Lab Assignment 1: Spinning Up React Native App

1. System Requirements

CPU: Processor: 11th Gen Intel(R) Core(TM) i7-11800H @ 2.30GHz, 2304 Mhz, 8 Core(s), 16 Logical Processor(s)

RAM: 16.0 GB

Windows Version: Windows 11

1. Installation instructions
   1. Install Chocolatey by inputting this into power shell administration version: Set-ExecutionPolicy Bypass -Scope Process -Force; [System.Net.ServicePointManager]::SecurityProtocol = [System.Net.ServicePointManager]::SecurityProtocol -bor 3072; iex ((New-Object System.Net.WebClient).DownloadString('https://community.chocolatey.org/install.ps1'))
   2. Install Node and JDK by inputting: choco install -y nodejs-lts microsoft-openjdk17
   3. Download Android Studio: <https://developer.android.com/studio/index.html>
   4. Check Android SDK, Android SDK Platform, Android Virtual Device
   5. Install Hyper V if not on computer: <https://android-developers.googleblog.com/2018/07/android-emulator-amd-processor-hyper-v.html>
   6. Open Android Studio – select more actions – select SDK manager
   7. Select SDK platforms – select show package details – expand Android 14 (UpsideDownCake) – check Android SDK Platform 34, Intel x86 Atom\_64 System Image and Google APIs Intel x86 Atom System Image
   8. Select SDK Tools – select show package details – expand Android SDK Build-Tools – select 34.0.0
   9. Click apply
2. Configuration steps
   1. Use the search bar to search ‘environment variables’ – open ‘edit the system environment variables’ – select environment variables
   2. Click new – add variable name (ANDROID\_HOME) – add variable value (C:\Users\IzylAppdata\Local\Android\Sdk)
   3. Click Path – Edit – Add New (C:\Users\IzylAppdata\Local\Android\Sdk\platform-tools)
   4. Open powershell – copy/paste **Get-ChildItem -Path Env:\** - check that ANDROID\_HOME is there and that the newest item is added to Path
3. Project creation
   1. Create Virtual Device by opening AVD Manager – select any phone - select UpsideDownCake API Level 34 image – select finish
   2. Install HAXM if not on computer: <https://github.com/intel/haxm/wiki/Installation-Instructions-on-Windows>
   3. Open power shell – remove previous react-native-cli packages by inputting: npm uninstall -g react-native-cli @react-native-community/cli
   4. Create a new project by inputting: npx @react-native-community/cli@latest init AwesomeProject –version 0.74.0
4. Running the project
   1. Open android studio – open AVD Manager - press play on the virtual device created in the last step
   2. Open terminal within project file – input: npm start – leave this terminal open
   3. Open a new terminal within project file – input: npm run android
5. Troubleshooting
   1. Could not move temporary workspace (…\android.gradle\8.6\dependencies-accessors\423f0288fa7dffe069445ffa4b72952b4629a15a-a4bfdb9a-3a8e-40d1-895b-328f0f4c6181) to immutable location (…\android.gradle\8.6\dependencies-accessors\423f0288fa7dffe069445ffa4b72952b4629a15a)

This can be fixed by downgrading the gradle version. I did this by running .\gradlew clean and then going to the folder /android/gradle/wrapper/gradle-wrapper.properties and changing the version from 8.6 to 8.5 (distributionUrl=https://services.gradle.org/distributions/gradle-8.5-all.zip).

* 1. Compile error due to wrong version of React Native.

I solved this by changing the version to 0.74.0 when creating the project. npx @react-native-community/cli@latest init AwesomeProject –version 0.74.0

1. This was used to solve the temporary workspace error: <https://stackoverflow.com/questions/78384724/react-native-error-java-io-uncheckedioexception-could-not-move-temporary-work>

This is used to set up the environment:

<https://reactnative.dev/docs/set-up-your-environment>

This is used to set up the project: <https://reactnative.dev/docs/getting-started-without-a-framework>

This is used to install chocolatey: <https://chocolatey.org/install>

This is used to install AMD Processor and Hyper-V: <https://android-developers.googleblog.com/2018/07/android-emulator-amd-processor-hyper-v.html>

This is used to install HAXM: <https://github.com/intel/haxm/wiki/Installation-Instructions-on-Windows>