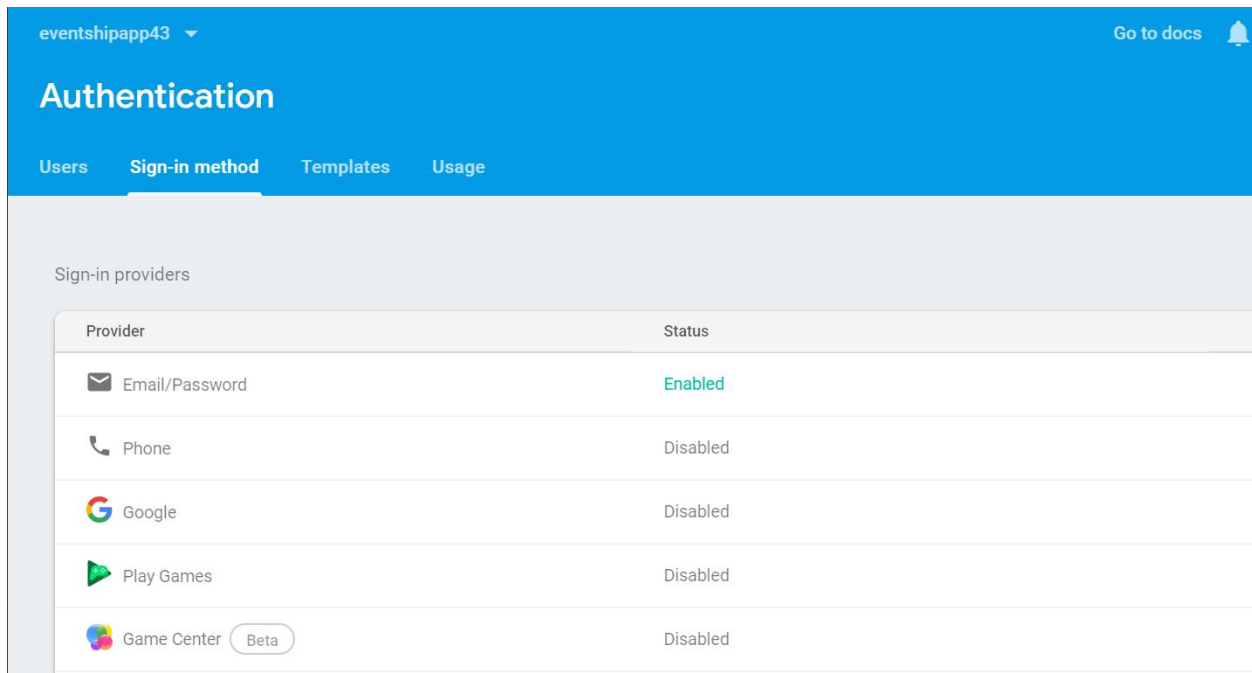
1. Connection Format: JSON
2. Tools: API level 21
3. Host: Google Cloud
4. Database: firebase

## CHAPTER 5

### Implementation and testing

#### 5.1 Implementation of Database:

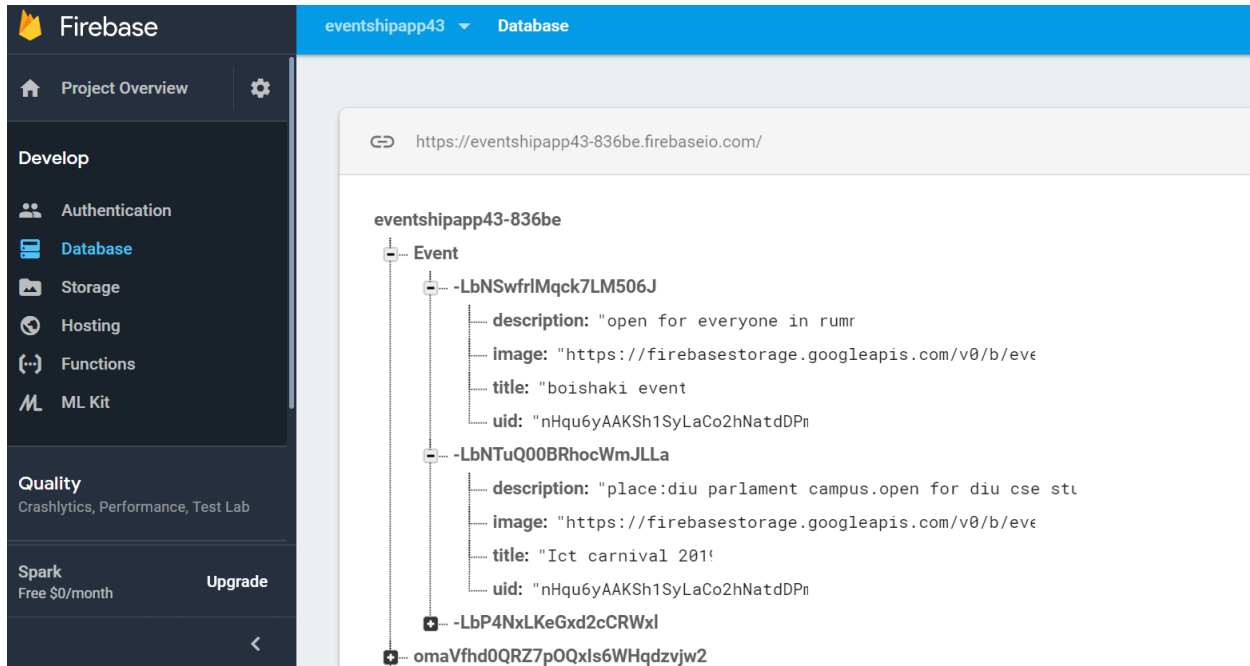
In this section we describe how we implemented our database. As we describe in the previous chapter that we use fire base as our main database. Fire base is a real time database so there is no need to use SQL query to perform the action. Fire base also has some other features like as hosting, crash reporting, cloud storage authentication, hosting and so on. How we use fire base to maintain our data is described below with proper diagram. To store information in the database the user has to register and sign in. To sign in in our database fire base gives several choices to the user. In our app user can sign in by their email and in some case they can also use their phone number. Fig 5.1 shows the authentication option.



**Fig 5.1: Authentication choice**

Fig 5.2: shows all the sub database we create in our project. All the sub database contains different types of information of the user. It provides the personal unique key for the each user by which the information of individuals is managed.





**Fig 5.2: Database creation**

## 5.2 Implementation of Front EndDesign:

Front page of an android application must draw the attention of the user. To make our application attractive to the user we use some Graphical User Interface (GUI). We design our project with easily understandable GUI so that, the user can easily access the app. In the front page we simply use a registration option and a sign in option. To sign in this app the user must complete the registration first.

## 5.3 Implementation of Interaction:

The relationship between the application and the user are define interaction. The app is convenient to use and it provides a great outcome to the user then it will gain the popularity. Experience is very essential for interaction design. Because mainly the user experiences focus on the experience between the user and the application. From this experience we tried to make most of the features of our app that can interact with the user. Though ours is a security based android app so we tried to provide great security to them by using the registration option which required valid email id and password of the user. UX design or user experience design is the most challenging part for a programmer. Always the need to focus on the experience of user of using android app and how they satisfy with a product. We pay attention on this sector and tried to implement an application that has satisfactory interface which should be accepted by the user.

#### **5.4 Testing Implementation:**

Our goal is to design a series of test cases that has a high likelihood of finding errors. To uncover the errors software techniques are used. This technique provides systematic guidance for designing test that

1. Exercise the internal logic of software components and
2. Exercise the input and output domains of the program to uncover errors in program function, behavior and performance.

#### **5.5 Test result and Report:**

Test Reports represent the result of the test in a formal way. Report contains the data which we evaluated in a professional and organized manner. Report describe the operating condition and shows the result with test objective. By analyzing the testing report we can say whether the app is ready to use or not. In table 5.1 we describe the test case no, test case id, test case description, step of the test case, expected result and what is the actual result is and the test case status which can be pass or fail

## **CHAPTER 6**

### **Conclusion and Future Scope**

#### **6.1 Conclusion**

For the grace of Almighty GOD, we are near to complete our project. It takes more than one year to complete this project. It will reduce the wasting of time to its user.

By using this app user will find their desire event with in a moment. This app will help student to make their time more usefully. They won't face any kind time loss. Business holder can share their project in an event. Those events can be reached by target audience. Fake events can be detecting by easily because there is some authentication process to post those events.

This app will also help those small events those are interesting. They can easily promote their events.

Eventship app will be very useful events and wont's to organize events. Especially it will help student and businessmen.

#### **6.2 Future Scope**

1. registration through this app.
2. payment for event.
3. all base chose events for individual.
4. Secure from fake event.
5. Adding google map.
6. AI recommendation for user.

## Reference

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## APPENDIX

### Project Reflection

As what I have learnt during the work on EventShip, a highperformance team.

When we start it seems to us very difficult. But I think our team did a great team work and we finished our project.

We fell it's our good luck that we made a great team with each other. The task and the relationship component both are important to me.

A good communication makes our team work so much easy to us. As we come close each other our work improvement grow rapidly. It's a "we're all in this together" kind of feeling. We want everyone to do well because we are a team.

One special thing in our team is good relationship between us. We divide our whole project part by part and put our whole effort to make it successful.

By doing EventShip I realize a good communication between team member is primary component for make a good project. The performance of our team member grows rapidly day by day.

In the end we face many problems but we face it together and make every problem solvable. Our team is one of the best team to me.

# EventShip

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