Step by Step Process for Getting React Native Working

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## System Requirements

**Processor**: AMD Ryzen 7 5800X3D 8-Core Processor

**Ram**: 32 GB

**OS**: Windows 11 Home

## Installation Instructions

1. Follow the link provided: <https://reactnative.dev/docs/environment-setup?guide=native>
2. Choose React Native CLI QuickStart, select windows and Android **OR** Download and install android studio from the Microsoft teams download provided.

**Note: Use the default settings no matter which download you choose.**

1. Install Node JS. Make sure you select LTS not CURRENT. <https://nodejs.org/en>
2. Open android studio.
3. Agree to both license agreements.
4. It will start downloading components.
5. If the CMD prompt asks for permission select yes.
6. Under more actions click sdk manager
7. **If you have an AMD processor you will need to follow this link:**

<https://android-developers.googleblog.com/2018/07/android-emulator-amd-processor-hyper-v.html>

## Configuration Steps

1. You will need to Change the environment variables to include android\_home
2. Todo this press the windows key and type “Environment Variable” and select “Edit Environment Variables for your account.”
3. Press new and for Variable name input ANDROID\_HOME and for variable value input %LOCALAPPDATA%\Android\Sdk and press OK.
4. Next there will be a variable called Path, select it and press edit. Add a new variable where your platform-tools are. Example: C:\Users\AdamM\AppData\Local\Android\Sdk\platform-tools **OR** add your direct path to platform-tools with browse.

## Project Creation

1. Create a folder called cprg303 for creating a react native project.
2. Write cmd into the path bar to open the command prompt with the correct path.
3. Run npx react-native@latest init MyFirstApp
4. Open the folder with visual studio code.
5. Rename and edit the App.tsx to App.jsx and remove the lines of code that were shown in the video.

## Running The Project

### Creating The Virtual Device

1. Open android studio, go into more actions and select virtual device manager.
2. Click the + sign in the top left corner to begin creating a device.
3. Choose phone from category and select Pixel 7 and hit next.
4. Download the release name “R.”
5. Now select “R” and hit next.
6. Select portrait mode and hit finish.
7. Now select Pixel 7 and hit the play arrow.
8. Allow access to the firewall and it will be set up.

### Getting The App Running

1. You may need to open your project in Android Studio to get it working the first time.
2. Open Android Studio and click Open.
3. You will then need to select where you created your project and go to the android part Example: “C:\cprg303\MyFirstApp\android”
4. Select “Trust Project”
5. It will take some time to load.
6. You may get a prompt in the bottom right asking if you would like to upgrade the project, but you can just close that box and ignore it.
7. Press Ctrl+F9 to make a project.
8. In the bottom left corner, you will see a hammer icon that will show you what part of the build you are on. This may take some time.
9. Press Shift+F10 to run the app. After some time, this will open it in the emulator.
10. A message will show up that says: “Unable to load script.” In red at the top of the phone.
11. To fix that error message, go into the CMD where the app was created. Example: “C:\cprg303\MyFirstApp>”
12. Type: npm run start
13. After that runs press “r” give it time to compile the scripts
14. Go back to Android Studio and after some time the phone will reload.
15. To test go to App.jsx and go the line where it says:  and change App.tsx to App.jsx, check back on Android Studio to see that it has been changed. Example:

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Description automatically generated

1. You now have a React Native app up and running!

## Troubleshooting

The best way to troubleshoot problems is by inputting your errors or issues into a search engine, into YouTube or by searching stack overflow.

## Resources

**Link to the download of react native:** <https://reactnative.dev/docs/environment-setup?guide=native>

**Link for the installation of Node JS (Select LTS):** <https://nodejs.org/en>

**Link to what you need if you are installing and configuring Android Studio if you have an AMD processor:**

<https://android-developers.googleblog.com/2018/07/android-emulator-amd-processor-hyper-v.html>