



LOVELY
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CA PROJECT REPORT

on

Study Material App

Submitted by

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Course Code: CSE227

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Programme Name:Btech.CSE

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1)DESCRIPTION

In today's educational landscape, accessing high-quality study materials is essential for students to excel in their academic pursuits. To facilitate this process and offer a user-friendly experience for both learners and educators, the development of a robust study material app is paramount. Our project aims to meet this demand by creating a comprehensive study material portal with intuitive features and secure authentication.

Features Implemented:

- 1) **User Authentication:** The cornerstone of our portal is its secure user authentication system. By requiring users to enter their email and password, we ensure that only authorized individuals can access the platform, safeguarding sensitive information.
- 2) **Class List:** Users are provided with a comprehensive list of classes, enabling them to choose the specific classes they wish to study.
- 3) **Quiz:** When the users wanted to take the quiz after study they can take the quiz and result will also be shown in database
- 4) **Feedback Page:** A personalized feedback page so that user can give their feedback and server can be improved through the request.
- 5) **Application Page :** If the user wanted to study the class which is not available in the app they can send the request and class will be added as soon as possible.

2) Topics Covered

1-) Splash Screen

2-)Firebase Authentication

3-)Real time Database

4-)Card View

5-)Notification Manager

6-)Alert Dialog Box

7-)Bottom Navigation View

8-)Explicit Implicit Intent

9-)Animations

10-)Pdf View Assest

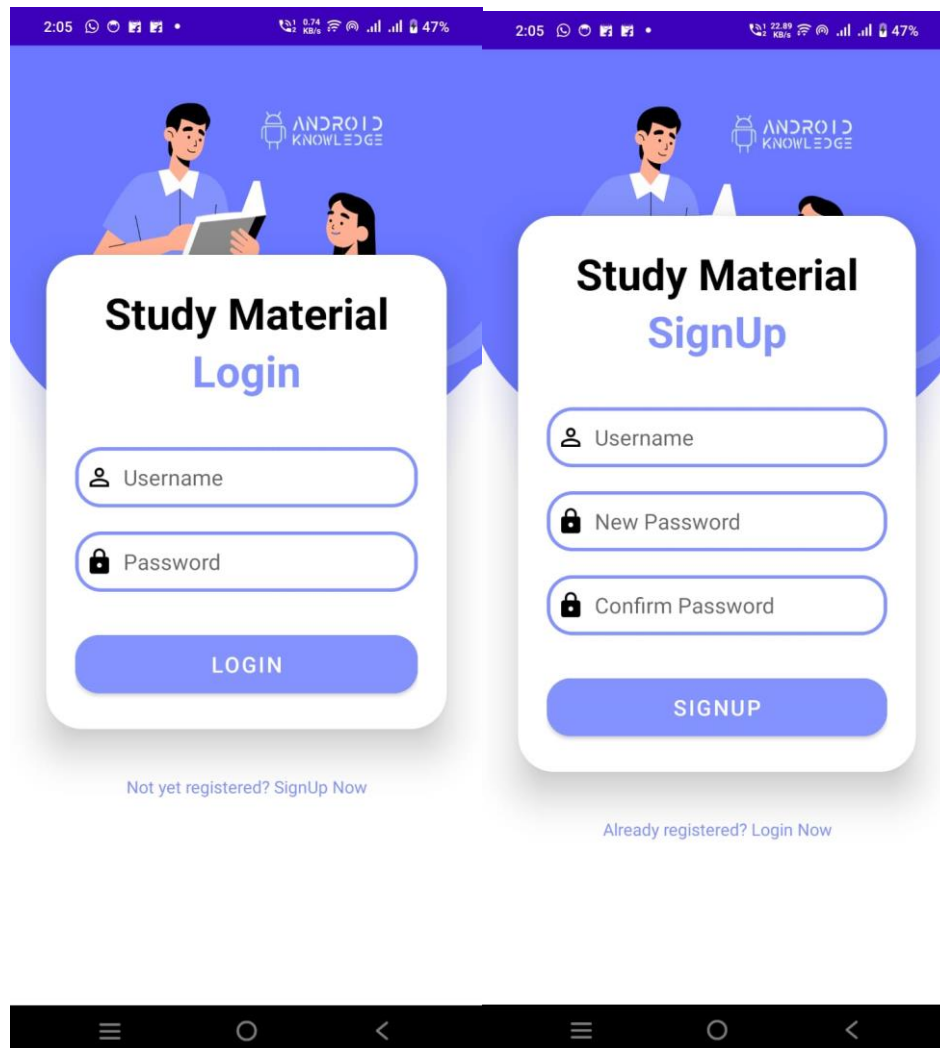
11-)Sensors

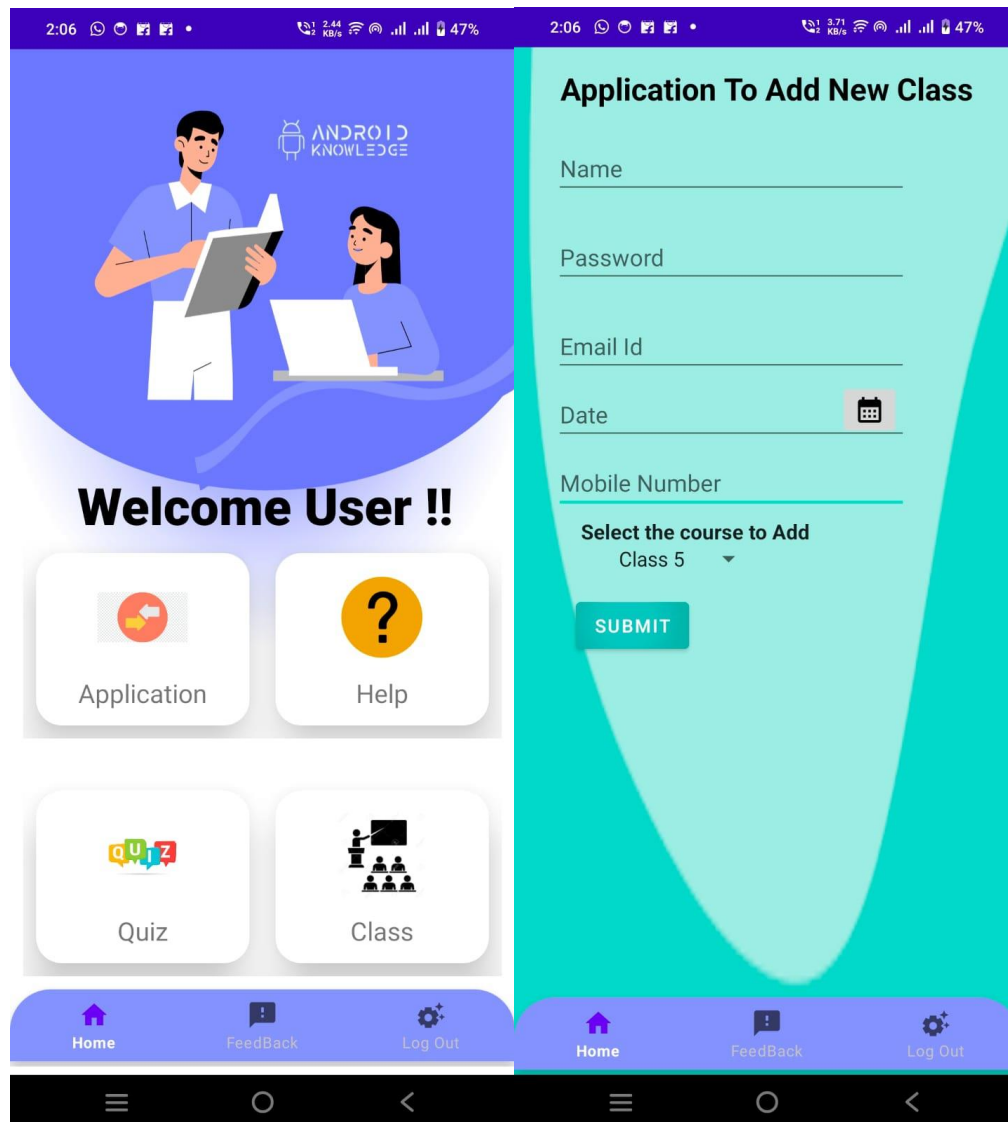
12-)Scroll View

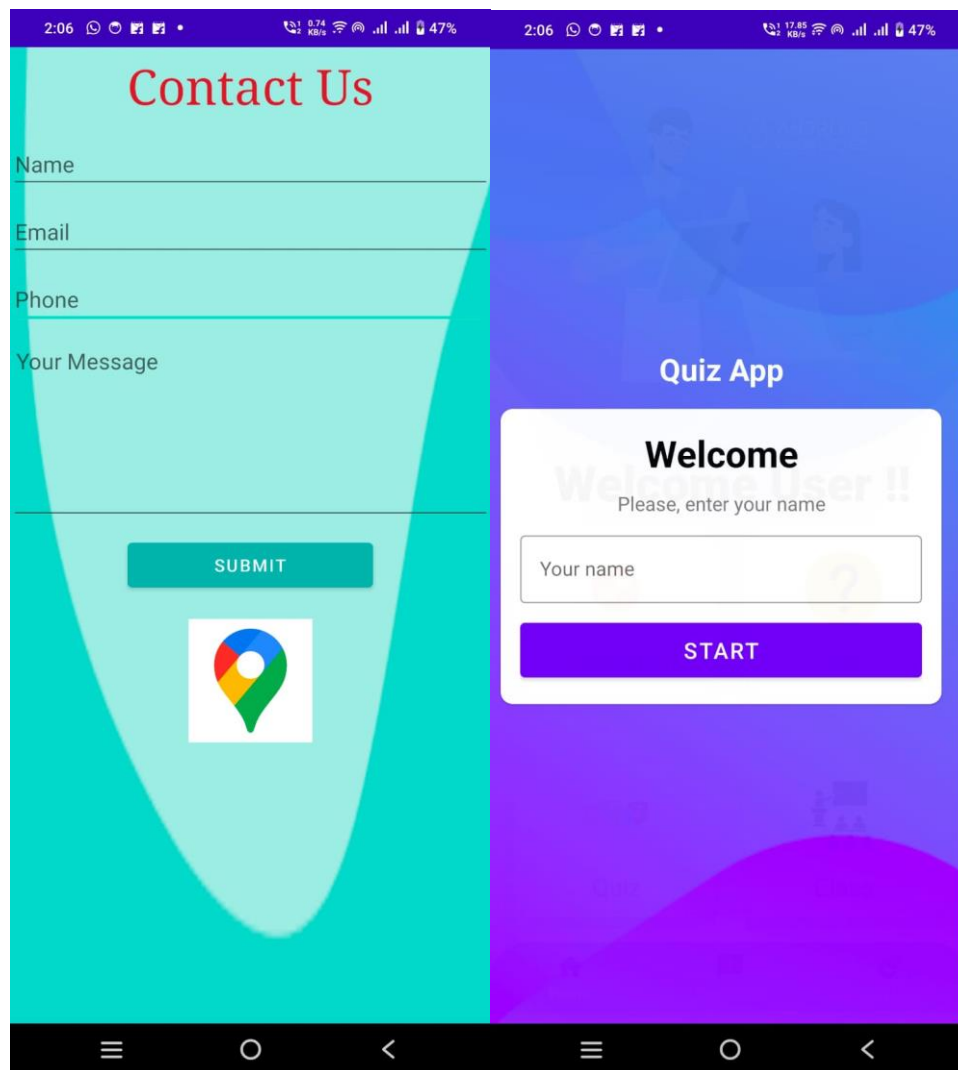
13-)Rating Bar

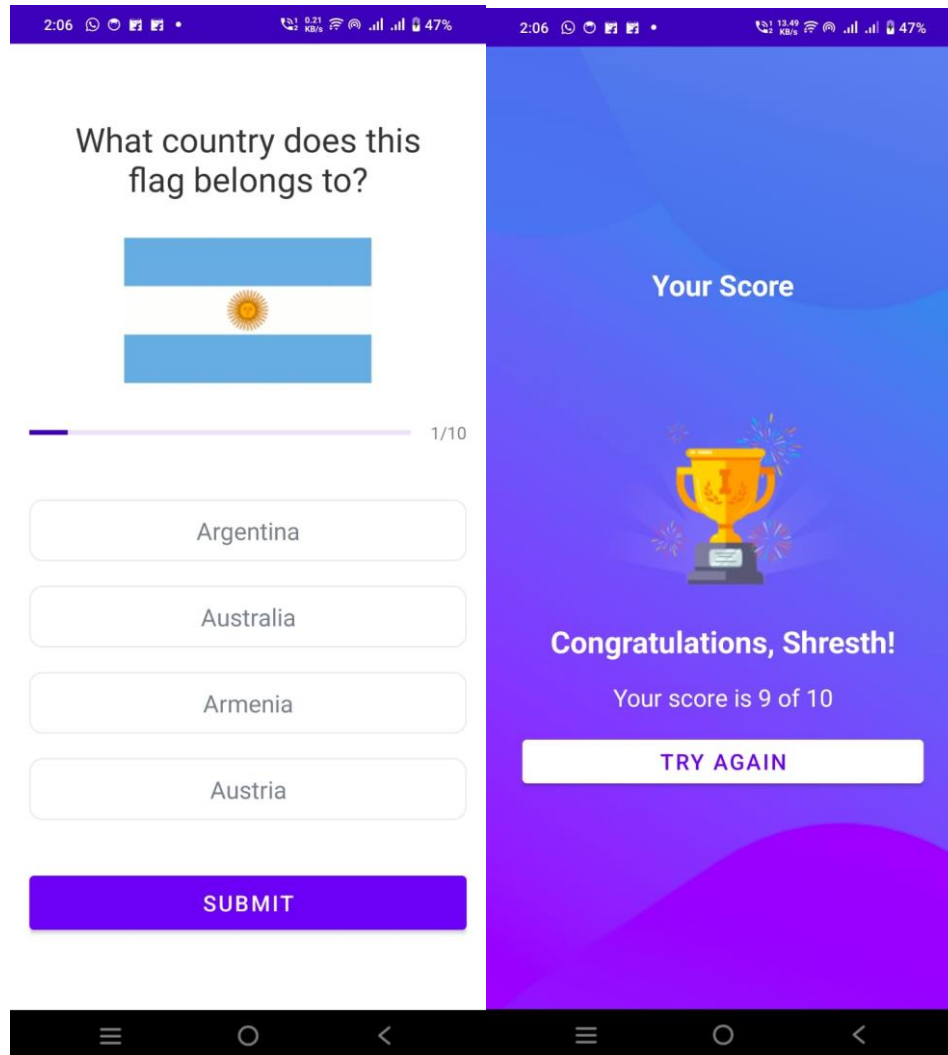
14-)Date Time Picker

Screenshots Output

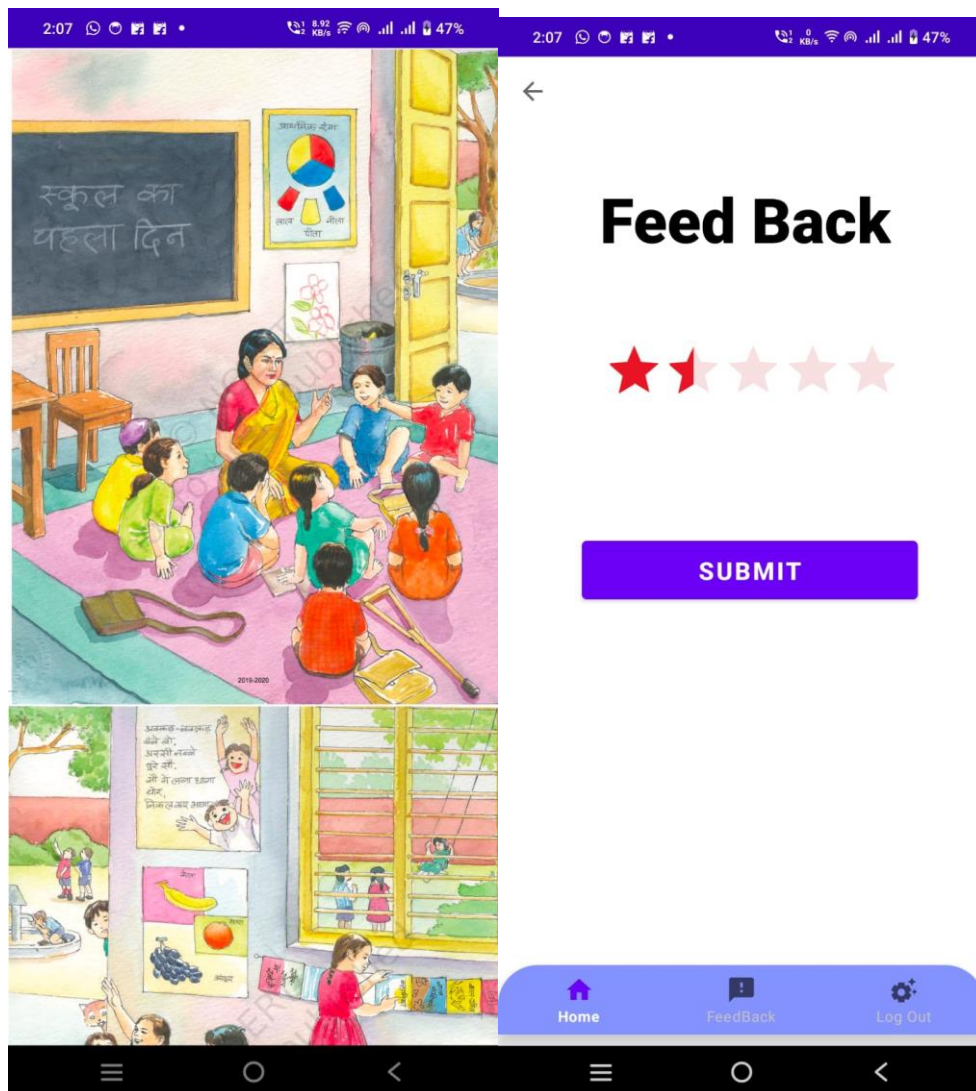


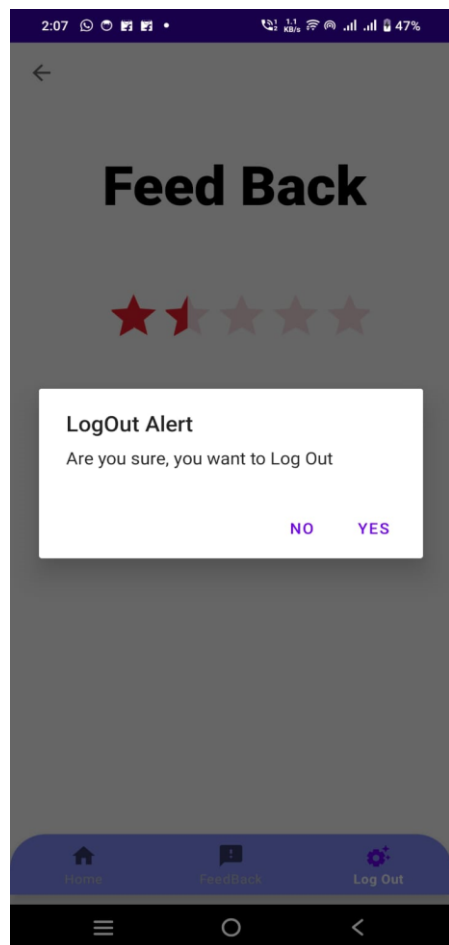












Kotlin Code

Splash Screen.kt

```
package com.example.program_transfer_management

import android.content.Intent
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.os.Handler
import android.os.Looper

class SplashScreen : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_splashscreen)
        Handler(Looper.getMainLooper()).postDelayed(
            {
                val i = Intent(this, SignInActivity::class.java)
                startActivity(i)
                finish()
            }, 3000
        )
    }
}
```

MainActivity2.kt

```
package com.example.program_transfer_management

import android.app.AlertDialog
import android.content.Context
import android.content.DialogInterface
import android.content.Intent
import android.content.res.Configuration
import android.hardware.Sensor
import android.hardware.SensorEvent
import android.hardware.SensorEventListener
import android.hardware.SensorManager
import android.os.Bundle
import android.widget.Toast
import androidx.appcompat.app.AppCompatActivity
import androidx.appcompat.app.AppCompatActivity
import androidx.appcompat.app.AppCompatActivity
import androidx.appcompat.app.AppCompatActivity
import androidx.cardview.widget.CardView
import com.google.android.material.bottomnavigation.BottomNavigationView
import com.google.firebase.auth.FirebaseAuth

class MainActivity2 : AppCompatActivity(), SensorEventListener {
    private lateinit var transfer: CardView
    private lateinit var quiz: CardView
    private lateinit var help: CardView
    private lateinit var progress: CardView
    private lateinit var bottom: BottomNavigationView
    private lateinit var auth: FirebaseAuth
    private lateinit var sensorManager: SensorManager
    private var lightSensor: Sensor? = null
```

```

override fun onCreate(savedInstanceState: Bundle?) {
    super.onCreate(savedInstanceState)
    setContentView(R.layout.activity_main2)

    initView()
    setupNavigation()

    sensorManager = getSystemService(Context.SENSOR_SERVICE) as
SensorManager
    lightSensor = sensorManager.getDefaultSensor(Sensor.TYPE_LIGHT)

    if (lightSensor == null) {
        Toast.makeText(this, "No Light Sensor Found!",
Toast.LENGTH_SHORT).show()
    }
}

private fun initView() {
    transfer = findViewById(R.id.clothingCard)
    quiz = findViewById(R.id.instructions)
    help = findViewById(R.id.help)
    progress = findViewById(R.id.progress)
    bottom = findViewById(R.id.btm)
    transfer.setOnClickListener {
        startActivity(Intent(this, programtransfer::class.java))
        overridePendingTransition(R.anim.fadein, R.anim.slideslide)
    }
    quiz.setOnClickListener {
        startActivity(Intent(this, quizmain::class.java))
        overridePendingTransition(R.anim.slideslide, R.anim.fadein)
    }
    help.setOnClickListener {
        val intent = Intent(this, contactus::class.java)
        startActivity(intent)
    }
    progress.setOnClickListener {
        val intent = Intent(this,
com.example.program_transfer_management.Class::class.java)
        startActivity(intent)
    }
}

private fun setupNavigation() {
    bottom.setOnItemSelectedListener {
        when (it.itemId) {
            R.id.firstcgpa -> {
                val intent = Intent(this, MainActivity2::class.java)
                startActivity(intent)
                true
            }
            R.id.secondcgpa -> {
                val intent = Intent(this, MainActivity3_f::class.java)
                startActivity(intent)
                true
            }
            R.id.fourthcgpa -> {
                val builder = AlertDialog.Builder(this)
                builder.setTitle("LogOut Alert")
                .setMessage("Are you sure, you want to Log Out")
            }
        }
    }
}

```

```

        .setCancelable(true)
        .setPositiveButton("Yes") { _, _ ->
            auth = FirebaseAuth.getInstance()
            auth.signOut()
            val intent = Intent(this,
SignInActivity::class.java)
            startActivity(intent)
        }
        .setNegativeButton("No") { dialogInterface, _ ->
            Toast.makeText(this, "You Have Clicked No",
Toast.LENGTH_SHORT).show()
        }
        .show()
        true
    }
    else -> true
}
}

override fun onResume() {
    super.onResume()
    sensorManager.registerListener(this, lightSensor,
SensorManager.SENSOR_DELAY_NORMAL)
}

override fun onPause() {
    super.onPause()
    sensorManager.unregisterListener(this)
}

override fun onSensorChanged(event: SensorEvent?) {
    event?.let {
        if (event.sensor.type == Sensor.TYPE_LIGHT) {
            val lux = event.values[0] // Ambient light level in lux
            if (lux < 20000) {

AppCompatActivity.setDefaultNightMode(AppCompatActivity.MODE_NIGHT_YES)
            } else {

AppCompatActivity.setDefaultNightMode(AppCompatActivity.MODE_NIGHT_NO)
            }
        }
    }
}

override fun onAccuracyChanged(sensor: Sensor?, accuracy: Int) {
}
}

```

MainActivity_3f.kt

```

package com.example.program_transfer_management

import android.app.AlertDialog
import android.content.Intent
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.widget.Button
import android.widget.RatingBar

```

```

import android.widget.Toast
import androidx.appcompat.widget.Toolbar
import com.google.android.material.bottomnavigation.BottomNavigationView
import com.google.firebase.auth.FirebaseAuth

class MainActivity3_f : AppCompatActivity() {
    lateinit var bottom: BottomNavigationView
    lateinit var auth: FirebaseAuth
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main_activity3_f)
        val simpleRatingBar = findViewById<RatingBar>(R.id.simpleRatingBar)
        var toolbar = findViewById<Toolbar>(R.id.toolbar)
        val submitButton = findViewById<Button>(R.id.submitButton)
        bottom=findViewById(R.id.btm)

        submitButton.setOnClickListener {
            val totalStars = " Total Stars: " + simpleRatingBar.numStars
            val rating = " Rating: " + simpleRatingBar.rating
            Toast.makeText(
                this, "" $totalStars$rating"".trimIndent(),
                Toast.LENGTH_LONG
            ).show()
            Toast.makeText(this, "Thank You For Your Valuable
Feedback", Toast.LENGTH_SHORT).show()
        }
        bottom.setOnItemSelectedListener {
            when(it.itemId) {
                R.id.firstcgpa->{
                    val intent=Intent(this,MainActivity2::class.java)
                    startActivity(intent)
                    true
                }
                R.id.secondcgpa->{
                    val intent=Intent(this,MainActivity3_f::class.java)
                    startActivity(intent)
                    true
                }
                R.id.fourthcgpa->{
                    val builder = AlertDialog.Builder(this)
                    builder.setTitle("LogOut Alert")
                    .setMessage("Are you sure, you want to Log Out ")
                    .setCancelable(true)
                    .setPositiveButton("Yes") {dialogInterface, which->
                        auth = FirebaseAuth.getInstance()
                        auth.signOut()
                        val intent=Intent(this,SignInActivity::class.java)
                        startActivity(intent)
                    }
                    .setNegativeButton("No") {dialogInterface, which->
                        Toast.makeText(this, "You Have Clicked
No", Toast.LENGTH_SHORT).show()
                    }
                    .show()

                    true
                }
            }
            else->true
        }
    }
}

```

```

        toolbar.setNavigationOnClickListener {
            val intent=Intent(this,MainActivity2::class.java)
            startActivity(intent)
        }
    }
}

programtransfer.kt
package com.example.program_transfer_management

import android.app.AlertDialog
import android.app.DatePickerDialog
import android.content.Intent
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.view.View
import android.widget.*
import com.google.android.material.bottomnavigation.BottomNavigationView
import com.google.firebase.auth.FirebaseAuth
import java.util.*

class programtransfer : AppCompatActivity() {
    lateinit var btnDatePicker:ImageButton
    lateinit var bottom:BottomNavigationView
    lateinit var auth: FirebaseAuth
    private var mYear:Int=0
    private var mMonth:Int=0
    private var mHour:Int=0
    private var mDay:Int=0
    private var mDate:Int=0

    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_programtransfer)
        bottom=findViewById(R.id.btm)
        btnDatePicker=findViewById(R.id.btn4)
        val editName = findViewById<EditText>(R.id.editName)
        val editPass = findViewById<EditText>(R.id.editPass)
        val editEmail = findViewById<EditText>(R.id.editEmail)
        val editDate = findViewById<EditText>(R.id.editDate)
        val editPhone = findViewById<EditText>(R.id.editPhone)
        val btn = findViewById<Button>(R.id.btn_submit)
        val res = findViewById<TextView>(R.id.res)
        val spinner = findViewById<Spinner>(R.id.dropdown)

        btnDatePicker.setOnClickListener{
            val c= Calendar.getInstance()
            mYear=c[Calendar.YEAR]
            mMonth=c[Calendar.MONTH]
            mDay=c[Calendar.DAY_OF_MONTH]
            val DatePicker = DatePickerDialog(this,
                {view,year,monthOfYear, dateOfMonth ->
                    editDate.setText(dateOfMonth.toString() + "-" + (monthOfYear+1)+"-"+year)},
                mYear,mMonth,mDate)
            DatePicker.show()
        }

        var course = arrayOf("Class 5", "Class 6", "Class 7", "Class 8", "Class
9")

```

```

var option = " "

if (spinner != null) {
    val adapter = ArrayAdapter(
        this,
        android.R.layout.simple_spinner_item, course
    )
    spinner.adapter = adapter
}

spinner.onItemSelectedListener=
    object :
        AdapterView.OnItemSelectedListener {
            override fun onItemSelected(
                parent: AdapterView<*>,
                view: View, position: Int, id: Long
            ) {
                option = course[position]
            }

            override fun onNothingSelected(p0: AdapterView<*>?) {
            }
        }

btn.setOnClickListener()
{
    val t1 = editName.text.toString()
    val t2 = editPass.text.toString()
    val t3 = editEmail.text.toString()
    val t4 = editDate.text.toString()
    val t5 = editPhone.text.toString()
    if (t1.isEmpty() || t2.isEmpty() ||
        t3.isEmpty() || t4.isEmpty() || t5.isEmpty())
    {
        res.text = "Enter All The Values"
    } else {
        val intent = Intent(this, programtransfer2::class.java)
        intent.putExtra("name", t1)
        intent.putExtra("pass", t2)
        intent.putExtra("email", t3)
        intent.putExtra("date", t4)
        intent.putExtra("phone", t5)
        intent.putExtra("cou", option)
        startActivity(intent)
    }
}

bottom.setOnItemSelectedListener {
    when(it.itemId) {
        R.id.firstcgpa->{
            val intent=Intent(this,MainActivity2::class.java)
            startActivity(intent)
            true
        }
        R.id.secondcgpa->{
            val intent=Intent(this,MainActivity3_f::class.java)
            startActivity(intent)
            true
        }
        R.id.fourthcgpa->{

```



```

private lateinit var binding: ActivitySignInBinding
private lateinit var firebaseAuth: FirebaseAuth

override fun onCreate(savedInstanceState: Bundle?) {
    super.onCreate(savedInstanceState)
    binding = ActivitySignInBinding.inflate(layoutInflater)
    setContentView(binding.root)

    firebaseAuth = FirebaseAuth.getInstance()

    binding.signupText.setOnClickListener {
        val intent = Intent(this, Signup::class.java)
        startActivity(intent)
    }

    binding.loginButton.setOnClickListener {
        val email = binding.username.text.toString()
        val pass = binding.password.text.toString()

        if (email.isNotEmpty() && pass.isNotEmpty()) {
            firebaseAuth.signInWithEmailAndPassword(email,
pass).addOnCompleteListener { task ->
                if (task.isSuccessful) {
                    val intent = Intent(this, MainActivity2::class.java)
                    startActivity(intent)
                } else {
                    Toast.makeText(this, task.exception?.message ?: "Sign
in failed", Toast.LENGTH_SHORT).show()
                }
            }
        } else {
            Toast.makeText(this, "Empty Fields Are not Allowed !!",
Toast.LENGTH_SHORT).show()
        }
    }
}

override fun onStart() {
    super.onStart()

    if (firebaseAuth.currentUser != null) {
        val intent = Intent(this, MainActivity2::class.java)
        startActivity(intent)
        finish()
    }
}
}

```

Signup.kt

```
package com.example.program_transfer_management
```

```

import android.content.Intent
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.widget.Button
import android.widget.Toast
import com.example.program_transfer_management.databinding.ActivitySignupBinding
import com.google.firebase.auth.FirebaseAuth

```

```

class Signup : AppCompatActivity() {
    lateinit var button: Button
    lateinit var auth: FirebaseAuth
    override fun onCreate(savedInstanceState: Bundle?) {
        lateinit var binding: ActivitySignupBinding
        lateinit var firebaseAuth: FirebaseAuth
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_signup)
        button=findViewById(R.id.signupButton)
        binding = ActivitySignupBinding.inflate(layoutInflater)
        setContentView(binding.root)

        firebaseAuth = FirebaseAuth.getInstance()

        binding.signupText1.setOnClickListener {
            val intent = Intent(this, SignInActivity::class.java)
            startActivity(intent)
        }
        binding.signupButton.setOnClickListener {
            val email = binding.username.text.toString()
            val pass = binding.signuppasword.text.toString()
            val confirmPass = binding.signupconfirmpassword.text.toString()

            if (email.isNotEmpty() && pass.isNotEmpty() &&
confirmPass.isNotEmpty()) {
                if (pass == confirmPass) {

                    firebaseAuth.createUserWithEmailAndPassword(email,
pass).addOnCompleteListener {
                        if (it.isSuccessful) {
                            auth = FirebaseAuth.getInstance()
                            auth.signOut()
                            val intent = Intent(this,
SignInActivity::class.java)
                            startActivity(intent)
                        } else {
                            Toast.makeText(this, it.exception.toString(),
Toast.LENGTH_SHORT).show()
                        }
                    } else {
                        Toast.makeText(this, "Password is not matching",
Toast.LENGTH_SHORT).show()
                    }
                } else {
                    Toast.makeText(this, "Empty Fields Are not Allowed !!",
Toast.LENGTH_SHORT).show()
                }
            }
        }
    }
}

```

Updateddata.kt

```
package com.example.program_transfer_management
```

```
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
```

```

import android.widget.Toast
import
com.example.program_transfer_management.databinding.ActivityUpdateDataBinding
import com.google.firebase.database.DatabaseReference
import com.google.firebase.database.FirebaseDatabase

class UpdateData : AppCompatActivity() {

    private lateinit var binding: ActivityUpdateDataBinding
    private lateinit var database : DatabaseReference

    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        binding = ActivityUpdateDataBinding.inflate(layoutInflater)
        setContentView(binding.root)

        binding.updateBtn.setOnClickListener {

            val userName = binding.userName.text.toString()
            val firstName = binding.firstName.text.toString()
            val lastName = binding.lastname.text.toString()
            val age = binding.age.text.toString()

            updateData(userName, firstName, lastName, age)

        }

    }

    private fun updateData(userName: String, firstName: String, lastName:
String, age: String) {

        database = FirebaseDatabase.getInstance().getReference("Users")
        val user = mapOf<String, String>(
            "firstName" to firstName,
            "lastName" to lastName,
            "age" to age
        )

        database.child(userName).updateChildren(user).addOnSuccessListener {

            binding.userName.text.clear()
            binding.firstName.text.clear()
            binding.lastname.text.clear()
            binding.age.text.clear()
            Toast.makeText(this, "Successfully
Updated", Toast.LENGTH_SHORT).show()

        }.addOnFailureListener{

            Toast.makeText(this, "Failed to Update", Toast.LENGTH_SHORT).show()

        }}

    }
}
User.kt
package com.example.program_transfer_management

data class User(val firstName : String? = null, val lastName : String? =

```

```

null, val age : String? = null, val userName : String? = null){
}
chapter1.kt
package com.example.program_transfer_management

import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import com.github.barteksc.pdfviewer.PDFView

class chapter1 : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_chapter1)
        var pdfview=findViewById<PDFView>(R.id.pdfview)
        pdfview.fromAsset("chapter1.pdf").load()
    }
}
class.kt
package com.example.program_transfer_management

import android.content.Intent
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import androidx.cardview.widget.CardView
import com.google.android.material.bottomnavigation.BottomNavigationView

class Class : AppCompatActivity() {
    lateinit var class1: CardView
    lateinit var instructions1: CardView
    lateinit var help: CardView
    lateinit var progress: CardView
    lateinit var bottom: BottomNavigationView
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_class)
        class1=findViewById(R.id.clothingCard)
        instructions1=findViewById(R.id.instructions)
        help=findViewById(R.id.help)
        bottom=findViewById(R.id.btm)
        progress=findViewById(R.id.progress)
        class1.setOnClickListener{
            val intent= Intent(this,firstclass::class.java)
            startActivity(intent)
        }
        instructions1.setOnClickListener {
            val intent= Intent(this,firstclass::class.java)
            startActivity(intent)
        }
        help.setOnClickListener {
            val intent= Intent(this,firstclass::class.java)
            startActivity(intent)
        }
        progress.setOnClickListener {
            val intent= Intent(this, firstclass::class.java)
            startActivity(intent)
        }
        bottom.setOnItemSelectedListener {

```

```

        when(it.itemId) {
            R.id.firstcgpa->{
                val intent= Intent(this,MainActivity2::class.java)
                startActivity(intent)
                true
            }
            R.id.secondecgpa->{
                val intent= Intent(this,MainActivity3_f::class.java)
                startActivity(intent)
                true
            }
            else->true
        }
    }
}

```

Constants.kt

```
package com.example.program_transfer_management
```

```

object Constants {
    val USER_NAME: String = "user_name"
    val TOTAL_QUESTIONS: String = "total_questions"
    val SCORE: String = "score"

    fun getQuestions(): ArrayList<Question> {
        val questionsList = ArrayList<Question>()

        // 1
        val questionOne = Question(
            1,
            "What country does this flag belongs to?",
            R.drawable.ic_flag_of_argentina,
            arrayOf("Argentina", "Australia", "Armenia", "Austria"),
            0,
        )
        questionsList.add(questionOne)

        // 2
        val questionTwo = Question(
            2,
            "What country does this flag belong to?",
            R.drawable.ic_flag_of_australia,
            arrayOf("Angola", "Austria",
                "Australia", "Armenia"),
            2
        )
        questionsList.add(questionTwo)

        // 3
        val questionThree = Question(
            3,
            "What country does this flag belong to?",
            R.drawable.ic_flag_of_brazil,
            arrayOf("Belarus", "Belize",
                "Brunei", "Brazil"),
            3
        )
        questionsList.add(questionThree)
    }
}

```

```

// 4
val questionFour = Question(
    4,
    "What country does this flag belong to?",
    R.drawable.ic_flag_of_belgium,
    arrayOf("Bahamas", "Belgium",
            "Barbados", "Belize"),
    1
)
questionsList.add(questionFour)

// 5
val questionFive = Question(
    5,
    "What country does this flag belong to?",
    R.drawable.ic_flag_of_fiji,
    arrayOf("Gabon", "France",
            "Fiji", "Finland"),
    2
)
questionsList.add(questionFive)

// 6
val questionSix = Question(
    6,
    "What country does this flag belong to?",
    R.drawable.ic_flag_of_germany,
    arrayOf("Germany", "Georgia",
            "Greece", "none of these"),
    0
)
questionsList.add(questionSix)

// 7
val questionSeven = Question(
    7,
    "What country does this flag belong to?",
    R.drawable.ic_flag_of_denmark,
    arrayOf("Dominica", "Egypt",
            "Denmark", "Ethiopia"),
    2
)
questionsList.add(questionSeven)

// 8
val questionEight = Question(
    8,
    "What country does this flag belong to?",
    R.drawable.ic_flag_of_india,
    arrayOf("Ireland", "Iran",
            "Hungary", "India"),
    3
)
questionsList.add(questionEight)

// 9
val questionNine = Question(
    9,

```

```

        "What country does this flag belong to?",
        R.drawable.ic_flag_of_new_zealand,
        arrayListOf("Australia", "New Zealand",
            "Tuvalu", "United States of America"),
        1
    )
    questionsList.add(questionNine)

    // 10
    val questionTen = Question(
        10,
        "What country does this flag belong to?",
        R.drawable.ic_flag_of_kuwait,
        arrayListOf("Kuwait", "Jordan",
            "Sudan", "Palestine"),
        0
    )
    questionsList.add(questionTen)

    return questionsList
}
}

```

contactus.kt

```

package com.example.program_transfer_management

import android.Manifest
import android.app.NotificationChannel
import android.app.NotificationManager
import android.content.Context
import android.content.Intent
import android.content.pm.PackageManager
import android.net.Uri
import android.os.Build
import android.os.Bundle
import android.widget.Button
import android.widget.EditText
import android.widget.ImageView
import android.widget.Toast
import androidx.appcompat.app.AlertDialog
import androidx.appcompat.app.AppCompatActivity
import androidx.core.app.ActivityCompat
import androidx.core.app.NotificationCompat
import androidx.core.app.NotificationManagerCompat
import com.google.android.material.bottomnavigation.BottomNavigationView
import com.google.firebase.database.DatabaseReference
import com.google.firebase.database.FirebaseDatabase

class contactus : AppCompatActivity() {
    private lateinit var bottom: BottomNavigationView
    private lateinit var submit: Button
    private lateinit var database: DatabaseReference
    private lateinit var mapLogo: ImageView

    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_contactus)

        // Initialize Firebase database reference
        database = FirebaseDatabase.getInstance().getReference("Users")
    }
}

```



```

val et1 = findViewById<EditText>(R.id.et1)
val et2 = findViewById<EditText>(R.id.et2)
val et3 = findViewById<EditText>(R.id.et3)
val et4 = findViewById<EditText>(R.id.et4)
submit = findViewById(R.id.submit)
bottom = findViewById(R.id.btm)
mapLogo = findViewById(R.id.map)

submit.setOnClickListener {
    val t1 = et1.text.toString()
    val t2 = et2.text.toString()
    val t3 = et3.text.toString()
    val t4 = et4.text.toString()

    if (t1.isEmpty() || t2.isEmpty() || t3.isEmpty() || t4.isEmpty()) {
        Toast.makeText(this, "Please Fill out All the Details",
Toast.LENGTH_SHORT).show()
    } else {
        // Save data to Firebase database
        saveDataToFirebase(t1, t2, t3, t4)
    }
}

bottom.setOnItemClickListener {
    when (it.itemId) {
        R.id.firstcgpa -> {
            val intent = Intent(this, MainActivity2::class.java)
            startActivity(intent)
            true
        }
        R.id.secondegpa -> {
            val intent = Intent(this, MainActivity3_f::class.java)
            startActivity(intent)
            true
        }
        R.id.fourthcgpa -> {
            val builder = AlertDialog.Builder(this)
            builder.setTitle("LogOut Alert")
                .setMessage("Are you sure, you want to Log Out?")
                .setCancelable(true)
                .setPositiveButton("Yes") { _, _ ->
                    val intent = Intent(this,
SignInActivity::class.java)
                    startActivity(intent)
                }
                .setNegativeButton("No") { dialogInterface, _ ->
                    Toast.makeText(this, "You Have Clicked No",
Toast.LENGTH_SHORT).show()
                }
                .show()
            true
        }
        else -> true
    }
}

mapLogo.setOnClickListener {
    openMap()
}

```

```

    }
}

private fun saveDataToFirebase(name: String, email: String, phone: String,
message: String) {
    val userMap = HashMap<String, Any>()
    userMap["Name"] = name
    userMap["Email"] = email
    userMap["Phone"] = phone
    userMap["Message"] = message

    val userId = database.push().key
    userId?.let {
        database.child(it).setValue(userMap)
            .addOnSuccessListener {
                Toast.makeText(this, "Data Successfully Submitted",
Toast.LENGTH_SHORT).show()
                showNotification("Submission Successful", "Thank you for
contacting us, we will get back to you soon.")
            }
            .addOnFailureListener {
                Toast.makeText(this, "Failed to Submit Data",
Toast.LENGTH_SHORT).show()
            }
    }
}

private fun showNotification(title: String, message: String) {
    val notificationId = 1
    val channelId = "app_notifications"

    if (Build.VERSION.SDK_INT >= Build.VERSION_CODES.O) {
        val channel = NotificationChannel(
            channelId,
            "App Notifications",
            NotificationManager.IMPORTANCE_DEFAULT
        ).apply {
            description = "App notification channel"
        }

        val notificationManager: NotificationManager =
            getSystemService(Context.NOTIFICATION_SERVICE) as
NotificationManager
        notificationManager.createNotificationChannel(channel)
    }

    val notificationBuilder = NotificationCompat.Builder(this, channelId)
        .setSmallIcon(R.drawable.baseline_notifications_active_24)
        .setContentType(title)
        .setContentType(message)
        .setPriority(NotificationCompat.PRIORITY_DEFAULT)

    if (ActivityCompat.checkSelfPermission(
        this,
        Manifest.permission.POST_NOTIFICATIONS
    ) != PackageManager.PERMISSION_GRANTED
    ) {
        // TODO: Consider calling
        //     ActivityCompat#requestPermissions

```

```

        // here to request the missing permissions, and then overriding
        // public void onRequestPermissionsResult(int requestCode,
String[] permissions,
        //                                     int[] grantResults)
        // to handle the case where the user grants the permission. See the
documentation
        // for ActivityCompat#requestPermissions for more details.
        return
    }
    NotificationManagerCompat.from(this).notify(notificationId,
notificationBuilder.build())
}

```

```

    private fun openMap() {
        val geoUri = "geo:28.6139,77.2090"
        val intent = Intent(Intent.ACTION_VIEW, Uri.parse(geoUri))
        intent.setPackage("com.google.android.apps.maps")
        startActivity(intent)
    }
}

```

echapter1.kt

```

package com.example.program_transfer_management

import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import com.github.barteksc.pdfviewer.PDFView

class echapter1 : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_echapter1)
        var pdfview=findViewById<PDFView>(R.id.pdfview)
        pdfview.fromAsset("echapter1.pdf").load()
    }
}

```

echapter2.kt

```

package com.example.program_transfer_management

import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import com.github.barteksc.pdfviewer.PDFView

class echapter2 : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_echapter2)
        var pdfview=findViewById<PDFView>(R.id.pdfview)
        pdfview.fromAsset("e-chapter2.pdf").load()
    }
}

```

echapter3.kt

```

package com.example.program_transfer_management

import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import com.github.barteksc.pdfviewer.PDFView

```

```

class echapter3 : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_echapter3)
        var pdfview=findViewById<PDFView>(R.id.pdfview)
        pdfview.fromAsset("echapter3.pdf").load()
    }
}

```

echapter4.kt

```

package com.example.program_transfer_management

```

```

import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import com.github.barteksc.pdfviewer.PDFView

```

```

class echapter4 : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_echapter4)
        var pdfview=findViewById<PDFView>(R.id.pdfview)
        pdfview.fromAsset("echapter4.pdf").load()
    }
}

```

English.kt

```

package com.example.program_transfer_management

```

```

import android.app.AlertDialog
import android.content.Intent
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.widget.Toast
import androidx.cardview.widget.CardView
import com.google.android.material.bottomnavigation.BottomNavigationView

```

```

class English : AppCompatActivity() {
    lateinit var englishchapter1: CardView
    lateinit var instructions1: CardView
    lateinit var help: CardView
    lateinit var progress: CardView
    lateinit var bottom: BottomNavigationView
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_english)
        englishchapter1=findViewById(R.id.clothingCard)
        instructions1=findViewById(R.id.instructions)
        help=findViewById(R.id.help)
        bottom=findViewById(R.id.btm)
        progress=findViewById(R.id.progress)
        englishchapter1.setOnClickListener{
            val intent= Intent(this,echapter1::class.java)
            startActivity(intent)
        }
        instructions1.setOnClickListener {
            val intent= Intent(this,echapter2::class.java)
            startActivity(intent)
        }
        help.setOnClickListener {
            val intent= Intent(this,echapter3::class.java)

```



```

class1=findViewById(R.id.clothingCard)
instructions1=findViewById(R.id.instructions)
help=findViewById(R.id.help)
bottom=findViewById(R.id.btm)
progress=findViewById(R.id.progress)
class1.setOnClickListener{
    val intent= Intent(this,Hindi::class.java)
    startActivity(intent)
}
instructions1.setOnClickListener {
    val intent= Intent(this,Maths::class.java)
    startActivity(intent)
}
help.setOnClickListener {
    val intent= Intent(this,English::class.java)
    startActivity(intent)
}
progress.setOnClickListener {
    val intent= Intent(this, Science::class.java)
    startActivity(intent)
}
bottom.setOnItemSelectedListener {
    when(it.itemId){
        R.id.firstcgpa->{
            val intent=Intent(this,MainActivity2::class.java)
            startActivity(intent)
            true
        }
        R.id.secondcgpa->{
            val intent=Intent(this,MainActivity3_f::class.java)
            startActivity(intent)
            true
        }
        R.id.fourthcgpa->{
            val builder = AlertDialog.Builder(this)
            builder.setTitle("LogOut Alert")
                .setMessage("Are you sure, you want to Log Out ")
                .setCancelable(true)
                .setPositiveButton("Yes"){dialogInterface,which->
                    val intent=Intent(this,SignInActivity::class.java)
                    startActivity(intent)
                }
                .setNegativeButton("No"){dialogInterface,which->
                    Toast.makeText(this,"You Have Clicked No",
Toast.LENGTH_SHORT).show()
                }
                .show()
            true
        }
        else->true
    }
}
}
}
}

```

hchapter2.kt

```
package com.example.program_transfer_management
```

```
import androidx.appcompat.app.AppCompatActivity
```

```
import android.os.Bundle
```

```

import com.github.barteksc.pdfviewer.PDFView

class hchapter2 : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_hchapter2)
        var pdfview=findViewById<PDFView>(R.id.pdfview)
        pdfview.fromAsset("hchapter2.pdf").load()
    }
}

hchapter3.kt
package com.example.program_transfer_management

import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import com.github.barteksc.pdfviewer.PDFView

class hchapter3 : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_hchapter3)
        var pdfview=findViewById<PDFView>(R.id.pdfview)
        pdfview.fromAsset("hchapter3.pdf").load()
    }
}

hchapter4.kt
package com.example.program_transfer_management

import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import com.github.barteksc.pdfviewer.PDFView

class hchapter4 : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_hchapter4)
        var pdfview=findViewById<PDFView>(R.id.pdfview)
        pdfview.fromAsset("hchapter4.pdf").load()
    }
}

Hindi.kt
package com.example.program_transfer_management

import android.content.Intent
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import androidx.cardview.widget.CardView
import com.google.android.material.bottomnavigation.BottomNavigationView

class Hindi : AppCompatActivity() {
    lateinit var class1: CardView
    lateinit var instructions1: CardView
    lateinit var help: CardView
    lateinit var progress: CardView
    lateinit var bottom: BottomNavigationView
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_hindi)
    }
}

```

```

class1=findViewById(R.id.clothingCard)
instructions1=findViewById(R.id.instructions)
help=findViewById(R.id.help)
bottom=findViewById(R.id.btm)
progress=findViewById(R.id.progress)
class1.setOnClickListener{
    val intent= Intent(this,chapter1::class.java)
    startActivity(intent)
}
instructions1.setOnClickListener {
    val intent= Intent(this,hchapter3::class.java)
    startActivity(intent)
}
help.setOnClickListener {
    val intent= Intent(this,hchapter2::class.java)
    startActivity(intent)
}
progress.setOnClickListener {
    val intent= Intent(this, hchapter4
    ::class.java)
    startActivity(intent)
}
bottom.setOnItemClickListener {
    when(it.itemId) {
        R.id.firstcgpa->{
            val intent= Intent(this,MainActivity2::class.java)
            startActivity(intent)
            true
        }
        R.id.secondegpa->{
            val intent= Intent(this,MainActivity3_f::class.java)
            startActivity(intent)
            true
        }
        else->true
    }
}
}
}

instructions.kt
package com.example.program_transfer_management

import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import com.github.barteksc.pdfviewer.PDFView

class instructions : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_instructions)
        var pdfview=findViewById<PDFView>(R.id.pdfview)
        pdfview.fromAsset("Instructions.pdf").load()
    }
}

Question.kt
package com.example.program_transfer_management

```



```

data class Question(
    val id: Int,
    val questionText: String,
    val image: Int,
    val alternatives: ArrayList<String>,
    val correctAnswerIndex: Int,
)

quiz_question.kt
package com.example.program_transfer_management

import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.content.Intent
import android.graphics.Color
import android.graphics.Typeface
import android.graphics.drawable.Drawable

import android.util.Log
import android.view.View
import android.widget.*
import androidx.core.content.ContextCompat
import kotlin.reflect.typeOf

class quiz_questions : AppCompatActivity() {
    private var userName: String? = null

    private val questionsList: ArrayList<Question> = Constants.getQuestions()
    private var currentQuestionIndex = 0;
    private var selectedAlternativeIndex = -1;
    private var isAnswerChecked = false;
    private var totalScore = 0;
    private val alternativesIds = arrayOf(R.id.optionOne, R.id.optionTwo,
R.id.optionThree, R.id.optionFour)

    private var tvQuestion: TextView? = null
    private var ivImage: ImageView? = null
    private var progressBar: ProgressBar? = null
    private var tvProgress: TextView? = null
    private var btnSubmit: Button? = null
    private var tvAlternatives: ArrayList<TextView>? = null
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_quiz_questions)
        userName = intent.getStringExtra(Constants.USER_NAME)

        tvQuestion = findViewById(R.id.tvQuestion)
        ivImage = findViewById(R.id.ivImage)
        progressBar = findViewById(R.id.progressBar)
        tvProgress = findViewById(R.id.tvProgress)
        btnSubmit = findViewById(R.id.btnSubmit)
        tvAlternatives = arrayListOf(
            findViewById(R.id.optionOne),
            findViewById(R.id.optionTwo),
            findViewById(R.id.optionThree),
            findViewById(R.id.optionFour),
        )

        updateQuestion()
    }

```

```

        btnSubmit?.setOnClickListener {
            if (!isAnswerChecked) {
                val anyAnswerIsChecked = selectedAlternativeIndex != -1
                if (!anyAnswerIsChecked) {
                    Toast.makeText(this, "Please, select an alternative",
Toast.LENGTH_SHORT).show()
                } else {
                    val currentQuestion = questionsList[currentQuestionIndex]
                    if (
                        selectedAlternativeIndex ==
currentQuestion.correctAnswerIndex
                    ) {
                        answerView(tvAlternatives!![selectedAlternativeIndex],
R.drawable.correct_option_border_bg)
                        totalScore++
                    } else {
                        answerView(tvAlternatives!![selectedAlternativeIndex],
R.drawable.wrong_option_border_bg)

                        answerView(tvAlternatives!![currentQuestion.correctAnswerIndex],
R.drawable.correct_option_border_bg)
                    }

                    isAnswerChecked = true
                    btnSubmit?.text = if (currentQuestionIndex ==
questionsList.size - 1) "FINISH" else "GO TO NEXT QUESTION"
                    selectedAlternativeIndex = -1
                }
            } else {
                if (currentQuestionIndex < questionsList.size - 1) {
                    currentQuestionIndex++
                    updateQuestion()
                } else {
                    val intent = Intent(this, quiz_result::class.java)
                    intent.putExtra(Constants.USER_NAME, userName)
                    intent.putExtra(Constants.TOTAL_QUESTIONS,
questionsList.size)
                    intent.putExtra(Constants.SCORE, totalScore)
                    startActivity(intent)
                    finish()
                }

                isAnswerChecked = false
            }
        }

        tvAlternatives?.let {
            for (optionIndex in it.indices) {
                it[optionIndex].let {
                    it.setOnClickListener{
                        if (!isAnswerChecked) {
                            selectedAlternativeView(it as TextView,
optionIndex)
                        }
                    }
                }
            }
        }
    }
}

```

```

    }

    private fun updateQuestion() {
        defaultAlternativesView()

        // Render Question Text
        tvQuestion?.text = questionsList[currentQuestionIndex].questionText
        // Render Question Image
        ivImage?.setImageResource(questionsList[currentQuestionIndex].image)
        // progressBar
        progressBar?.progress = currentQuestionIndex + 1
        // Text of progress bar
        tvProgress?.text = "${currentQuestionIndex + 1}/${questionsList.size}"

        for (alternativeIndex in
            questionsList[currentQuestionIndex].alternatives.indices) {
            tvAlternatives!![alternativeIndex].text =
                questionsList[currentQuestionIndex].alternatives[alternativeIndex]
        }

        btnSubmit?.text = if (currentQuestionIndex == questionsList.size - 1)
            "FINISH" else "SUBMIT"
    }

    private fun defaultAlternativesView() {
        for (alternativeTv in tvAlternatives!!) {
            alternativeTv.typeface = Typeface.DEFAULT
            alternativeTv.setTextColor(Color.parseColor("#7A8089"))
            alternativeTv.background = ContextCompat.getDrawable(
                this@quiz_questions,
                R.drawable.default_option_border_bg
            )
        }
    }

    private fun selectedAlternativeView(option: TextView, index: Int) {
        defaultAlternativesView()
        selectedAlternativeIndex = index

        option.setTextColor(
            Color.parseColor("#363A43")
        )
        option.setTypeface(option.typeface, Typeface.BOLD)
        option.background = ContextCompat.getDrawable(
            this@quiz_questions,
            R.drawable.selected_option_border_bg
        )
    }

    private fun answerView(view: TextView, drawableId: Int) {
        view.background = ContextCompat.getDrawable(
            this@quiz_questions,
            drawableId
        )
        tvAlternatives!![selectedAlternativeIndex].setTextColor(
            Color.parseColor("#FFFFFF")
        )
    }
}

```

```

quizresult.kt
package com.example.program_transfer_management

import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.content.Intent
import android.widget.Button
import android.widget.TextView
import android.widget.Toast
import com.google.firebase.database.DatabaseReference
import com.google.firebase.database.FirebaseDatabase

class quiz_result : AppCompatActivity() {
    private lateinit var database: DatabaseReference

    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_quiz_result)

        // Initialize Firebase database reference
        database = FirebaseDatabase.getInstance().getReference("Users")

        // Retrieve data from intent extras
        val userName = intent.getStringExtra(Constants.USER_NAME)
        val totalQuestions = intent.getIntExtra(Constants.TOTAL_QUESTIONS, 0)
        val score = intent.getIntExtra(Constants.SCORE, 0)

        // Find views
        val congratulationsTv: TextView = findViewById(R.id.congratulationsTv)
        val scoreTv: TextView = findViewById(R.id.scoreTv)
        val btnRestart: Button = findViewById(R.id.btnRestart)

        // Display congratulations message and score
        congratulationsTv.text = "Congratulations, $userName!"
        scoreTv.text = "Your score is $score of $totalQuestions"

        // Save score to Firebase Realtime Database
        saveScoreToDatabase(userName, score)

        // Restart quiz button click listener
        btnRestart.setOnClickListener {
            val intent = Intent(this, quizmain::class.java)
            startActivity(intent)
            finish()
        }
    }

    private fun saveScoreToDatabase(userName: String?, score: Int) {
        if (userName != null) {
            // Create a new entry in the database under "Users" node with
            // user's name as key
            database.child(userName).setValue(score)
                .addOnSuccessListener {
                    Toast.makeText(this, "Score Saved Successfully",
                        Toast.LENGTH_SHORT).show()
                }
                .addOnFailureListener {
                    Toast.makeText(this, "Failed to Save Score",
                        Toast.LENGTH_SHORT).show()
                }
        }
    }
}

```

```

        }
    }
}

quizmain.kt
package com.example.program_transfer_management

import android.content.Intent
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.widget.Button
import android.widget.EditText
import android.widget.Toast

class quizmain : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_quizmain)
        val etName = findViewById<EditText>(R.id.etName)
        val btnStart = findViewById<Button>(R.id.btnStart)

        btnStart.setOnClickListener {
            if (etName.text.isEmpty()) {
                Toast.makeText(this, "Please, enter your name",
                    Toast.LENGTH_LONG).show()
            } else {
                val intent = Intent(this, quiz_questions::class.java)
                intent.putExtra(Constants.USER_NAME, etName.text.toString())
                startActivity(intent)
                finish()
            }
        }
    }
}

```

```

ReadData.kt
package com.example.program_transfer_management

import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.widget.Toast
import com.google.firebase.database.DatabaseReference
import com.google.firebase.database.FirebaseDatabase
import com.example.program_transfer_management.databinding.ActivityReadDataBinding
class ReadData : AppCompatActivity() {

    private lateinit var binding : ActivityReadDataBinding
    private lateinit var database : DatabaseReference

    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        binding = ActivityReadDataBinding.inflate(layoutInflater)
        setContentView(binding.root)

        binding.readdataBtn.setOnClickListener {

            val userName : String = binding.etusername.text.toString()
            if (userName.isNotEmpty()) {

```

```

        readData(userName)

    }else{

        Toast.makeText(this,"Please enter the
Username",Toast.LENGTH_SHORT).show()

    }

}

}

private fun readData(userName: String) {

    database = FirebaseDatabase.getInstance().getReference("Users")
    database.child(userName).get().addOnSuccessListener {

        if (it.exists()){

            val firstname = it.child("firstName").value
            val lastName = it.child("lastName").value
            val age = it.child("age").value
            Toast.makeText(this,"Successfully
Read",Toast.LENGTH_SHORT).show()
            binding.etusername.text.clear()
            binding.tvFirstName.text = firstname.toString()
            binding.tvLastName.text = lastName.toString()
            binding.tvAge.text = age.toString()

        }else{

            Toast.makeText(this,"User Doesn't
Exist",Toast.LENGTH_SHORT).show()

        }

    }.addOnFailureListener{

        Toast.makeText(this,"Failed",Toast.LENGTH_SHORT).show()

    }

}

}
}

```

CONCLUSION

In conclusion, the development of our comprehensive study material app represents a significant advancement in enhancing educational access and efficiency. By integrating user-friendly features with robust security measures, we have crafted a platform that prioritizes user experience and academic integrity. Moving forward, continual refinement and adaptation will be crucial to ensure that the app remains in sync with evolving educational trends and learner needs.

Ultimately, our goal is to empower students to navigate their educational journeys with confidence while providing educators with a streamlined avenue for content delivery. Through collaboration and innovation, we endeavor to transform the landscape of educational resources and facilitate effective learning engagements. This app aims to connect learners with the necessary tools and resources, fostering an environment of growth and learning excellence.