1. **System requirements**: Document specifications of the system being used for React Native development. This includes the CPU, RAM size, and Windows version.

CPU: AMD Ryzen 5 5600X 6-Core Processor

RAM size: 32 GB

Windows version: Windows 11

1. **Installation instructions**: Include step-by-step instructions for installing the necessary tools and dependencies required for the framework, such as Node.js, and the React Native CLI.

* Download and install Node.js and NPM
* Download and install Android Studio

While on Android Studio installation wizard, check the following items

* Android SDK
* Android SDK Platform
* Android Virtual Device
* Hyper-V: Performance (Intel ® HAXM)

1. **Configuration steps**: Detail any necessary configuration steps required to set up the framework, such as setting environment variables or configuring project settings.

Open SDK Manager, under SDK platforms, make sure Android API is checked. Under SDK Tools, check SDK Build Tools, Android Emulator, Android Emulator Hypervisor Driver, Android SDK Platform, and Intel x86 Emulator Accelerator.

#### Configure the ANDROID\_HOME environment variable under Settings, click

#### on **New** to create a new ANDROID\_HOME user variable that points to the path to my Android SDK. If the SDK is installed by default, the path should be the following:

*%LOCALAPPDATA%\Android\Sdk*

#### Add platform-tools to Path by selecting the Path variable. Then click edit, new and add the path to platform-tools to the list. The default location for this folder is:

*%LOCALAPPDATA%\Android\Sdk\platform-tools*

1. **Project creation**: Outline the steps involved in creating a new project using the framework, including any necessary setup or configuration.

First create a folder for the project, open the folder in the command line then type the following line:

*npx react-native@latest init AwesomeProject*

After the project is created, open it in VS code and update the App.tsx file to App.jsx by simply changing the file name and deleting the red lines.

1. **Running the project**: Detail how to run the project in an Android Device Simulator.

- Run the project in command line by typing *npm run start*

- Run the project in Android Studio, first open the Android folder in Android Studio, under *Build* click on *Make Project*, wait for the process to complete then click on *Run*  *App*.

1. **Troubleshooting**: Include information on how to troubleshoot common issues that may arise during setup or development, such as debugging and error messages. This may need to be updated in the future.

- Reset Android Studio to the default setting

I ran into this problem and the solution to it is to delete the AndroidStudio[verison] folder from the path *C:\Users\Chan\AppData\Roaming\Google*. It will remove the previous settings and allow you to reconfigure from the beginning.

- Update Java version

When I ran the app from the command line, I got the below error:

*FAILURE: Build failed with an exception. \* Where: Build file 'C:\Users\Chan\Desktop\cprg303\Incredible\android\app\build.gradle' line: 1 \* What went wrong: A problem occurred evaluating project ':app'. > Failed to apply plugin 'com.android.internal.application'. > Android Gradle plugin requires Java 17 to run. You are currently using Java 11. Your current JDK is located in C:\Program Files\Microsoft\jdk-11.0.16.101-hotspot You can try some of the following options: - changing the IDE settings. - changing the JAVA\_HOME environment variable. - changing `org.gradle.java.home` in `gradle.properties`.*

Even though I have installed Java 17, when I ran java –version in the command line, it still shows Java 11. I fixed this issue by ensuring that the directory where OpenJDK 17 installed is in my system’s PATH environment variable and typing the following line in PowerShell.

*$env:PATH += ";C:\Program Files\Microsoft\jdk-17.0.10.7-hotspot\bin"*

1. **Resources**: Provide links to additional resources and documentation that can be used for reference and further learning, such as official documentation, tutorials, and Stack Overflow answers.

<https://stackoverflow.com/questions/19384033/how-to-reset-android-studio>