**Lab 1 – Setting up React Native process**

My system specifications:

CPU: 13th Gen Intel(R) Core™ i7-1355U, 1700 Mhz, 10 Cores, 12 logical processors

RAM: 32 GB

Windows: Windows 11

Official instructions here: https://reactnative.dev/docs/environment-setup?guide=native

**Step 1- installation:** install Node.js, npm and React Native CLI. make sure it is the most updated version.

1. Download the latest version of Node.js from their website: <https://nodejs.org/en>

(npm is included with this)

1. Download and install Android Studio : <https://developer.android.com/studio>

(ensure Android SDK, Android SDK Platform and Android virtual Device are installed during the process)

Go to SDK platforms and install android 13 tiramisu, android SDK Platform 33 and intel x86 Atom\_64 System Image

1. Install Chocolatey: run command

choco install -y nodejs-lts microsoft-openjdk17

1. React installation

-Open windows PowerShell in administrative mode

Enter the following command into the command prompt:  
  
npm install -g react-native-cli

**Step 2 - configuration:** Make sure that React Native CLI and Node.js are in the system path in the terminal

-create ANDROID\_HOME environment

-Open control panel, select user accounts, select it again, then change environment variables

-Create a new variable called ANDROID\_HOME and set its path to the sdk folder (\appdata\local\Android\sdk)

Add platform tools path

-Open control panel, select user accounts, select it again, then change environment variables

-select path

-select edit

-add a new path to the platform-tools folder (\appdata\local\Android\Sdk\platform-tools)

**Step 3 - Create a project:** run the following command:

npx react-native init CoolProjectName

navigate to the new project-

cd CoolProjectName

**Step 4 – Running the new project:**

First, create a new AVD in android studio and select desired device (I chose medium) and select Tiramisu API level 33. Click next and then finish.

Since I have an android this this be for android devices- run the following command

npx react-native run-android

assuming all is well, the emulator should open and the screen should turn on. All Set!

**Troubleshooting:**

Many troubleshooting options are available in the official instructions but some of the main issues I ran into were.

-install packages failing: make sure that you are in the right file location and you are running command promt/ powershell as administrator

-Build failures due to environment setup: make sure gradle is updated

./gradlew wrapper --gradle-version=7.3 --distribution-type=bin

-make sure Java is in an updated version

echo $env:JAVA\_HOME (make sure its version 8, 10 or 11)

-Choco is not recognized: make sure the chocolaty stuff is installed in the path to your project

**Additional Ressources:**

Official instructions: <https://reactnative.dev/docs/environment-setup?guide=native>

Gradle versions : <https://gradle.org/releases/> and <https://gradle.org/https://services.gradle.org/distributions/>

Chat GPT can also assist with troubleshooting