

STUDENT'S FEE APP

A PROJECT REPORT

Submitted by

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*in partial fulfilment for the award of the
degree of*

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE AND ENGINEERING



Centurion
UNIVERSITY

Shaping Lives...
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SCHOOL OF ENGINEERING AND TECHNOLOGY

PARALAKHEMUNDI CAMPUS

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
ODISHA

JANUARY 2024

SPECIMEN CERTIFICATE

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

SCHOOL OF ENGINEERING AND TECHNOLOGY

PARALAKHEMUNDI CAMPUS

BONAFIDE CERTIFICATE

Certified that this project report “**STUDENT’S FEE APP**” is the bonafide work of “**RAJ KAPOOR**” who carried out the project work under my supervision. This is to further certify to the best of my knowledge, that this project has not been carried out earlier in this institute and the university.

SIGNATURE

(Dr. Dhawaleswar Rao)

Assistant Professor

Of

School of Engineering and Technology

Certified that the above-mentioned project has been duly carried out as per the norms of the college and statutes of the university.

SIGNATURE

HEAD OF THE DEPARTMENT / DEAN OF THE SCHOOL

Professor of School of Engineering and Technology

DEPARTMENT SEAL

DECLARATION

I hereby declare that the project entitled “**STUDENT’S FEE APP**” submitted for the “**Android App Development Project**” of **4th** semester B. Tech in Computer Science Engineering is my original work and the project has not formed the basis for the award of any Degree / Diploma or any other similar titles in any other University / Institute.

Name of the Student:

Signature of the Student:

Registration No:

Place:

Date:

ACKNOWLEDGEMENTS

I wish to express my profound and sincere gratitude to **Dr. Dhawaleshwar Rao**, School Of Engineering CUTM, parlakhemundi Campus, who guided me into the intricacies of this project nonchalantly with matchless magnanimity. I thank **Prof. Debendra Maharana**, Head of the Dept. of Department of Computer Science and Engineering, SoET, Parlakhemundi Campus and **Dr. Prafulla Kumar Panda** Dean School of Engineering and Technology, Parlakhemundi Campus for extending their support during Course of this investigation.

Name of the Student:

Signature of the Student:

Registration No:

Place:

Date:

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ABSTRACT

The Student Fee Application (SFA) is a comprehensive software solution designed to streamline and automate fee-related processes within educational institutions. This application aims to simplify fee collection, tracking, and management, thereby enhancing efficiency and reducing administrative burden. It offers a user-friendly interface for students, parents, and administrative staff, enabling seamless interaction and communication regarding fee-related matters. Key features include online fee payment, automated fee reminders, real-time fee status tracking, customizable fee structures, and comprehensive reporting capabilities. By leveraging modern technology and intuitive design, it seeks to revolutionize fee application in educational institutions, ensuring transparency, accuracy, and convenience for all stakeholders.

1.1 INTRODUCTION

The Student's Fee Application provides a vital overview of fee payment statuses for individual students, aiming to streamline processes and enhance transparency within educational institutions. By clearly indicating fees as either paid or unpaid, this section facilitates efficient monitoring for administrators, parents, and students. Its intuitive interface and timely notifications ensure stakeholders stay informed, promoting prompt action and reducing confusion. Through fostering transparency and accountability, the section cultivates a culture of financial responsibility among students and parents. Ultimately, it contributes to the overall efficiency and financial sustainability of educational institutions by simplifying fee management processes and promoting timely settlements.

- **User Roles:** Responsible for system application, user fee details, and overall show fee data.
- **Application Management:** Facilitates easy and accurate recording of student a fee through intuitive user interfaces, including options for manual entry or automated tracking methods.
- **Application Status Tracking:** Tracks user interactions within the application, providing insights into usage patterns and identifying areas for improvement.

1.2 Objectives

- **Transparency:** Provide transparency regarding fee payments by clearly displaying the status of each student's fees as either paid or unpaid.
- **Ease of Monitoring:** Enable administrators, parents, and students to easily monitor and track the payment status of fees, reducing confusion and ensuring timely payments.
- **Financial Oversight:** Facilitate financial oversight by allowing administrators to efficiently oversee the collection of fees, identify outstanding payments, and manage financial resources effectively.
- **Compliance:** Ensure compliance with fee payment deadlines and regulations by providing timely notifications and reminders for unpaid fees.
- **Record-Keeping:** Maintain accurate records of fee payments for auditing purposes, enabling administrators to generate reports and analyze payment trends over time.
- **User Accountability:** Foster accountability among students and parents by clearly indicating the status of fee payments and encouraging timely settlements.
- **Enhanced Communication:** Improve communication between educational institutions, parents, and students regarding fee-related matters, fostering a collaborative approach to fee management.
- **Efficiency:** Streamline administrative processes related to fee collection and tracking, reducing manual efforts and enhancing overall operational efficiency.
- **Customer Satisfaction:** Enhance satisfaction among stakeholders, including students, parents, and administrators, by providing a user-friendly interface and ensuring a seamless fee payment experience.
- **Financial Sustainability:** Contribute to the financial sustainability of educational institutions by optimizing fee collection processes and ensuring the timely receipt of funds necessary for maintaining operations and delivering quality education.

2.1 SYSTEM DESIGN

- **User Interface (UI):** The application uses XML layout files to define the UI components, including text views, image views, and constraints for positioning elements on the screen. This ensures a visually appealing and interactive user experience.
- **Activity Lifecycle:** The Java code defines activities that control the app's behavior and interaction with the user. Each activity corresponds to a specific screen or functionality within the app, such as displaying paid or unpaid fees.
- **Event Handling:** The Java code contains event listeners to handle user interactions, such as clicks on text views or image views. These listeners trigger actions, such as navigating to a different activity or updating UI elements.
- **Data Display:** The app dynamically displays fee information based on user actions. For example, when the user clicks on the "Paid Fees" or "Unpaid Fees" text views, the app retrieves and displays relevant fee details.
- **Data Management:** Fee data, including bill numbers, names, dates, and amounts, is stored in arrays within the Java code. This data is used to populate text views and provide information to the user.
- **Color and Styling:** The app utilizes color and styling to enhance the visual presentation of UI elements. For instance, text colors change based on the selected section (paid or unpaid), providing visual cues to the user.
- **Navigation:** The app includes navigation between different screens using intents. When the user clicks on the "Paid Fees" text view, the app navigates to MainActivity2, where paid fee details are displayed.
- **Modularity:** The code demonstrates a modular approach, with separate XML layout files defining UI elements and Java classes managing activity logic. This modular structure enhances code readability, maintainability, and scalability.

Overall, the system design follows standard Android development practices, emphasizing a responsive UI, efficient event handling, and effective data management to deliver a seamless user experience for managing student fees.

3.1 PROJECT SCOPE

- **Fee Tracking:** The core objective is to provide a platform for tracking student fees, distinguishing between paid and unpaid fees, and displaying detailed information for each transaction.
- **User Authentication:** Implementing secure user authentication mechanisms to ensure that only authorized users, such as administrators, parents, and students, can access sensitive fee-related data and functionalities.
- **Payment Integration:** Integrating payment gateways or methods to facilitate convenient and secure fee payments directly through the application, streamlining the payment process for users.
- **Notification System:** Develop a notification system to alert users about upcoming fee payment deadlines, outstanding balances, and other important updates related to fee management.
- **Reporting and Analytics:** Incorporating features for generating reports and analytics on fee collection, payment trends, overdue fees, and other relevant metrics to provide insights for administrators and improve fee management strategies.

3.2 FUTURE ENHANCEMENTS

In future iterations, the fee management application could evolve by focusing on key areas such as enhancing user experience through multi-platform compatibility and real-time updates. Integration with Student Information Systems (SIS) and advanced analytics would streamline data management and provide deeper insights into fee collection trends. Personalized dashboards, automated reminders, and flexible payment options would improve user convenience and promote proactive fee management. Additionally, features like offline access, AI-powered insights, and customizable reporting would enhance usability and decision-making. Integration with mobile wallets and gamification elements could further incentivize timely payments and boost user engagement, enriching the overall effectiveness of the fee management system.

4.1 METHODOLOGY

Activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@android:color/white"
    android:orientation="vertical"
    tools:context=".MainActivity">

    <View
        android:id="@+id/line1"
        android:layout_width="50dp"
        android:layout_height="4dp"
        android:layout_marginStart="20dp"
        android:layout_marginTop="10dp"
        android:background="@color/black"
        tools:ignore="MissingConstraints" />

    <View
        android:id="@+id/line2"
        android:layout_width="50dp"
        android:layout_height="4dp"
        android:layout_below="@+id/line1"
        android:layout_marginStart="20dp"
        android:layout_marginTop="5dp"
        android:background="@color/black"
        tools:ignore="MissingConstraints" />

    <View
        android:id="@+id/line3"
        android:layout_width="50dp"
        android:layout_height="4dp"
        android:layout_below="@+id/line2"
        android:layout_marginStart="20dp"
        android:layout_marginTop="5dp"
        android:background="@color/black"
        tools:ignore="MissingConstraints" />

    <TextView
        android:id="@+id/home"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="30sp"
        android:layout_marginLeft="45dp"
        android:layout_marginTop="6dp"
        android:layout_toRightOf="@+id/line3"
        android:text="Home"
        android:textSize="25dp"
```

```
android:textStyle="bold"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent" />
```

```
<View
    android:id="@+id/line4"
    android:layout_width="match_parent"
    android:layout_height="4dp"
    android:layout_below="@+id/home"
    android:layout_marginTop="5dp"
    android:background="@android:color/holo_green_light"
    tools:ignore="MissingConstraints" />
```

```
<TextView
    android:id="@+id/box"
    android:layout_width="364dp"
    android:layout_height="136dp"
    android:layout_below="@+id/line4"
    android:layout_alignParentStart="true"
    android:layout_alignParentEnd="true"
    android:layout_marginStart="25dp"
    android:layout_marginTop="31dp"
    android:layout_marginEnd="22dp"
    android:background="@android:color/holo_green_light"
```

```
    android:text=" \n  SHAMSHAD ALAM\n  SEM 4TH \n\n  Addendence 52%    Fee    100% "
    android:textColor="#FF0000"
    android:textSize="16sp" />
```

```
<View
    android:id="@+id/boxline5"
    android:layout_width="150dp"
    android:layout_height="4dp"
    android:layout_below="@+id/line2"
    android:layout_alignEnd="@+id/box"
    android:layout_marginStart="97dp"
    android:layout_marginTop="180dp"
    android:layout_marginEnd="49dp"
    android:layout_toEndOf="@+id/boxline7"
    android:background="@color/black"
    tools:ignore="MissingConstraints" />
```

```
<View
    android:id="@+id/boxline6"
    android:layout_width="52dp"
    android:layout_height="4dp"
    android:layout_below="@+id/line2"
    android:layout_alignStart="@+id/box"
    android:layout_marginStart="23dp"
    android:layout_marginTop="180dp"
    android:background="@color/black"
    tools:ignore="MissingConstraints" />
```

```
<View
    android:id="@+id/boxline7"
    android:layout_width="43dp"
    android:layout_height="3dp"
```

```
android:layout_below="@+id/line2"
android:layout_marginStart="100dp"
android:layout_marginTop="180dp"
android:background="#D3C9C9"
tools:ignore="MissingConstraints" />
```

```
<ImageView
    android:id="@+id/imageView2"
    android:layout_width="53dp"
    android:layout_height="43dp"
    android:layout_marginStart="35dp"
    android:layout_marginTop="54dp"
    app:srcCompat="@drawable/profile" />
```

```
<TextView
    android:id="@+id/textView2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignEnd="@+id/box"
    android:layout_alignParentStart="true"
    android:layout_marginStart="30dp"
    android:layout_marginTop="214dp"
    android:layout_marginEnd="3dp"
    android:background="#03A9F4"
    android:text="School Updates"
    android:textSize="20dp" />
```

```
<ImageView
    android:id="@+id/imageView3"
    android:layout_width="49dp"
    android:layout_height="46dp"
    android:layout_marginStart="35dp"
    android:layout_marginTop="243dp"
    app:srcCompat="@drawable/img" />
```

```
<TextView
    android:id="@+id/textView"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="45dp"
    android:layout_marginTop="293dp"
    android:layout_marginEnd="1dp"
    android:text="News"
    android:textStyle="bold" />
```

```
<ImageView
    android:id="@+id/imageView"
    android:layout_width="49dp"
    android:layout_height="46dp"
    android:layout_marginStart="74dp"
    android:layout_marginTop="243dp"
    android:layout_toEndOf="@+id/imageView3"
    app:srcCompat="@drawable/events" />
```

```
<TextView
    android:id="@+id/textView3"
    android:layout_width="49dp"
```

```
android:layout_height="wrap_content"
android:layout_below="@+id/imageView"
android:layout_marginStart="75dp"
android:layout_marginTop="5dp"
android:layout_toEndOf="@+id/textView"
android:text="Events"
android:textStyle="bold" />
```

```
<ImageView
    android:id="@+id/imageView4"
    android:layout_width="49dp"
    android:layout_height="46dp"
    android:layout_alignParentEnd="true"
    android:layout_marginStart="24dp"
    android:layout_marginTop="243dp"
    android:layout_toEndOf="@+id/imageView"
    app:srcCompat="@drawable/bulletin" />
```

```
<TextView
    android:id="@+id/textView4"
    android:layout_width="57dp"
    android:layout_height="16dp"
    android:layout_marginStart="64dp"
    android:layout_marginTop="293dp"
    android:layout_toEndOf="@+id/textView3"
    android:text="Bulletin"
    android:textStyle="bold" />
```

```
<TextView
    android:id="@+id/textView5"
    android:layout_width="360dp"
    android:layout_height="wrap_content"
    android:layout_alignEnd="@+id/box"
    android:layout_alignParentStart="true"
    android:layout_marginStart="30dp"
    android:layout_marginTop="310dp"
    android:layout_marginEnd="-1dp"
    android:background="#03A9F4"
    android:text="Academics"
    android:textSize="19dp" />
```

```
<ImageView
    android:id="@+id/imageView5"
    android:layout_width="49dp"
    android:layout_height="46dp"
    android:layout_alignParentStart="true"
    android:layout_marginStart="35dp"
    android:layout_marginTop="345dp"
    app:srcCompat="@drawable/assignment" />
```

```
<TextView
    android:id="@+id/textView6"
    android:layout_width="92dp"
    android:layout_height="25dp"
    android:layout_marginStart="35dp"

    android:layout_marginTop="389dp"
    android:text="Assignment"
```

```
android:textStyle="bold" />
```

```
<ImageView  
    android:id="@+id/imageView6"  
    android:layout_width="49dp"  
    android:layout_height="46dp"  
    android:layout_marginStart="74dp"  
    android:layout_marginTop="345dp"  
    android:layout_toEndOf="@+id/imageView5"  
    app:srcCompat="@drawable/homework" />
```

```
<ImageView  
    android:id="@+id/imageView7"  
    android:layout_width="49dp"  
    android:layout_height="46dp"  
    android:layout_alignParentEnd="true"  
    android:layout_marginStart="24dp"  
    android:layout_marginTop="345dp"  
    android:layout_toEndOf="@+id/imageView6"  
    app:srcCompat="@drawable/reportcard" />
```

```
<TextView  
    android:id="@+id/textView7"  
    android:layout_width="80dp"  
    android:layout_height="18dp"  
  
    android:layout_marginStart="24dp"  
    android:layout_marginTop="389dp"  
    android:layout_toEndOf="@+id/textView6"  
    android:text="Homework"  
    android:textStyle="bold" />
```

```
<TextView  
    android:id="@+id/textView8"  
    android:layout_width="83dp"  
    android:layout_height="20dp"  
    android:layout_marginStart="29dp"  
    android:layout_marginTop="389dp"  
    android:layout_toEndOf="@+id/textView7"  
    android:text="Report Card"  
    android:textStyle="bold" />
```

```
<TextView  
    android:id="@+id/textView9"  
    android:layout_width="172dp"  
    android:layout_height="wrap_content"  
    android:layout_alignStart="@+id/textView5"  
    android:layout_alignEnd="@+id/box"  
    android:layout_marginTop="418dp"  
    android:background="#03A9F4"  
    android:text="My Updates"  
    android:textSize="20dp" />
```

```
<ImageView  
    android:id="@+id/imageView8"  
    android:layout_width="49dp"  
  
    android:layout_height="46dp"
```

```
    android:layout_alignParentStart="true"
    android:layout_marginStart="35dp"
    android:layout_marginTop="458dp"
    android:layout_marginBottom="125dp"
    android:onClick="onFeesIconClicked"
    app:srcCompat="@drawable/fees" />
```

```
<ImageView
    android:id="@+id/imageView9"
    android:layout_width="49dp"
    android:layout_height="46dp"
    android:layout_marginStart="32dp"
    android:layout_marginTop="458dp"
    android:layout_toEndOf="@+id/imageView8"
    app:srcCompat="@drawable/attendance" />
```

```
<TextView
    android:id="@+id/textView10"
    android:layout_width="49dp"
    android:layout_height="wrap_content"
    android:layout_marginStart="35dp"
    android:layout_marginTop="510dp"
    android:text="Fee"
    android:textStyle="bold" />
```

```
<TextView
    android:id="@+id/textView11"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="32dp"
    android:layout_marginTop="510dp"
    android:layout_toEndOf="@+id/textView10"
    android:text="Attedence"
    android:textStyle="bold" />
```

```
<TextView
    android:id="@+id/textView12"
    android:layout_width="360dp"
    android:layout_height="wrap_content"
    android:layout_alignEnd="@+id/box"
    android:layout_alignParentStart="true"
    android:layout_marginStart="30dp"
    android:layout_marginLeft="30dp"
    android:layout_marginTop="530dp"
    android:layout_marginEnd="-1dp"
    android:background="#03A9F4"
    android:text="Communication"
    android:textSize="20dp" />
```

```
<ImageView
    android:id="@+id/imageView10"
    android:layout_width="49dp"
    android:layout_height="46dp"
    android:layout_alignParentStart="true"
    android:layout_marginStart="33dp"
    android:layout_marginTop="580dp"
    app:srcCompat="@drawable/chat" />
```

```
<TextView
```



```
android:id="@+id/textView14"
android:layout_width="49dp"
android:layout_height="27dp"
android:layout_marginStart="37dp"
android:layout_marginTop="630dp"
android:text="chat"
android:textStyle="bold" />
```

```
<ImageView
    android:id="@+id/imageView11"
    android:layout_width="49dp"
    android:layout_height="46dp"
    android:layout_alignEnd="@+id/imageView9"
    android:layout_marginStart="32dp"
    android:layout_marginTop="580dp"
    android:layout_marginEnd="2dp"
    android:layout_toEndOf="@+id/imageView10"
    app:srcCompat="@drawable/sms" />
```

```
<TextView
    android:id="@+id/textView14"
    android:layout_width="49dp"
    android:layout_height="27dp"
    android:layout_below="@+id/imageView11"
    android:layout_alignEnd="@+id/imageView11"
    android:layout_marginTop="7dp"
    android:layout_marginEnd="0dp"
    android:text="SMS"
    android:textStyle="bold" />
```

```
<ImageView
    android:id="@+id/imageView12"
    android:layout_width="49dp"
    android:layout_height="46dp"
    android:layout_marginStart="348dp"
    android:layout_marginTop="50dp"
    app:srcCompat="@drawable/size" />
```

```
<RelativeLayout
    android:id="@+id/relativeLayout"
    android:layout_width="match_parent"
    android:layout_height="80dp"
    android:layout_marginTop="670dp"
    android:background="@android:color/holo_green_light">
```

```
<ImageView
    android:id="@+id/ima"
    android:layout_width="30dp"
    android:layout_height="20dp"
    android:layout_marginStart="38dp"
    android:layout_marginTop="10dp"
    android:layout_marginBottom="5dp"
    app:srcCompat="@drawable/img_1" />
```

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

```
    android:layout_marginStart="38dp"
    android:layout_marginTop="40dp"
    android:layout_marginBottom="2dp"
    android:text="Home"
    android:textStyle="bold" />
```

```
</RelativeLayout>
</RelativeLayout>
```

Activity_main2.xml

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity2">

    <TextView
        android:id="@+id/textView15"
        android:layout_width="116dp"
        android:layout_height="27dp"
        android:text="Paid Fees"
        android:textSize="20dp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.057"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.063" />

    <TextView
        android:id="@+id/textView16"
        android:layout_width="88dp"
        android:layout_height="27dp"
        android:text="Unpaid Fees"
        android:textSize="20sp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.881"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.063" />

    <!-- TextView to display bill details -->

    <TextView
        android:id="@+id/bill_details_text_view"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:padding="16dp"
        android:textColor="@android:color/black"
        android:textSize="16sp"
        app:layout_constraintBottom_toBottomOf="parent"
```

```
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.559"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toBottomOf="@id/textView15"
app:layout_constraintVertical_bias="0.306" />
```

```
<TextView
```

```
    android:id="@+id/section_message_text_view"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@id/bill_details_text_view"
    android:layout_centerHorizontal="true"
    android:layout_marginBottom="48dp"
```

```
    android:maxLines="1"
    android:textColor="@android:color/black"
    android:textSize="18sp"
    app:layout_constraintBottom_toTopOf="@+id/bill_details_text_view"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.54"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.925"
    tools:ignore="MissingConstraints" />
```

```
</androidx.constraintlayout.widget.ConstraintLayout>
```

MainActivity.java

```
package com.example.feepaid;

import android.content.Intent;
import android.graphics.Color;
import android.os.Bundle;
import android.view.View;
import android.widget.ImageView;
import android.widget.TextView;

import androidx.activity.EdgeToEdge;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.graphics.Insets;
import androidx.core.view.ViewCompat;
import androidx.core.view.WindowInsetsCompat;

public class MainActivity extends AppCompatActivity {
    ImageView img;
    ImageView im;
    TextView te;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity_main);
        img = findViewById(R.id.imageView8);
        im = findViewById(R.id.ima);
        te=findViewById(R.id.text);

        te.setTextColor(Color.GREEN);
        img.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {

                startActivity(new Intent(MainActivity.this, MainActivity2.class));
            }
        });
    }
}
```

MainActivity2.java

```
package com.example.feepaid;

import android.annotation.SuppressLint;
import android.graphics.Color;
import android.os.Bundle;
import android.view.View;
import android.widget.TextView;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity2 extends AppCompatActivity {
    private TextView paidTextView;
    private TextView unpaidTextView;
    private TextView billDetailsTextView;
```

```

private TextView sectionMessageTextView;

@SuppressLint("MissingInflatedId")
@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main2);

    paidTextView = findViewById(R.id.textView15);
    unpaidTextView = findViewById(R.id.textView16);
    billDetailsTextView = findViewById(R.id.bill_details_text_view);
    sectionMessageTextView = findViewById(R.id.section_message_text_view);

    paidTextView.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {

            displayBillInformation(true);

            sectionMessageTextView.setText("You are in the Paid section.");
            sectionMessageTextView.setTextColor(Color.RED);

            paidTextView.setTextColor(Color.RED);

            unpaidTextView.setTextColor(Color.BLACK);
        }
    });

    unpaidTextView.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            displayBillInformation(false);
            sectionMessageTextView.setText("You are in the Unpaid section.");
            sectionMessageTextView.setTextColor(Color.GREEN);
            unpaidTextView.setTextColor(Color.RED);
            paidTextView.setTextColor(Color.BLACK);
        }
    });
}

private void displayBillInformation(boolean isPaid) {
    String[] billNumbers;
    String[] names;
    String[] dates;
    String[] amounts;

    if (isPaid) {
        billNumbers = new String[]{"01", "02", "03", "04", "05"};
        names = new String[]{"RAJ", "SAMDU", "WAHAB", "SUNIL", "SUMANT"};
        dates = new String[]{"2024-04-19", "2024-04-20", "2024-04-21", "2024-04-22", "2024-04-23"};
        amounts = new String[]{"100", "200", "300", "400", "500"};
    } else {
        billNumbers = new String[]{"11", "12", "13", "14", "15"};
        names = new String[]{"ROCKY", "FATIMA", "GOLU", "HRITIK", "DHONI"};
        dates = new String[]{"2024-04-24", "2024-04-25", "2024-04-26", "2024-04-27", "2024-04-28"};
        amounts = new String[]{"600", "700", "800", "900", "1000"};
    }

    StringBuilder message = new StringBuilder();

```

```
message.append("+-----+-----+-----+-----+\n");

message.append(String.format("| %-12s | %-12s | %-12s | %-17s |\n", "Bill No.", "Name", "Date", "Amount"));

for (int i = 0; i < billNumbers.length; i++) {
    message.append(String.format("| %-12s | %-12s | %-12s | $%-11s |\n", billNumbers[i], names[i], dates[i],
amounts[i]));
}
message.append("+-----+-----+-----+-----+\n");

billDetailsTextView.setText(message.toString());
}
}
```

OUTPUT

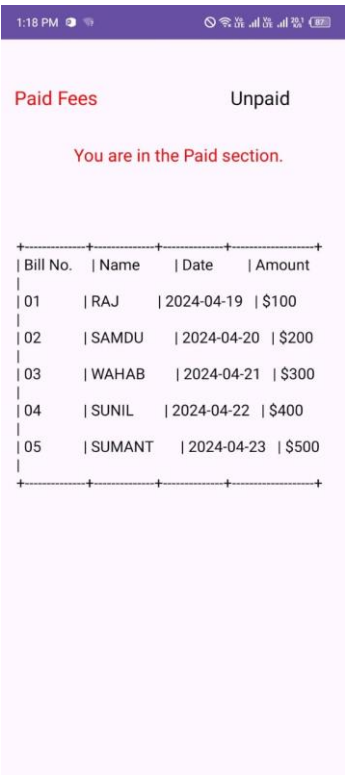
4.2 HOME



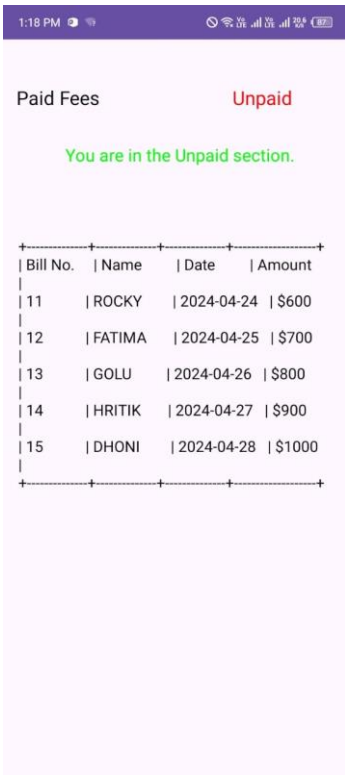
SHOW PAID & UNPAID FEES



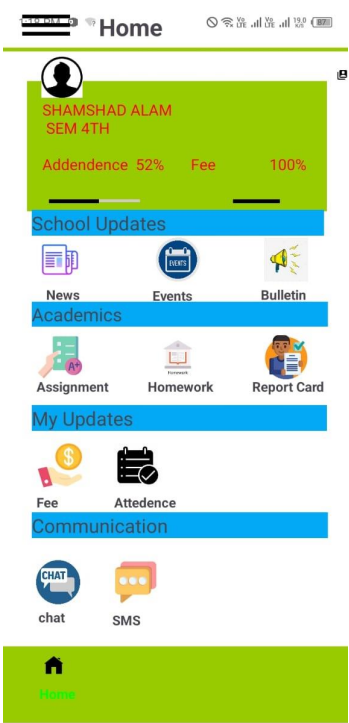
check paid fees



Check unpaid fee



Back to home



CONCLUSION

In conclusion, the development and enhancement of the fee management application signify a significant step towards improving efficiency and transparency in fee-related processes within educational institutions. By leveraging technology and incorporating user-centric features, the application aims to streamline fee management, promote timely payments, and provide valuable insights for administrators, parents, and students alike. As the application evolves, it will continue to adapt to the changing needs of users and the educational landscape, ensuring a seamless and intuitive experience for all stakeholders involved. With ongoing innovation and refinement, the fee management application stands poised to make a lasting impact on fee administration and contribute to the overall advancement of educational institutions.

REFERENCES

- <https://developer.android.com/docs>
- <https://square.github.io/retrofit/>
- <https://github.com/topics/android-sample>
- [Youtube \(youtube.com\)](https://www.youtube.com)

ASSESSMENT

Internal:

SL NO	RUBRICS	FULL MARK	MARKS OBTAINED	REMARKS
1	Understanding the relevance, scope and dimension of the project	10		
2	Methodology	10		
3	Quality of Analysis and Results	10		
4	Interpretations and Conclusions	10		
5	Report	10		
	Total	50		

Date:

Signature of the Faculty

COURSE OUTCOME (COs)

ATTAINMENT

Expected Course Outcomes (COs):

(Refer to COs Statement in the Syllabus)

1. Introduction to the Android platform for Mobile Application Development.
2. Understand Native Android Application, Android SDK features, Android Virtual Device (AVD), SDK manager, The Android Application Lifecycle.
3. Introduction Android Database, Introduction SQLite, and Content value working with SQLite Databases.

Course Outcome Attained:

How would you rate your learning of the subject based on the specified COs?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1	2	3	4	5	6	7	8	9	10

LOW

HIGH

Learning Gap (if any):

NO GAP.

Books / Manuals Referred:

1. Head First Android Development
 2. http://yuliana.lecturer.pens.ac.id/Android/Buku/professional_android_4_application_development.pdf
-
-



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