WWW.IJRPR.COM

International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

Study Seek

Rishabh Billore, Neeraj sharma, Ritik Bokre,Sagar Gupta

UG Student, Acropolis Institute of Technology and Research,Bhopal

ABSTRACT: -

In recent times education is one of the major thing affected due to pandemic so to make online education easier we have made an Android app design to find the perfect study group and even create your own study session. So to Help Overcome and also for future prevention.We have made an android application for students that allows you to connect to users and create and organize study groups easily.

Key-words:- ANDROID STUDIO, FIREBASE, JAVA, GPU- Graphical Processing Unit , Application

Introduction: -

"StudySeek" as the name suggest it is an android application made to connect users by creating study groups.
Due to problem like finding perfect study material or group there should be proper app to sort this out that's where StudySeek comes in help. It is an Android Studio app design to find the study group and even create your own study session.
We all wanted to create something we need in our everyday student life to make education easier and also by looking at recent times of impact on education due to pandemic.Education is one the major thing affected by covid and lockdown. Students got highly dependent on technology but there is still a lack of proper study material and study groups.
•So by this application it allows user to login and start to create a multiple study group or questions and answers insides each study group. These answers or questions are arranged based on time created or the number of votes by users.
• Study Group will be arrange in highly systematic and user friendly way so that user can easily find the group of his/her interest.

Literature Review

During recent times of Pandemic we have experience that education is one of the most affected thing.
Student and teachers got highly dependent on online study but still it is very difficult to find perfect study material or study groups so that student can interact with each other and collaborate effectively. Student and teacher interaction have been reduced a lot and students are facing loss of academics so that's why thought of the idea of an application where students can connect and interact with each other and also where teachers can interact with students and answer their doubts.
Study Seek is an application to find study groups and add and connect your buddies and create study groups also where you can mentor and study materials.
Study Seeks lets you create account and login and sign up easily and create and join different study groups according to their course and subject and also appoint mentor as well as ask questions and answer also and as well as find and post study material for your respective course or subject.

Methodology

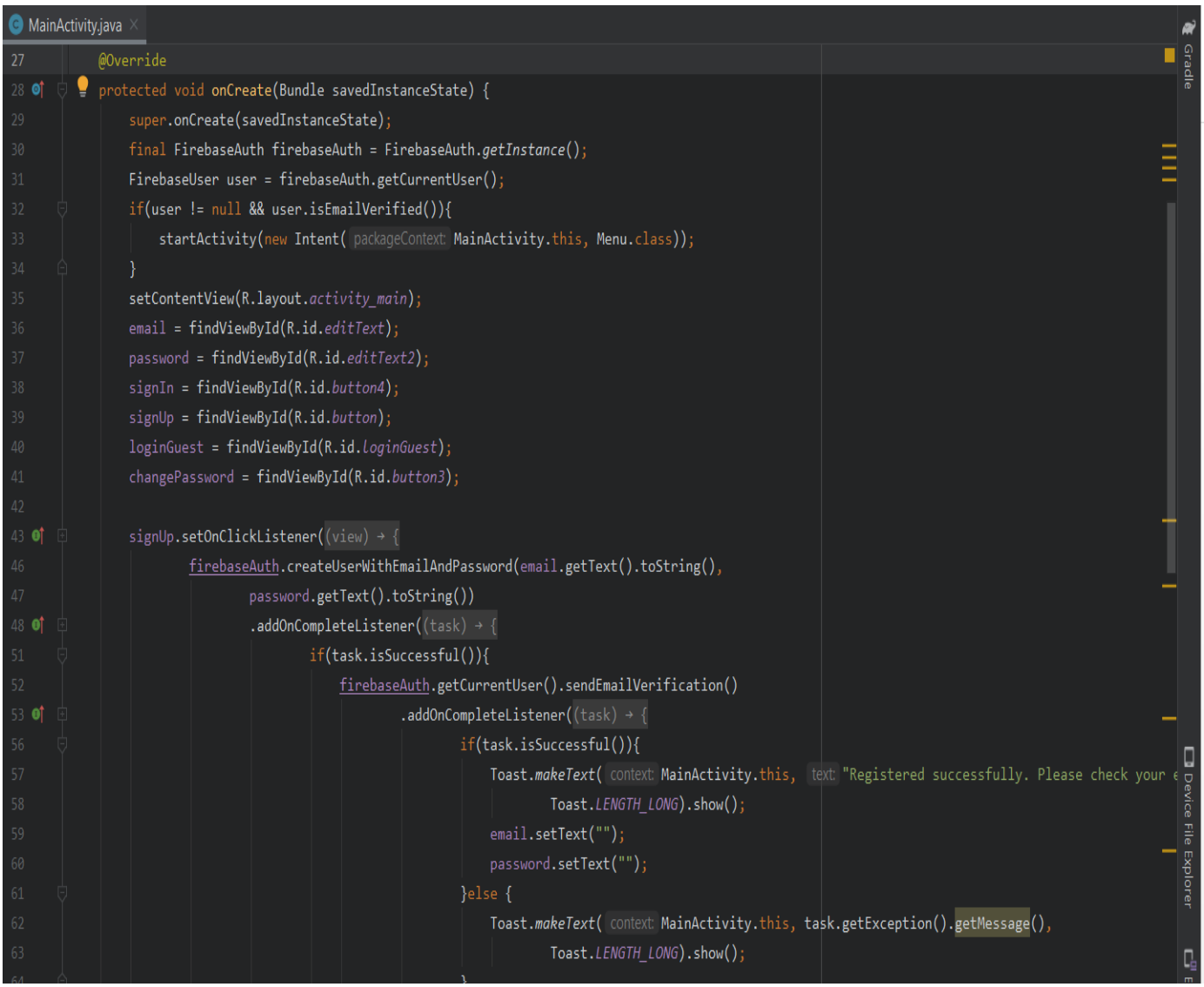
Proposed system

1. Creating Sign/Login Screen and Using firebase as database
2. Create group
3. Join Group
4. Testing

Creating Sign/Login Screen and Using firebase as database

- Material Design Sign up/login screen

We have used Java along with xml for creating the sign up and login screen and storing the user data in Firebase in android studio.



```
MainActivity.java
27      @Override
28      protected void onCreate(Bundle savedInstanceState) {
29          super.onCreate(savedInstanceState);
30          final FirebaseAuth firebaseAuth = FirebaseAuth.getInstance();
31          FirebaseUser user = firebaseAuth.getCurrentUser();
32          if(user != null && user.isEmailVerified()){
33              startActivity(new Intent( packageContext: MainActivity.this, Menu.class));
34          }
35          setContentView(R.layout.activity_main);
36          email = findViewById(R.id.editText);
37          password = findViewById(R.id.editText2);
38          signIn = findViewById(R.id.button4);
39          signUp = findViewById(R.id.button);
40          loginGuest = findViewById(R.id.loginGuest);
41          changePassword = findViewById(R.id.button3);
42
43          signUp.setOnClickListener((view) → {
46                  firebaseAuth.createUserWithEmailAndPassword(email.getText().toString(),
47                          password.getText().toString())
48                          .addOnCompleteListener((task) → {
51                                  if(task.isSuccessful()){
52                                      firebaseAuth.getCurrentUser().sendEmailVerification()
53                                              .addOnCompleteListener((task) → {
56                                                      if(task.isSuccessful()){
57                                                          Toast.makeText( context: MainActivity.this,  text: "Registered successfully. Please check your e
58                                                                  Toast.LENGTH_LONG).show();
59                                                          email.setText("");
60                                                          password.setText("");
61                                                      }else {
62                                                          Toast.makeText( context: MainActivity.this, task.getException().getMessage(),
63                                                                  Toast.LENGTH_LONG).show();
```

Figure 1: Code for Main Activity

Create Group Screen

CreateGroup.java FindGroup.java

```
12
13  public class CreateGroup extends AppCompatActivity {
14
15      @Override
16      protected void onCreate(Bundle savedInstanceState) {
17          super.onCreate(savedInstanceState);
18          setContentView(R.layout.activity_create_group);
19          final Spinner Department = findViewById(R.id.faculty);
20          final Spinner Faculty = findViewById(R.id.departament);
21          Department.setOnItemSelectedListener(new AdapterView.OnItemSelectedListener() {
22              @Override
23              public void onItemSelected(AdapterView<?> adapterView, View view, int i, long l) {
24                  if(i==0){
25                      ArrayAdapter<CharSequence> adapter = ArrayAdapter.createFromResource( context: CreateGroup.this,
26                              R.array.engineering_departments, android.R.layout.simple_spinner_item);
27                      adapter.setDropDownViewResource(android.R.layout.simple_spinner_dropdown_item);
28                      Faculty.setAdapter(adapter);
29
30                  }
31                  if(i==1){
32                      ArrayAdapter<CharSequence> adapter = ArrayAdapter.createFromResource( context: CreateGroup.this,
33                              R.array.medicine_departments, android.R.layout.simple_spinner_item);
34                      adapter.setDropDownViewResource(android.R.layout.simple_spinner_dropdown_item);
35                      Faculty.setAdapter(adapter);
36
37                  }
38                  if(i==2){
39                      ArrayAdapter<CharSequence> adapter = ArrayAdapter.createFromResource( context: CreateGroup.this,
40                              R.array.natural_science_departments, android.R.layout.simple_spinner_item);
41                      adapter.setDropDownViewResource(android.R.layout.simple_spinner_dropdown_item);
42                      Faculty.setAdapter(adapter);
43
44                  }
```

Figure 2: Code of creating group according to respective subject or stream

3.Find Group Screen

FindGroup.java

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

    Button buttonEngineer = findViewById(R.id.buttonEngineering);
    buttonEngineer.setOnClickListener(
            (v) → {
                    startActivity(new Intent( packageContext: FindGroup.this, SearchEngineer.class));
            });

    Button buttonMedicine = findViewById(R.id.buttonMedicine);
    buttonMedicine.setOnClickListener(
            (v) → {
                    startActivity(new Intent( packageContext: FindGroup.this, SearchMedicine.class));
            });
    Button buttonNatural = findViewById(R.id.buttonNatural);
    buttonNatural.setOnClickListener(
            (v) → {
                    startActivity(new Intent( packageContext: FindGroup.this, SearchNatural.class));
            });
    Button buttonBusiness = findViewById(R.id.buttonBusiness);
    buttonBusiness.setOnClickListener(
            (v) → {
                    startActivity(new Intent( packageContext: FindGroup.this, SearchBusiness.class));
            });


}
}
```

Figure 3: Code of finding group according to stream

Testing

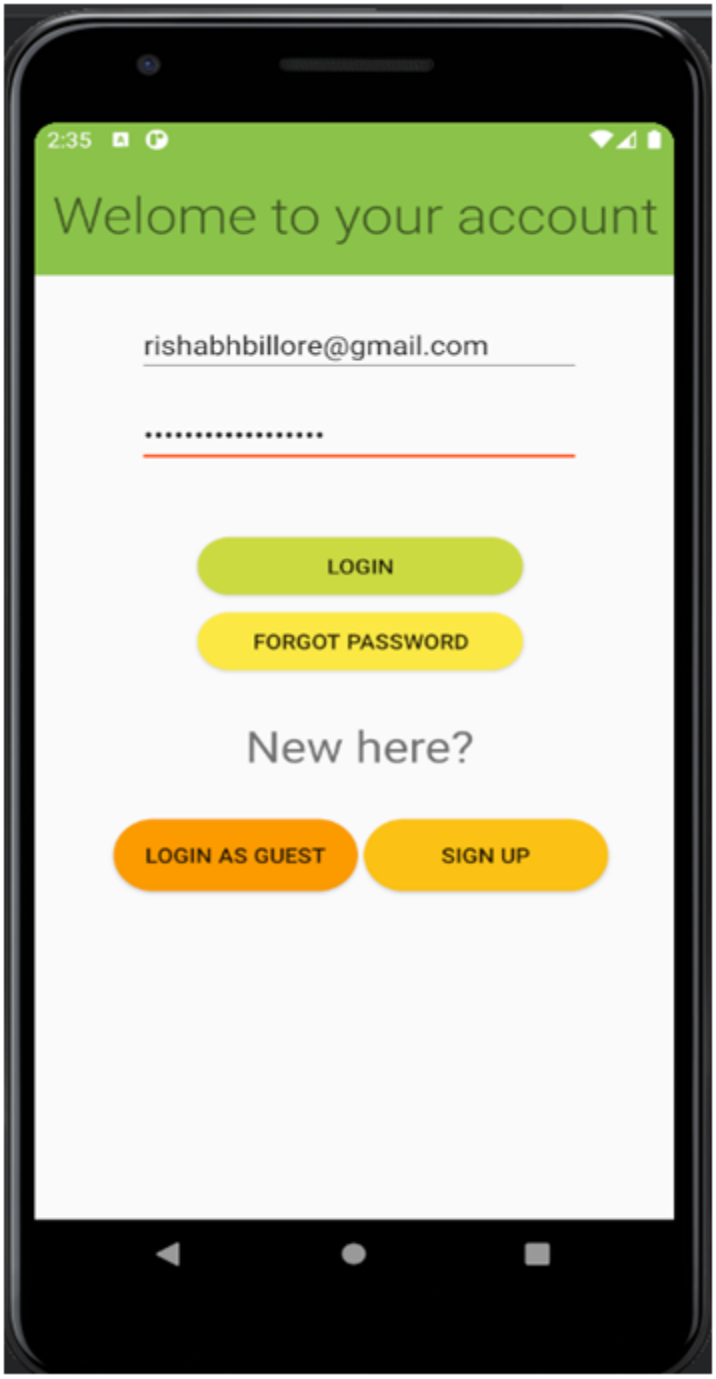
Testing is the process of evaluation of a system to detect differences between given input and expected output and also to assess the feature of the system. Testing assesses the quality of the product. It is a process that is done during the development process. .

Strategy Used

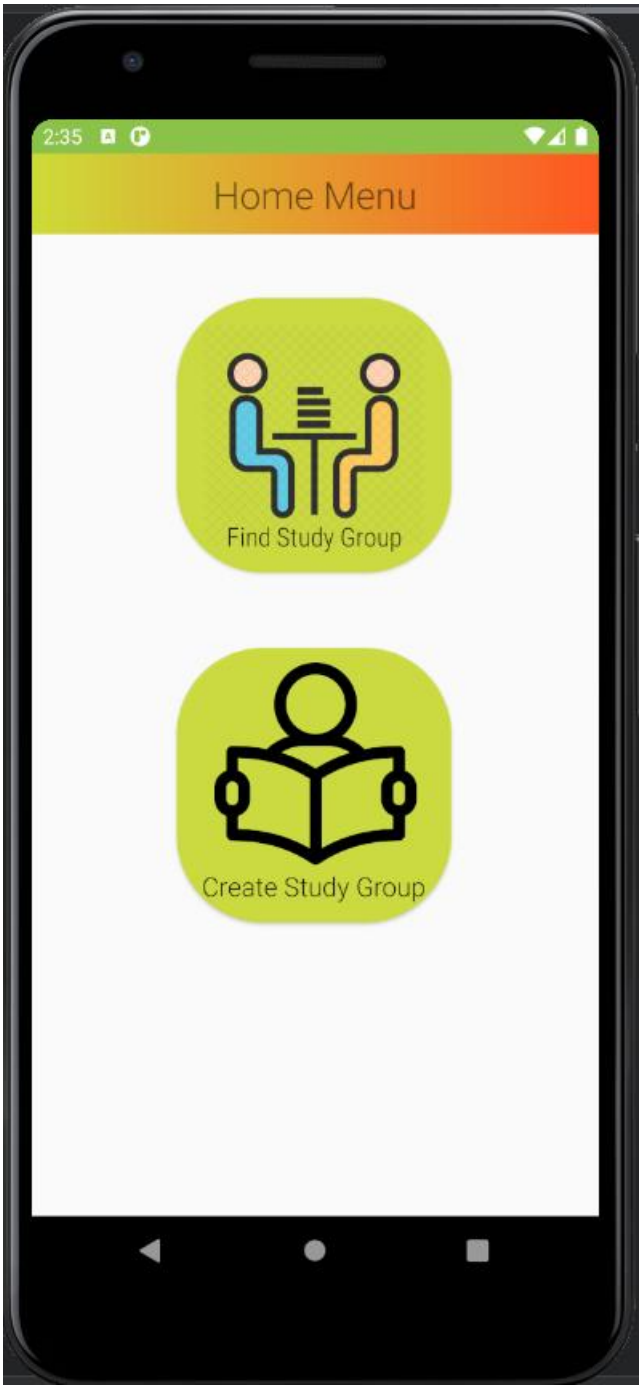
Tests can be conducted based on two approaches –
Functionality testing
Implementation

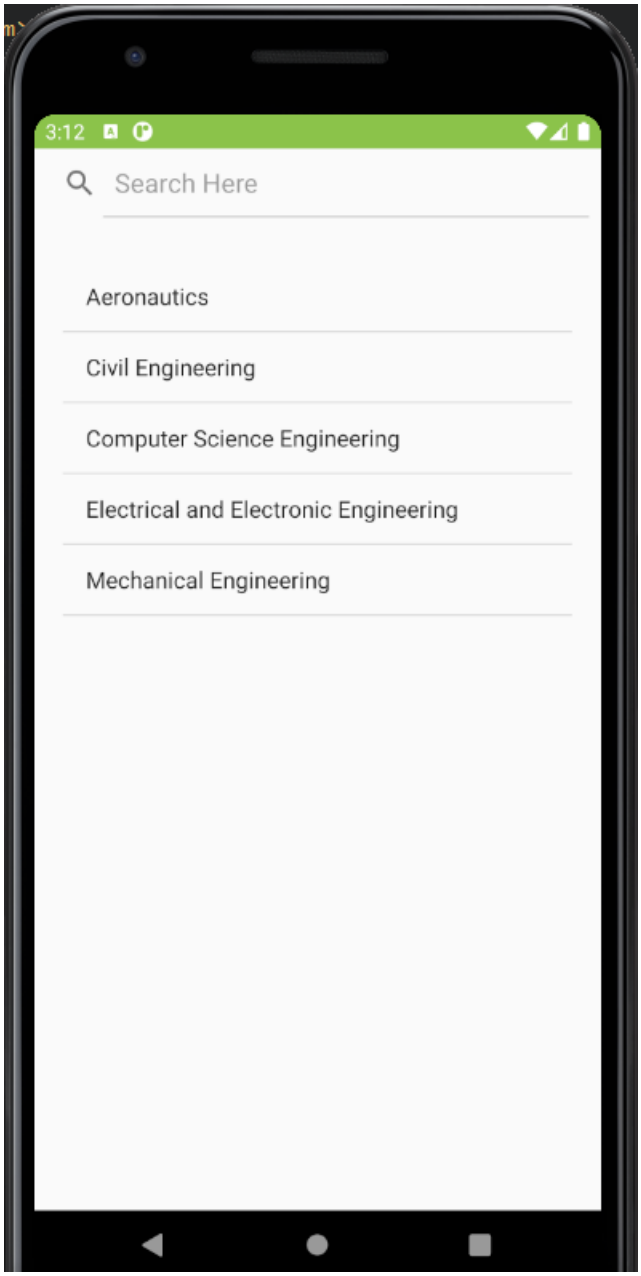
Test Case Output 1:-

LOGIN AND SIGN UP PAGE

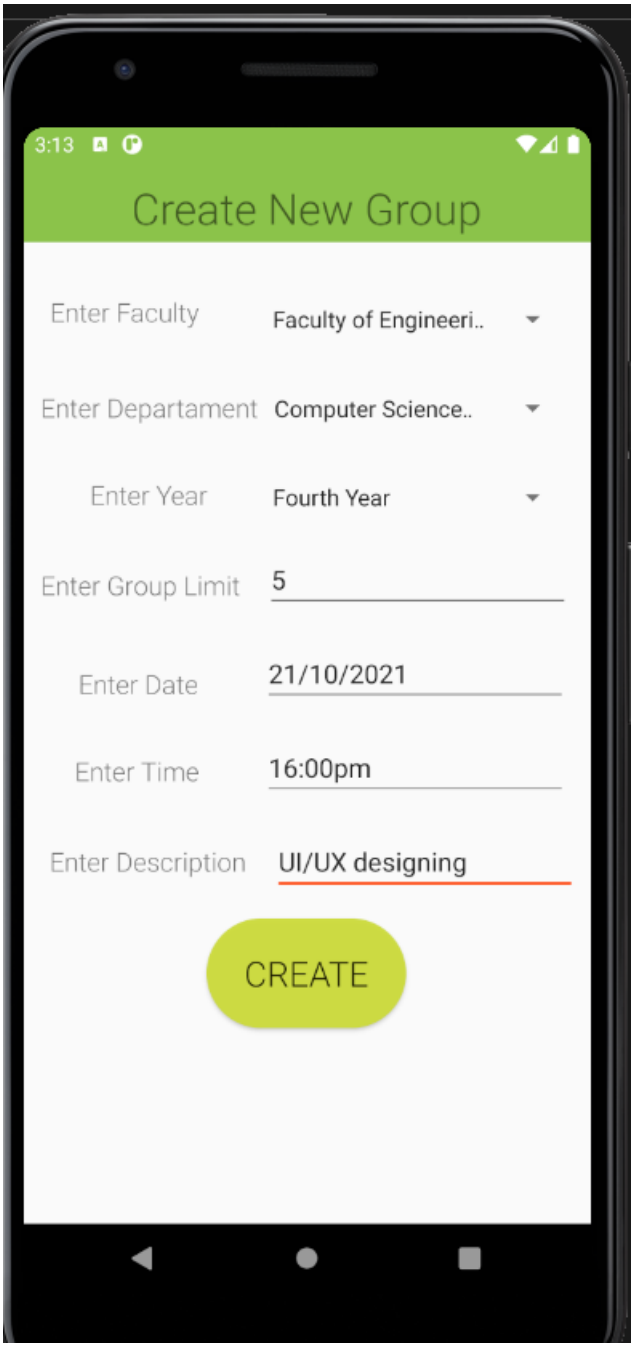


FINDING AND CREATING STUDY GROUPS





JOINING EXISTING STUDY GROUPS



CREATING NEW STUDY GROUP ACCORDING TO STREAM AND SUBJECT

Minimum Hardware used

Operating System – windows 7 or higher
Processor – Intel i3 or higher
IDE used android studio and firebase as the storage

Programming Languages: JAVA
Android Studio
XML
Firebase

Limitations: -There are some limitation like lack of quiz and chatting so that features will be added in upcoming updates like
Chat option
Quiz option
Challenge of the day option
Find mentor option
Find study room option
Track progress option

Activity diagram

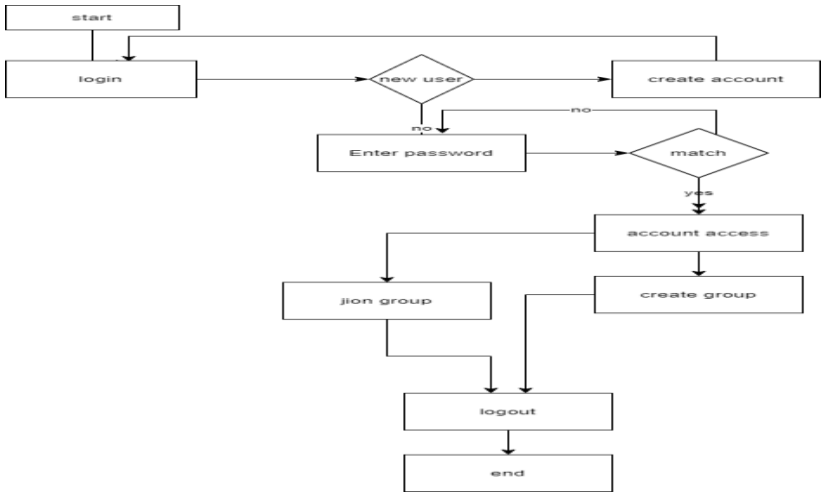


Figure 11: Activity Diagram

Result Discussion

The application allows user to login and start to create a multiple study group or questions and answers insides each study group. These answers or questions are arranged based on time created or the number of votes by users. We used Parse as our solution for the back end of the app so that multiple devices can run and see the updated questions or answers at run time.

Perfect Study Groups for particular field as per the interest.

USER FRIENDLY UI AND ORGANIZED DATATBASE

SESSION MAINTAINANCE

EFFECTIVE INTERACTION

Conclusion: -

SO this android application will surely help users to connect to study groups and ask their queries and answer other's questions and thus helping in interactive communication

To provide platform for student to connect them and study effectively
To provide collaborative platform where users can connect with different users with the same interest
To provide study material in an organized way
To provide user friendly UI for creating and searching Study groups
The main objective is to make student connect with study groups and interact easily

Acknowledgement

We thank the almighty Lord for giving me the strength and courage to sailout through the tough and reach on shoresafely.

There are number of people without whom this projects work would nothave been feasible. Their high academic standards and personal integrity provided me with continuous guidance andsupport.

We owe a debt of sincere gratitude, deep sense of reverence and respect to our guide and mentor **Prof. Krupi Saraf,** Professor, AITR, Indore for his motivation, sagacious guidance, constant encouragement, vigilant supervision and valuable critical appreciation throughout this project work, which helped us to successfully complete the project on time.

We are grateful to **our parent** and **family members** who have always loved and supported us unconditionally. To all of them, we want to say "Thank you", for being the best family that one could ever have and without whom none of this would have been possible.

References: -

[1] Introduction to Android: http://developer.android.com/guide/index.html.
[2] Android API: http://developer.android.com/reference/packages.html
[3] Java 17 API: http://docs.oracle.com/javase/6/docs/api/
[4] Android Fundamentals: http://developer.android.com/guide/components/fundamentals.html
[5] The Java Tutorials: http://docs.oracle.com/javase/tutorial/
[6] Android User Interfaces: http://developer.android.com/guide/topics/ui/index.html
[7] Layout: http://developer.android.com/guide/topics/ui/declaring-layout.html
[8] Common Tasks: http://developer.android.com/guide/appendix/faq/commontasks.html
[9] Google Maps: http://code.google.com/android/add-ons/google-apis/maps-overview.html
[10] Iconography: http://developer.android.com/guide/practices/ui_guidelines/icon_design.html
[11] Sample Source Code: http://developer.android.com/resources/samples/get.html
[12] Android Training: http://developer.android.com/training/index.html.
[13] Android Developer's Blog: http://android-developers.blogspot.com/
[14] Developer FAQ: http://developer.android.com/resources/faq/
[15] Developer Forums: http://developer.android.com/resources/community-groups.html
[16] Android Developer's Group: http://groups.google.com/group/android-developers?lnk=
[17] XDA-Developers Forums: http://forum.xda-developers.com/