Lab Assignment 1: Spinning Up React Native App

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1. **System requirements:**

* CPU: Minimum dual-core processor
* RAM: Minimum 8GB RAM
* Operating System: Windows 10 (64-bit)

1. **Installation instructions**:

* Visit Node.js official website ([https://nodejs.org/)](https://nodejs.org/)%20) and download the LTS version for Windows and to verify open command prompt and paste ***‘node-v’*** command.
* Dependencies are Node, the React Native command line interface, a JDK, and Android Studio.
* Open a command prompt and run the following command to install the React Native CLI: ***npx react-native <command>***
* Download JDK from <https://openjdk.java.net/projects/jdk/17/>
* Download and install Android Studio using:

(<https://developer.android.com/studio/index.html>)

and make sure the boxes next to all the following items are checked:

Android SDK

Android SDK Platform

Android Virtual Device

* And then click ‘Next.’

1. **Configuration steps**:

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:

The SDK is installed, by default, at the following location:

***%LOCALAPPDATA%\Android\Sdk***

1. **Project creation**;

* If you previously installed a global react-native-cli package, please remove it as it may cause unexpected issues:Run the following command to create a new React Native project using the React Native CLI:

***npx react-native@latest init Incredible Todo List App***

* Move into the newly created project directory:

***cd IncredibleTodoListApp***

1. **Running the project**:

* Metro is the JavaScript build tool for React Native. To start the Metro development server, run the following from your project folder:

***npm start***

* Let Metro Bundler run in its own terminal. Open a new terminal inside your React Native project folder. Run the following***:***

***npm run android***

* If everything is set up correctly, you should see your new app running in your Android emulator shortly.

1. **Troubleshooting**:

* If you encounter dependency issues, try running ***npm install*** in the project directory.

Verify that all system variables and PATH configurations are correct.

1. **Resources**:

* Node.js- <https://nodejs.org/>
* JDK- <https://openjdk.java.net/projects/jdk/17/>
* React Native Official- ***npx react-native <command>***
* Android Studio- <https://developer.android.com/studio/index.html>