SYNOPSIS FOR THE ANDROID APPLICATION PROJECT

CHAPTER 1

INTRODUCTION

Name of the application: Student Database Using Firebase

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Description:

Android Studio is the official IDE for android platform development and is freely available under the apache license. It is designed specifically for Android development and I am using it to develop the app, as thus far the app is exclusive to android.

Google Firebase is a mobile platform for helping to develop app and increase your user base. It's made up of features that can be mixed and matched to fit the needs of the user. Most of the features on Firebase are free to use.

Our app "Student Database Using Firebase" helps in educational institutions, where the mandatory processes with student details like - collection, management, and maintenance are done for the student record. Since the management and maintenance part of the data is cumbersome for any educational institution there are many built software and applications. Student Database Using Firebase is an android application developed to enable ease of work in such managing and maintaining processes. Our project helps in creating the database of the student which maintains the record of student Name, USN, Specialization and Department Name.

CHAPTER 2

LITERATURE SURVEY

In this paper [1], the author Introduces the Android platform and the features of Android applications and gave a detailed description of Android application framework from the prospective of developers. A simple music player is provided as instance to illustrate the basic working processes of Android application components. This paper could provide guidance to understanding the operation mechanism of Android applications and to developing applications on Android platform.

In this paper [2], the author studied that the learning and building an Android application can be both easy and hard at the same time due to all the figures and facts mentioned throughout the thesis. It takes time and requires the developers to deeply understand what they are dealing with. The main purpose of this thesis is to develop a simple REST API Android application. All the information leads to the result that the application that searches venues near users' current location is built. Throughout the process of making an application, the author has acquired more knowledge in Java programming, Android development as well as how to publish an application to Google Play store.

In this paper [3], the author describes about how the android application provides a full overview on how to save the data in the application, along with other operations as such sorting, searching, changing themes, etc. The UI of the application is made attractive to provide the user a good soothing experience. Widgets and other features as such voice navigation and searching for the user is available.

CHAPTER 3

Requirements

Requirement 1: Start Application
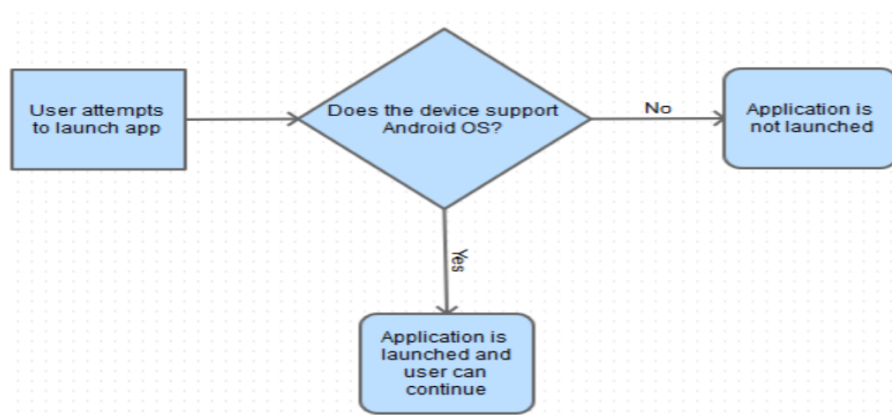
Description & Priority

This use case is first in the priority list and describes the key functions that are offered to the user on starting up the application. If the user does not have the correct hardware, they cannot launch the application.

Use Case

Scope

The scope of this use case is to describe how a user can launch the application and access the primary functions that are displayed to the user.

Use Case Diagram

Requirement 2: Student details entry
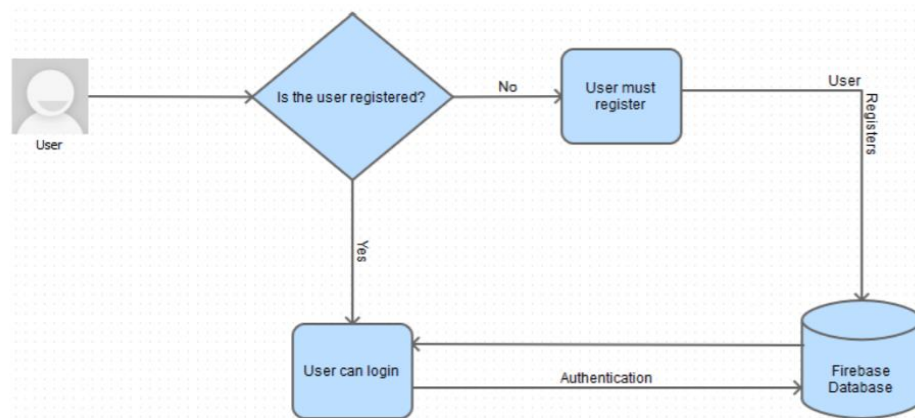
Description & Priority

This use case is second in the priority list and describes the process of student registering, once the application has booted up the user must be able to register.

Use Case

Scope

The scope of this use case is to describe how the user can begin registering the student details.

Use Case Diagram

CHAPTER 4

Results

Student Details

Name of the student

USN of the student

Specialization

Department name

SEND DATA

VIEW DATA

FirebaseStudent

Details

Meghana
1RV18SIT12
IT
ISE

Details

lakshita
1RV18SIT12
IT
ISE

Details

Shilpa
1RV18SIT14
IT
ISE

```
        studentspecialization: "IT"
-Lx0cQ4qPaGbNdg00sQ0
        studentName: "lakshita"
        studentUSN: "1RV18SIT12"
        studentdept: "ISE"
        studentid: "-Lx0cQ4qPaGbNdg00sQ0"
        studentspecialization: "IT"
-Lx0cXafvSf6o_3Ox7U-
        studentName: "Shilpa"
        studentUSN: "1RV18SIT14"
        studentdept: "ISE"
        studentid: "-Lx0cXafvSf6o_3Ox7U-"
        studentspecialization: "IT"
-Lx11xhFT_7wegq3SF-C
        studentName: "Manjunath"
        studentUSN: "1RV18SIT11"
        studentdept: "ISE"
        studentid: "-Lx11xhFT_7wegq3SF-C"
        studentspecialization: "IT"
```

Database   Realtime Database

Data   Rules   Backups   Usage

https://fir-student-b0...

fir-student-b0e02
    students
        -Lx0cH3pW2OykI8dxMaH
        -Lx0cQ4qPaGbNdg00sQ0
        -Lx0cXafvSf6o_3Ox7U-
        -Lx11xhFT_7wegq3SF-C
        -Lx12YOnho1_3YrjUrCa