

Task 2

Home Screen

```
import android.content.Intent
import android.os.Bundle
import android.widget.Button
import android.widget.TextView
import androidx.appcompat.app.AppCompatActivity
import okhttp3.OkHttpClient
import okhttp3.Request
import org.json.JSONObject
import kotlin.concurrent.thread

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

        val currentWeatherTextView = findViewById<TextView>(R.id.currentWeatherTextView)
        val showForecastButton = findViewById<Button>(R.id.showForecastButton)
        val searchLocationButton = findViewById<Button>(R.id.searchLocationButton)
        fetchCurrentWeather(currentWeatherTextView)

        showForecastButton.setOnClickListener {
            val intent = Intent(this, ForecastActivity::class.java)
            startActivity(intent)
        }
    }
}
```

```

searchLocationButton.setOnClickListener {

} }

private fun fetchCurrentWeather(textView: TextView) {

    thread {

        val client = OkHttpClient()

        val request = Request.Builder()

            .url("https://api.openweathermap.org/data/2.5/weather?q=London&appid=YOUR_API_KEY&units=metric")

            .build()

        val response = client.newCall(request).execute()

        val jsonData = response.body?.string()

        if (jsonData != null) {

            val jsonObject = JSONObject(jsonData)

            val main = jsonObject.getJSONObject("main")

            val temp = main.getDouble("temp")

            val weather =
            jsonObject.getJSONArray("weather").getJSONObject(0).getString("description")

            val weatherInfo = "Temperature: $temp°C\nDescription: $weather"

            runOnUiThread {

                textView.text = weatherInfo

            } } }

    }}

```

Forecast Screen

```
import android.os.Bundle

import android.widget.Button

import android.widget.TextView

import androidx.appcompat.app.AppCompatActivity

import okhttp3.OkHttpClient

import okhttp3.Request

import org.json.JSONObject

import kotlin.concurrent.thread

class ForecastActivity : AppCompatActivity() {

    override fun onCreate(savedInstanceState: Bundle?) {

        super.onCreate(savedInstanceState)

        setContentView(R.layout.activity_forecast)

        val forecastTextView = findViewById<TextView>(R.id.forecastTextView)

        val backToHomeButton = findViewById<Button>(R.id.backToHomeButton)

        fetchForecast(forecastTextView)

        backToHomeButton.setOnClickListener {

            finish()

        }

    }

    private fun fetchForecast(textView: TextView) {

        thread {
```

```

val client = OkHttpClient()

val request = Request.Builder()

    .url("https://api.openweathermap.org/data/2.5/forecast?q=London&appid=YOUR_API_KEY&units=metric")

    .build()

val response = client.newCall(request).execute()

val jsonData = response.body?.string()

if (jsonData != null) {

    val jsonObject = JSONObject(jsonData)

    val list = jsonObject.getJSONArray("list")

    val forecastInfo = StringBuilder()

    for (i in 0 until list.length()) {

        val item = list.getJSONObject(i)

        val main = item.getJSONObject("main")

        val temp = main.getDouble("temp")

        val weather =
item.getJSONArray("weather").getJSONObject(0).getString("description")

        forecastInfo.append("Date: ${item.getString("dt_txt")}\nTemperature:
$temp°C\nDescription: $weather\n\n")

    }

    runOnUiThread {

        textView.text = forecastInfo.toString()

    }

} } }

```

