



# **PROJECT REPORT**

**ACADEMIC INFORMATION SYSTEM**

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## **PROBLEM STATEMENT**

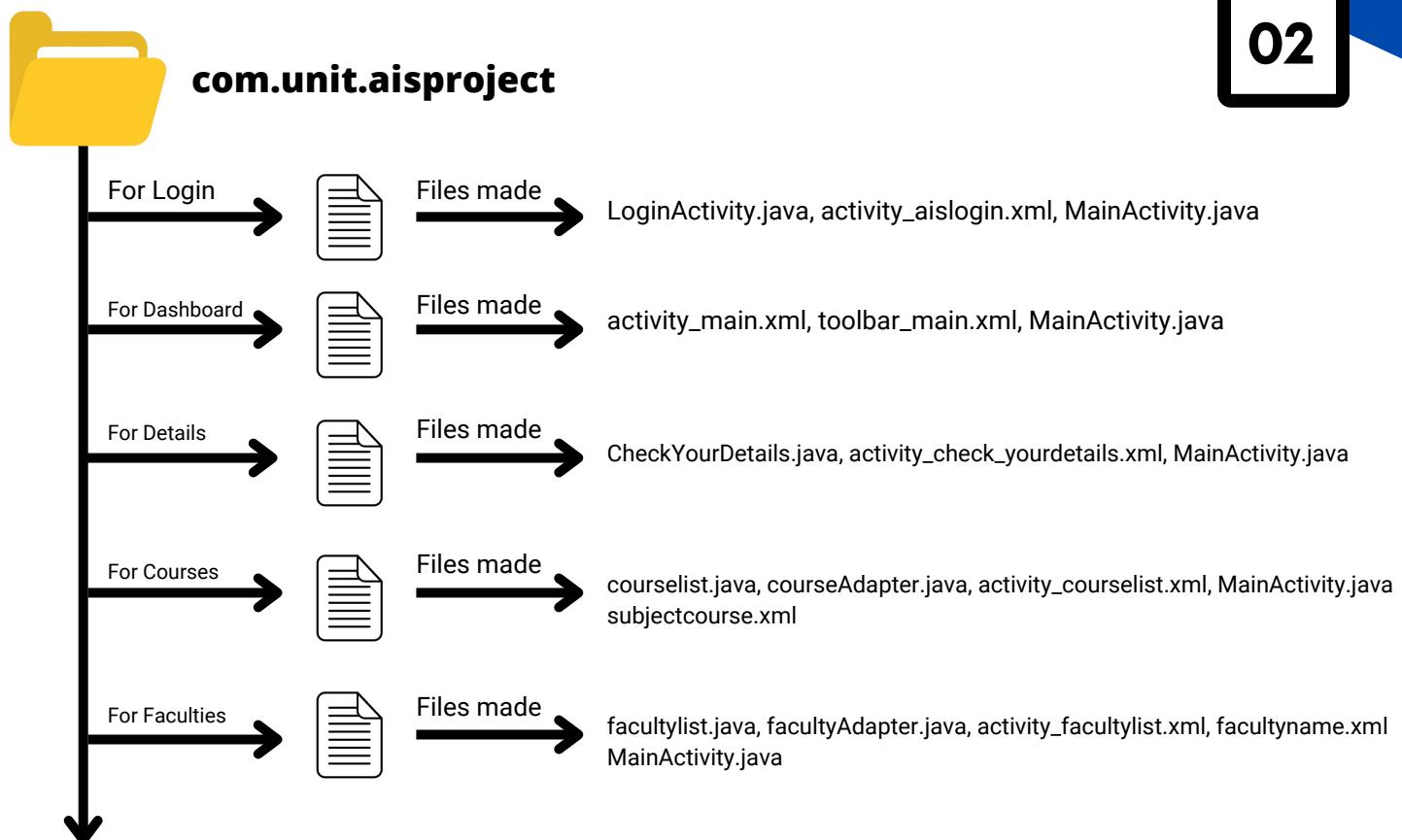
Build an android application containing the login page of the student followed by the interior page which stores basic details about the student, Courses that the student is going to study in the following years, Faculties in the University, about the XIM University, Feedback to the developer, Result of the students i.e. grades and credits, Queries, Developers detail and the logout tab.

## **RELEVENCE**

Academic Information System is software which is used to present and organize information related to the administration of academic activities. With the use of software, academic administration activities is expected to be managed properly and the required information can be obtained easily and quickly. Through the Academic Information System (AIS) that students can see the grade, courses which they're enrolled into or which they've been studying, and also the percentage of the absence and presence in the class of the students as well as other data related to the students' academic record. The data presented may vary between academic bodies.

# OVERALL PROJECT PLAN

02



The overall plan to develop an **AIS Android Application** was to **create a login page** which would have **two input fields Username/Email, Password**. Whilst logging in, the **Firebase console** would **authenticate the user to further proceed to his/her personalized dashboard**. Then on, the user would be provided options to view his/her **details**, view the **Courses** which he/she has studied or is currently pursuing, the **Faculties** with which he/she was associated or is currently associated, which also allows the user to **provide Feedback and Ask a Question using Email Addressing mechanism**. Few static CardViews such as **Result** is present which can be further developed to incorporate the results of a particular student. Followed by this is a **Logout** button which would return the user to the Login Page/Activity.

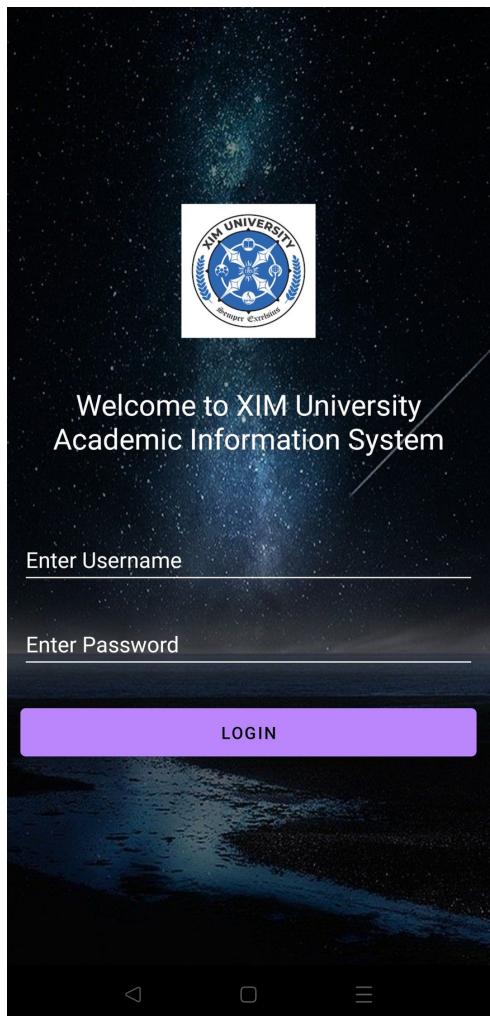
## TOOLS USED



## TECHNOLOGIES USED



# SCREENSHOTS



This is the initial and main pathway to access the AIS, where a user need to enter his/her Credentials which will be User ID and Password. Which would then be authenticated and authorized from the firebase and would be allowed to enter into his/her personalized dashboard.

**SCREENSHOT #1**

# CODE SNIPPET FOR SCREENSHOT #1

05

## aislogin.java

```
public class aislogin extends AppCompatActivity {  
  
    @Override  
    protected void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
        setContentView(R.layout.activity_aislogin);  
  
        Button btn = (Button) findViewById(R.id.idBtnLogin);  
  
        btn.setOnClickListener(new View.OnClickListener() {  
            @Override  
            public void onClick(View v) {  
                startActivity(new Intent(aislogin.this,MainActivity.class));  
            }  
        });  
    }  
}
```

## LoginActivity.java

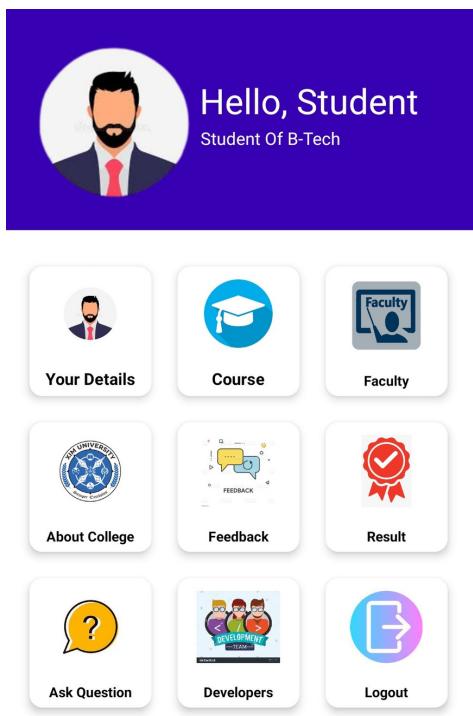
```
public class LoginActivity extends AppCompatActivity {  
  
    private EditText usernameTextView, passwordTextView;  
    private Button loginBtn;  
  
    private FirebaseAuth mAuth;  
  
    @Override  
    protected void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
        setContentView(R.layout.activity_aislogin);  
  
        mAuth = FirebaseAuth.getInstance();  
  
        usernameTextView = findViewById(R.id.idEdtUserName);  
        passwordTextView = findViewById(R.id.idEdtPassword);  
        loginBtn = findViewById(R.id.idBtnLogin);  
  
        loginBtn.setOnClickListener(new View.OnClickListener() {  
            @Override  
            public void onClick(View v)  
            {  
                loginUserAccount();  
            }  
        });  
    }  
}
```

# CODE SNIPPET FOR SCREENSHOT #1 CONTINUED

LoginActivity.java

06

```
private void loginUserAccount() {  
  
    String username, password;  
    username = usernameTextView.getText().toString();  
    password = passwordTextView.getText().toString();  
  
    if (TextUtils.isEmpty(username)) {  
        Toast.makeText(getApplicationContext(), "Please enter email!!", Toast.LENGTH_LONG).show();  
        return;  
    }  
  
    if (TextUtils.isEmpty(password)) {  
        Toast.makeText(getApplicationContext(), "Please enter password!!", Toast.LENGTH_LONG).show();  
        return;  
    }  
  
    mAuth.signInWithEmailAndPassword(username, password)  
        .addOnCompleteListener(  
            new OnCompleteListener<AuthResult>() {  
                @Override  
                public void onComplete(  
                    @NonNull Task<AuthResult> task) {  
                    if (task.isSuccessful()) {  
                        Toast.makeText(getApplicationContext(), "Login successful!!", Toast.LENGTH_LONG).show();  
  
                        Intent intent = new Intent(LoginActivity.this, MainActivity.class);  
                        startActivity(intent);  
                    }  
                    else {  
                        Toast.makeText(getApplicationContext(), "Login failed!!", Toast.LENGTH_LONG).show();  
                    }  
                }  
            }  
        );  
    }  
}
```



Users would be able to view the tasks allotted to him/her by their college administrator.

User requests for the desired data from the database and processes it to be displayed to the users as an end result.

# CODE SNIPPET FOR SCREENSHOT #2

## MainActivity.java

08

```
public class MainActivity extends AppCompatActivity implements View.OnClickListener {  
  
    @Override  
    protected void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
        setContentView(R.layout.activity_main);  
  
        CardView details = findViewById(R.id.details);  
        CardView course = findViewById(R.id.course);  
        CardView faculty = findViewById(R.id.faculty);  
        CardView feedback = findViewById(R.id.feedback);  
        CardView result = findViewById(R.id.result);  
        CardView question = findViewById(R.id.question);  
        CardView support = findViewById(R.id.support);  
        CardView logout = findViewById(R.id.logout);  
  
        details.setOnClickListener(this);  
        course.setOnClickListener(this);  
        faculty.setOnClickListener(this);  
        feedback.setOnClickListener(this);  
        result.setOnClickListener(this);  
        question.setOnClickListener(this);  
        support.setOnClickListener(this);  
        logout.setOnClickListener(this);  
  
        CardView aboutcollege;  
        aboutcollege = findViewById(R.id.aboutcollege);  
  
        aboutcollege.setOnClickListener(new View.OnClickListener() {  
            @Override  
            public void onClick(View view) {  
                Intent browserIntent = new Intent(Intent.ACTION_VIEW, Uri.parse("http://www.xim.edu.in"));  
                startActivity(browserIntent);  
            }  
        });  
    }  
}
```

# CODE SNIPPET FOR SCREENSHOT #2

09

```
@Override
public void onClick(View v) {
    switch (v.getId()) {
        case R.id.details:
            Intent details = new Intent(MainActivity.this, CheckYourdetails.class);
            startActivity(details);
            break;

        case R.id.course:
            Toast.makeText(this, "Viewing Your Course", Toast.LENGTH_SHORT).show();
            Intent courses = new Intent(MainActivity.this, courselist.class);
            startActivity(courses);
            break;

        case R.id.faculty:
            Toast.makeText(this, "Faculty Details", Toast.LENGTH_SHORT).show();
            Intent faculty = new Intent(MainActivity.this, facultylist.class);
            startActivity(faculty);
            break;

        case R.id.aboutcollege:
            Toast.makeText(this, "Opening College Website...", Toast.LENGTH_LONG).show();
            break;

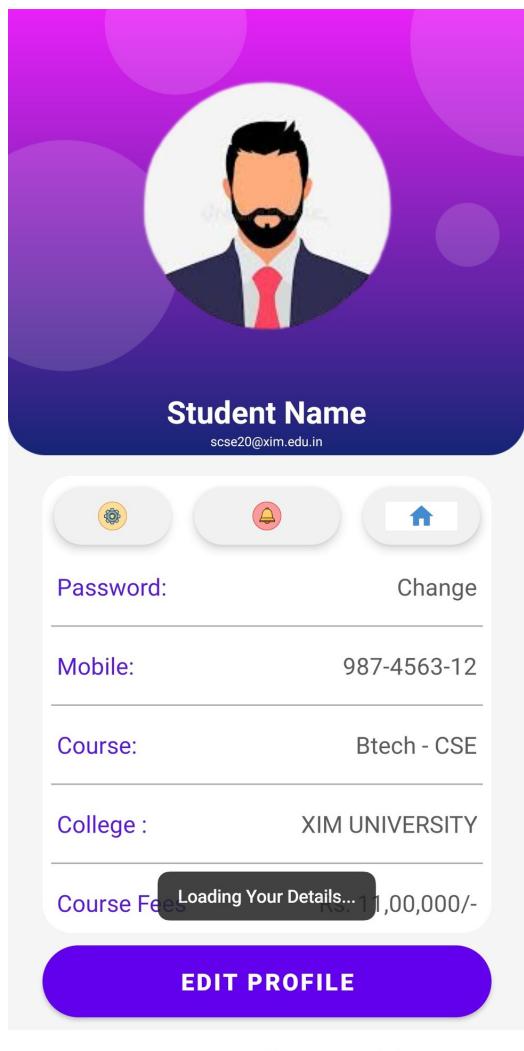
        case R.id.feedback:
            Toast.makeText(this, "Loading Feedback", Toast.LENGTH_SHORT).show();
            break;

        case R.id.result:
            Toast.makeText(this, "Loading Result...", Toast.LENGTH_SHORT).show();
            break;

        case R.id.question:
            Toast.makeText(this, "Ask Question...", Toast.LENGTH_SHORT).show();
            break;

        case R.id.support:
            Toast.makeText(this, "Support", Toast.LENGTH_LONG).show();
            break;

        case R.id.logout:
            Toast.makeText(this, "Logged Out...", Toast.LENGTH_LONG).show();
            Intent logout = new Intent(MainActivity.this, aislogin.class);
            startActivity(logout);
            break;
    }
}
```



The user would enter into his/her personalized dashboard by clicking on the Your Details button and move to the Edit Profile Activity which would enable him to edit his/her editable information e.g., Mobile Number, Name, etc.

Under Edit Profile Activity, various fields should be enlisted which should be segregated from each other as Editable and Non - Editable fields e.g., Course, Course Fees.

Toast as a message will be shown :  
**"Loading Your Details"**

# CODE SNIPPET FOR SCREENSHOT #3

## CheckYourDetails.java

11

```
public class CheckYourdetails extends AppCompatActivity {

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

        ImageButton btn = (ImageButton) findViewById(R.id.detailhomeimg);

        btn.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                startActivity(new Intent(CheckYourdetails.this,MainActivity.class));
            }
        });
    }
}
```



The user would enter into his/her faculty details section by clicking on the Faculty Details button and it will move to the faculty list activity.

Toast as a message will be shown :  
**"Loading Faculty Details"**

# CODE SNIPPET FOR SCREENSHOT #4

## courselist.java

13

```
public class courselist extends AppCompatActivity {
    ListView listView;

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

        listView = findViewById(R.id.courseListV);
        List<String> title = new ArrayList<>();
        List<Integer> image = new ArrayList<>();

        title.add("C/C++ Programming\n SEM 1");
        title.add("JAVA\nSEM 2");
        title.add("DSA\nSEM 2");
        title.add("Discrete Mathematics\nSEM 2");
        title.add("Software Engineering\nSEM 5");
        title.add("FLAT\nSEM 5");
        title.add("Android Programming\nSEM 5");
        title.add("PYTHON\nSEM 2");
        title.add("Web Design\nSEM 1");
        title.add("Cyber Security\nElective");
        title.add("Artificial Intelligence\nElective");
        title.add("Machine Learning\nElective");

        image.add(R.drawable.cprogram);
        image.add(R.drawable.java);
        image.add(R.drawable.dsa);
        image.add(R.drawable.discrete);
        image.add(R.drawable.software);
        image.add(R.drawable.flat);
        image.add(R.drawable.android);
        image.add(R.drawable.python);
        image.add(R.drawable.web);
        image.add(R.drawable.cyber);
        image.add(R.drawable.ai);
        image.add(R.drawable.ml);

        courseAdapter CourseAdapter = new courseAdapter(this,title,image);
        listView.setAdapter(CourseAdapter);

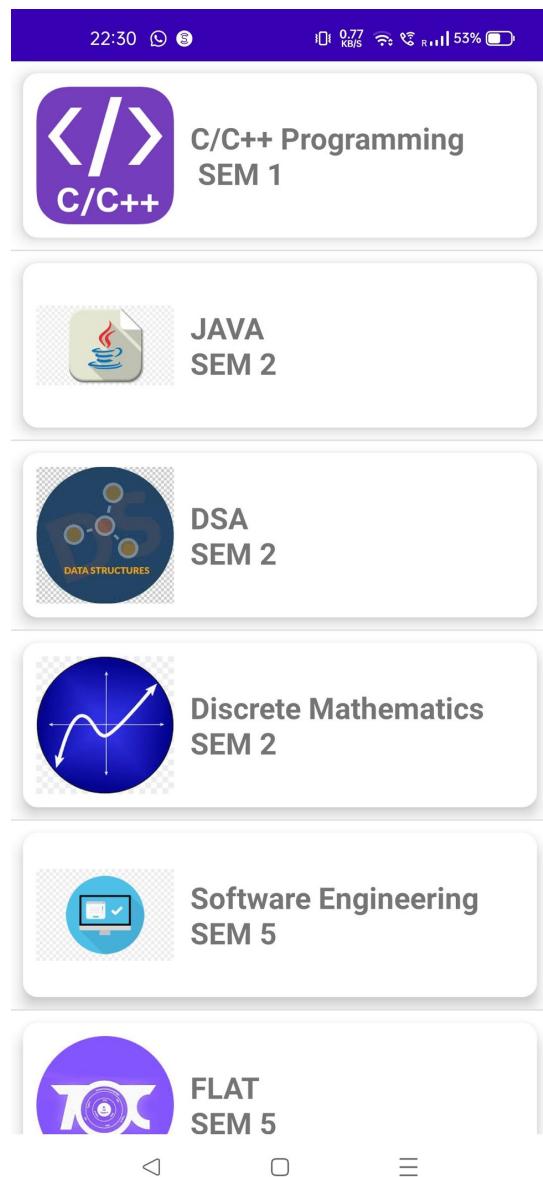
    }
}
```

# CODE SNIPPET FOR SCREENSHOT #4

## courseAdapter.java

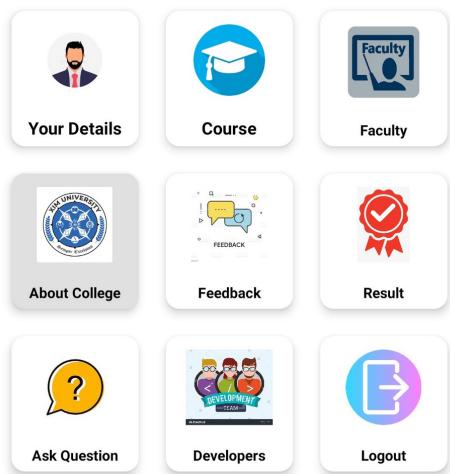
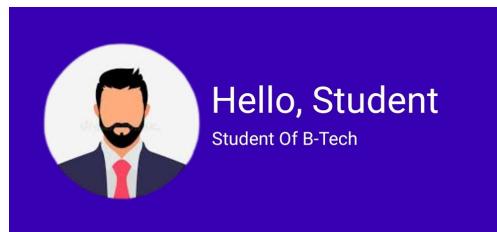
14

```
public class courseAdapter extends ArrayAdapter {  
    List<String> courseTitle;  
    List<Integer> imageLI;  
    Context context;  
    public courseAdapter(@NonNull Context context, List<String> title, List<Integer> image) {  
        super(context, R.layout.courselayout,title);  
  
        this.courseTitle = title;  
        this.imageLI = image;  
        this.context = context;  
    }  
  
    @NonNull  
    @Override  
    public View getView(int position, @Nullable View convertView, @NonNull ViewGroup parent) {  
        //return super.getView(position, convertView, parent);  
        View view = LayoutInflater.from(context).inflate(R.layout.courselayout, parent, false);  
        ImageView imageview = view.findViewById(R.id.courseimg);  
        TextView textview = view.findViewById(R.id.courseename);  
  
        textview.setText(courseTitle.get(position));  
        imageview.setImageResource(imageLI.get(position));  
        return view;  
    }  
}
```



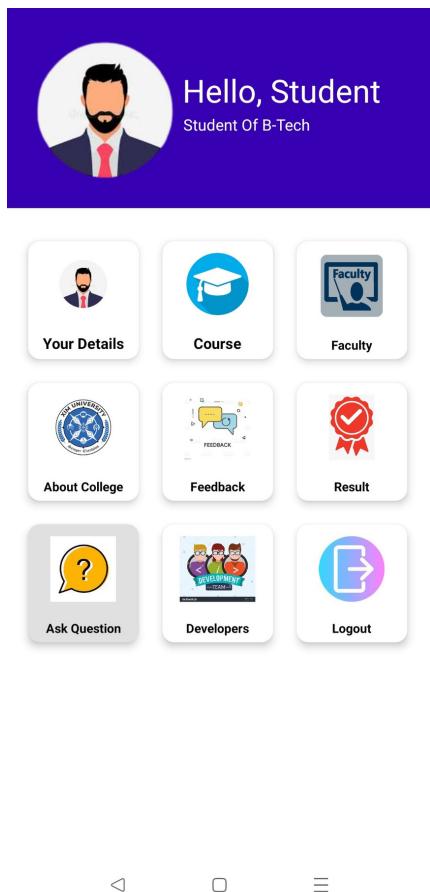
The user would enter into his/her course section by clicking on the Course button and it will move to the course list activity.

Toast as a message will be shown :  
**"Loading Your Course"**

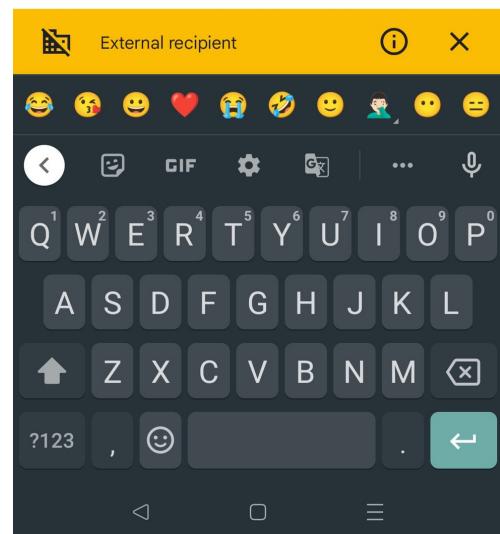
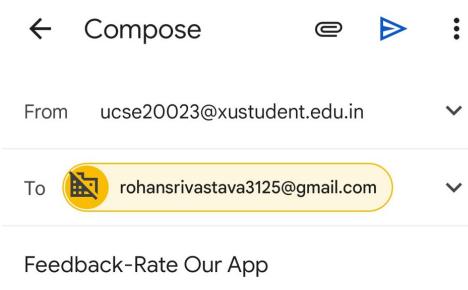


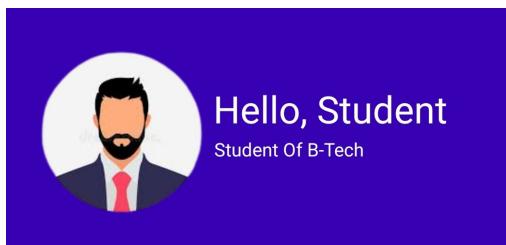
The user can know about his/her college details under the About College Button by clicking on it, which will move to the college website .

A screenshot of a mobile browser displaying the website of XIM University. The header includes a home icon, a lock icon, and the URL "xim.edu.in". Below the header is the university's logo and a search bar. The main content area features a banner for "ADMISSION 2022 OPEN FOR UNDERGRADUATE PROGRAMS" with a list of programs: B.Sc.- Mass Communication, B.Sc.-Economics, B.Tech, B.A.-LLB, B.B.A-LLB, B.Sc.- Sustainable Development, B.Sc.- Environmental Science, B.A.- Public Administration & Governance, B.Plan, B.A.-Psychology and B.A.-English. A blue button says "APPLY NOW". Below the banner is an orange "ANNOUNCEMENT" bar. The footer section is titled "ABOUT XIM UNIVERSITY" with a sub-section about the university's mission.

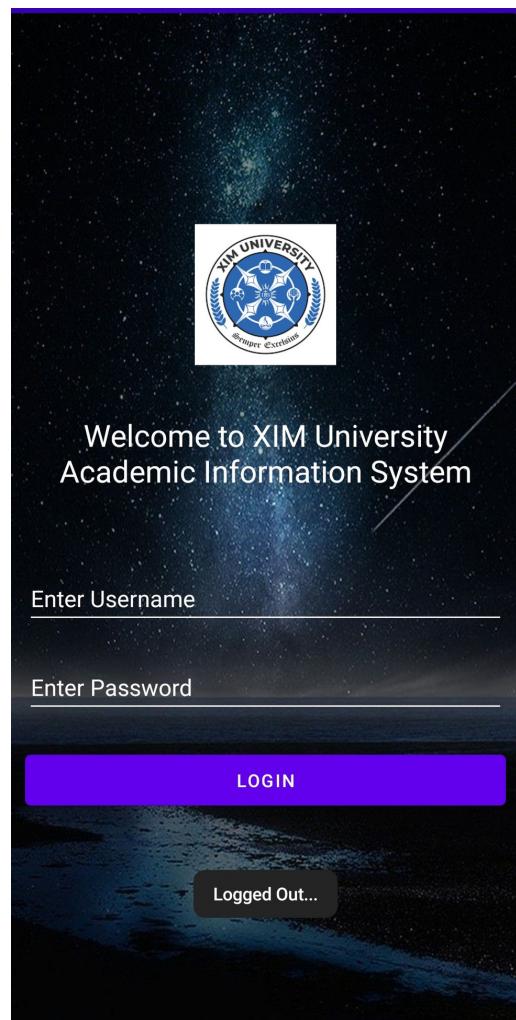


The user can raise a query related to academic and college under the Ask a Question Button by clicking on it, which will take him/her to the gmail to send the query to the college administrative.





The user would click on the log out button within the AIS Dashboard and the system would direct him to the login page thus terminating his/her session.



# REFERENCES

19

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