

# CSE225: DEVELOPING ANDROID APPS

## CA-1

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**Section:** KO103

**Roll Nos.:** RKO103B56

**github link :** <https://github.com/Sudeep-kr-1999/LPUSemester6AndroidCA1.git>

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### Problem-1 Solution

#### Keywords :

- RatingBar
- Splash Screen
- Alarm Manager
- Reciever
- Progress Bar
- Scroll View
- Intent
- Pending Intent

Code: (Kotlin & XML)

#### XML

##### activity\_main.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:layout_width="match_parent"

    android:layout_height="match_parent"

    tools:context=".MainActivity">

    <ImageView
```

```
android:id="@+id/imageView"
android:layout_width="351dp"
android:layout_height="464dp"
android:layout_marginTop="84dp"
app:layout_constraintBottom_toTopOf="@+id/textView"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.0"
app:srcCompat="@drawable/survey1" />
```

<TextView

```
android:id="@+id/textView"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginBottom="128dp"
android:fontFamily="sans-serif-condensed-medium"
android:text="Online Course Survey"
android:textAlignment="center"
android:textColor="@color/purple_700"
android:textSize="24sp"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="@+id/imageView"
app:layout_constraintStart_toStartOf="@+id/imageView" />
```

<ProgressBar

```
android:id="@+id/progressBar"
```

```
style="?android:attr/progressBarStyle"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
app:layout_constraintBottom_toBottomOf="@+id/imageView"
app:layout_constraintEnd_toEndOf="@+id/imageView"
app:layout_constraintHorizontal_bias="0.498"
app:layout_constraintStart_toStartOf="@+id/imageView"
app:layout_constraintTop_toTopOf="@+id/imageView"
app:layout_constraintVertical_bias="1.0" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

### **activity\_home\_screen.xml**

```
<?xml version="1.0" encoding="utf-8"?>
<ScrollView 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/scrollView2"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:layout_marginStart="5dp"
    android:layout_marginEnd="5dp"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    tools:context=".HomeScreen"
    tools:ignore="SpeakableTextPresentCheck">
```

<LinearLayout

```
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:padding="20dp"
    android:layout_margin="10dp"
    android:orientation="vertical">
```

<ImageView

```
    android:id="@+id/imageView3"
    android:layout_width="131dp"
    android:layout_height="109dp"
    android:layout_gravity="center"
    android:layout_marginTop="10dp"
    android:layout_marginBottom="10dp"
    app:srcCompat="@drawable/survey2" />
```

<TextView

```
    android:id="@+id/textView8"
    android:layout_width="105dp"
    android:layout_height="wrap_content"
    android:fontFamily="sans-serif-black"
    android:text="Name"
    android:textColor="@color/purple_700"
    android:textSize="18sp" />
```

<EditText

```
android:id="@+id/name"

android:layout_width="match_parent"

android:layout_height="wrap_content"

android:layout_marginBottom="10dp"

android:ems="10"

android:inputType="textPersonName"

android:textColor="@color/black" />
```

<TextView

```
android:id="@+id/textView9"

android:layout_width="match_parent"

android:layout_height="wrap_content"

android:fontFamily="sans-serif-black"

android:text="Registration Number"

android:textColor="@color/purple_700"

android:textSize="18sp" />
```

<EditText

```
android:id="@+id/registrationNumber"

android:layout_width="match_parent"

android:layout_height="wrap_content"

android:layout_marginBottom="10dp"

android:ems="10"

android:inputType="number" />
```

<TextView

```
android:id="@+id/textView10"
```

```
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:fontFamily="sans-serif-black"
android:text="Parent Section"
android:textColor="@color/purple_700"
android:textSize="18sp" />
```

<EditText

```
android:id="@+id/parentSection"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:layout_marginBottom="10dp"
android:ems="10"
android:inputType="textCapCharacters" />
```

<TextView

```
android:id="@+id/textView11"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:fontFamily="sans-serif-black"
android:text="Section"
android:textColor="@color/purple_700"
android:textSize="18sp" />
```

<EditText

```
android:id="@+id/section"
android:layout_width="match_parent"
```

```
android:layout_height="wrap_content"

android:layout_marginBottom="10dp"

android:ems="10"

android:inputType="textCapCharacters" />
```

```
<TextView
```

```
    android:id="@+id/textView12"

    android:layout_width="match_parent"

    android:layout_height="wrap_content"

    android:fontFamily="sans-serif-black"

    android:text="Roll Number"

    android:textColor="@color/purple_700"

    android:textSize="18sp" />
```

```
<EditText
```

```
    android:id="@+id/rollNumber"

    android:layout_width="match_parent"

    android:layout_height="wrap_content"

    android:layout_marginBottom="10dp"

    android:ems="10"

    android:inputType="textCapCharacters" />
```

```
<TextView
```

```
    android:id="@+id/textView13"

    android:layout_width="match_parent"

    android:layout_height="wrap_content"

    android:fontFamily="sans-serif-black"
```

android:text="Course Feedback( max 500 characters)"

android:textColor="@color/purple\_700"

android:textSize="18sp" />

<EditText

android:id="@+id/feedback"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:ems="10"

android:maxLength="100"

android:isScrollContainer="true"

android:inputType="textMultiLine"

android:textAlignment="textStart" />

<ProgressBar

android:layout\_marginTop="10dp"

android:layout\_marginBottom="10dp"

android:id="@+id/feedbackProgress"

style="?android:attr/progressBarStyleHorizontal"

android:layout\_width="match\_parent"

android:layout\_height="24dp" />

<Button

android:id="@+id/submitFeedback"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="Submit Feedback" />



</LinearLayout>

</ScrollView>

### **activity\_confirmation\_page.xml**

<?xml version="1.0" encoding="utf-8"?>

<ScrollView 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/scrollView2"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:layout\_marginStart="5dp"

android:layout\_marginEnd="5dp"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

tools:context=".ConfirmationPage"

tools:ignore="SpeakableTextPresentCheck">

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_margin="10dp"

android:orientation="vertical"

android:padding="20dp">

<ImageView

```
    android:id="@+id/imageView3"
    android:layout_width="131dp"
    android:layout_height="109dp"
    android:layout_gravity="center"
    android:layout_marginTop="10dp"
    android:layout_marginBottom="10dp"
    app:srcCompat="@drawable/survey2" />
```

<TextView

```
    android:id="@+id/textView8"
    android:layout_width="105dp"
    android:layout_height="wrap_content"
    android:fontFamily="sans-serif-black"
    android:text="Name"
    android:textColor="@color/purple_700"
    android:textSize="18sp" />
```

<TextView

```
    android:id="@+id/name_confirm"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginTop="5dp"
    android:layout_marginBottom="10dp"
    android:fontFamily="sans-serif-black"
    android:textColor="@color/black"
```

```
android:textSize="18sp" />
```

```
<TextView
```

```
    android:id="@+id/textView9"
```

```
    android:layout_width="match_parent"
```

```
    android:layout_height="wrap_content"
```

```
    android:fontFamily="sans-serif-black"
```

```
    android:text="Registration Number"
```

```
    android:textColor="@color/purple_700"
```

```
    android:textSize="18sp" />
```

```
<TextView
```

```
    android:id="@+id/registration_confirm"
```

```
    android:layout_width="match_parent"
```

```
    android:layout_height="wrap_content"
```

```
    android:layout_marginTop="5dp"
```

```
    android:layout_marginBottom="10dp"
```

```
    android:fontFamily="sans-serif-black"
```

```
    android:textColor="@color/black"
```

```
    android:textSize="18sp" />
```

```
<TextView
```

```
    android:id="@+id/textView10"
```

```
    android:layout_width="match_parent"
```

```
    android:layout_height="wrap_content"
```

```
    android:fontFamily="sans-serif-black"
```

```
    android:text="Parent Section"
```

```
android:textColor="@color/purple_700"  
android:textSize="18sp" />
```

<TextView

```
android:id="@+id/parentSection_confirm"  
android:layout_width="match_parent"  
android:layout_height="wrap_content"  
android:layout_marginTop="5dp"  
android:layout_marginBottom="10dp"  
android:fontFamily="sans-serif-black"  
android:textColor="@color/black"  
android:textSize="18sp" />
```

<TextView

```
android:id="@+id/textView11"  
android:layout_width="match_parent"  
android:layout_height="wrap_content"  
android:fontFamily="sans-serif-black"  
android:text="Section"  
android:textColor="@color/purple_700"  
android:textSize="18sp" />
```

<TextView

```
android:id="@+id/SectionConfirm"  
android:layout_width="match_parent"  
android:layout_height="wrap_content"  
android:layout_marginTop="5dp"
```

```
android:layout_marginBottom="10dp"

android:fontFamily="sans-serif-black"

android:textColor="@color/black"

android:textSize="18sp" />
```

```
<TextView
```

```
    android:id="@+id/textView12"

    android:layout_width="match_parent"

    android:layout_height="wrap_content"

    android:fontFamily="sans-serif-black"

    android:text="Roll Number"

    android:textColor="@color/purple_700"

    android:textSize="18sp" />
```

```
<TextView
```

```
    android:id="@+id/RollNumber_confirm"

    android:layout_width="match_parent"

    android:layout_height="wrap_content"

    android:layout_marginTop="5dp"

    android:layout_marginBottom="10dp"

    android:fontFamily="sans-serif-black"

    android:textColor="@color/black"

    android:textSize="18sp" />
```

```
<TextView
```

```
    android:id="@+id/textView13"

    android:layout_width="match_parent"
```

```
android:layout_height="wrap_content"
android:fontFamily="sans-serif-black"
android:text="Course Feedback"
android:textColor="@color/purple_700"
android:textSize="18sp" />
```

<TextView

```
android:id="@+id/feedback_confirm"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:layout_marginTop="5dp"
android:layout_marginBottom="10dp"
android:fontFamily="sans-serif-black"
android:textColor="@color/black"
android:textSize="18sp" />
```

<TextView

```
android:id="@+id/textView15"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:layout_marginTop="10dp"
android:fontFamily="sans-serif-black"
android:text="Rate The Course (Out of 5)"
android:textColor="@color/purple_700"
android:textSize="18sp" />
```

<RatingBar

```
    android:id="@+id/courseRating"
    android:layout_width="wrap_content"
    android:layout_height="44dp"
    android:layout_gravity="center"
    android:layout_marginTop="10dp"
    android:numStars='5'
    android:stepSize="0.5"
    android:layout_marginBottom="10dp" />
```

```
<Button
```

```
    android:id="@+id/btnRatingSubmit"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginTop="10dp"
    android:text="Submit Rating" />
```

```
</LinearLayout>
```

```
</ScrollView>
```

## MainActivity.kt

```
package sudeep.example.semester6cal

import android.content.Intent
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.os.Handler
import android.os.Looper
import android.view.View
import android.widget.ProgressBar

class MainActivity : AppCompatActivity() {

    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main)
        val progressBar=findViewById<ProgressBar>(R.id.progressBar);

        progressBar.visibility= View.VISIBLE;
        //    it worked like set timeout
        Handler(Looper.getMainLooper()).postDelayed({
            progressBar.visibility=View.INVISIBLE;
            val i=Intent(this,HomeScreen::class.java)
            startActivity(i);
            finish();
        },5000);
    }
}
```



```
}
```

### **HomeScreen.kt**

```
package sudeep.example.semester6cal

import android.content.Intent
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.widget.Button
import android.widget.EditText
import android.widget.ProgressBar
import androidx.core.widget.addTextChangedListener

class HomeScreen : AppCompatActivity() {

    lateinit var name: EditText;

    lateinit var registrationNumber: EditText

    lateinit var parentSection: EditText

    lateinit var section: EditText

    lateinit var rollNumber: EditText

    lateinit var feedback: EditText

    lateinit var feedbackProgress: ProgressBar

    lateinit var submitBtn: Button

    override fun onCreate(savedInstanceState: Bundle?) {

        super.onCreate(savedInstanceState)

        setContentView(R.layout.activity_home_screen)

        name = findViewById(R.id.name)

        registrationNumber = findViewById(R.id.registrationNumber)
```

```
parentSection = findViewById(R.id.parentSection)

section = findViewById(R.id.section)

rollNumber = findViewById(R.id.rollNumber)

feedback = findViewById(R.id.feedback)

feedbackProgress = findViewById(R.id.feedbackProgress)

submitBtn = findViewById(R.id.submitFeedback)
```

```
feedback.addTextChangedListener {

    val i = feedback.length();

    feedbackProgress.progress = i;

}

submitBtn.setOnClickListener {

    val enteredName = name.text.toString();

    val enteredRegistrationNo = registrationNumber.text.toString();

    val enteredParentSection = parentSection.text.toString();

    val enteredSection = section.text.toString();

    val enteredRollNumber = rollNumber.text.toString();

    val enteredFeedback = feedback.text.toString();

    val i = Intent(this, ConfirmationPage::class.java);

    i.putExtra("Name", enteredName);

    i.putExtra("RegistrationNumber", enteredRegistrationNo);

    i.putExtra("ParentSection", enteredParentSection);

    i.putExtra("Section", enteredSection);

    i.putExtra("RollNumber", enteredRollNumber);

    i.putExtra("Feedback", enteredFeedback);

    startActivity(i);

}
```

```
    }  
    }  
}
```

### **ConfirmationPage.kt**

```
package sudeep.example.semester6cal
```

```
import android.app.job.JobInfo  
import android.app.job.JobScheduler  
import android.content.ComponentName  
import android.content.Intent  
import androidx.appcompat.app.AppCompatActivity  
import android.os.Bundle  
import android.os.Handler  
import android.os.Looper  
import android.view.View  
import android.widget.Button  
import android.widget.RatingBar  
import android.widget.TextView  
import android.widget.Toast
```

```
class ConfirmationPage : AppCompatActivity() {  
    lateinit var nameConfirm: TextView  
    lateinit var registrationConfirm: TextView  
    lateinit var parentSectionConfirm: TextView  
    lateinit var sectionConfirm: TextView  
    lateinit var rollnumberConfirm: TextView
```

```
lateinit var feedbackConfirm: TextView
```

```
lateinit var name: String;
```

```
lateinit var registrationNumber: String;
```

```
lateinit var parentSection: String;
```

```
lateinit var section: String;
```

```
lateinit var rollNumber: String;
```

```
lateinit var feedback: String;
```

```
lateinit var courseRating: RatingBar;
```

```
lateinit var submitRating: Button;
```

```
var jobScheduler: JobScheduler? = null
```

```
override fun onCreate(savedInstanceState: Bundle?) {
```

```
    super.onCreate(savedInstanceState)
```

```
    setContentView(R.layout.activity_confirmation_page)
```

```
    nameConfirm = findViewById(R.id.name_confirm);
```

```
    registrationConfirm = findViewById(R.id.registration_confirm);
```

```
    parentSectionConfirm = findViewById(R.id.parentSection_confirm);
```

```
    sectionConfirm = findViewById(R.id.SectionConfirm);
```

```
    rollnumberConfirm = findViewById(R.id.RollNumber_confirm);
```

```
    feedbackConfirm = findViewById(R.id.feedback_confirm);
```

```
    courseRating = findViewById(R.id.courseRating);
```

```
    submitRating = findViewById(R.id.btnRatingSubmit);
```

```
    val intentBundle: Bundle? = intent.extras;
```

```
    name = intentBundle?.get("Name").toString();
```

```
    registrationNumber = intentBundle?.get("RegistrationNumber").toString();
```

```
    parentSection = intentBundle?.get("ParentSection").toString();
```

```

section = intentBundle?.get("Section").toString();

rollNumber = intentBundle?.get("RollNumber").toString();

feedback = intentBundle?.get("Feedback").toString();

nameConfirm.text = name;

registrationConfirm.text = registrationNumber;

parentSectionConfirm.text = parentSection;

sectionConfirm.text = section;

rollnumberConfirm.text = rollNumber;

feedbackConfirm.text = feedback;


submitRating.setOnClickListener {

    val totalStars = courseRating.numStars;

    val rating = courseRating.rating;

    Toast.makeText(this, "Rating captured ${rating}/${totalStars}", Toast.LENGTH_LONG)

        .show();

    jobScheduler = getSystemService(JOB_SCHEDULER_SERVICE) as JobScheduler

    val componentName = ComponentName(this, MyJobService::class.java)

    val builder = JobInfo.Builder(123, componentName);

    builder.setMinimumLatency(1000)

    builder.setOverrideDeadline(3000)

    builder.setPersisted(true)

    builder.setRequiredNetworkType(JobInfo.NETWORK_TYPE_ANY)

    builder.setRequiresCharging(false)

    jobScheduler!!.schedule(builder.build())

}

}

}

```

## **MyJobService.kt**

```
package sudeep.example.semester6cal
```

```
import android.app.AlarmManager
```

```
import android.app.PendingIntent
```

```
import android.app.job.JobParameters
```

```
import android.app.job.JobService
```

```
import android.content.Intent
```

```
import android.util.Log
```

```
import android.widget.Toast
```

```
class MyJobService : JobService() {
```

```
    override fun onStartJob(p0: JobParameters?): Boolean {
```

```
        val intent = Intent(this@MyJobService, ThanksPlayerBroadCast::class.java)
```

```
        val pendingIntent = PendingIntent.getBroadcast(this@MyJobService, 234, intent, 0)
```

```
        val alarmManager = getSystemService(ALARM_SERVICE) as AlarmManager
```

```
        alarmManager.set(AlarmManager.RTC_WAKEUP, System.currentTimeMillis(),  
pendingIntent)
```

```
        return true;
```

```
    }
```

```
    override fun onStopJob(p0: JobParameters?): Boolean {
```

```
        return true;
```

```
    }
```

```
}
```

## **ThanksPlayerBroadCast.kt**

```

package sudeep.example.semester6ca1

import android.content.BroadcastReceiver
import android.content.Context
import android.content.Intent
import android.media.MediaPlayer
import kotlin.system.exitProcess

class ThanksPlayerBroadCast:BroadcastReceiver() {

    override fun onReceive(context:Context, intent: Intent) {

        val mp=MediaPlayer.create(context,R.raw.audio);

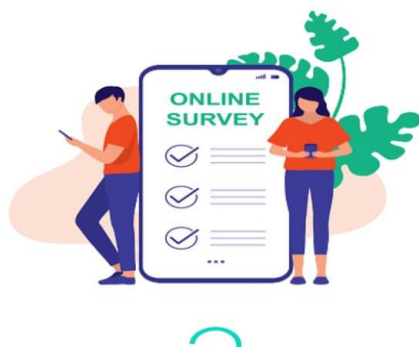
        mp.start();

    }

}

```

## Screenshots



Online Course Survey



### Name

Sudeep Kumar

### Registration Number

11917205

### Parent Section

K19CD

### Section

KO103

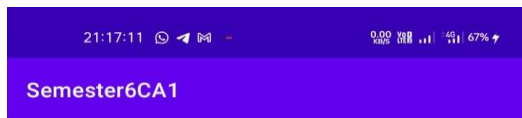
### Roll Number

RKO103B56

### Course Feedback( max 500 characters)

This course is very good in content and it help me to learn more about android and android studio

SUBMIT FEEDBACK



**Name**

**Sudeep Kumar**

**Registration Number**

**11917205**

**Parent Section**

**K19CD**

**Section**

**KO103**

**Roll Number**

**RK0103B56**

**Course Feedback**

**This course is very good in content and it help me to learn more about android and android studio**

**Rate The Course (Out of 5)**



**SUBMIT RATING**



**Name**

**Sudeep Kumar**

**Registration Number**

**11917205**

**Parent Section**

**K19CD**

**Section**

**KO103**

**Roll Number**

**RK0103B56**

**Course Feedback**

**This course is very good in content and it help me to learn more about android and android studio**

**Rate The Course (Out of 5)**



**SUBMIT RATING**

**Rating captured 4.5/5**

A audio will be played in 2 second after the above Rating Captured Toast the audio will say  
“ThankYou”