

## CPRG303 - Lab 1

1. System requirements: Document specifications of the system being used for React Native development. This includes the CPU, RAM size, and Windows version.
  - a. CPU: AMD Ryzen 9 5900X, RAM: 64GBs Windows Version: 10
2. 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.
  - a. Navigate to Node.js website and download the latest Node Executable
  - b. Open Command Prompt
  - c. Navigate to the root folder (cd ../../)
  - d. Create a new directory with a name of your choosing (mkdir **Name**)
  - e. Navigate to that directory (cd **Name**)
  - f. Run the command **npm install -g create-react-native-app**
3. Configuration steps: Detail any necessary configuration steps required to set up the framework, such as setting environment variables or configuring project settings.
  - a. None at this time
4. Project creation: Outline the steps involved in creating a new project using the framework, including any necessary setup or configuration.
  - a. In the same folder where you ran step f in item 2 run the command **npm create-expo-app@latest**
  - b. Follow the Prompts and name your application
  - c. You now have successfully created an expo app using react CLI and Node JS
  - d. If using visual studio code you can move to the directory (cd **appName**)
  - e. Enter code . to open the folder in the IDE
  - f. Once in the IDE open a command line terminal
  - g. Enter **npm expo start** to start a development server.
5. Running the project: Detail how to run the project in an Android Device Simulator.
  - a. Download an android sdk from the android website
  - b. Once downloaded follow the prompts for installation
  - c. Once installed provide your IDE with the location of the SDK
  - d. In your command line where you ran step g from part 4 enter a to open an android emulator
6. 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.
  - a. If the expo will not start when you enter the command `npm expo start` insure you are in the correct folder and not using powershell command prompt but instead cmd
  - b. If any packages are missing use **npm i** to fetch and install
7. 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.
  - a. <https://nodejs.org/en>

- b. <https://reactnative.dev/docs/environment-setup>
- c. <https://docs.expo.dev/get-started/start-developing/>
- d. <https://developer.android.com/tools>
- e. [https://www.tutorialspoint.com/react\\_native/react\\_native\\_environment\\_setup.htm](https://www.tutorialspoint.com/react_native/react_native_environment_setup.htm)