

КГУСТА

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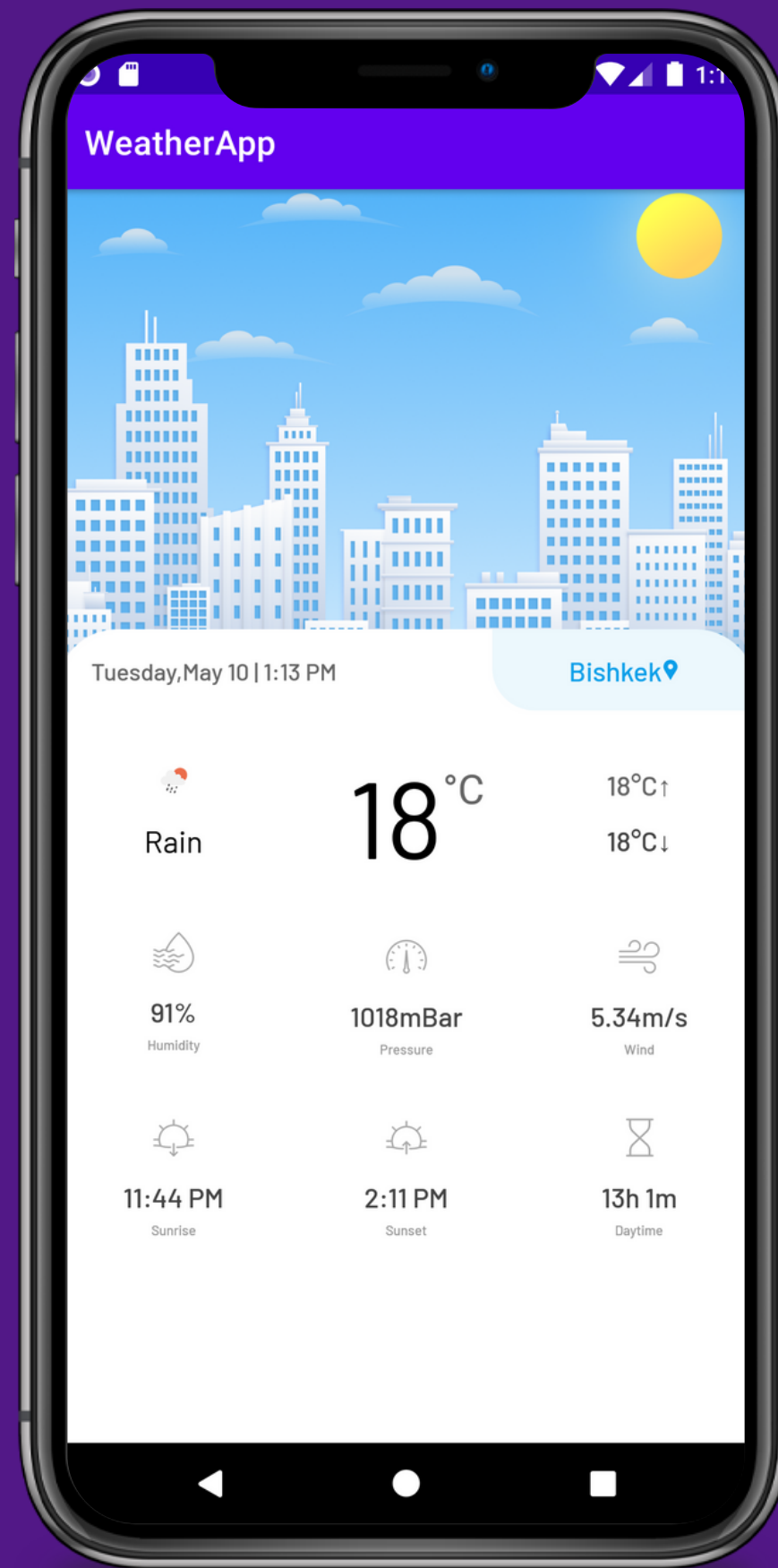


МОБИЛЬНОЕ ПРИЛОЖЕНИЕ

WeatherApp



Приложение разработано для просмотра погоды



НА ЧЕМ НАПИСАН?

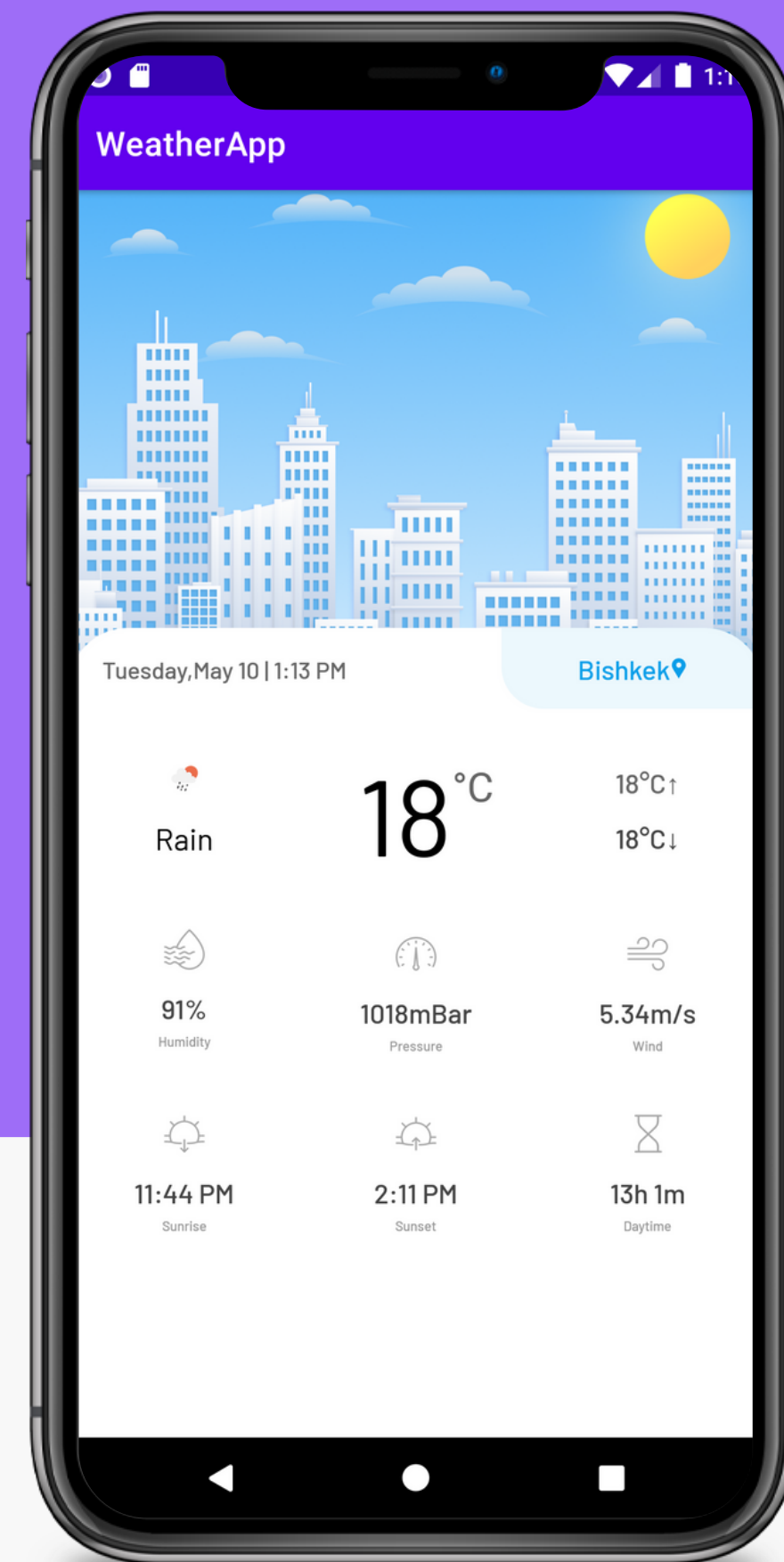
Написан в среде разработки Android Studio,
используемый язык Java

ИСПОЛЬЗУЕМЫЕ РЕСУРСЫ

Backend часть взята с бесплатного сайта
openweathermap.org

ОСНОВНОЙ ЭКРАН И ФУНКЦИИ

**На главном экране выведено текущая температура,
влажность воздуха,
атмосферное давление,
скорость ветра,
время рассвета и заката,
протяженность дня**





Город выбирается с
помощью карты Google
maps

Retrofit

```
1 package kg.geektech.weatherapi.data.remote;
2
3 import ...
4
5
6
7
8
9
10
11 public class RetrofitClient {
12
13     @
14     private OkHttpClient provideOkHttpClient(){
15         return new OkHttpClient.Builder().
16             writeTimeout( timeout: 10, TimeUnit.SECONDS)
17             .readTimeout( timeout: 10, TimeUnit.SECONDS)
18             .connectTimeout( timeout: 10, TimeUnit.SECONDS)
19             .addInterceptor(provideLogin())
20             .build();
21     }
22
23     @
24     private Interceptor provideLogin(){
25         return new HttpLoggingInterceptor().setLevel(HttpLoggingInterceptor.Level.BODY);
26     }
27
28     private Retrofit retrofit = new Retrofit.Builder()
29         .addConverterFactory(GsonConverterFactory.create())
30         .client(provideOkHttpClient())
31         .baseUrl("https://api.openweathermap.org/data/2.5/")
32         .build();
33
34     public WeatherApi provideApi() { return retrofit.create(WeatherApi.class); }
35 }
```

Запросы

```
package kg.geektech.weatherapi.data.remote;

import ...

public interface WeatherApi {

    @GET("weather?")
    Call<Weather> getTemp(
        @Query("lat") String lat,
        @Query("lon") String lon,
        @Query("appid") String appId,
        @Query("units") String metric
    );
}
```

Класс данных

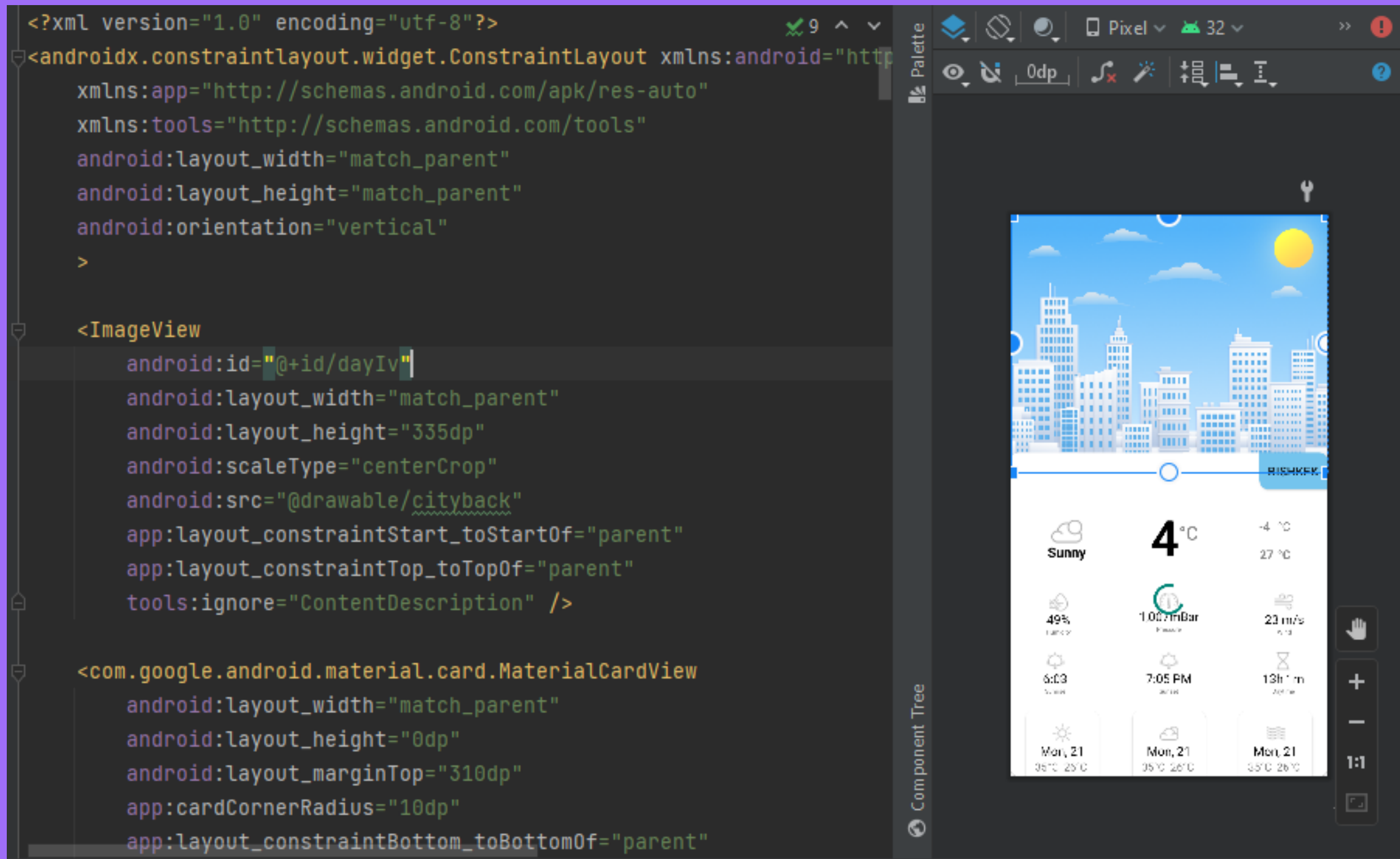
```
public class Main {  
  
    @SerializedName("temp")  
    @Expose  
    private Double temp;  
  
    @SerializedName("feels_like")  
    @Expose  
    private Double feelsLike;  
  
    @SerializedName("temp_min")  
    @Expose  
    private Double tempMin;  
  
    @SerializedName("temp_max")  
    @Expose  
    private Double tempMax;  
  
    @SerializedName("pressure")  
    @Expose  
    private Integer pressure;  
  
    @SerializedName("humidity")  
    @Expose  
    private Integer humidity;  
}
```


XML

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res-auto"
    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"
    android:orientation="vertical"
    >

    <ImageView
        android:id="@+id/dayIv"
        android:layout_width="match_parent"
        android:layout_height="335dp"
        android:scaleType="centerCrop"
        android:src="@drawable/cityback"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        tools:ignore="ContentDescription" />

    <com.google.android.material.card.MaterialCardView
        android:layout_width="match_parent"
        android:layout_height="0dp"
        android:layout_marginTop="310dp"
        app:cardCornerRadius="10dp"
        app:layout_constraintBottom_toBottomOf="parent"
```



The screenshot displays the Android Studio environment. On the left, the XML layout code is visible, defining a vertical `ConstraintLayout` containing an `ImageView` and a `MaterialCardView`. The `ImageView` is set to `match_parent` width and `335dp` height, with `centerCrop` scaling and a source of `@drawable/cityback`. The `MaterialCardView` is positioned below the image with a height of `0dp` and a top margin of `310dp`. On the right, the design preview shows a weather application. The top section features a cityscape background with a blue sky, white clouds, and a yellow sun. Below this, a white card displays weather information for 'RISHKES'. The card includes a 'Sunny' icon, a large '4°C' temperature, and a high/low of '-4 °C / 27 °C'. Other details shown are 49% humidity, 1.007 mBar pressure, 23 m/s wind, 6:03 sunrise, 7:05 PM sunset, and 13h 11m of daylight. At the bottom, a three-day forecast for Monday, 21st, shows a high of 35°C and a low of 25°C.

спасибо за внимание