

1. Temperature_convertor

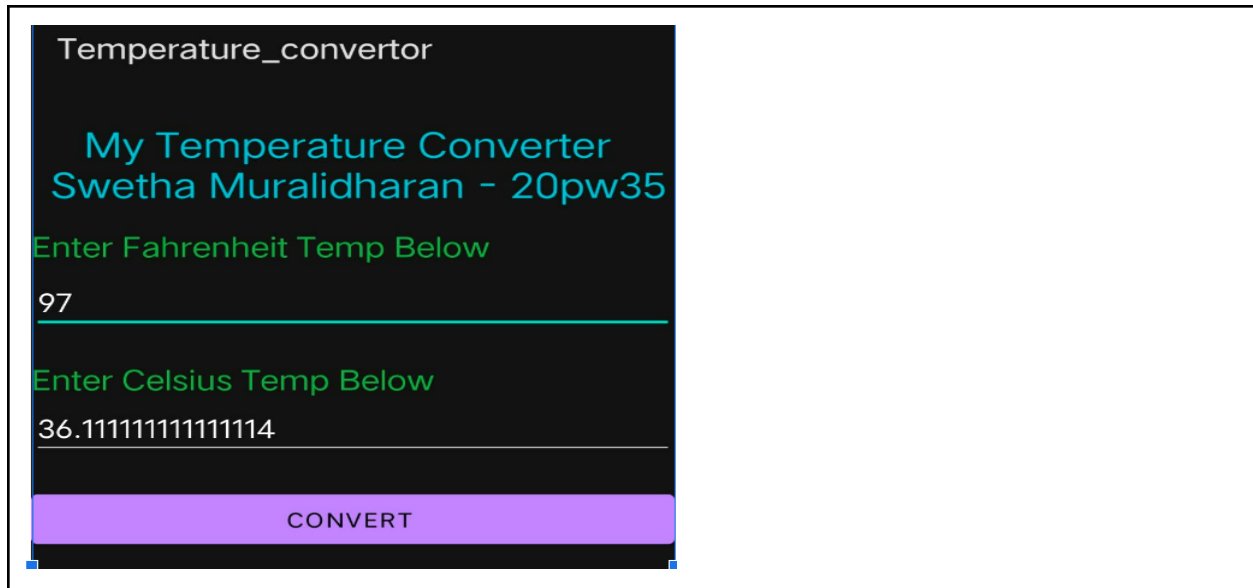
```
package com.example.temperature_convertor;
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.widget.Button
import android.widget.EditText

class MainActivity : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main)

        val showButton = findViewById<Button>(R.id.button3)
        val faren = findViewById<EditText>(R.id.ftoc)
        val cel = findViewById<EditText>(R.id.ctof)

        showButton.setOnClickListener {

            if (cel.isFocused)
            {
                val x = cel.text.toString().toDouble()
                faren.setText((9.toDouble() / 5 * x + 32).toString())
            } else if (faren.isFocused)
            {
                val x = faren.text.toString().toDouble()
                cel.setText(((x - 32) * 5.toDouble() / 9).toString())
            }
        }
    }
}
```



2.Eat_cookie

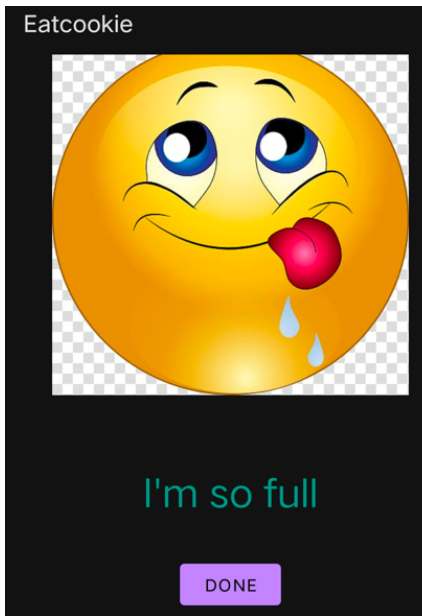
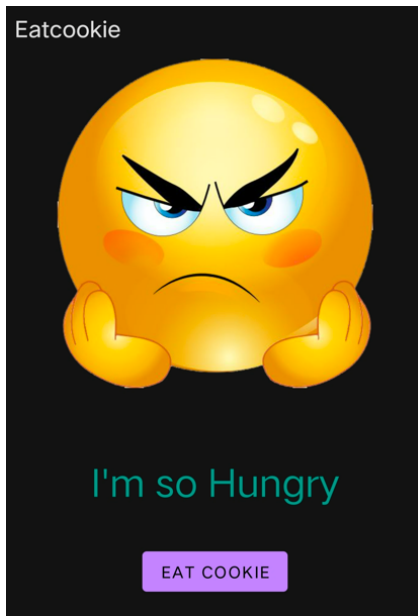
```
package com.example.eatcookie
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.view.View
import android.widget.Button
import android.widget.ImageView
import android.widget.TextView

class MainActivity : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main)
        val btn = findViewById<Button>(R.id.button)
        val hungry = findViewById<ImageView>(R.id.imageView)
        val happy = findViewById<ImageView>(R.id.imageView2)
        val message = findViewById<TextView>(R.id.textView)
        var count = 0
        btn.setOnClickListener {
            if (count % 2 == 0) {
                hungry.visibility = View.INVISIBLE
                happy.visibility = View.VISIBLE
                message.text = "I'm so full"
                btn.text = "Done"
            } else {
```

```

        hungry.visibility = View.VISIBLE
        happy.visibility = View.INVISIBLE
        message.text = "I'm so Hungry"
        btn.text = "Eat Cookie"
    }
    count++
}
}
}

```



3.Feedback

```

package com.example.feedbackform

import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.widget.Button
import android.widget.RatingBar
import android.widget.TextView
import android.widget.Toast

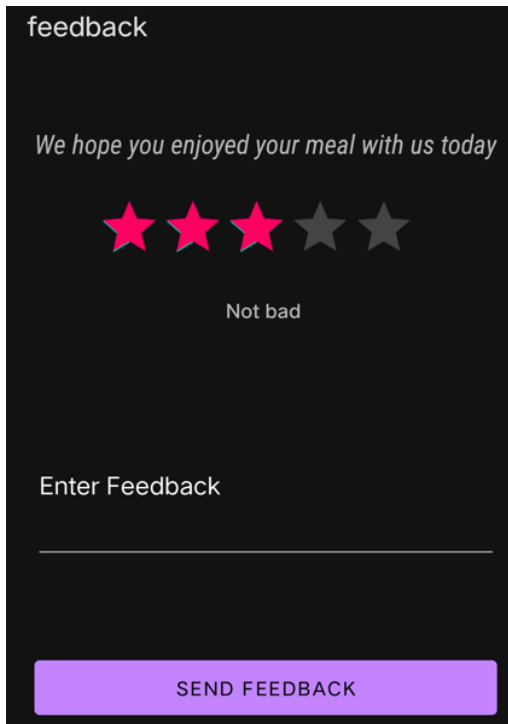
class MainActivity : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?)
    {

```

```

super.onCreate(savedInstanceState)
setContentView(R.layout.activity_main)
val rat = findViewById<RatingBar>(R.id.ratingBar)
val button = findViewById<Button>(R.id.button)
val txt = findViewById<TextView>(R.id.editTextTextPersonName)
val fd = findViewById<TextView>(R.id.textView2)
rat.setOnRatingBarChangeListener { ratingBar, fl, b ->
    val rate = fl.toInt()
    if(rate==5)
        txt.text="Awesome. I love it"
    else if(rate==4)
        txt.text="Good. Enjoyed it"
    else if(rate==3)
        txt.text="Satisfied"
    else if(rate==2)
        txt.text="Not good. Need improvement"
    else if(rate==1)
        txt.text="Disappointed. Very poor"
    else
        txt.text=" "
    button.setOnClickListener {
        txt.text = " "
        Toast.makeText(applicationContext,"Feedback is successfully
submitted",Toast.LENGTH_SHORT).show()
        fd.text=" "
        rat.rating= 0F
    }
}
}
}
}

```



4.Material_light

Main_activity1

```
package com.example.materiallight

import android.content.Intent
import android.os.Bundle
import android.text.Html
import android.view.View
import android.widget.*
import androidx.appcompat.app.AppCompatActivity
import android.widget.AdapterView

class MainActivity : AppCompatActivity(){
    private lateinit var radioGroup: RadioGroup
    lateinit var Spinner: Spinner
    var pos = 0
    var str : String = " "
    // on below line we are creating a variable for our list of data to be displayed in spinner.
    var Country =
        arrayOf<String>("India","Pakistan","China","Korea")
```

```

private lateinit var selectedRadioButton: RadioButton
override fun onCreate(savedInstanceState: Bundle?) {
    super.onCreate(savedInstanceState)
    setContentView(R.layout.activity_main)
    supportActionBar?.title = Html.fromHtml("<font color=\"black\">" +
getString(R.string.app_name) + "</font>");
    val btn = findViewById<Button>(R.id.contin)
    val fname = findViewById<TextView>(R.id.fname1)
    val lname = findViewById<TextView>(R.id.lname1)

    radioGroup = findViewById(R.id.radioGroup)
    Spinner = findViewById(R.id.spinner)

    // on below line we are initializing adapter for our spinner
    val adapter: ArrayAdapter<CharSequence> =
        ArrayAdapter(this, android.R.layout.simple_spinner_item, Country)

    // on below line we are setting drop down view resource for our adapter.
    adapter.setDropDownViewResource(android.R.layout.simple_spinner_dropdown_item)

    // on below line we are setting adapter for spinner.
    Spinner.adapter = adapter

    // on below line we are creating a variable to which we have to set our spinner item
    selected.
    val selection = "India"

    // on below line we are getting the position of the item by the item name in our adapter.
    val spinnerPosition: Int = adapter.getPosition(selection)

    // on below line we are setting selection for our spinner to spinner position.
    Spinner.setSelection(spinnerPosition)

    Spinner.onItemSelectedListener = object : AdapterView.OnItemSelectedListener {
        override fun onItemSelected(p0: AdapterView<*>?, p1: View?, p2: Int, p3: Long) {

            Toast.makeText(applicationContext, Country[p2], Toast.LENGTH_SHORT).show()
            str = Country[p2]
        }
        override fun onNothingSelected(p0: AdapterView<*>?) {
        }
    }

    btn.setOnClickListener {
        if(!fname.text.toString().isEmpty() && !lname.text.toString().isEmpty()) {

```

```

        val intent = Intent(this, MainActivity2::class.java)
        intent.putExtra("fname", fname.text.toString())
        intent.putExtra("lname", lname.text.toString())
        val selectedRadioButtonId: Int = radioGroup.checkedRadioButtonId

        if (selectedRadioButtonId != -1) {
            selectedRadioButton = findViewById(selectedRadioButtonId)
            val string: String = selectedRadioButton.text.toString()
            intent.putExtra("radio", string)
            intent.putExtra("pos", str)
        }
        startActivity(intent)
    }
    else
    {
        Toast.makeText(applicationContext, "Enter the required fields",
Toast.LENGTH_SHORT).show()
    }
}
}
}
}

```

Main activity2

```
package com.example.materiallight
```

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

```
class MainActivity2 : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main2)
        val intent = intent
        val fname = findViewById<TextView>(R.id.fname2)
        val lname = findViewById<TextView>(R.id.lname2)
        val rad2 = findViewById<TextView>(R.id.rad1)
        val cont = findViewById<TextView>(R.id.country)

        val first = intent.getStringExtra("fname")
        val last = intent.getStringExtra("lname")
        val rad = intent.getStringExtra("radio")
        val con = intent.getStringExtra("pos")
    }
}

```

```

        fname.text = first
        lname.text = last
        rad2.text = rad
        cont.text = con
    }
}

```

A screenshot of a mobile application interface titled "MATERIAL LIGHT". The form contains the following elements:

- First Name :** A text input field containing "Swetha".
- Last Name :** A text input field containing "Muralidharan".
- Visit Type :** Two radio button options: "Bussiness" (unselected) and "Social" (selected).
- Country :** A dropdown menu currently showing "India".
- Buttons:** Two buttons at the bottom, "CONTINUE" and "CANCEL", both with a blue gradient.

A screenshot of a mobile application interface titled "Material Light". It displays the details of the form data in a list format:

- Details** (Section Header)
- First Name** Swetha
- Last Name** Muralidharan
- Visit Type** Social
- Country** India

5. Captcha

Main_Activity1

```
package com.example.captcha
```

```

import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.widget.Button
import android.widget.EditText
import android.widget.TextView
import java.util.*
import android.content.Intent
import android.textEditable
import android.text.TextWatcher
import android.widget.Toast

```



```

class MainActivity : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main)
        val phone = findViewById<EditText>(R.id.editTextPhone)
        val cap = findViewById<TextView>(R.id.captcha)
        val ent = findViewById<EditText>(R.id.editTextTextPersonName)
        val but = findViewById<Button>(R.id.button3)
        cap.text = randomString(10)
        ent.addTextChangedListener(object : TextWatcher {
            override fun beforeTextChanged(p0: CharSequence?, p1: Int, p2: Int, p3: Int) {

            }

            override fun onTextChanged(p0: CharSequence?, p1: Int, p2: Int, p3: Int) {

            }

            override fun afterTextChanged(p0: Editable?) {

                if (cap.text.toString().equals(p0.toString(), true)) {
                    but.setOnClickListener {
                        val intent = Intent(this@MainActivity, MainActivity2::class.java)
                        intent.putExtra("phone", phone.text.toString())
                        Toast.makeText(applicationContext, "Successfully sent",
Toast.LENGTH_SHORT)
                            .show()
                            startActivity(intent)
                        }
                    }
                }
            })
    }

    fun getRandomNumber(min: Int, max: Int): Int {
        return Random().nextInt((max - min) + 1) + min
    }

    fun randomString(stringLength: Int): String {
        val list =
"ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz".toCharArray()
        var randomS = ""
    }

```

```

        for (i in 1..stringLength) {
            randomS += list[getRandomNumber(0, list.size - 1)]
        }
        return randomS
    }
}

```

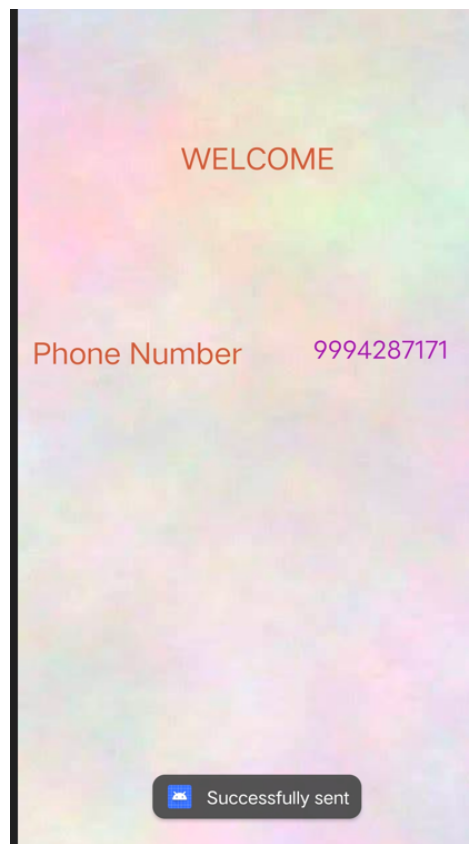
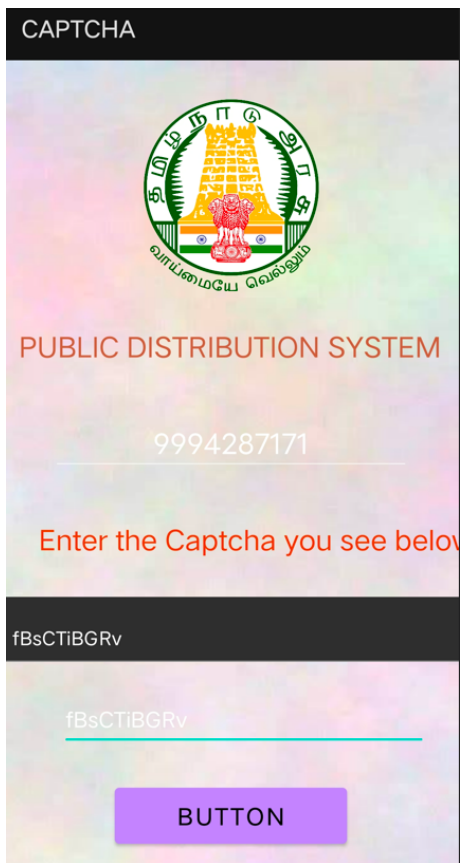
Main_activity2

```
package com.example.captcha
```

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

```
class MainActivity2 : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main2)
        val intent = intent
        val txt = findViewById<TextView>(R.id.textView3)
        val ph = intent.getStringExtra("phone")
        txt.text = ph
    }
}

```



6. Homescreen

Mainactivity1

```
package com.example.homescreen

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

class MainActivity : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main)
        val first = findViewById<EditText>(R.id.editTextTextPersonName)
        val last = findViewById<EditText>(R.id.editTextTextPersonName3)
        val phone = findViewById<EditText>(R.id.editTextPhone)
        val email = findViewById<EditText>(R.id.editTextTextEmailAddress)
        val bdate = findViewById<EditText>(R.id.editTextDate)
        val gender= findViewById<EditText>(R.id.editTextTextPersonName6)
        val address = findViewById<EditText>(R.id.editTextTextPersonName7)
        val button = findViewById<Button>(R.id.button)
        button.setOnClickListener {
            val finame = first.text.toString()
            if (first.text.toString() == "" || last.text.toString() == "" ||
                phone.text.toString() == "" || email.text.toString() == "" ||
                bdate.text.toString() == "" || gender.text.toString() == "" ||
                address.text.toString() == "") {
                Toast.makeText(
                    this@MainActivity,
                    "please enter all the details",
                    Toast.LENGTH_LONG
                ).show()
            } else {
                button.visibility = VISIBLE
                val abc = Intent(this@MainActivity, MainActivity2::class.java)
                abc.putExtra("fname", finame)
                startActivity(abc)
            }
        }
    }
}
```

Mainactivity2

```
package com.example.homescreen
import android.content.Intent
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
```

```

import android.widget.Button
import android.annotation.SuppressLint

class MainActivity2 : AppCompatActivity() {
    @SuppressWarnings("MissingInflatedId")
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)

        val intent = intent
        val fname = findViewById<TextView>(R.id.fname)
        val lname = findViewById<TextView>(R.id.lname)
        val phone = findViewById<TextView>(R.id.phonenumber)
        val email = findViewById<TextView>(R.id.mail)
        val bday = findViewById<TextView>(R.id.birthdate)
        val gender = findViewById<TextView>(R.id.gender)
        val address = findViewById<TextView>(R.id.address)
        val Confirm = findViewById<Button>(R.id.button4)
        val Edit = findViewById<Button>(R.id.button2)

        val first = intent.getStringExtra("fname")
        val last = intent.getStringExtra("lname")
        val phonenumber = intent.getStringExtra("phone")
        val mail = intent.getStringExtra("mailid")
        val date = intent.getStringExtra("date")
        val gen = intent.getStringExtra("gen")
        val add = intent.getStringExtra("add")

        fname.text = first
        lname.text = last
        phone.text = phonenumber
        email.text = mail
        bday.text = date
        gender.text = gen
        address.text = add

        Confirm.setOnClickListener {
            val intent = Intent(this@MainActivity2, MainActivity3::class.java)
            startActivity(intent)
        }
        Edit.setOnClickListener {
            val intent = Intent(this@MainActivity2, MainActivity::class.java)
            startActivity(intent)
        }
    }
}

```

Mainactivity3

```
package com.example.homescreen
```

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

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

```
import android.widget.TextView
```

```
class MainActivity3 : AppCompatActivity() {  
    override fun onCreate(savedInstanceState: Bundle?) {  
        super.onCreate(savedInstanceState)  
        setContentView(R.layout.activity_main3)  
        setContentView(R.layout.activity_main2)  
        val display=findViewById<TextView>(R.id.tv)  
        val name=intent.getStringExtra("fname")  
        val msg="hello $name , you are successfully registered"  
        display.text=msg  
    }  
}
```

First Name

Last Name

Phone number

Email

Birthdate

Gender

Address

SAVE

Details

First name TextView

Last name TextView

Phone number TextView

Email TextView

Birthday TextView

Gender TextView

Address TextView

CONFIRM

EDIT