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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

MOBILE APPLICATION DEVELOPMENT
MINI PROJECT (18CSMP68)

“ATTENDANCE SYSTEM”

Submitted By

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for the academic year 2021-2022

Under the guidance of

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Department of Computer Science & Engineering

Certificate

This is to certify that the implementation of
Mobile Application Development MINI PROJECT (18CSMP68) entitled
“ATTENDANCE SYSTEM” has been successfully completed by

1BI19CS011

AKASH JAIN

of VI semester B.E. for the partial fulfillment of the requirements for the Bachelor's
degree in **Computer Science & Engineering** of the **Visvesvaraya Technological**
University during the academic year **2021-2022**.

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AKASH JAIN
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Chapter-1

INTRODUCTION

1.1 PROJECT SUMMARY

Attendance Management System app deal with the maintenance of the student's attendance details. It generates the attendance of the student on basis of presence in class. It is maintaining the daily basis of attendance, the staff will be provided with a separate username and password to make student attendance.

The staff handling the particular subject to responsible to make the attendance of all students. Only if the student presents the particular date, the attendance will be calculated.

The student attendance report based monthly and consolidated will be generated.

1.2 PROJECT PURPOSE

Attendance Management System app is a software developed for daily student attendance in schools, colleges, and institutes. It facilitates to access the attendance information of a particular student in a particular class. The information is sorted by the operators, which will be provided by the teacher for a particular class. This system will also help in evaluating the attendance eligibility criteria of a student. Class attendance is one of the most important factors that help students to complete their understanding and to improve their knowledge and skills. Attending class regularly can help students to retain information longer, especially when they are participating in class activities, and sharing their opinions and working in groups. These activities enhance the students' ability to keep knowledge in their mind. Moreover, students attending class regularly enhances their necessary skills. By attentive listening and positive contribution in class, skills in speaking, listening, and presentation will be improved significantly. Students can control unexceptional situations not only in their studies but also in the real life. Hence, class attendance is positively and significantly related to student performance

1.3 PROJECT SCOPE

A faculty having multiple classes will find it difficult to manage the attendance of students with different subjects. So a common tracker to manage the attendance of students will be of tremendous benefit to faculties. At present mobile devices with an android operating system are mostly used by users all over the world. By considering these improvements in mobile

technology, knowing the information about the attendance of a student through mobile in less time can be a useful application for faculties.

1.4 TECHNOLOGY AND LITERATURE REVIEW

XML stands for Extensible Markup Language. XML is a markup language much like HTML used to describe data. It is derived from Standard Generalized Markup Language(SMGL). Basically, the XML tags are not predefined in XML. We need to implement and define the tags in XML. XML tags define the data and used to store and organize data. It's easily scalable and simple to develop. In Android, the XML is used to implement UI-related data, and it's a lightweight markup language that doesn't make layout heavy. XML only contains tags, while implementing they need to be just invoked.

Different Types of XML Files Used in Android Studio

Different XML files serve different purposes in Android Studio. The list of various XML files in Android Studio with their purposes is discussed below.

1. Layout XML files in android

The Layout XML files are responsible for the actual User Interface of the application. It holds all the widgets or views like Buttons, TextViews, EditTexts, etc. which are defined under the ViewGroups.

2. AndroidManifest.xml file

This file describes the essential information about the applications, like the application's package names which matches code's namespaces, a component of the application like activities, services, broadcast receivers, and content providers. Permission required by the user for the application features also mentioned in this XML file.

3. strings.xml file

This file contains texts for all the TextViews widgets. This enables reusability of code, and also helps in the localization of the application with different languages. The strings defined in these files can be used to replace all hardcoded text in the entire application.

4. themes.xml file

This file defines the base theme and customized themes of the application. It also used to define styles and looks for the UI(User Interface) of the application. By defining styles we can customize how the views or widgets look on the User Interface.

5. Drawable XML files

These are the XML files that provide graphics to elements like custom background for the buttons and their ripple effects, also various gradients can be created. This also holds the vector graphics like icons. Using these files custom layouts can be constructed for EditTexts.

6. colors.xml file

The colors.xml file is responsible to hold all the types of colors required for the application. It may be primary brand color and its variants and secondary brand color and its variants. The colors help uphold the brand of the applications. So the colors need to be decided cautiously as they are responsible for the User Experience. The colors need to be defined in the hex code format.

1.5 PROBLEM STATEMENT / AIM

The main aim of developing this Android application is to provide proper support for every faculty to manage and track all the attendance of students in their respective branches and subjects with ease.

1.6 OBJECTIVE OF PROJECT

1. To implement an application that provides teachers to take attendance.
2. To provide authentication for the teachers before viewing or taking attendance..
3. To design a user interface that is novice-friendly.

Chapter-2

HARDWARE AND SOFTWARE REQUIREMENTS

2.1 USER CHARACTERISTICS

- Start the Application
- After the application is started the first screen contains login interface where the user can switch between admin and faculty login and will enter the username and password.
- The user has to click on the login button if he has been already registered by the admin else the user has to ask the admin to add his login credentials.
- In adding the student screen the admin has to enter a name, contact, address, department, and year of student and click on submit button.
- In adding the faculty screen the admin has to enter the name, Mobile No, address, username, and password of the Faculty and click on submit button.
- After registering the account the user can go to login page where the user has to enter his/her credentials and log in.
- After logging in the home screen opens up with a View Attendance button at the top where the Faculty can see the attendance of the students.
- Faculty has to select Branch, Year, date, and subject to take or view attendance.
- There is an Add attendance button which will add the attendance for the specified branch, year subject, and date.
- The faculty can then log out of the application at the end.

2.2 Hardware Requirements Processor:

- Intel CORE i5
- Ram: 8GB
- Hard Disk: 1TB

2.2.1 Software Requirements:

- Android Studio
- Internet Connection

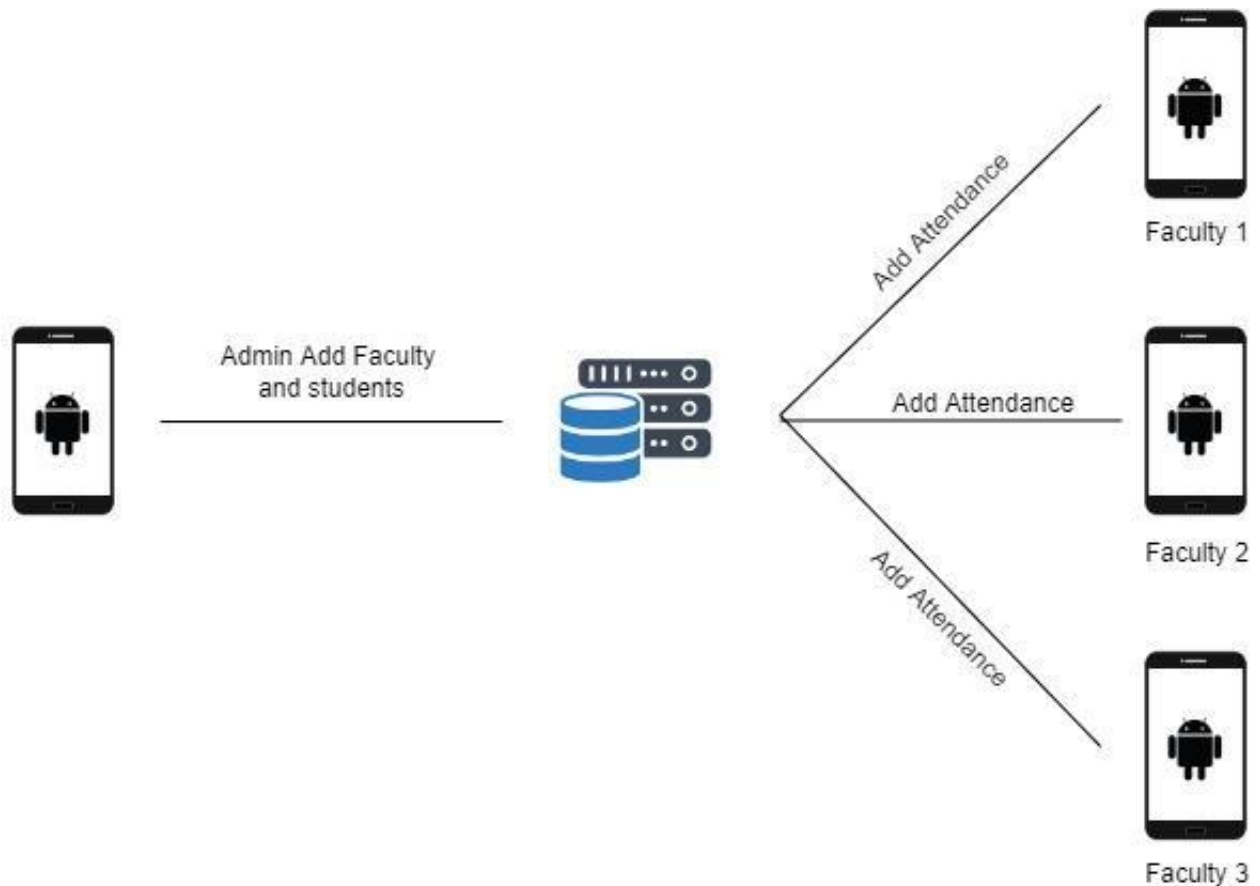
2.3 Project Constraints

1. There is no range selector to select attendance on specific dates.
2. Students login page is not there. Student has to contact there teachers for there attendance status.

Chapter-3

DESIGN

3.1 SYSTEM ARCHITECTURE AND DESIGN:



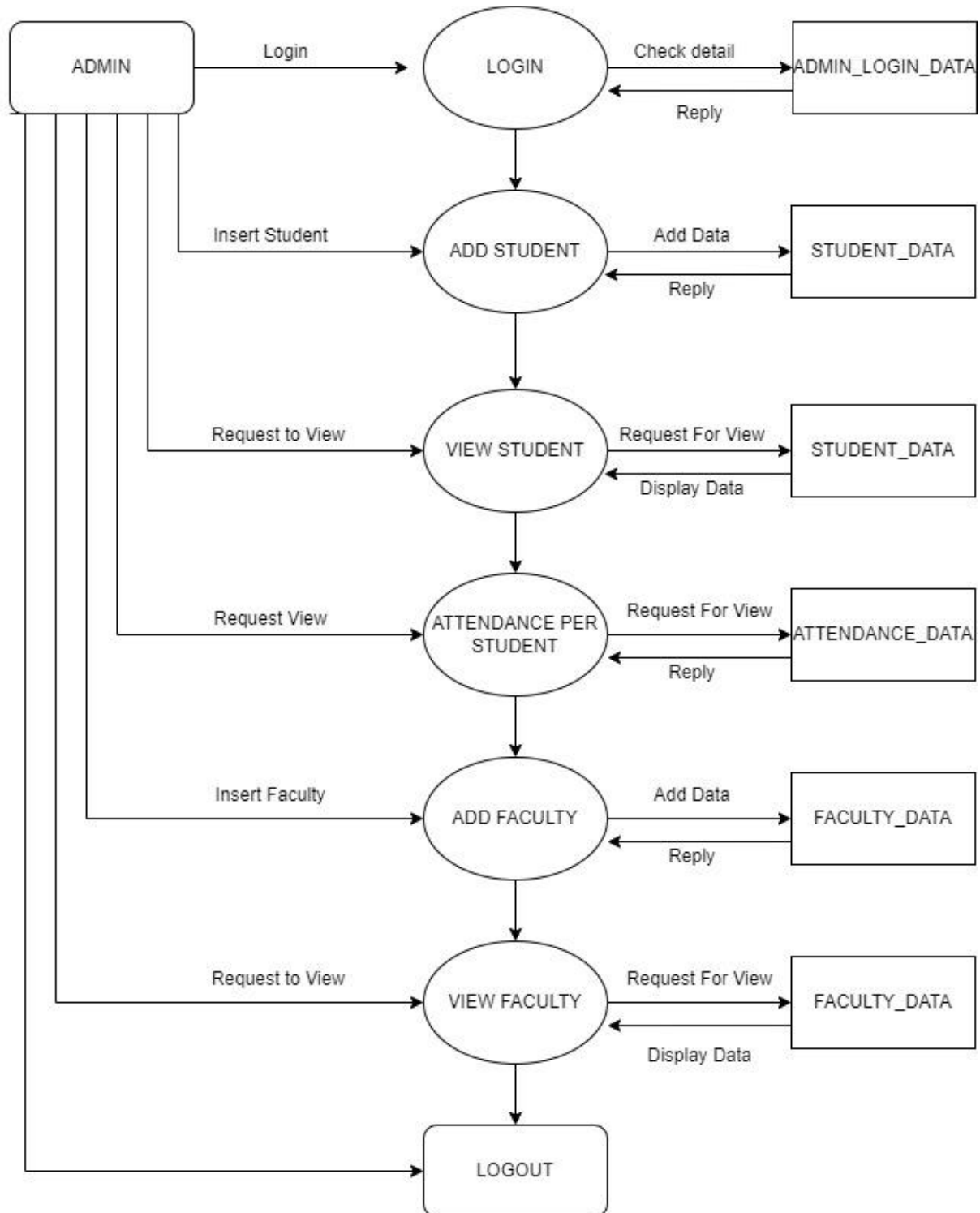
The admin first adds the students and faculties on the SQLite server through the application. Then the faculty will login in the application using the username and password set by the admin for him/her.

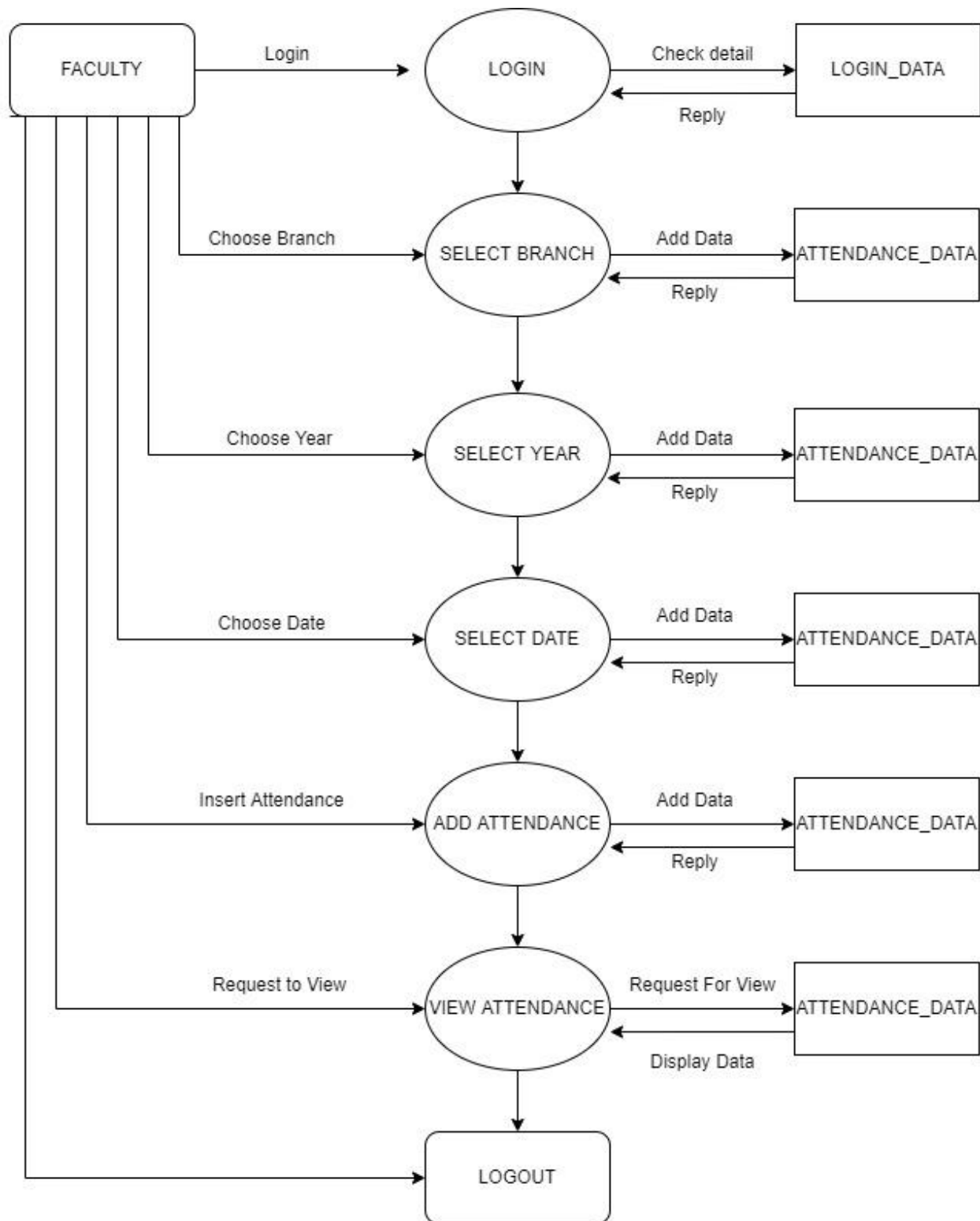
After the login is successful teacher can update and view the attendance of students. The server stores all these data.

Admin can also view the attendance of any student in admin panel.

3.2 CONTROL FLOW GRAPH

1. Admin Flow:



2. Faculty Flow:

3.3 MODULE DESCRIPTION

1. Start:

Starts the application.

2. Login:

The users have to login with proper credentials to enter the home screen of the application.

3. Main Menu Admin:

When the admin enters the main menu he can add student, view student, see attendance per student, add faculty and view faculty.

4. Main Menu Faculty:

When faculty enters the main menu he/she can view attendance, set branch, set year, select subject, set date, add attendance and can view attendance.

5. Submit:

This will add the student, add the faculty and submit the attendance.

6. Logout:

After the attendance is taken the faculty logs out.

Chapter-4

IMPLEMENTATION

4.1 Built In Function

S.No.	Function	Description
1	TextView	A TextView displays text to the user and optionally allows them to edit it. A TextView is a complete text editor, however the basic class is configured to not allow editing.
2	EditText	A EditText is an overlay over TextView that configures itself to be editable. It is the predefined subclass of TextView that includes rich editing capabilities.
3	Button	In Android, Button represents a push button. A Push buttons can be clicked, or pressed by the user to perform an action.
4	RadioButton	Radio buttons allow the user to select one option from a set. You should use radio buttons for optional sets that are mutually exclusive if you think that the user needs to see all available options side-by-side. If it's not necessary to show all options side-by-side, use a spinner instead.
5	Widgets	widget is a small gadget or control of the android application placed on home screen. Widgets can be very handy as they allow you to put your favorite applications on your home screen in order to quickly access them.
6	ImageView	Displays image resources, for example Bitmap or Drawable resources. ImageView is also commonly used to apply tints to an image and handle image scaling.
7	Hint	android: hint is more like a placeholder that sort of explains what type of input the EditText is asking for. i.e. If an EditText is asking for posting a status on social media, the hint like What's on your mind? will be suitable.
8	Toast	A toast provides simple feedback about an operation in a small popup. It only fills the amount of space required for the message and the current activity remains visible and interactive. Toasts automatically disappear after a timeout.
9	Spinner	Spinners provide a quick way to select one value from a set. In the default state, a spinner shows its currently selected value. Touching the spinner displays a dropdown menu with all other available values from which the user can select a new one.

4.2 Android Manifest and Special Permissions

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.androidattendancesystem"
    android:versionCode="1"
    android:versionName="1.0" >

    <application
        android:name="com.android.attendance.context.ApplicationContext"
        android:allowBackup="true"
        android:icon="@drawable/ic_launcher"
        android:label="@string/app_name"
        android:theme="@style/AppTheme" >

        <activity
            android:name="com.android.attendance.activity.MainActivity"
            android:label="@string/app_name" >
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
        <activity
            android:name="com.android.attendance.activity.LoginActivity"
            android:label="@string/app_name" >
        </activity>
        <activity
            android:name="com.android.attendance.activity.MenuActivity"
            android:label="@string/app_name" >
        </activity>
        <activity
            android:name="com.android.attendance.activity.AddFacultyActivity"
            android:label="@string/app_name" >
        </activity>
        <activity
            android:name="com.android.attendance.activity.AddStudentActivity"
            android:label="@string/app_name" >
        </activity>
        <activity
```

```
        android:name="com.android.attendance.activity.ViewFacultyActivity"
        android:label="@string/app_name" >
    </activity>
    <activity
        android:name="com.android.attendance.activity.ViewStudentActivity"
        android:label="@string/app_name" >
    </activity>
    <activity
        android:name="com.android.attendance.activity.TestActivity"
        android:label="@string/app_name" >
    </activity>
    <activity
        android:name="com.android.attendance.activity.ViewStudentByBranchYear"
        android:label="@string/app_name" >
    </activity>
    <activity
        android:name="com.android.attendance.activity.AddAttendanceSessionActivity"
        android:label="@string/app_name" >
    </activity>
    <activity
        android:name="com.android.attendance.activity.AddAttendanceActivity"
        android:label="@string/app_name" >
    </activity>
    <activity
        android:name="com.android.attendance.activity.ViewAttendanceByFacultyActivity"
        android:label="@string/app_name" >
    </activity>
    <activity
        android:name="com.android.attendance.activity.ViewAttendancePerStudentActivity"
        android:label="@string/app_name" >
    </activity>

</application>

</manifest>
```


4.3 XML and Java code:

XML code:

- **activity_main.xml**

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    android:background="@drawable/background"
    tools:context=".MainActivity" >

    <Button
        android:id="@+id/buttonstart"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_centerHorizontal="true"
        android:layout_centerVertical="true"
        android:background="@drawable/roundedbutton"
        android:text="Start" />
</RelativeLayout>
```

- **add_attendance.xml**

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/faculty"
    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    tools:context=".MainActivity" >

    <TextView
        android:id="@+id/textView1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
```

```
        android:layout_alignParentLeft="true"
        android:layout_marginLeft="16dp"
        android:text="Select dept"
        android:textAppearance="?android:attr/textAppearanceSmall" />

<Spinner
    android:id="@+id/spinner1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentTop="true"
    android:layout_marginLeft="50dp"
    android:layout_marginTop="85dp"
    android:layout_toRightOf="@+id/textView1" />

<TextView
    android:id="@+id/textView3"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@+id/spinner1"
    android:layout_marginTop="-20dp"
    android:layout_marginRight="18dp"
    android:layout_toLeftOf="@+id/spinner1"
    android:text="Branch"
    android:textAppearance="?android:attr/textAppearanceSmall" />

<TextView
    android:id="@+id/textView2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@+id/spinner1"
    android:layout_marginTop="34dp"
    android:layout_toLeftOf="@+id/spinner1"
    android:text="Select year"
    android:textAppearance="?android:attr/textAppearanceSmall" />

<Spinner
    android:id="@+id/spinnerSE"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@+id/spinneryear"
```

```
    android:layout_alignLeft="@+id/spinneryear"  
    android:layout_marginLeft="0dp"  
    android:layout_marginTop="19dp" />
```

```
<Spinner  
    android:id="@+id/spinneryear"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_below="@+id/spinner1"  
        android:layout_alignLeft="@+id/spinner1"  
    android:layout_marginLeft="-4dp"  
    android:layout_marginTop="24dp" />
```

```
<EditText  
    android:id="@+id/DateEditText"  
    android:layout_width="150dp"  
    android:layout_height="wrap_content"  
    android:layout_alignTop="@+id/DateImageButton"  
    android:layout_marginTop="4dp"  
    android:layout_marginRight="6dp"  
    android:layout_toLeftOf="@+id/spinnerSE"  
    android:background="#ffffff"  
    android:editable="false"  
    android:ems="10">
```

```
    <requestFocus />  
</EditText>
```

```
<ImageButton  
    android:id="@+id/DateImageButton"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_below="@+id/spinnerSE"  
    android:layout_alignLeft="@+id/spinnerSE"  
    android:layout_marginLeft="25dp"  
    android:layout_marginTop="26dp"  
    android:cropToPadding="true"  
    android:src="@drawable/calendar_icon" />
```

```
<Button
```

```
android:id="@+id/buttonsubmit"
style="?android:attr/buttonStyleSmall"
android:layout_width="395dp"
android:layout_height="wrap_content"
android:layout_below="@+id/DateImageButton"
android:layout_alignParentRight="true"
android:layout_marginTop="24dp"
android:layout_marginRight="0dp"
android:background="@drawable/roundedbutton"
android:text="Add Attendance" />
```

```
<TextView
    android:id="@+id/textView3"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignLeft="@+id/textView2"
    android:layout_alignTop="@+id/spinnerSE"
    android:layout_marginLeft="1dp"
    android:layout_marginTop="9dp"
    android:text="Subject"
    android:textAppearance="?android:attr/textAppearanceSmall" />
```

```
<Button
    android:id="@+id/viewTotalAttendanceButton"
    style="?android:attr/buttonStyleSmall"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_alignParentBottom="true"
    android:layout_alignParentRight="true"
    android:background="@drawable/roundedbutton"
    android:text="View Total Attendance" />
```

```
<Button
    android:id="@+id/viewAttendancebutton"
    style="?android:attr/buttonStyleSmall"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_above="@+id/button1"
    android:layout_alignParentLeft="true"
    android:layout_marginBottom="35dp"
```

```
        android:background="@drawable/roundedbutton"
        android:text="View Attendance" />
```

```
</RelativeLayout>
```

- **addfaculty.xml**

```
<ScrollView xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/admin"
    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin" >
```

```
<RelativeLayout
    android:layout_width="match_parent"
    android:layout_height="700dp" >
```

```
<TextView
    android:id="@+id/textViewFormName"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentTop="true"
    android:layout_centerHorizontal="true"
    android:layout_marginTop="20dp"
    android:text="registration"
    android:textColor="#FFFFFF"
    android:textSize="15sp"
    android:textStyle="bold" />
```

```
<TextView
    android:id="@+id/textViewFirstName"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentLeft="true"
    android:layout_below="@+id/textViewFormName"
    android:layout_marginTop="10dp"
    android:text="firstname"
    android:textColor="#FFFFFF" />
```

```
<requestFocus />
```

```
<EditText
    android:id="@+id/editTextFirstName"
    android:layout_width="match_parent"
    android:layout_height="25dp"
    android:layout_alignParentLeft="true"
    android:layout_below="@+id/textViewFirstName"
    android:layout_marginTop="5dp"
    android:background="@drawable/roundedtextview"
    android:ems="10"
    android:hint="firstname"
    android:inputType="textPersonName"
    android:paddingLeft="15dp" />
```

```
<TextView
    android:id="@+id/textViewLastName"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignLeft="@+id/editTextFirstName"
    android:layout_below="@+id/editTextFirstName"
    android:layout_marginTop="15dp"
    android:text="lastname"
    android:textColor="#FFFFFF" />
```

```
<EditText
    android:id="@+id/editTextLastName"
    android:layout_width="match_parent"
    android:layout_height="25dp"
    android:layout_alignLeft="@+id/textViewLastName"
    android:layout_below="@+id/textViewLastName"
    android:layout_marginTop="5dp"
    android:background="@drawable/roundedtextview"
    android:ems="10"
    android:hint="lastname"
    android:inputType="textPersonName"
    android:paddingLeft="15dp" />
```

```
<TextView
```

```
android:id="@+id/textViewEmail"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_alignParentLeft="true"
android:layout_below="@+id/editTextLastName"
android:layout_marginTop="10dp"
android:text=""
android:textColor="#FFFFFF" />
```

```
<EditText
    android:id="@+id/editTextPhone"
    android:layout_width="match_parent"
    android:layout_height="25dp"
    android:layout_below="@+id/textViewPhone"
    android:layout_centerHorizontal="true"
    android:layout_marginTop="5dp"
    android:background="@drawable/roundedtextview"
    android:ems="10"
    android:hint="phone"
    android:inputType="phone"
    android:paddingLeft="15dp" />
```

```
<TextView
    android:id="@+id/textViewUserName"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignLeft="@+id/editTextPhone"
    android:layout_below="@+id/editTextPhone"
    android:layout_marginTop="15dp"
    android:text="Address"
    android:textColor="#FFFFFF" />
```

```
<Button
    android:id="@+id/Cancel_Button"
    android:layout_width="100dp"
    android:layout_height="30dp"
    android:layout_above="@+id/MessageforRegister"
    android:layout_alignParentRight="true"
    android:layout_marginRight="18dp"
    android:background="@drawable/roundedbutton"
```

```
        android:textColor="#ffffff"
        android:text="cancel" />
```

```
<Button
    android:id="@+id/RegisterButton"
    android:layout_width="100dp"
    android:layout_height="30dp"
    android:layout_alignParentLeft="true"
    android:layout_below="@+id/editTextPassword"
    android:layout_marginLeft="26dp"
    android:layout_marginTop="51dp"
    android:textColor="#ffffff"
    android:background="@drawable/roundedbutton"
    android:text="submit" />
```

```
<TextView
    android:id="@+id/MessageforRegister"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@+id/RegisterButton"
    android:layout_marginTop="54dp"
    android:layout_toRightOf="@+id/textViewUserName"
    android:text=""
    android:textColor="#FFFFFF" />
```

```
<EditText
    android:id="@+id/editTextPassword"
    android:layout_width="match_parent"
    android:layout_height="25dp"
    android:layout_alignParentLeft="true"
    android:layout_below="@+id/textViewPassword"
    android:background="@drawable/roundedtextview"
    android:ems="10"
    android:hint="password"
    android:inputType="textPassword"
    android:paddingLeft="15dp" />
```

```
<EditText
    android:id="@+id/editTextUserName"
    android:layout_width="match_parent"
```



```
android:layout_height="25dp"
android:layout_alignParentLeft="true"
android:layout_below="@+id/textViewUserName"
android:layout_marginTop="59dp"
android:background="@drawable/roundedtextview"
android:ems="10"
android:hint="username"
android:inputType="textPersonName"
android:paddingLeft="15dp" />
```

```
<TextView
    android:id="@+id/textViewPassword"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentLeft="true"
    android:layout_below="@+id/editTextUserName"
    android:layout_marginTop="14dp"
    android:text="password"
    android:textColor="#FFFFFF" />
```

```
<EditText
    android:id="@+id/editTextaddr"
    android:layout_width="match_parent"
    android:layout_height="25dp"
    android:layout_alignParentRight="true"
    android:layout_below="@+id/textViewUserName"
    android:background="@drawable/roundedtextview"
    android:hint="address"
    android:ems="10" />
```

```
<TextView
    android:id="@+id/textViewPhone"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignBaseline="@+id/textViewEmail"
    android:layout_alignBottom="@+id/textViewEmail"
    android:layout_alignRight="@+id/textViewPassword"
    android:text="Mobilenos"
    android:textColor="#FFFFFF" />
```

```
<TextView
    android:id="@+id/textView1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentLeft="true"
    android:layout_below="@+id/editTextaddr"
    android:layout_marginTop="18dp"
    android:text="Username"
    android:textAppearance="?android:attr/textAppearanceSmall"
    android:textColor="#ffffff" />
```

```
</RelativeLayout>
```

```
</ScrollView>
```

- **addstudent.xml**

```
<ScrollView xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/admin"
    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin" >
```

```
<RelativeLayout
    android:layout_width="match_parent"
    android:layout_height="700dp" >
```

```
<TextView
    android:id="@+id/textViewFormName"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentTop="true"
    android:layout_centerHorizontal="true"
    android:layout_marginTop="20dp"
    android:text="registration"
    android:textColor="#FFFFFF"
    android:textSize="15sp"
    android:textStyle="bold" />
```

```
<TextView
    android:id="@+id/textViewFirstName"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentLeft="true"
    android:layout_below="@+id/textViewFormName"
    android:layout_marginTop="10dp"
    android:text="firstname"
    android:textColor="#FFFFFF" />

<requestFocus />

<EditText
    android:id="@+id/editTextFirstName"
    android:layout_width="match_parent"
    android:layout_height="25dp"
    android:layout_alignParentLeft="true"
    android:layout_below="@+id/textViewFirstName"
    android:layout_marginTop="5dp"
    android:background="@drawable/roundedtextview"
    android:ems="10"
    android:hint="firstname"
    android:inputType="textPersonName"
    android:paddingLeft="15dp" />

<TextView
    android:id="@+id/textViewLastName"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignLeft="@+id/editTextFirstName"
    android:layout_below="@+id/editTextFirstName"
    android:layout_marginTop="15dp"
    android:text="lastname"
    android:textColor="#FFFFFF" />

<EditText
    android:id="@+id/editTextLastName"
    android:layout_width="match_parent"
    android:layout_height="25dp"
```

```
    android:layout_alignLeft="@+id/textViewLastName"
    android:layout_below="@+id/textViewLastName"
    android:layout_marginTop="5dp"
    android:background="@drawable/roundedtextview"
    android:ems="10"
    android:hint="lastname"
    android:inputType="textPersonName"
    android:paddingLeft="15dp" />
```

```
<TextView
    android:id="@+id/textViewPhone"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@+id/editTextLastName"
    android:layout_marginTop="15dp"
    android:text="Contact"
    android:textColor="#FFFFFF" />
```

```
<EditText
    android:id="@+id/editTextPhone"
    android:layout_width="match_parent"
    android:layout_height="25dp"
    android:layout_below="@+id/textViewPhone"
    android:layout_centerHorizontal="true"
    android:layout_marginTop="5dp"
    android:background="@drawable/roundedtextview"
    android:ems="10"
    android:hint="phone"
    android:inputType="phone"
    android:paddingLeft="15dp" />
```

```
<TextView
    android:id="@+id/textViewUserName"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignLeft="@+id/editTextPhone"
    android:layout_below="@+id/editTextPhone"
    android:layout_marginTop="15dp"
    android:text="Address"
    android:textColor="#FFFFFF" />
```

```
<Button
    android:id="@+id/Cancel_Button"
    android:layout_width="100dp"
    android:layout_height="30dp"
    android:layout_above="@+id/MessageforRegister"
    android:layout_alignParentRight="true"
    android:layout_marginRight="18dp"
    android:background="@drawable/roundedbutton"
    android:text="cancel"
    android:textColor="#ffffff" />

<TextView
    android:id="@+id/MessageforRegister"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@+id/RegisterButton"
    android:layout_marginTop="54dp"
    android:layout_toRightOf="@+id/textViewUserName"
    android:text=""
    android:textColor="#FFFFFF" />

<TextView
    android:id="@+id/textViewPassword"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentLeft="true"
    android:layout_below="@+id/textViewUserName"
    android:layout_marginTop="14dp"
    android:text=""
    android:textColor="#FFFFFF" />

<EditText
    android:id="@+id/editTextaddr"
    android:layout_width="match_parent"
    android:layout_height="25dp"
    android:layout_alignParentRight="true"
    android:layout_below="@+id/textViewUserName"
    android:background="@drawable/roundedtextview"
    android:ems="10"
```

```
android:hint="address" />
```

```
<TextView
    android:id="@+id/textView1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentLeft="true"
    android:layout_below="@+id/textViewPassword"
    android:text="Select dept"
    android:textAppearance="?android:attr/textAppearanceSmall"
    android:textColor="#ffffff" />
```

```
<Spinner
    android:id="@+id/spinnerdept"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentLeft="true"
    android:layout_below="@+id/textView1" />
```

```
<TextView
    android:id="@+id/textView2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignRight="@+id/textView1"
    android:layout_below="@+id/spinnerdept"
    android:text="Select year"
    android:textAppearance="?android:attr/textAppearanceSmall"
    android:textColor="#ffffff" />
```

```
<Spinner
    android:id="@+id/spinneryear"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@+id/textView2"
    android:layout_toRightOf="@+id/textViewPassword" />
```

```
<Button
    android:id="@+id/RegisterButton"
    android:layout_width="100dp"
    android:layout_height="30dp"
```

```

        android:layout_below="@+id/spinneryear"
        android:layout_marginTop="15dp"
        android:background="@drawable/roundedbutton"
        android:text="submit"
        android:textColor="#ffffff" />
    </RelativeLayout>

</ScrollView>

```

- **login.xml**

```

<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    android:background="@drawable/background"
    tools:context=".MainActivity" >

    <TextView
        android:id="@+id/textView1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentLeft="true"
        android:layout_alignParentTop="true"
        android:layout_marginLeft="82dp"
        android:layout_marginTop="43dp"
        android:text="Login here.."
        android:textAppearance="?android:attr/textAppearanceLarge" />

    <EditText
        android:id="@+id/editTextpassword"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignLeft="@+id/textView3"
        android:layout_below="@+id/textView3"
        android:layout_marginTop="15dp"
        android:background="@drawable/roundedtextview"

```

```
        android:ems="10"
        android:inputType="textPassword" />

<TextView
    android:id="@+id/textView3"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignLeft="@+id/editTextusername"
    android:layout_below="@+id/editTextusername"
    android:layout_marginTop="14dp"
    android:text="Password"
    android:textAppearance="?android:attr/textAppearanceMedium" />

<TextView
    android:id="@+id/textView2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignLeft="@+id/editTextusername"
    android:layout_below="@+id/textView1"
    android:layout_marginTop="110dp"
    android:text="Username"
    android:textAppearance="?android:attr/textAppearanceMedium" />

<EditText
    android:id="@+id/editTextusername"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@+id/textView2"
    android:layout_centerHorizontal="true"
    android:layout_marginTop="20dp"
    android:background="@drawable/roundedtextview"
    android:ems="10" >

    <requestFocus />
</EditText>

<Spinner
    android:id="@+id/spinnerloginas"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
```



```
        android:layout_alignBottom="@+id/textView2"
        android:layout_alignLeft="@+id/textView2"
        android:layout_alignParentRight="true"
        android:layout_marginBottom="32dp" />

    <Button
        android:id="@+id/buttonlogin"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_alignParentBottom="true"
        android:layout_alignRight="@+id/spinnerloginas"
        android:layout_marginBottom="34dp"
        android:text="Login" />

</RelativeLayout>
```

JAVA code:

- **MainActivity.java**

```
package com.android.attendance.activity;

import com.example.androidattendancesystem.R;

import android.os.Bundle;
import android.app.Activity;
import android.content.Intent;
import android.view.Menu;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;

public class MainActivity extends Activity {

    Button start;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        start =(Button)findViewById(R.id.buttonstart);
        start.setOnClickListener(new OnClickListener() {

            @Override
            public void onClick(View v) {
                // TODO Auto-generated method stub

                Intent intent =new Intent(MainActivity.this,LoginActivity.class);
                startActivity(intent);
            }
        });
    }

    @Override
    public boolean onCreateOptionsMenu(Menu menu) {
        // Inflate the menu; this adds items to the action bar if it is present.
        getMenuInflater().inflate(R.menu.main, menu);
    }
}
```

```
        return true;
    }
}
```

- **MenuActivity.java**

```
package com.android.attendance.activity;

import java.util.ArrayList;

import com.android.attendance.bean.AttendanceBean;
import com.android.attendance.context.ApplicationContext;
import com.android.attendance.db.DBAdapter;
import com.example.androidattendancesystem.R;

import android.os.Bundle;
import android.app.Activity;
import android.content.Intent;
import android.view.Menu;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;

public class MenuActivity extends Activity {

    Button addStudent;
    Button addFaculty;
    Button viewStudent;
    Button viewFaculty;
    Button logout;
    Button attendancePerStudent;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.menu);

        addStudent =(Button)findViewById(R.id.buttonaddstudent);
        addFaculty =(Button)findViewById(R.id.buttonaddfaculty);
        viewStudent =(Button)findViewById(R.id.buttonViewstudent);
        viewFaculty =(Button)findViewById(R.id.buttonviewfaculty);
    }
}
```

```
logout =(Button)findViewById(R.id.buttonlogout);

addStudent.setOnClickListener(new OnClickListener() {

    @Override
    public void onClick(View v) {
        // TODO Auto-generated method stub

        Intent intent =new Intent(MenuActivity.this,AddStudentActivity.class);
        startActivity(intent);
    }
});

addFaculty.setOnClickListener(new OnClickListener() {

    @Override
    public void onClick(View v) {
        // TODO Auto-generated method stub

        Intent intent =new Intent(MenuActivity.this,AddFacultyActivity.class);
        startActivity(intent);
    }
});

viewFaculty.setOnClickListener(new OnClickListener() {

    @Override
    public void onClick(View v) {
        // TODO Auto-generated method stub

        Intent intent =new Intent(MenuActivity.this,ViewFacultyActivity.class);
        startActivity(intent);
    }
});

viewStudent.setOnClickListener(new OnClickListener() {

    @Override
    public void onClick(View v) {
```

```

        // TODO Auto-generated method stub

        Intent intent =new Intent(MenuActivity.this,ViewStudentActivity.class);
        startActivity(intent);
    }
});
logout.setOnClickListener(new OnClickListener() {

    @Override
    public void onClick(View v) {
        // TODO Auto-generated method stub

        Intent intent =new Intent(MenuActivity.this,MainActivity.class);
        intent.addFlags(Intent.FLAG_ACTIVITY_CLEAR_TOP);
        startActivity(intent);
    }
});
attendancePerStudent=(Button)findViewById(R.id.attendancePerStudentButton);
attendancePerStudent.setOnClickListener(new OnClickListener() {

    @Override
    public void onClick(View arg0) {

        DBAdapter dbAdapter = new DBAdapter(MenuActivity.this);
        ArrayList<AttendanceBean>
attendanceBeanList=dbAdapter.getAllAttendanceByStudent();

        ((ApplicationContext)MenuActivity.this.getApplicationContext()).setAttendanceBeanList(attendanceBeanList);

        Intent intent = new
Intent(MenuActivity.this,ViewAttendancePerStudentActivity.class);
        startActivity(intent);
    }
});
}

@Override
public boolean onCreateOptionsMenu(Menu menu) {
    // Inflate the menu; this adds items to the action bar if it is present.

```

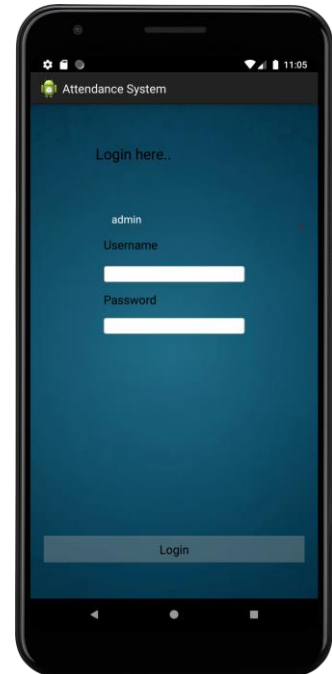
```
        getMenuInflater().inflate(R.menu.main, menu);  
        return true;  
    }  
}
```

Chapter-5

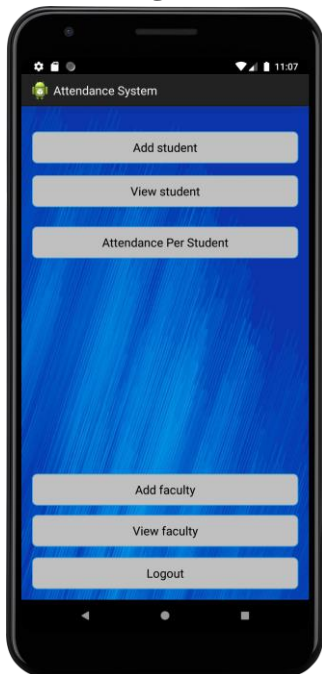
RESULTS



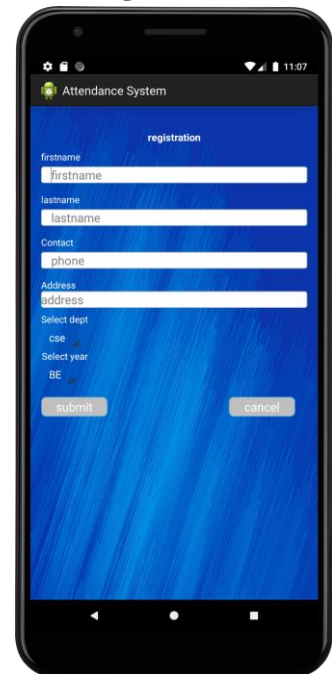
Starting Window



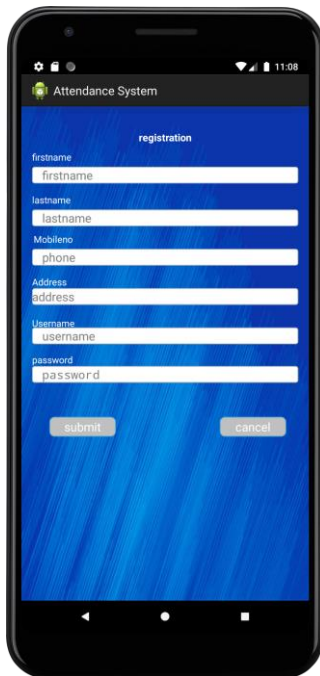
Login Window



Admin Panel



Add Student Window



A mobile application screen titled "Attendance System" showing a registration form. The form has fields for "firstname", "lastname", "Mobileno", "Address", "Username", and "password". Each field has a corresponding input box. Below the fields are "submit" and "cancel" buttons. The background is a blue gradient.

Add Faculty Window

A mobile application screen titled "Attendance System" showing an attendance panel. It features a "View Attendance" button at the top. Below it, there are dropdown menus for "Branch" (CSE), "Select year" (BE), and "Subject" (DS). A date field shows "10 / 7 / 2022". Below these is an "Add Attendance" button. At the bottom is a "View Total Attendance" button. The background is a purple gradient.

Attendance Panel

A mobile application screen titled "Attendance System" showing a marking attendance window. It has two radio buttons labeled "P" (Present) and "A" (Absent). The "P" button is selected. Below the radio buttons is a "Submit" button. The background is a dark blue gradient.

Marking Attendance

Chapter-6

CONCLUSION

Having identified the process of the existing attendance system and the advantages of the newly developed mobile system, this application proves to be of great use. This software will increase the efficiency of faculties. These solutions provide benefits to both the faculties, as well as the students. The numerous advantages would also have a positive impact on the system of the college.

FUTURE ENHANCEMENT

The project has a very vast scope in the future. The project can be implemented on the intranet in the future. The project can be updated in near future as and when the requirement for the same arises, as it is very flexible in terms of expansion. With the proposed database software, the teacher can now manage student attendance; hence, the Attendance System app can work much better, more accurately, and error-free. The following are the future scope for the project.

1. Adding customizations in the faculty module.
2. Add range to get attendance.
3. Adding AI-powered GUI.
4. Provide a more secure database.

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