# 10 Minute React Native Tutorial

**Goal:** To Create a React Native UI that has a button / image that adds one to a counter.

**Tools:**

* React native
* Expo

**Disclaimer:**

* This tutorial is intended for android phones, if you are trying to do this on an IOS platform the general instructions may be like but not exact. You can still do this with IOS, just this tutorial is not tailored to that.

**Prerequisites:**

* Android phone
* Node.js installed
* VS Code Installed
* React native installed
* Android studio installed
  + this is the easiest way to get the Android SDK
* Expo installed into node environment
* EXPO Go App installed on your phone
* Basic html or UI knowledge

#### Installation:

1. To run React Native apps you must have Node.js installed

* <https://nodejs.org/en/download>
* Download, windows installer

1. To install the android SDK install Android Studio
   1. install android studio: <https://developer.android.com/studio>
2. To install React Native & Expo on your computer
   1. Open up VS code and navigate to a folder you want to store your app
   2. Run the following
      1. mkdir myApp
      2. cd myApp
      3. npm install react-native
   3. Install expo using this command
      1. npm install expo-cli
   4. Create new app:
      1. npx create-expo-app@latest
      2. this will ask you for the name of an app
      3. cd the\_name\_you\_came\_up\_with
      4. npm start
3. To see your app either go to the port specified to see the web version or go to the Expo Go app and scan the QR code
   1. Ex : A screenshot of a qr code

      AI-generated content may be incorrect.
   2. My web app is running at <http://localhost:8081>, I would put that in my browser

#### Coding the App:

1. Ctrl + shift + e to view explorer in vscode

A . app\_name > app > (tabs) > index.tsx

* + This is your landing page, the fpage that everything essentially builds out from
* App\_name> Components >
  + This is where your reusable components go
  + But for now we will be working in index.tsx

2. code in index.tsx

1. import { Image, StyleSheet, Platform } from 'react-native';
2. import { ThemedText } from '@/components/ThemedText';
3. import { ThemedView } from '@/components/ThemedView';
4. import React, {useState} from 'react'
5. import {View, Text, Button} from 'react-native';
6. export default *function* HomeScreen() {
7. // Use state instead of a regular variable
8. *const* [counter, setCounter] = useState(0);
9. // Function to update the counter
10. *const* myButton = () *=>* {
11. setCounter(*prevCounter* *=>* *prevCounter* + 1);
12. };
13. return (
14. <*View* style={styles.container}>
15. <*ThemedView* style={styles.topTitle}>
16. <*ThemedText* type="title" style={styles.BigText}>counter : {counter}</*ThemedText*>
17. </*ThemedView*>
18. <*View*>
19. <*Button* onPress={myButton} title="Click me" />
20. </*View*>
21. </*View*>
22. );
23. };
24. // inorder to create styles you need to add them to the stylesheet namespace RN has
25. *const* styles = StyleSheet.create({
26. container: {
27. margin: "auto",
28. },
29. BigText : {
30. color: 'white',
31. textAlign: 'center',
32. fontSize: 35,
33. },
34. topTitle : {
35. backgroundColor: 'grey',
36. padding: 20,
37. }
38. })

### Trouble shooting:

* If you are getting errors on the mobile version but not the web version
  + 1. Are you using a react component or a native component
    - React: 
    - Native:
    - 
    - All native components (the ones that work on phones) are uppercase
* App not refreshing on mobile device
  + back out of the Expo Go app, close all windows of the app, relaunch the app, and rescan the QR code