# Lab 1: Spinning Up React Native App

## System Requirements

Processor: 12th Gen Intel(R) Core(TM) i7-12700H, 2300 Mhz, 14 Core(s), 20 Logical Processor(s)

Installed Physical Memory (RAM: 16.0 GB

Total Physical Memory 15.7 GB

OS Name: Microsoft Windows 11 Home Version 10.0.22621 Build 22621

## Installation Instructions

1. Go to <https://reactnative.dev/>
2. Click Development -> Guides
3. Navigate to Environment setup -> Setting up the development environment
4. Click React Native CLI Quickstart tab
5. Choose Development OS (Windows) and Target OS (Android)
6. Make sure you have Node.js installed (LTS)
7. Download Android Studio and run setup with all default options
8. Finish and select do not import existing configuration
9. Choose whether to share statistics with Google
10. Click next and keep Standard selected, then click next
11. Accept all license agreements and finish
12. On the create project screen, select more options -> SDK Manager
13. Under SDK Platforms make sure you have: Android API (34) (make sure Android SDK Platform is selected under Android API by clicking show package details
14. Under SDK Tools make sure you have: Android SDK Build Tools 34, Android Emulator, Intel Accelerator
15. Click OK
16. Right click on Windows Start and select Settings
17. In the search bar, type “environment variables”
18. Select Edit environment variables for your account
19. Click new and copy and paste ANDROID\_HOME for variable name and for value copy and paste your install location for the SDK then click OK. If you need to find it: Go into Android Studio, click more options -> SDK Manager, the location should be at the top, you can copy and paste that
20. Select path from the variable and click edit
21. Browse the path where you have the SDK installed, under SDK, select platform-tools and click OK

## Configuration Steps

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## Project Creation and Adding Device

1. In the file explorer, open the folder you have chosen to create the project in
2. In the search bar, type cmd then enter
3. In the command line, copy and paste npx react-native@latest init
4. Hit space and type “IncredibleToDoListApp” then enter
5. Type “y” then enter
6. When finished, type “npm i -g npm” then enter
7. Open Visual Studio Code and click File -> Open Folder, then click the folder where the project was created and select
8. To change the App file to JavaScript, right click in App.tsx and click rename, rename to App.jsx and remove all lines with errors

### Creating the Emulator Device

1. In Android Studio, click on More Actions -> Virtual Device Manager
2. Click Create Device or + sign
3. Click on Phone, then select Pixel 7 and click next
4. Click the download button beside R and when complete, click finish
5. Now you can select R and click next
6. Select Portrait Mode for the device and finish
7. Click the play button on the emulator you created

## Running the Project

1. In Android Studio, click open, find the folder where your project is located, and select android
2. Click Build -> Make Project
3. When finished Click Run -> Run app
4. To fix unable to load script error, go back into the command line in the directory where the project was created and type “npm run start” then enter, then press r

### Running from Command Line

1. In the command line in the directory where the project was created, type “npm run start”
2. Press a

## Troubleshooting

1. Couldn’t see the AppData folder when setting the environment variable. Fixed by going into the folders settings and showing hidden files.
2. Computer crashed while running the app, upon running it again I received the zip END header not found error. Solved by going into the user root directory and deleting the hidden .gradle folder.
3. Fixed command line build error fix by following tutorial uploaded in Teams.

## Resources

I recommend just googling your problem and clicking on any forums/discussions.

<https://stackoverflow.com/> and <https://github.com/> are always useful and was particularly helpful in this lab.