

# Homework 1

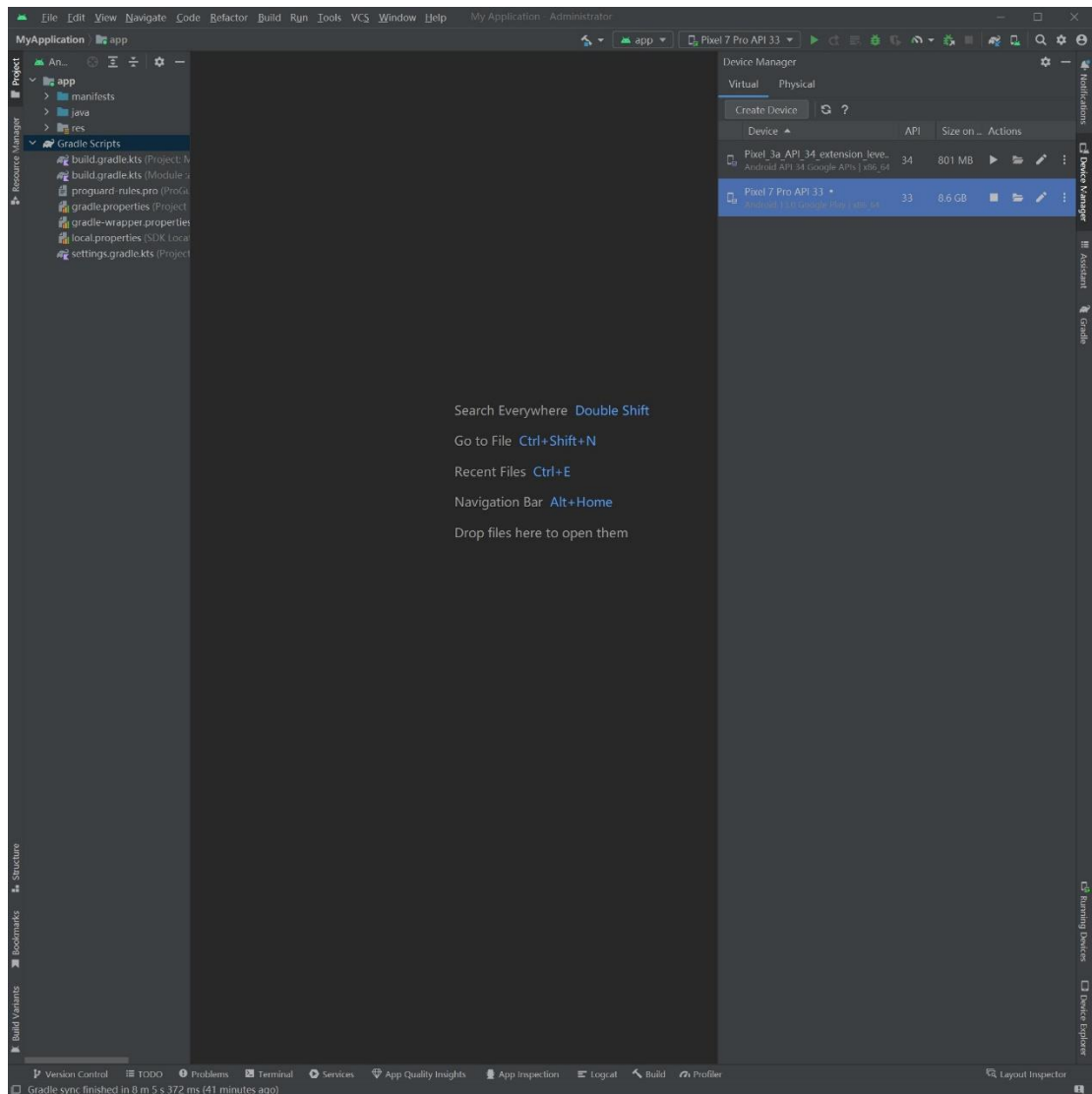
Team: Tuesday and Thursday

Team member: Sicheng Chen (Thursday section), Siyi Du (Tuesday Section)

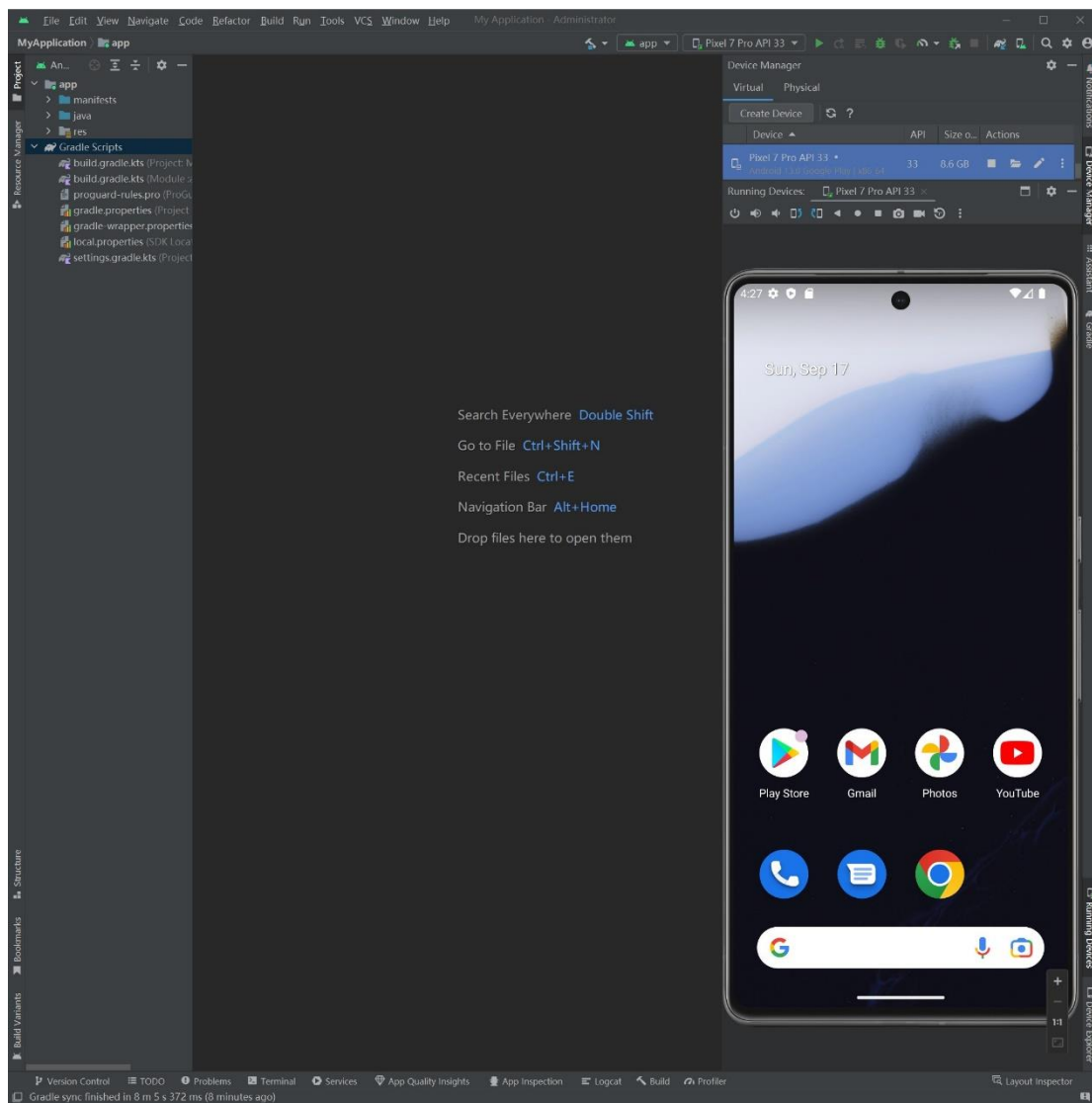
Team GitHub Repo: [csc0007/CS501\\_GroupWork: Group Work Only \(github.com\)](https://github.com/csc0007/CS501_GroupWork)

Personal GitHub Repo: [csc0007/CS501: Homeworks&other \(github.com\)](https://github.com/csc0007/CS501: Homeworks&other (github.com))

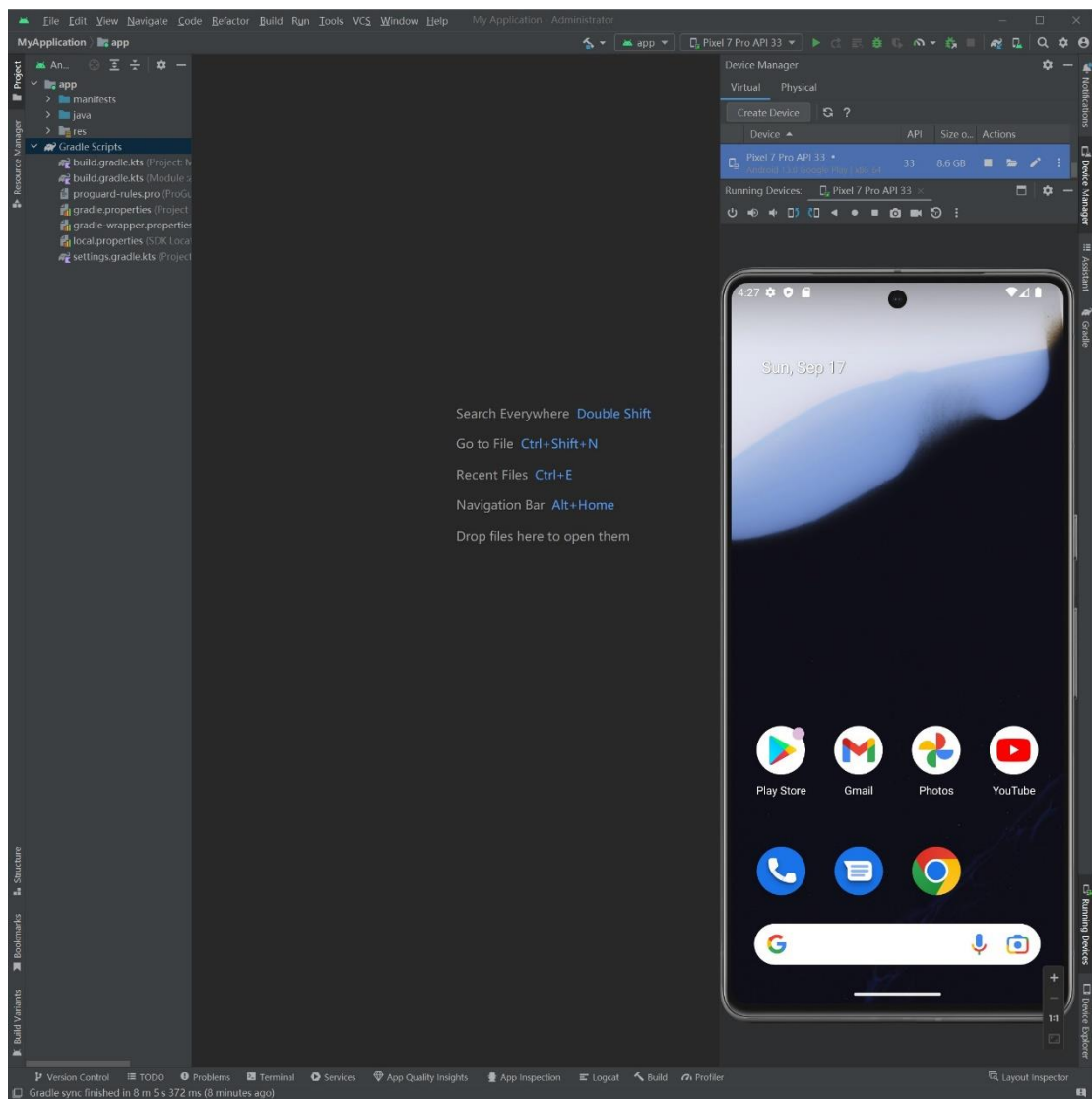
## 2. Screenshot of the installed IDE



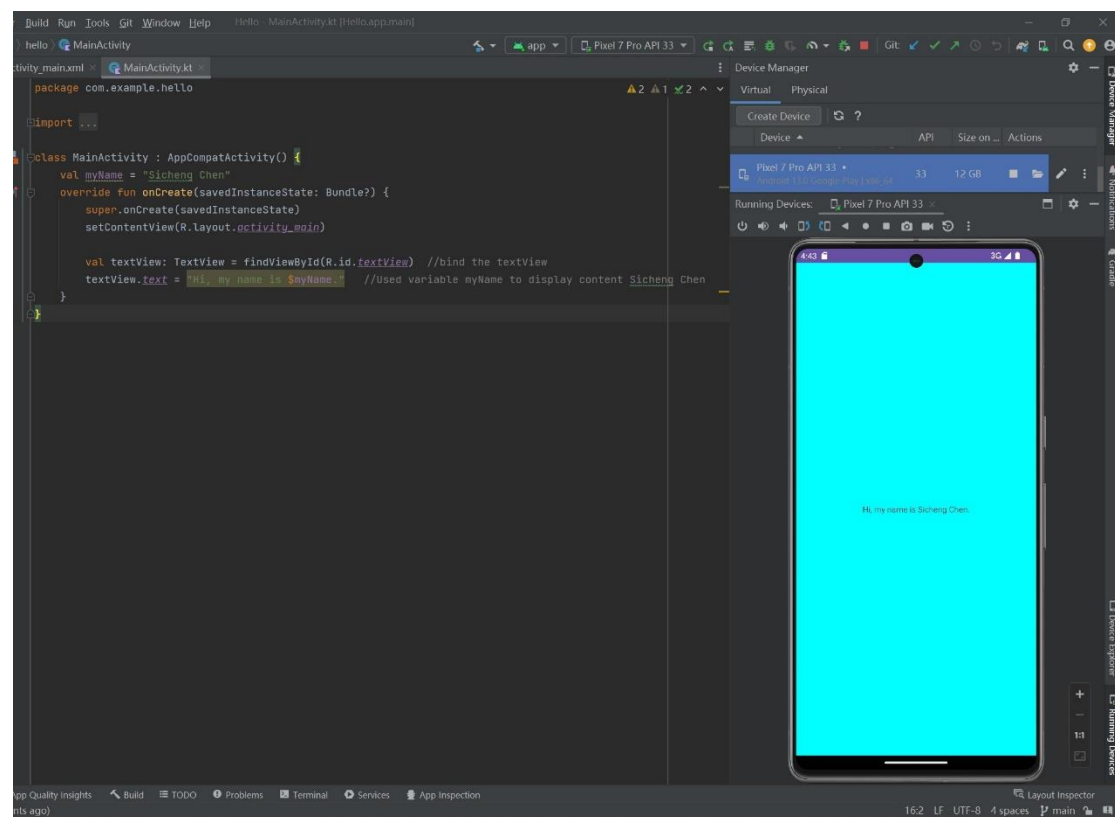
## Screenshot of the Virtual Machine



### 3. Screenshot of the Virtual Device



#### 4. Hello World APP



For code details, please refer to my personal GitHub Repo: [csc0007/CS501: Homeworks&other \(github.com\)](https://github.com/csc0007/CS501-Homeworks&other) under path: `./HW/HW1/Code`

5.

a. List the various sensors and devices on typical mobile devices

Sensors: touchscreen, microphone, camera, accelerometer, gyro, compass, barometer, GPS, NFC, fingerprint sensor.

Device: CPU, GPU, SD card, Speaker, vibrator, Memory, SIM card, LED, Button, Battery.

b. List five of your favorite apps. Briefly describe what they do and what makes them so great.

WeChat: WeChat is a "superapp" that includes a wide range of functionalities. It integrates payment, identification, messaging, video calling, moment sharing, online ordering, utility bill checking, and more. It incorporates every aspect of daily life, making it incredibly convenient. With WeChat, there's no need to download multiple apps since everything is available in this one comprehensive application.

Bilibili: It is an online video app. It was firstly introduced by animation lovers to share their resource of episode. The app gradually developed into a big online video and live stream platform with variety of topics. The app first introduced the bullet-style live comment over the video, and the app is completely ad free.

The Little RedBook: It is an online sharing platform, but also an encyclopedia of everything involved in daily life. It is first developed by Chinese oversea student to share their experience

using cosmetic product in their study country. Now it is developed to for everyone to share their life and experience. Not sure what to in at Cambridge? Go to this app and see what other users say!

Weibo: This is an app that you can search for current trends, especially for the official announcement, since most of the authorities have their official account in this app. Also, most of the corporations share their news too. It will be a replacement for traditional news press.

Zenly: A fun app that can track you and your friends location (With their approval). It is also a fun way to mess up with your friends.

c. Identify an App you use often, but you wish were better, (eg., - Uber, Lym, Venmo, Indeed, etc.) Identify the pros and cons of each, and what features are great, but could be improved, what features are missing. For the latter two items, describe with some detail how you would implement these features and what technology might be used to implement these missing features.

Whoo: This is also a location sharing application. It is aimed to replace Zenly after Meta decided to shut down this service. It have a function to send ridiculous emojis to your friend, but the emoji library can be improved to include more icons and animations.

If I implement this feature, I will first go to the famous and fun icon design studios to let them work on more patterns. Then find out which part in the app code control such feature, and work on this part to increase the emojis supported.

6. Please refer to our team GitHub Repo for the detail: [csc0007/CS501\\_GroupWork: Group Work Only \(github.com\)](https://github.com/csc0007/CS501_GroupWork)