SOFTWARE REQUIREMENT SPECIFICATION (SRS)

EVENT NOTIFIER MOBILE APP

Version 1.0

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Chapter 1

Introduction

It was chosen to create a generic product in order to develop a convenience in order to solve the managerial issues of diverse institutes. The event notifier, as its name implies, alerts the user about impending event associated with the user's ID while also assisting management in keeping track of the administrative issues surrounding that event. The dynamic UI design makes it easier for both the administrator and the user to stay on top of their respective tasks. A proper requirement analysis takes the audience into account and leaves no maintenance issues behind.The database, which employs SQLite, assists in maintaining the records and provides the necessary reminders in accordance. Since the program is broad in nature, anyone can utilize it. In this section,we will further see how the project evolves and caters the respective audience.The scope,which indirectly specifies the need id also taken into account.

1.1 Document Purpose

With the clear goal of ”ease” as its only focus, this project's main objective is to make the user's everyday chores simpler by reminding them of the important details. The document centers on a few of the application's in development branches. An event notifier can foster a feeling of community, encourage collaboration and networking, or serve as a forum for knowledge and idea exchange. It might be a practical building tool. Establishing linkages and connections between individuals or groups. An engaging interactive application that has numerous user-friendly screens keeps the user interested and helps them remember the important details of the event they are currently registered in or interested in.

1.2 Product Scope

An event notifier appears to have a fairly defined scope. However, an event notifier typically offers users tools and capabilities to interact with the admin, share feedback and ratings, and participate in events and activities. We have a variety of screens to display these elements, some of which are helpful to users, such as forms, profiles, menus, etc. In the end, an event notifier's reach will be determined by the particular requirements and objectives of the neighborhood it serves.

1.3 Intended Audience and Document Overview

With the help of this program, a particular spectrum of events may be managed, ranging from managing just a few specialized services for the customer to handling every aspect of the event's creative, technical, and logistical approach. Either students or the group of people who work for the administrative charge must be the targeted audience. As the program is controlled by the administration, they are in charge of making good use of the features to make it simple for the users or intended audience.

1.4 Definitions, Acronyms and Abbreviations

1. **ANDROID:** Android is a mobile operating system based on a open-source software, designed primarily for touchscreen mobile devices such as smartphones and tablets.

2. **ANDROID STUDIO:**The official integrated development environment (IDE) for Android application development.

3. **CRUD:** Create,read,update and delete.

4. **DFD:** Data flow diagram.

5. **EVENT:** The use of methos involving people witnessing a happening within a capsule of time,for the purpose of communication of a message.

6. **GUI:** Graphical User Interface

7. **LATEX:** A document formatting tool to prepare documents.

8. **OS:** Operating system.

9. **SQLite:** SQLite is an embedded SQL database engine. An open-source relational database management system commonly used in android based projects.

10. **MOBILE APP:** It is a client–server computer program that the client (including the user interface and client-side logic) runs on a mobile.

1.5 Document Conventions

The Latex software, a mechanism for creating documents, was used to create the SRS. Instead of using the prepared text found in WYSIWYG word processors, the writer writes in plain text.

Chapter 2

Overall Description

2.1 Product Perspective

The application simply focuses to certify enchantment for all the services provided to the clients as per the ingrained uncanny to present events in a contained manner.

2.2 Product Functionality

A DFD has been attached which depicts the basic functionalities. For better understanding they are mentioned below as well. **For the User:**

- Allows usual logins using enrolment number and password.
- Allows signing up, a request is sent to the department administrator such that, he will accept or reject the request based on credentials and a email is sent to the requester on a successful login signup.The try is failed otherwise.
- Allows viewing different sort of events and announcements
- Provides maintenance of a list of events to the user is interested in.
- Enables the user to filter the events by different categories.
- Lets the user provide feedback and rate the app.
- Provide the user ability to logout, delete account etc.

For the Admin:

- Can CRUD events and announcements.
- Can view the feedback of the users. Can view the stats for rating of the application.
- Can view the list of different users.

2.3 Data Flow Diagrams: Level 0 - 1

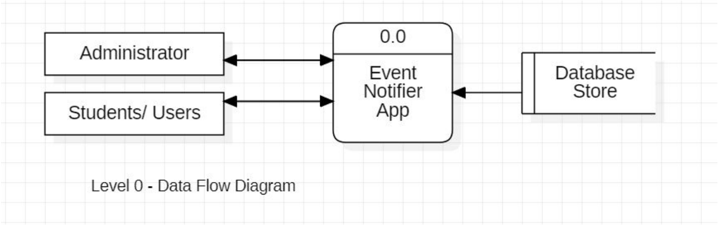


Figure 2.1: Basic Overview of the Project - Context Diagram

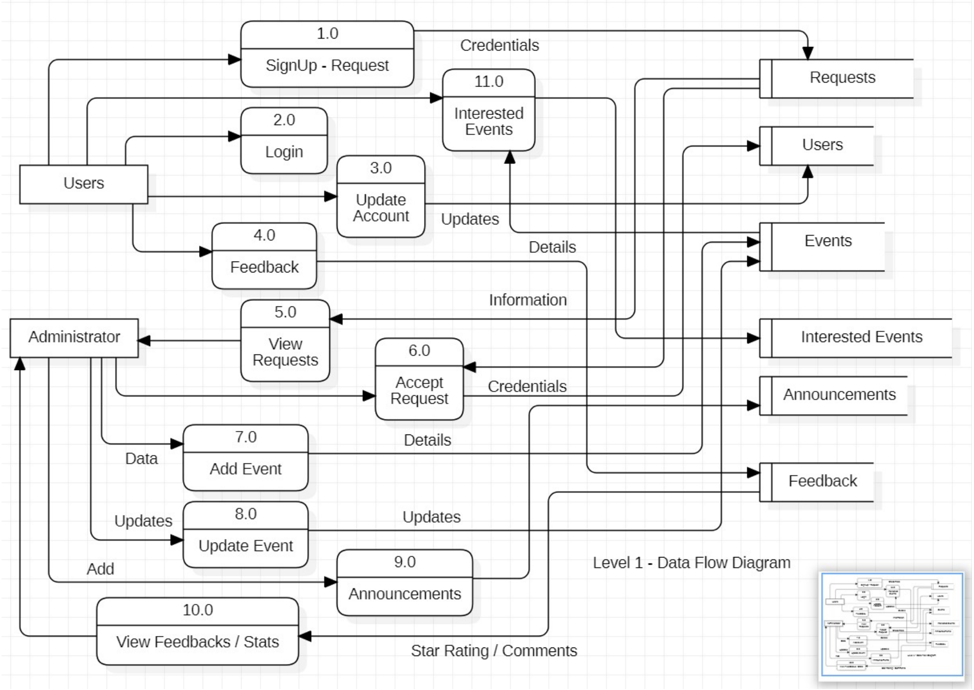


Figure 2.2: Context Diagram - Level 1 DFD

2.4 Users and Characteristics

The users are well defined and seem not to vary with the changing requirements. There either is an admin who administrates all or the user who enjoys the functionalities being provided. As per the maintained list of each user, the app may target users with specific interests.

- Admin: An Administrator provides support to either an individual or team and is vital for the smooth running of the application. Their duties may include fielding keeping a check on the database tables, directing the users, setting up reminders, monitoring statistics, and catering queries of the user. The administrator will have all the privileges of all other user types. They will be able to impersonate other users within the system. They will also have the authority to view and get the application edited.

- User: The students are the main users of the system as they would make a majority of the clientele. They would use the system most frequently as compared to all other users. Their characteristics have been specified in section 2.2.

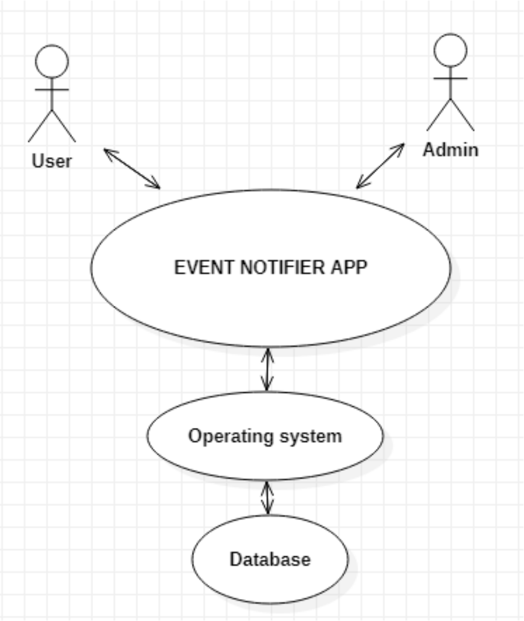


Figure 2.3: A Generic Interaction

2.5 Operating Environment

The operating environment for an event notifier application, such reflects the basic hardware and software constraints the application has to meet. Below, are some potential operating environments for a social media app:

- **OS:** This application is limited to android.
- **Devices:** Can be downloaded on devices being supported by android,such as phones.
- **Other:**For the sake of integration,it may connect to other softwares to email or text the respective client.

2.6 Design and Implementation Constraints

2.6.1 Design:

- **Objective:** Identifying the goals,target and requirements of the audience of the application.
- **Research:** Researching the requirements and creating a drafted plan
- **DBMS:** Working on the database storage especially google firebase.
- **Prototype:** Developing different prototypes designs to connect with the desired product and striving for the optimal way out to the most expected outcome
- **User Interface:** Creating a UI design to judge the visual display of the application.
- **App development:** Developing the application by coding on android studio using java with firebase database.
- **Testing and deploying:** Testing the application to ensure that it works appropriately and fixing bugs. Receiving a positive result deploying.
- **Maintenance:** Releasing it to the target market is not enough unless the application is flexible enough to cope with the changing requirements that may arise with a period of time in terms of updates

2.6.2 Constraints:

- Only admin can announce the occurrence of events and the announcements.
- An admin is capable of uploading a picture and nothing else that of a picture like video, a gif, etc.
- Users associated to a particular department can view the upcoming events and the announcements related to that department only.
- Users are not provided any functionality to interact among themselves.
- Users may give a feedback and rating.
- User may inquire too as mentioned in the upcoming section.

2.7 Entity Relationship Diagram

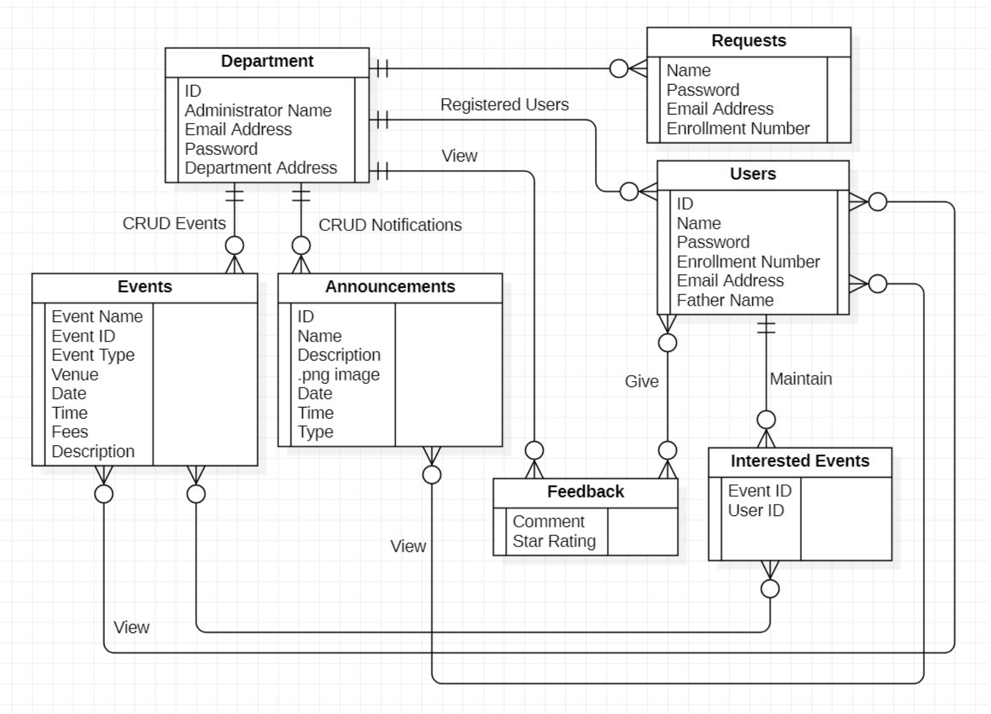


Figure 2.4: ERD

2.8 User Documentation

The application has a swift transition in screens which is the basic assurance of user friendliness. The view of menus and forms provides ease and the rating ability makes the user vocal enough to spread the word regarding desirable changes in the application. Making the user confident with the application, to run which no prior knowledge seems mandatory.

2.9 Assumptions and Dependencies

As far as the dependencies are concerned, there is no such dependency other than that it operates in an android environment. Assumption is made that the departmental information are manually stored in the database, there is not a form for that.

Chapter 3

Specific Requirements

3.1 External Interface Requirements

3.1.1 User Interfaces

The user interface encapsulates a number of screens,forms,menus and lists. The flow can be more greatly understood by the pointers below:

3.1.2 The User

- **Splash screen:** An image that appears on the screen when it is first switched on, or when an app or program is starting.
- **Login/Signup:** Depending on the familiarity of the user with the environment it is assumed that a respective login/signup would be made and an email will be generated if the attempt goes successful.
- **Other screens:** Screen with various options. On clicking which a new screen appears.
  - To view events.
  - To filter events.
  - To create a list of chosen or events the user is interested in
  - To check for deadlines .
  - to check for notifications.

3.1.3 The Admin

- **SignUp:** On the credentials being matched the admin lands in the application
- **Announcements:** The admin makes announcements in accordance with the variance associated with each department
- **Views:** The admin may view:
  - Events delayed
  - Events ahead
  - Events happened already
  - Events whose deadlines have been expired
  - Feedbacks of different users
  - Rating of the app

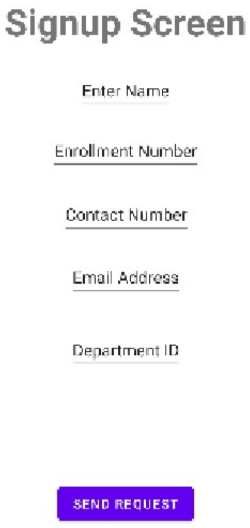


Figure 3.1: The product perspective as that of a student

3.1.4 Hardware Interfaces

The application, being purely software oriented has no hardware dependency. And,hence,no hardware interface.

3.1.5 Software Interfaces

The software interface is limited to android environment. The database can be viewed and accessed by project android studio and db browser.

3.1.6 Communications Interfaces

As the heading implies,it refers to how does the application interacts with the user. It either texts,notifies or emails the user when needed.

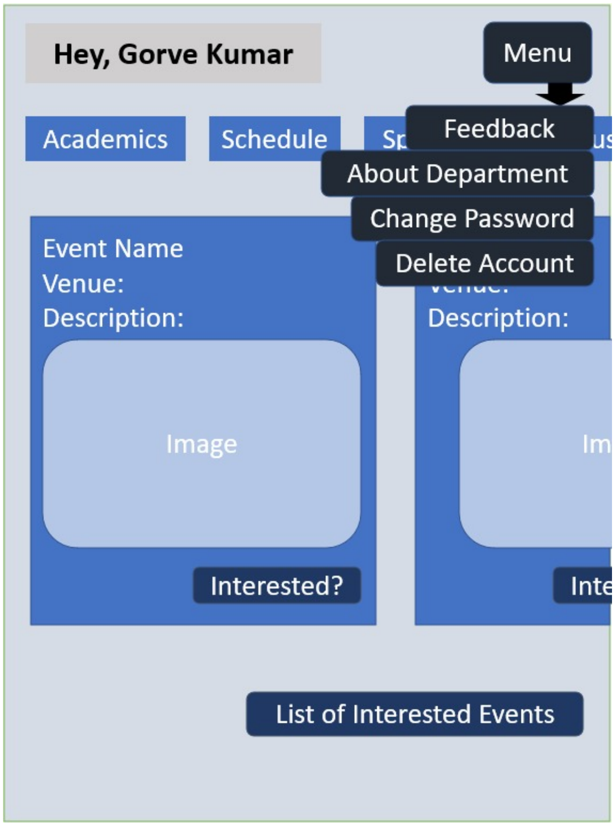


Figure 3.2: The product perspective as that of a student

- **Texts:** The admin is able to text the admin within the application so as to bring things to notice.
- **Emails:**The user receives an email to get notified and may send one too at the specified address to appeal for the respective request.
- **Notifications:**Refering to the notifications within that application,these are an essential feature of the app to make the user aware.

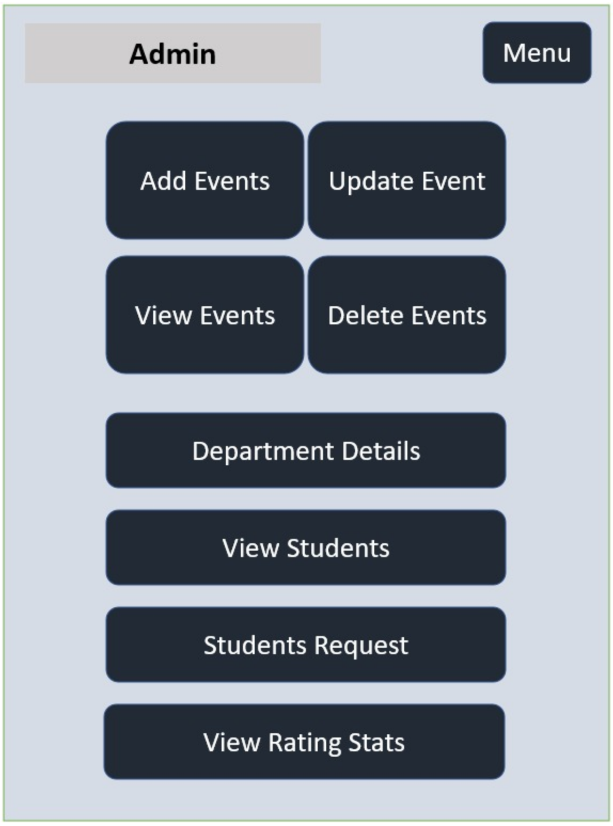


Figure 3.3: The product perspective as that of a student

3.2 Functional Requirements

These are the services the software provides. The functional requirements of this application deals with the following:

1. The events and announcements should be populated at the users screen,the details of which can be viewed by clicking on that event.
2. User can maintain a list of events in which that user is interested in. The interests being susceptible to change, should have the functionality of removing the events from that list.
3. The events should get removed from the user's screen on meeting the deadline.
4. Admin is capable to CRUD the events and announcements.
5. Admin can accept or reject the enrollment request to the application.
6. Admin can view the list of students and their respective feedback.
7. Admin can monitor the statistical records of the feedback.

3.3 Behaviour Requirements

3.3.1 Use Case View

Use case diagrams are used to describe a set of actions (use cases) that some system or systems (subject) should or can perform in collaboration with one or more external users of the system (actors). Here,as visible are two actors. The admin who controls and the user who takes advantage of the services being provided.

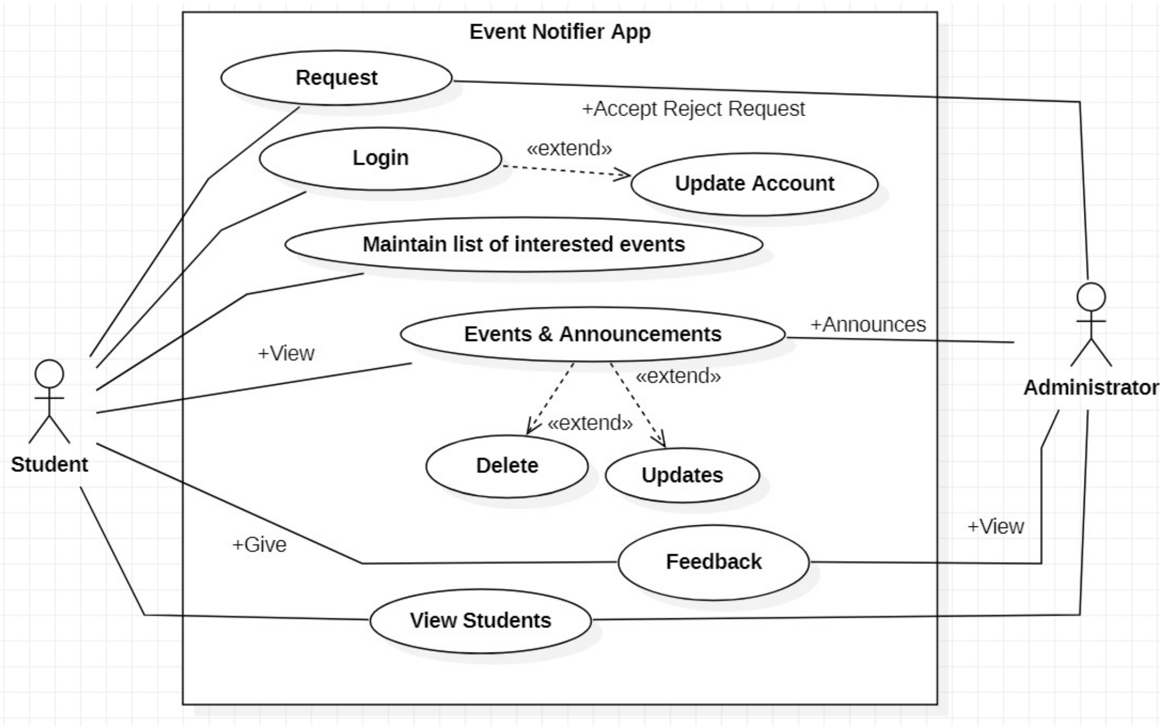


Figure 3.4: Use Case Diagram for the App

Chapter 4

Other Non-Functional Requirements

4.3.1 Adaptibility There can be a change in the information stored in the database. 4.3.2 Availability The system is up and running for most of the time and server is not down for more than a few minutes to avoid inconvenience of the clients. 4.3.3 Correctness The techniques for the data structure operations must work accurately to build proper concepts of students. 4.3.4 Flexibility

If need arises in the future, software can be modified to change the requirements.

4.0.1 Interoperability

The data is transferred from the database to the app interface and vice versa. This way data is transferred from one part of the system to another.

4.0.2 Maintainability

Software can be easily repaired if a fault occurs.

4.0.3 Portability

Software can be easily installed on devices and would run smoothly according to the requirement.

4.0.4 Reliability

No matter how many students access it, system must give the correct results.

4.0.5 Reuseability

Current version can be used in the future versions with more functionality added.

4.0.6 Robustness

Software must have checks to ensure that valid data items are entered.

4.0.7 Testability

All the requirements are fulfilled, response time is low, and all functions are working perfectly.

4.0.8 Useability

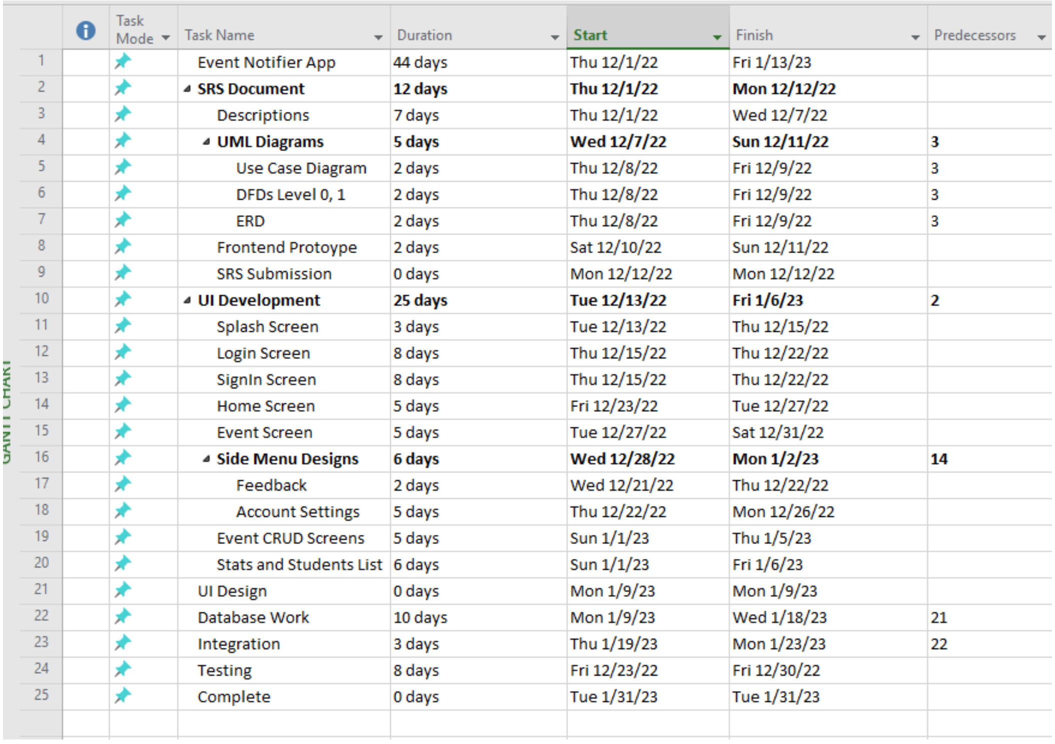
Interface of the software must be easy to use. It would not be complex since students have a view, so interface should be simple.

4.1 Software Quality Attributes

After the development the application will be tested on various devices through a set of tests as the project evolves through increments. Integration is done simultaneously with unit testing. System testing is used to wrap the project on fair terms.

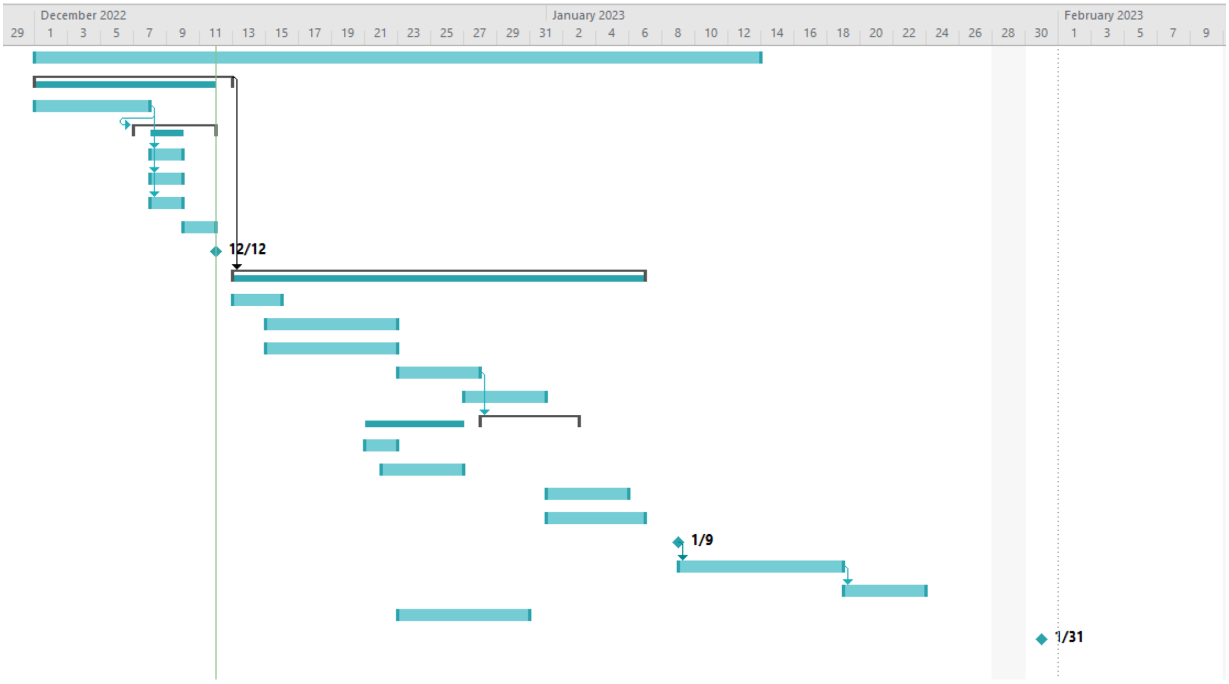
Chapter 5

Project Plan



	ℹ	Task Mode	Task Name	Duration	Start	Finish	Predecessors
1		📌	Event Notifier App	44 days	Thu 12/1/22	Fri 1/13/23	
2		📌	**◢ SRS Document**	**12 days**	**Thu 12/1/22**	**Mon 12/12/22**	
3		📌	Descriptions	7 days	Thu 12/1/22	Wed 12/7/22	
4		📌	**◢ UML Diagrams**	**5 days**	**Wed 12/7/22**	**Sun 12/11/22**	**3**
5		📌	Use Case Diagram	2 days	Thu 12/8/22	Fri 12/9/22	3
6		📌	DFDs Level 0, 1	2 days	Thu 12/8/22	Fri 12/9/22	3
7		📌	ERD	2 days	Thu 12/8/22	Fri 12/9/22	3
8		📌	Frontend Protoype	2 days	Sat 12/10/22	Sun 12/11/22	
9		📌	SRS Submission	0 days	Mon 12/12/22	Mon 12/12/22	
10		📌	**◢ UI Development**	**25 days**	**Tue 12/13/22**	**Fri 1/6/23**	**2**
11		📌	Splash Screen	3 days	Tue 12/13/22	Thu 12/15/22	
12		📌	Login Screen	8 days	Thu 12/15/22	Thu 12/22/22	
13		📌	SignIn Screen	8 days	Thu 12/15/22	Thu 12/22/22	
14		📌	Home Screen	5 days	Fri 12/23/22	Tue 12/27/22	
15		📌	Event Screen	5 days	Tue 12/27/22	Sat 12/31/22	
16		📌	**◢ Side Menu Designs**	**6 days**	**Wed 12/28/22**	**Mon 1/2/23**	**14**
17		📌	Feedback	2 days	Wed 12/21/22	Thu 12/22/22	
18		📌	Account Settings	5 days	Thu 12/22/22	Mon 12/26/22	
19		📌	Event CRUD Screens	5 days	Sun 1/1/23	Thu 1/5/23	
20		📌	Stats and Students List	6 days	Sun 1/1/23	Fri 1/6/23	
21		📌	UI Design	0 days	Mon 1/9/23	Mon 1/9/23	
22		📌	Database Work	10 days	Mon 1/9/23	Wed 1/18/23	21
23		📌	Integration	3 days	Thu 1/19/23	Mon 1/23/23	22
24		📌	Testing	8 days	Fri 12/23/22	Fri 12/30/22	
25		📌	Complete	0 days	Tue 1/31/23	Tue 1/31/23	

Figure 5.1: Project Plan from December 1st to January 31st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Chapter 6

Appendix A - Data Dictionary

Data dictionary is used to track all the different variables, states and functional requirements that you described in your document. Make sure to include the complete list of all constants, state variables (and their possible states), inputs and outputs in a table. In the table, include the description of these items as well as all related operations and requirements.