

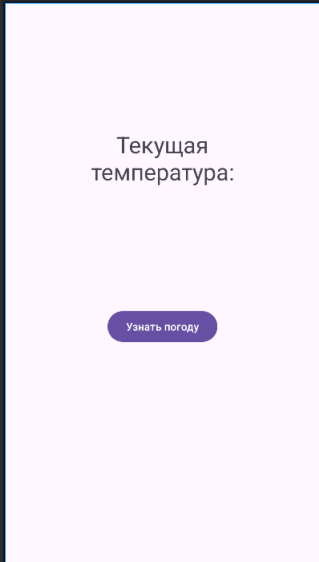
Практическая работа 11

1. Добавляем разрешения в манифест

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools">
    <uses-permission android:name="android.permission.ACCESS_COARSE_LOCATION"/>
    <uses-permission android:name="android.permission.ACCESS_FINE_LOCATION"/>
    <uses-permission android:name="android.permission.INTERNET"/>
    <application
        android:allowBackup="true"
        android:dataExtractionRules="@xml/data_extraction_rules"
        android:fullBackupContent="@xml/backup_rules"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/lab_11"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportRtl="true"
        android:theme="@style/Theme.Lab_11"
        tools:targetApi="31">
```

2. Activity_main

```
<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@color/white">
    <TextView
        android:id="@+id/text1"
        android:layout_width="263dp"
        android:layout_height="98dp"
        android:gravity="center"
        android:text="Текущая температура:"
        android:textSize="38dp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.243" />
    <TextView
        android:id="@+id/text2"
        android:layout_width="335dp"
        android:layout_height="82dp"
        android:gravity="center"
        android:text=""
        android:textSize="28dp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.45" />
    <Button
        android:id="@+id/btn1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Узнать погоду"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.584" />
</androidx.constraintlayout.widget.ConstraintLayout>
```



3. MainActivity.kt. Api-key берем с сайта <https://openweathermap.org/>.

```
class MainActivity : AppCompatActivity() {
    var api_key = "740454c32461221b2fa279da664798ab"
    private lateinit var btVar1: Button
    private lateinit var textView: TextView
    private lateinit var fusedLocationClient: FusedLocationProviderClient
    private val LOCATION_PERMISSION_REQUEST_CODE = 1
    @SuppressWarnings("MissingInflatedId")
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        enableEdgeToEdge()
        setContentView(R.layout.activity_main)
        textView = findViewById(R.id.text2)
        btVar1 = findViewById(R.id.btn1)
        fusedLocationClient =
            LocationServices.getFusedLocationProviderClient(activity: this)
        btVar1.setOnClickListener {
            checkForPermission()
        }
    }
    //Метод для проверки наличия разрешений
    private fun checkForPermission() {
        if (ActivityCompat.checkSelfPermission(context: this,
            Manifest.permission.ACCESS_FINE_LOCATION) !=
            PackageManager.PERMISSION_GRANTED &&
            ActivityCompat.checkSelfPermission(context: this,
            Manifest.permission.ACCESS_COARSE_LOCATION) !=
            PackageManager.PERMISSION_GRANTED) {
            ActivityCompat.requestPermissions(activity: this,
                arrayOf(
                    Manifest.permission.ACCESS_FINE_LOCATION,
                    Manifest.permission.ACCESS_COARSE_LOCATION),
                LOCATION_PERMISSION_REQUEST_CODE)
        } else {
            obtainLocation()
        }
    }
}
```

```

@SuppressLint("MissingPermission")
private fun obtainLocation() {
    fusedLocationClient.lastLocation
        .addOnSuccessListener { location: Location? ->
            if (location != null) {
                val weatherUrl =
                    "https://api.openweathermap.org/data/2.5/weather?lat=${location.latitude}&lon=${location.longitude}&units=metric&appid=${api_key}"
                getTemp(weatherUrl)
            } else {
                Toast.makeText(context, this, text: "Не удалось получить местоположение", Toast.LENGTH_SHORT).show()
            }
        }
        .addOnFailureListener {
            Toast.makeText(context, this, text: "Location Permission not granted",
                Toast.LENGTH_SHORT).show()
        }
    }
}

private fun getTemp(url: String) {
    val queue = Volley.newRequestQueue(context)
    val stringReq = StringRequest(
        Request.Method.GET, url, { response ->
            val obj = JSONObject(response)
            val main: JSONObject = obj.getJSONObject(name: "main")
            val temperature = main.getString(name: "temp")
            println(temperature)
            val city = obj.getString(name: "name")
            println(city)
            textView.text = "${temperature} Градусов по цельсию в ${city}"
            System.out.println(obj.toString())
        },
        { textView.text = "Ошибка!" })
    queue.add(stringReq)
}
}

```

4. Результат:

