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Lab Assignment 1: Spinning Up React Native App

**1. System Requirements**

The development machine meets the following specifications:

- CPU: 2 core processor or higher

- RAM size: 8GB or higher

- Windows version: Windows 10 (64-bit)

**2. Installation Instructions and 3. Configurat:**

1. Come to this website ([https://reactnative.dev/docs/environment-setup?guide=native](https://reactnative.dev/docs/environment-setup?guide=native).)) and when clicking on it, you will be led to this page

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2. Make sure to choose the tab “React Native CLI Quickstart” to get started, with the “Windows” selected on Development OS and “Android” selected on Target OS

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- **In terms of installing Node.js**, come to this website to install “[nodejs.org](https://nodejs.org/en)” and select “LTS” version and start downloading

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- When it is installed, you will see the popup screen, click on next, agree the license and leave it in default

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**- Install Android Studio:** Come to this link to start downloading “<https://developer.android.com/studio>”.

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- It then will show up, click on, and wait. Do not click multiple times if it doesn’t open right away.



- After that, click on next, leave it as default and install

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- After finishing installing the app, there will be a screen appearing, click on Next, make sure “Android SDK”, “Performance (Intel ® HAXM)”, “Android Virtual Device” boxes are checked  
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- Make sure to accept all the licenses for the components which will be installed and finish.

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- Choose More Actions and click on SDK Manager.

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- In SDK Platforms tab, check on the “Show Package Details’ box to show more details to make sure Android SDK Platform already downloaded, then click OK button.

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- The React Native tools require some environment variables to be set up in order to build apps with native code.

1. Open the **Windows Control Panel.**
2. Click on **User Accounts,** then click **User Accounts** again.
3. Click on **Change my environment variables.**
4. Click on **New...** to create a new ANDROID\_HOME user variable that points to the path to your Android SDK:

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- **To find the variable value above,** turn back to Android Studio, click on More Actions and SDK Manager. The variable value is displayed in Android SDK Location, copy, and paste it to the path  
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- **Add platform-tools to Path:** Click on Path and then Edit

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- Click on New or Browse and select the place where you store your Android SDK folder then choose platform-tools and OK.

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**4. Project Creation + 5.0 Running the Project**

- Go to the folder you store course CPRG303 Mobile and type “cmd”, there will be a command prompt appeared.  
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- Then write this and enter. After that open Visual Studio Code and open MyFirstApp. Change App.tsx to App.jsx and delete those red lines, errors in App.jsx.

  
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**- Device Emulator Setup:** Turn back to Android Studio, click on More Actions and choose Virtual Device Manager  
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- Click on “Create Device”

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- Choose Phone/Pixel 7 and click on Next button. A screenshot of a phone

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- After that, click on download “R” in Release Name column and click on play icon to show the emulator.

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- Go to Android Studio, click Run button to start

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- After successfully building the app, turn back to Visual Studio Code, in the terminal, write “npm start” to make the device run. Because before, we change App.tsx to App.jsx so App.jsx appears on the screen.

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