ACA Project

Android Development

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Objective

In our project, we aimed at learning basic android application developing techniques using Android Studio..

Project Description

- ★ Camera App -
 - The app had a button which on clicked listed all the image capture apps installed in the android system.
 - The image could then be captured, saved and viewed whenever required.
- ★ SQL Database App -
 - We used SQL language for creating a basic database that could store some data given to it and can keep it available even after the app is switched off.
 - The app could add or remove rows as per our requirement.
- ★ Fitstep App -
 - Fitstep is an android fitness app which can measure the number of steps taken by user as he/she works out which makes it unique in terms of fitness app.
- ★ And many more..

Android Studio

- Android apps are created using android studio.
- There are two parts of any android application, first its body or its display which the
 users can see and second the inner brains of the application or that code that
 governs its functioning.
- The former is coded in XML and the latter in Java.
- Thus the package of the application, as soon as it is created, by default creates a
 java class which functions as the basic code controlling the entire app and various
 other resources like the XML layout file which serves as the user interface of the
 application.
- Other by default created resource values include XML files which are used to save user defined strings, colors and styles.
- Also, a file named AndroidManifest.xml serves the purpose of parental controls and decides whether various permissions like internet access, background functioning, notification access etc.
- We learnt many app building processes and methods to create many types of apps and adding many elements to the applications which we generally see in real life apps.

Problems Faced And their Solutions

We faced a lot of problems during our project duration.

- Many of them were due to the fact Java language was new for us. We generally referred to Google for our problems.
- Many times, we got stuck in the syntax or faced many problems in classes and methods being used in Java. the New Boston tutorials proved to be very helpful in that case.
- During building small applications, we were not able to understand the code properly or gut stuck in understanding its functioning. Stackoverflow and theNewBoston tutorials helped us out.

Project Links

- SQL Database App
- Broadcaster And Receiver
- Fragments App (Meme Creator)
- Notifier App
- SharedPreferences App (Styles)

Resources Used

- theNewBoston Android Studio tutorials.
- Stackoverflow
- Tutorials Point
- Udacity

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