MAP524 – Mobile App Development Android
Assignment – 3

Evaluation: 100 Points. (15%)

Instructions:

- This assignment is to be done individually.
- I will use **Google Pixel 4 XL configured with API 27** to run and test the app. If you are on MacBook with M1 chip, you can use the emulator that is compatible on your machine but make sure that you submit the video of the app execution in the drop box.
- Besides implementing the required functionality submissions are required to use the correct coding conventions used in class, professional organization of the code, alignment, clarity of names is all going to be part of the evaluation.

Task:

You are to create an app named as **YourFirstname_Weather** as per the specifications given below, so that the app allows the user to view weather information for their device location.

- The app should fetch the current location of the user. Once the location is obtained, perform geocoding to get the city name & country and display on screen.
- Using the obtained latitude and longitude from the location, the app should fetch the weather information from the API. Every time the location updates, the weather information also must be updated accordingly and reflected on screen for the user.
- To fetch the weather information, the app should use https://www.weatherapi.com/. Please note that you will have to create a free account on their website to obtain the API key. You must use API key to execute the fetch request using URL of the format

  https://api.weatherapi.com/v1/current.json?key=YOUR_API_KEY&q=LAT,LNG

- You may use the API explorer provided by weather API to learn about possible response format. The following are some of the important fields to be extracted from response object.
  temp_c, feelslike_c, wind_kph, wind_dir, humidity, uv, vis_km, and condition
- I encourage you to enhance the UI for professional look and feel in the app.

Submission Checklist:

- Write the comments containing your student ID, full name at top of each file.
- Once you complete the app, create the zip of your entire project folder using following steps:
  - o In Android Studio, open "**Build**" menu and select "**Clean Project**".
  - o Open "**File**" menu →select "**Export**" → select "**Export to zip file**".
- Upload the exported **.zip** file in drop box.
- A **screen/video recording** demonstrating your app execution with all the functionalities or any errors if you have any.

- In the comment section of your submission, write the **reflection** (approximately a paragraph) mentioning your learning in the assignment, any difficulties that you have faced while doing the assignment and how you manage to resolve them.