Lab: Setting up the Environment using Expo Snack

Estimated time needed: 20 minutes

What you will learn

This app is a simple demonstration of how to set up and run a React Native project using Expo Go and Expo Snack. It allows users to easily test and develop mobile apps in real time. You will gain hands-on experience in setting up a React Native development environment using Expo Go and Expo Snack. You will also understand how to run and preview projects on a mobile device without complex configurations.

Learning objectives

After completing this lab, you will be able to:

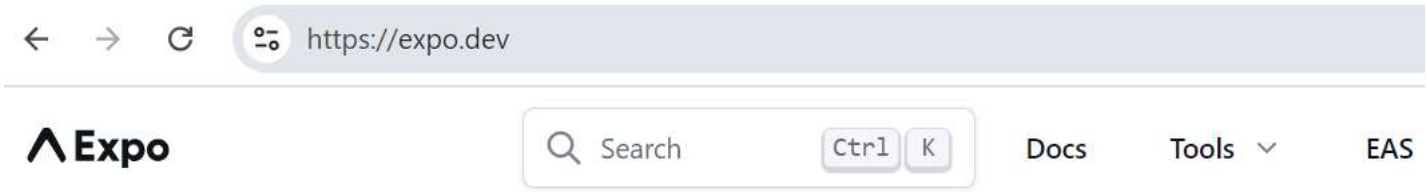
- Install and configure Expo Go on a mobile device
- Use Expo Snack to write and test React Native code in the browser
- Learn how to preview and update mobile apps in real time with Expo Go

Expo Snack

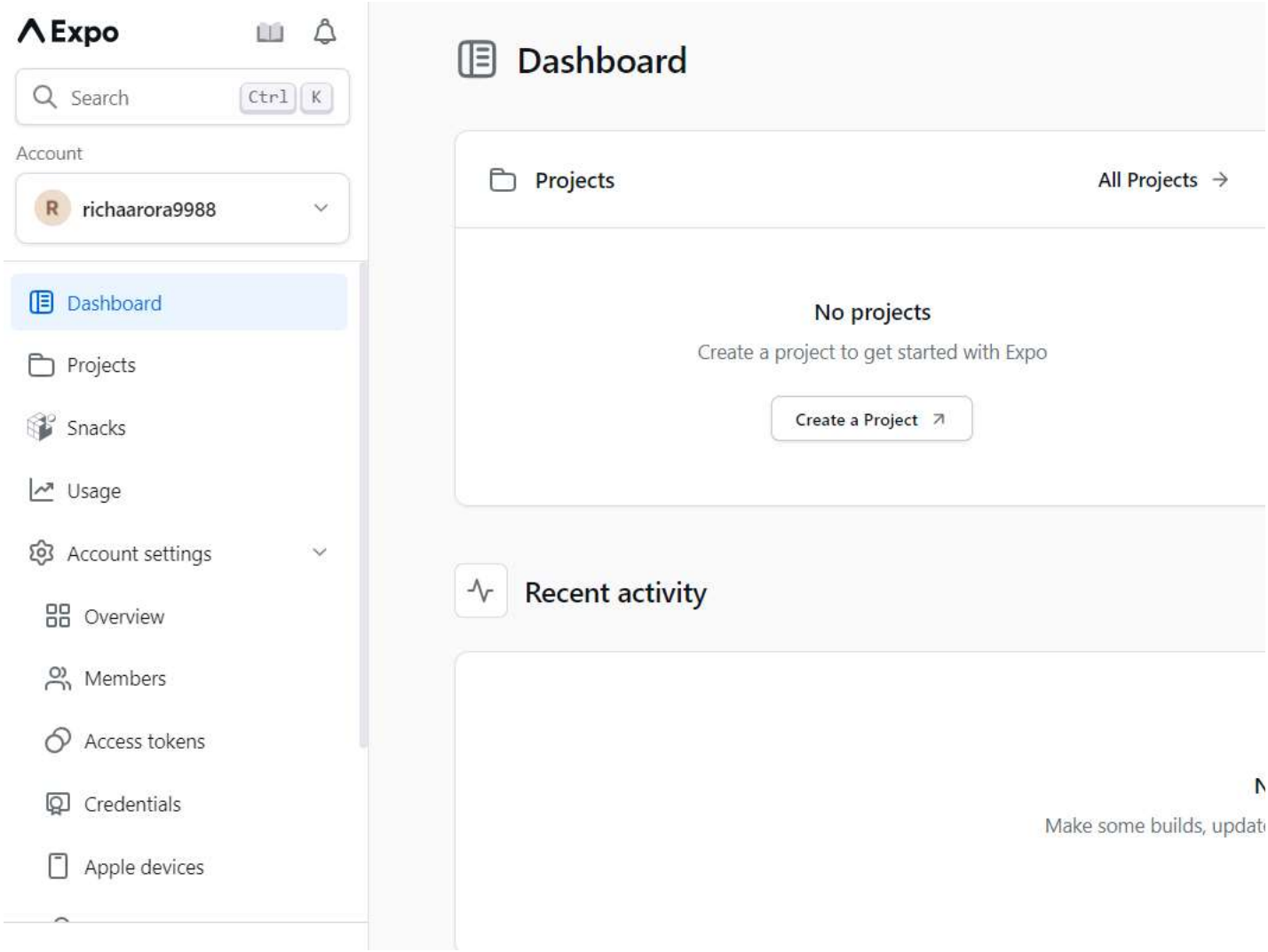
Expo Snack is an online code editor and development tool that lets you write, preview, and share React Native apps directly in your web browser. It allows you to test your app on virtual and real devices without installing anything locally, providing a quick and simple way to experiment with React Native. It reduces the need for the Android Emulator, which tests React Native applications for Android devices. Also, it reduces the need for the iOS Simulator, which tests React Native applications for Apple iOS devices.

Account setup on Expo Dev

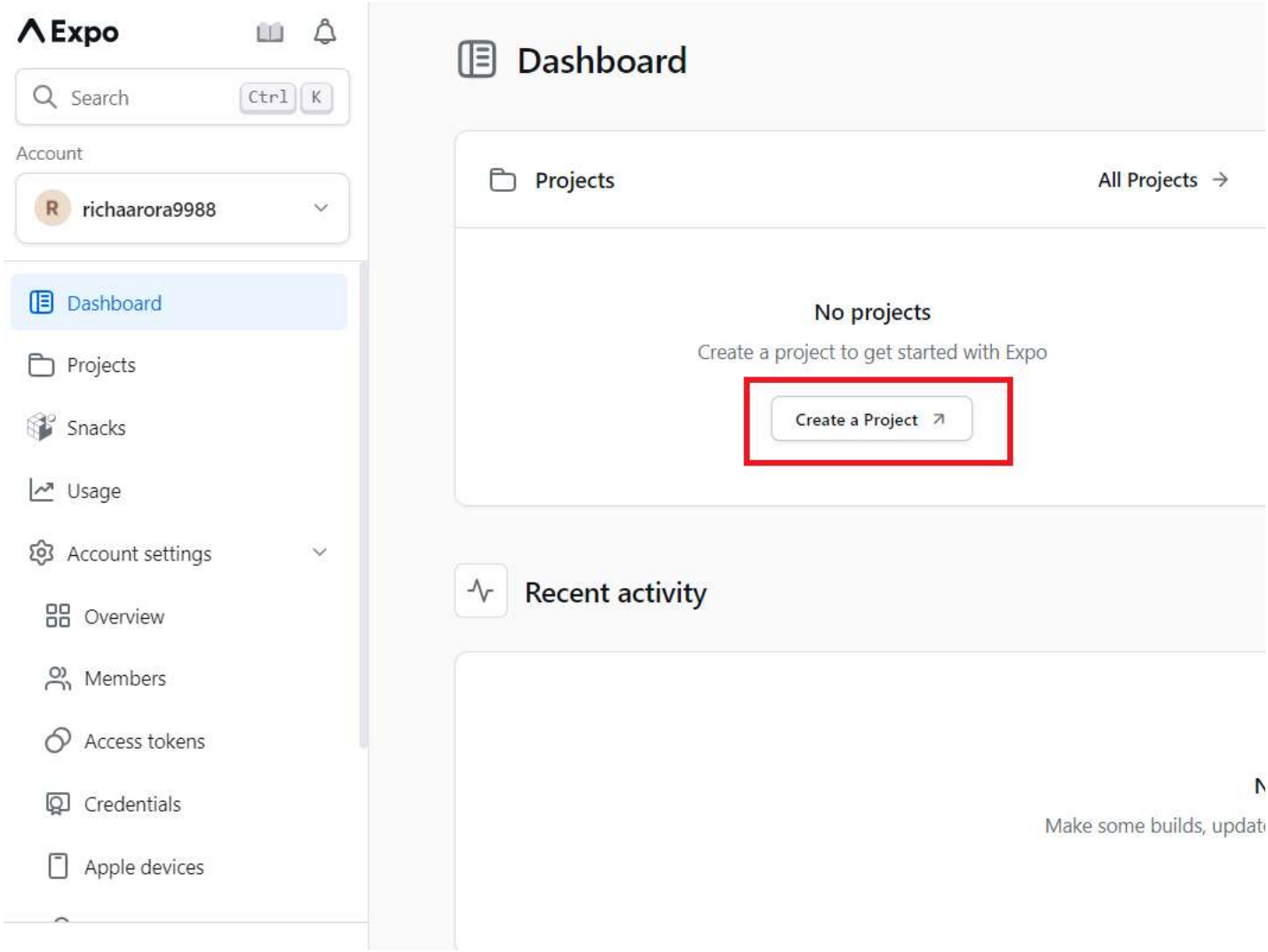
1. First, you need to have an account on https://expo.dev/ if you have not signed up yet. Otherwise, log in to the account.



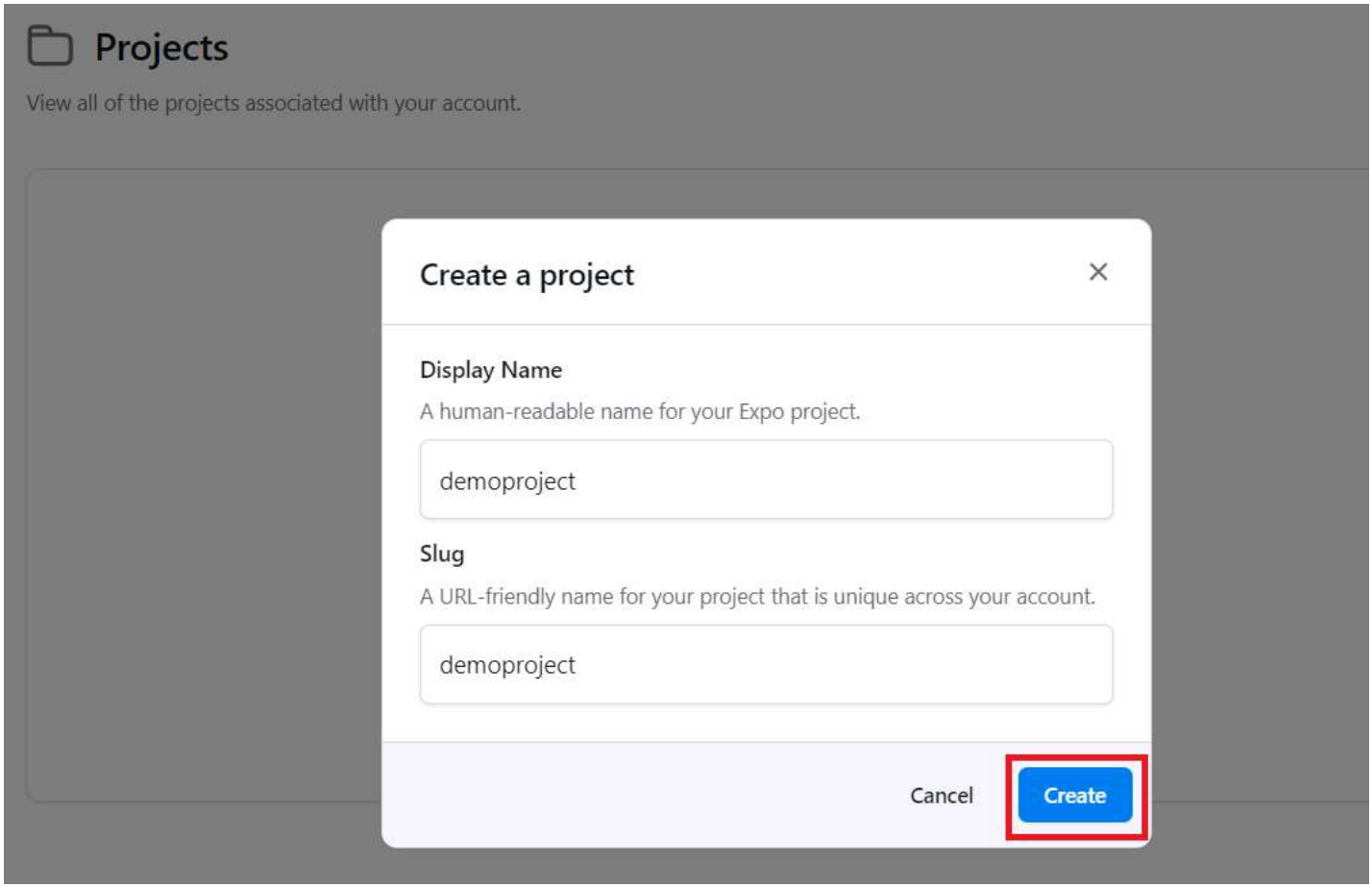
2. After login, your dashboard for Expo Dev will open as in the screenshot below.



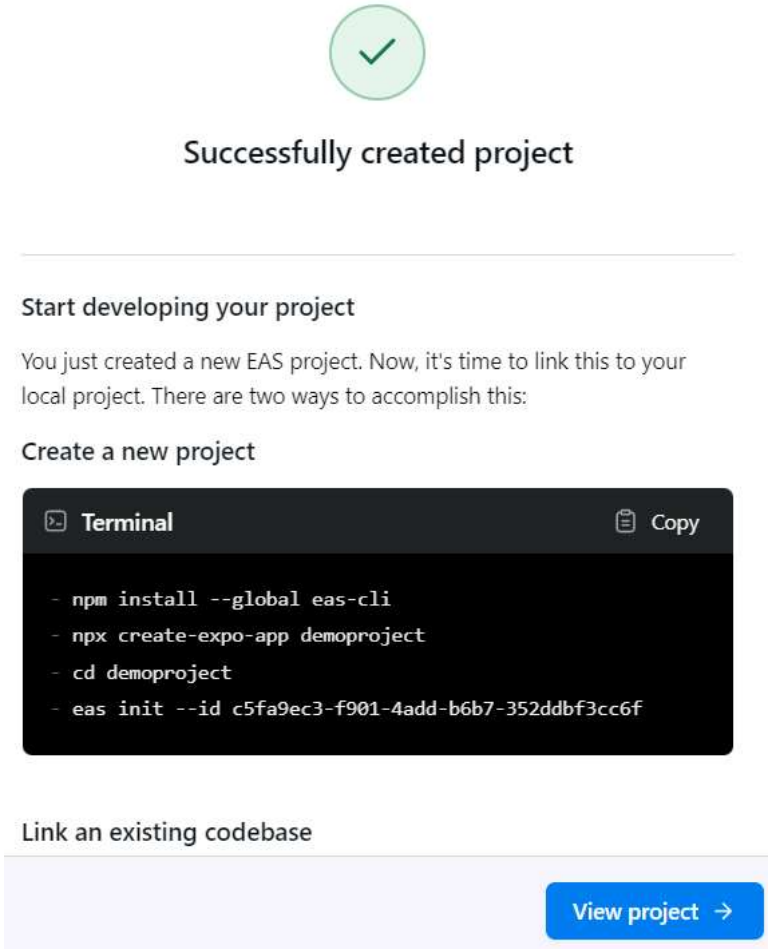
3. The **Projects** section will be empty. To create a new project, click **Create a Project**.



4. Then, it will display a pop-up dialog box where you need to provide the project name. Then click **Create**.

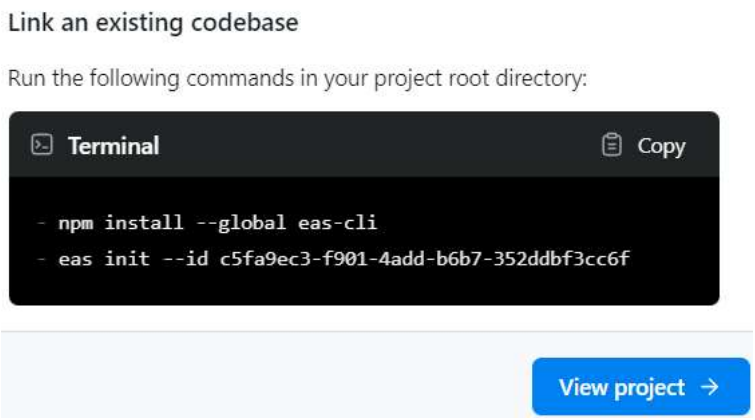


5. After creating a new project, one more pop-up dialog box will appear, as in the screenshot below.

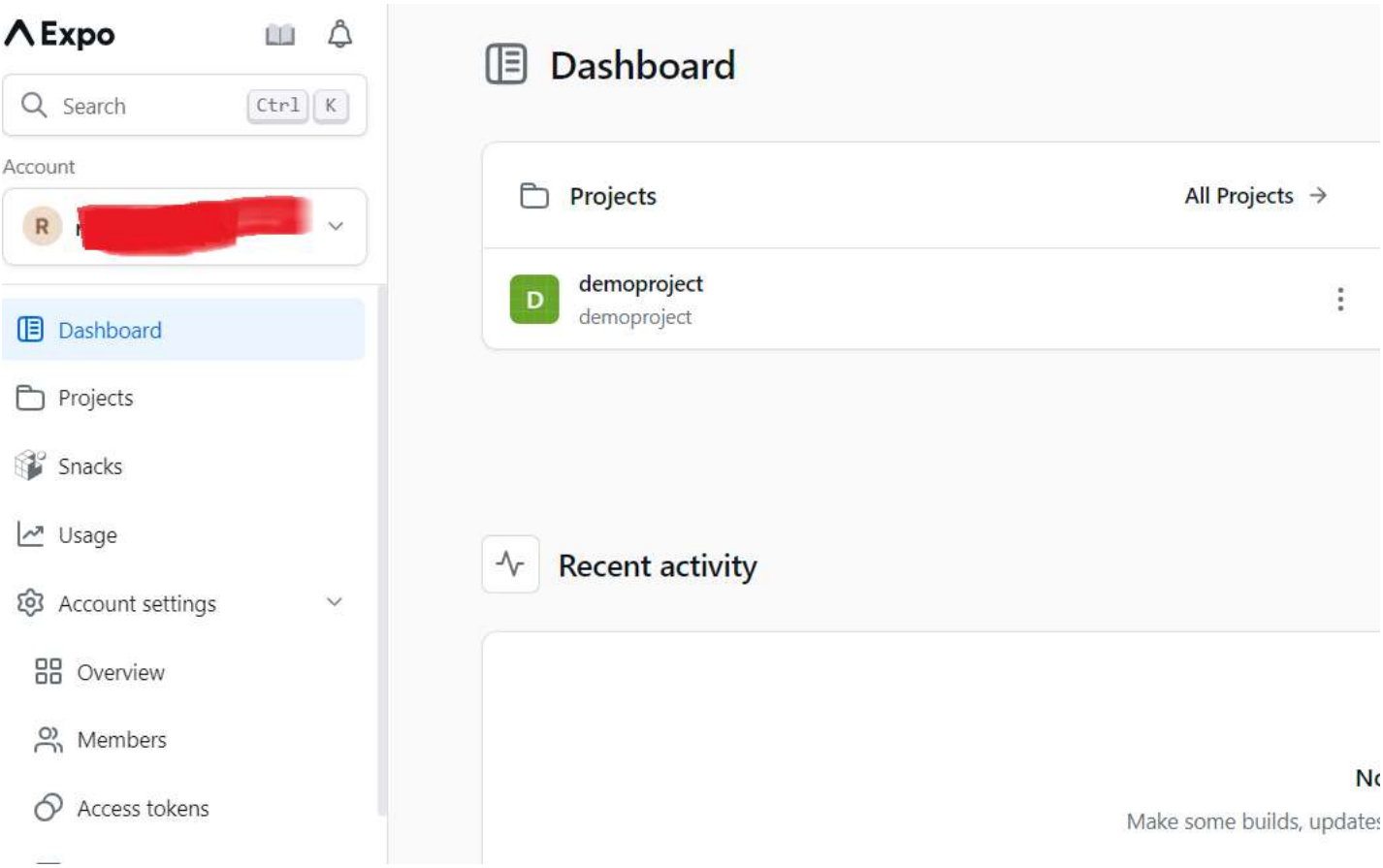


6. The pop-up box in step 5 will show you two ways to include this newly built project with your project in localhost. The first step will guide you in creating a new project in your localhost code editor's terminal. To do this, you need to follow the commands step-by-step.

7. Another useful approach is to use the project already running on your localhost. You can connect your project in Expo Dev with the one already hosted on your localhost.



8. Now, your Expo Dev dashboard will look like the screenshot below.

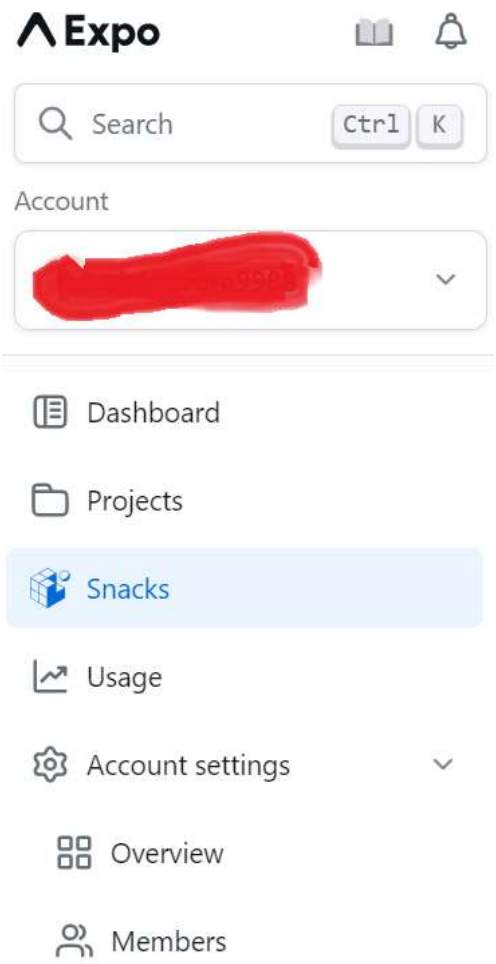


9. Click the newly built project to see the details.

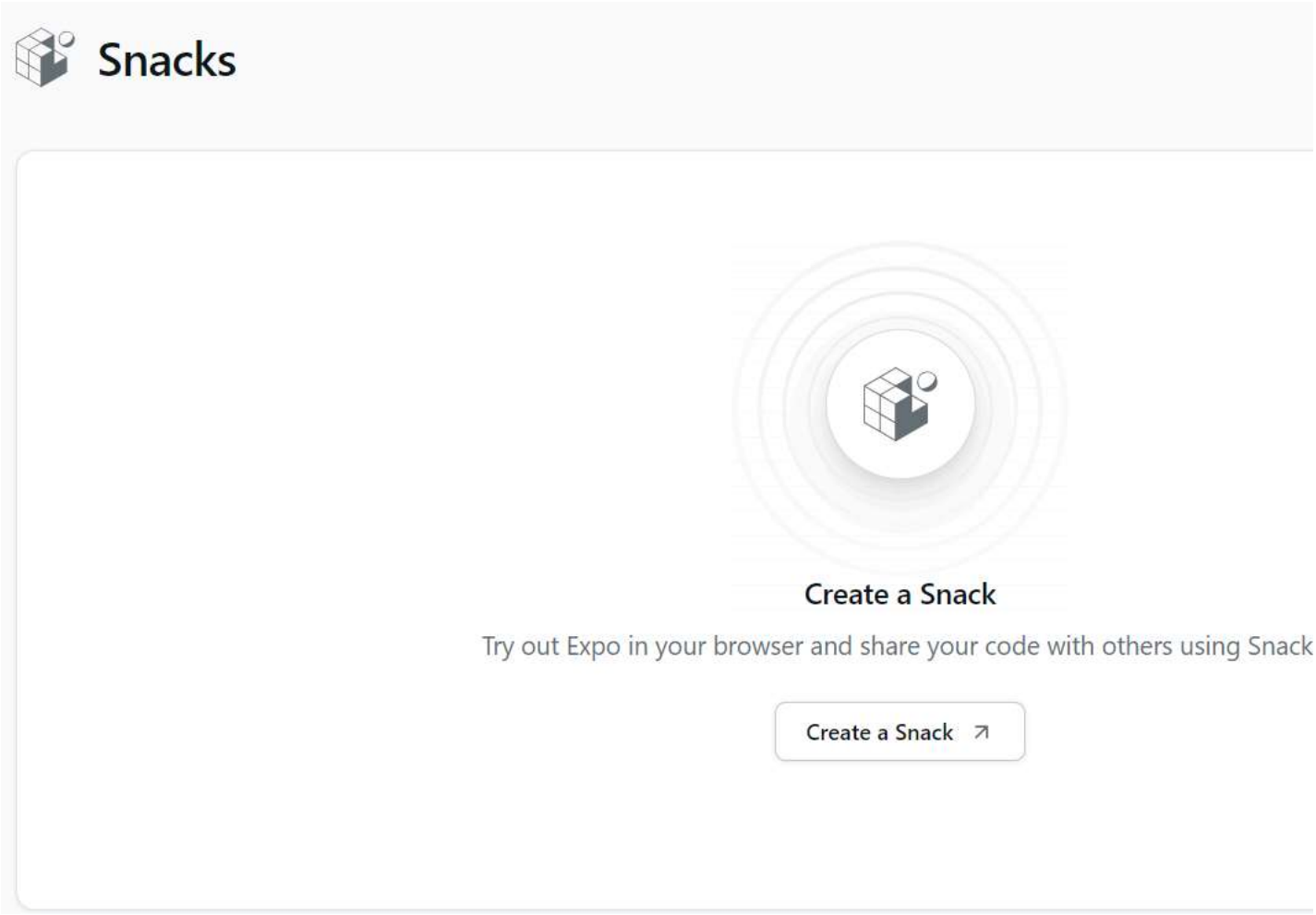
10. You will notice that the **ID** references shown in steps 5, 7, and 9 are the same.

Use Snack for a web-based development environment

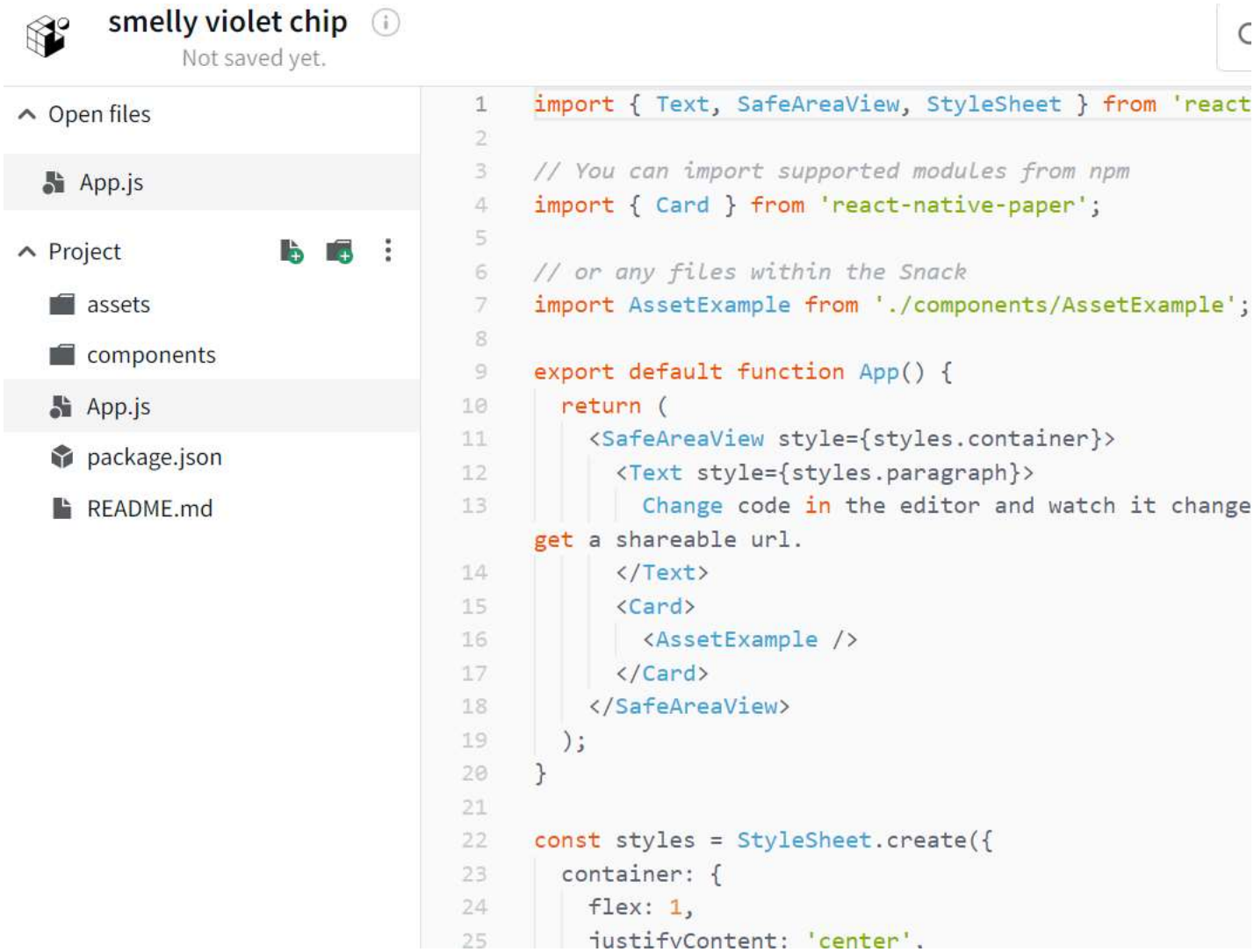
1. You can also create React Native applications on Expo Dev's online platform, Expo Snack.
2. Expo Snack is a web-based development environment for Expo that lets you build and test React Native apps in your browser. You don't need to install any tools on your computer or phone to use Snack.
3. Now, in your left window pane, you will see a **Snacks** option. You need to click it.



4. After clicking **Snacks** your dashboard will look like the screenshot below. There, you need to click **New Snack**.

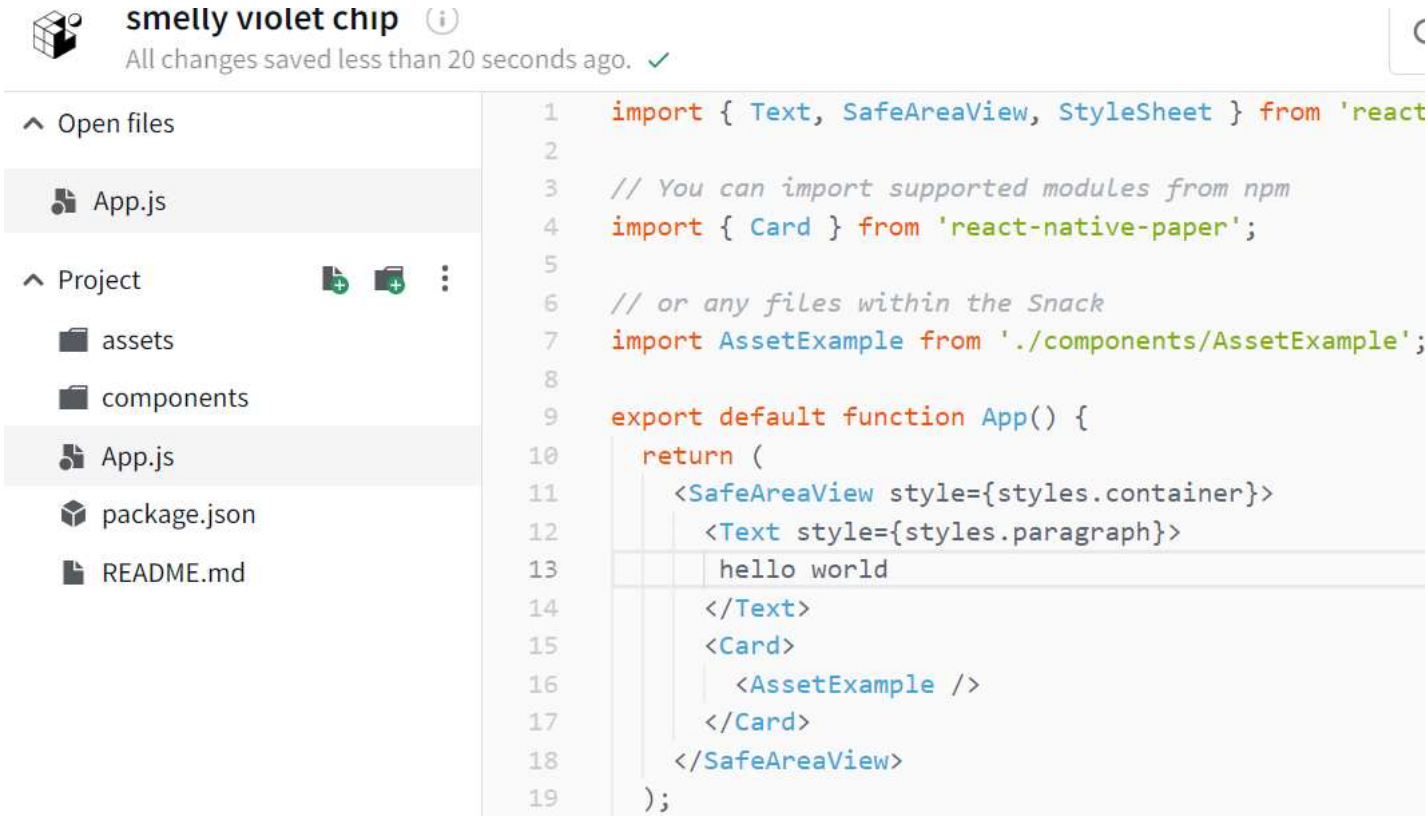


5. The dashboard for Snack will display as in the screenshot below. Here, you will see the default and basic layout of the code, which you will start to understand in upcoming hands-on labs.

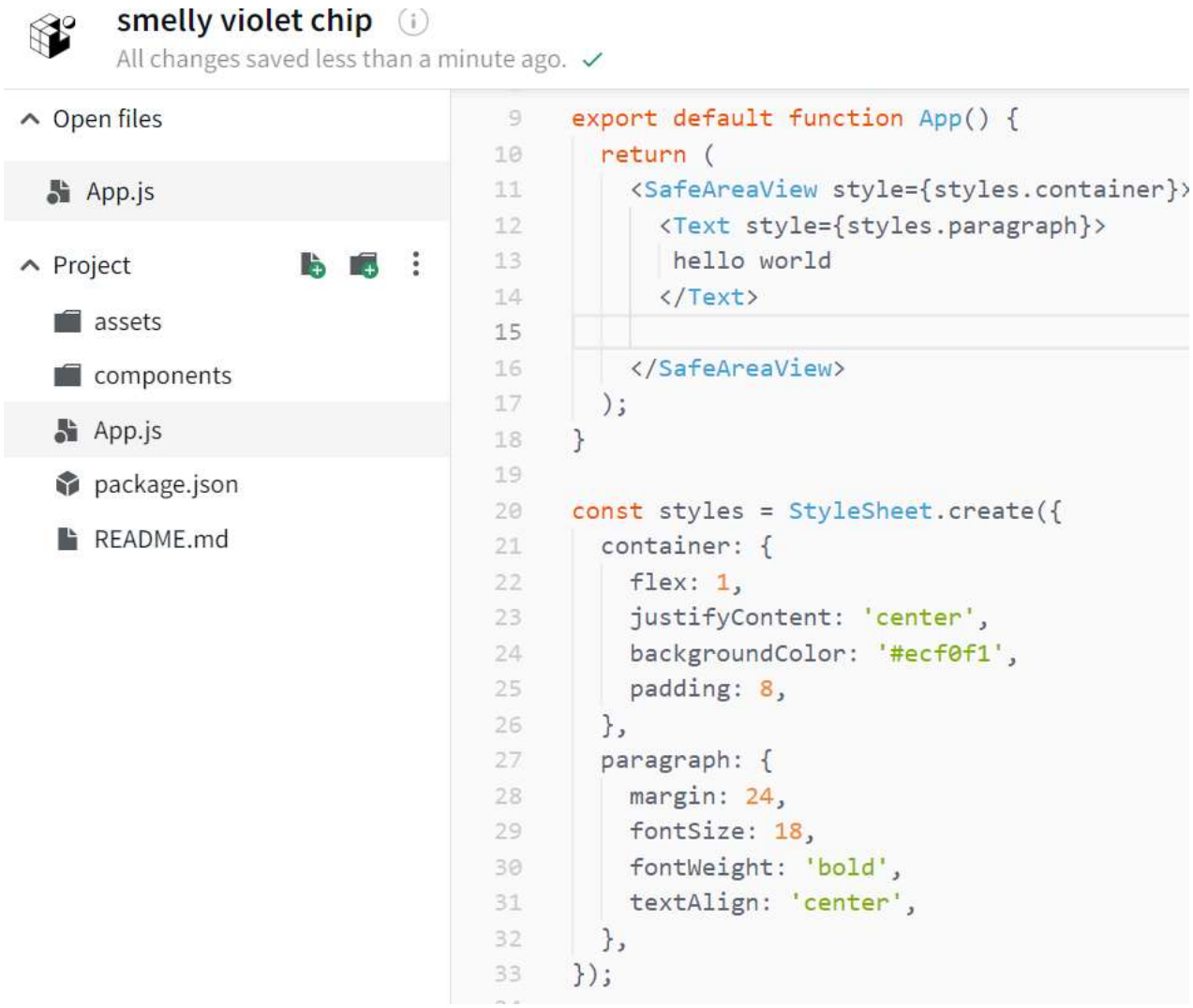


6. The basic file structure is on the left side of this window, and the different preview options are on the right side. These options allow you to easily view how your application will look on different devices.

7. To see the changes in the above screenshot, you can see the code for the **App.js** file. At line number 13, you need to replace this entirely with **hello world**, which will look like the screenshot below. Now, from this screenshot, you need to remove line numbers 15, 16, and 17.



8. After removing line numbers 15, 16, and 17, it will look like the screenshot below.



9. If you choose the **Android** tab, you will need to click **Launch Snack**, as shown in the screenshot below.

10. Select any device you want to see the output for. For example, click **Pixel 7**.

11. After clicking **Pixel 7**, you will see multiple device options, and you can select any of them.

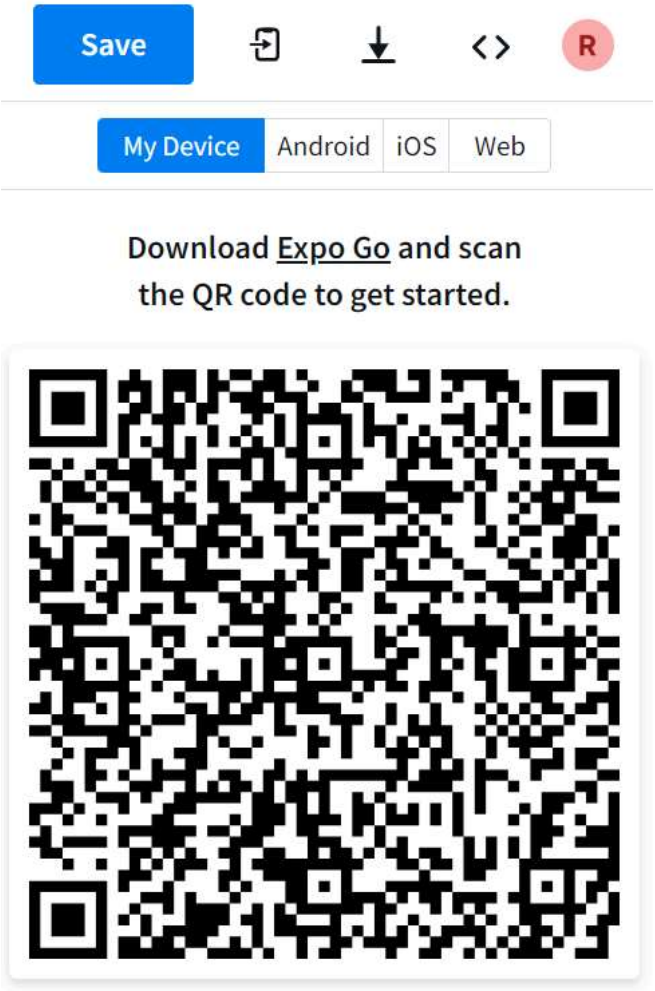
12. After clicking **Launch Snack** you will see the output on the screen displaying **hello world**.

```
export default function App() {
  return (
    <SafeAreaView style={styles.container}>
      <Text style={styles.paragraph}>
       hello world
      </Text>

    </SafeAreaView>
  );
}

const styles = StyleSheet.create({
  container: {
    flex: 1,
    justifyContent: 'center',
    backgroundColor: '#ecf0f1',
    padding: 8,
  },
  paragraph: {
    margin: 24,
    fontSize: 18,
    fontWeight: 'bold',
    textAlign: 'center',
```

13. Similarly, you can choose **iOS** from the tabs and click **Launch Snack**. It will then ask you to open it in **Expo Go** by clicking **Open**.

14. You will then see the **hello world** as the output. After clicking **iPhone 15 Pro**, you can also choose any other device.

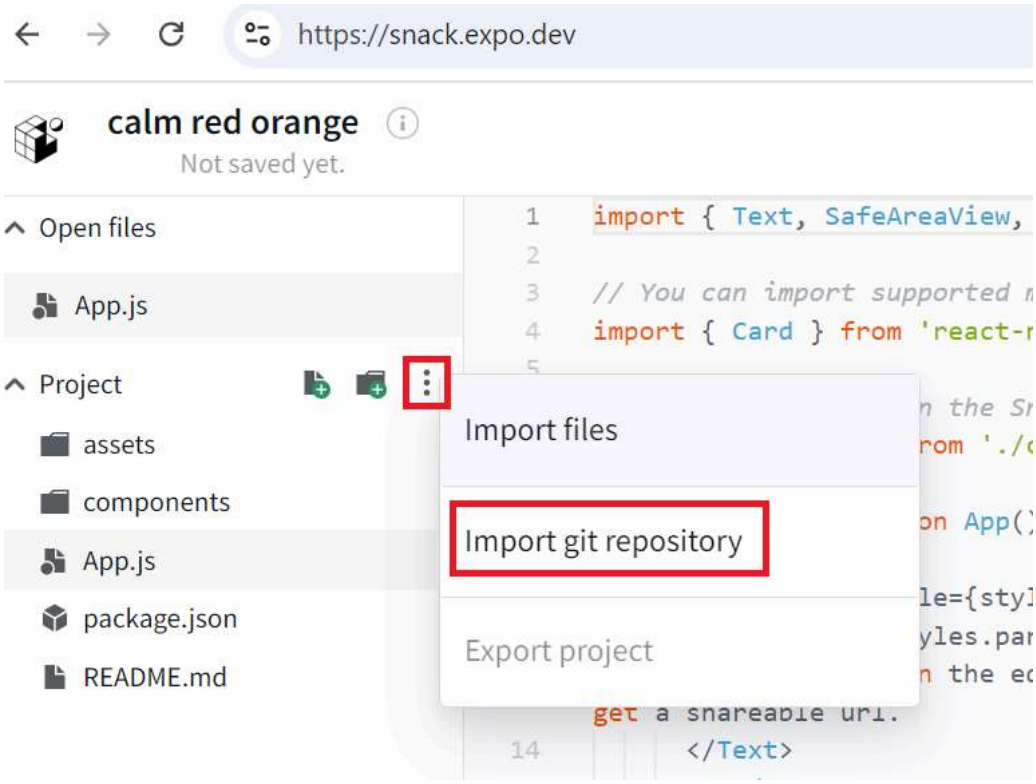
15. Now select the **My Device** tab. It will display a scannable QR code, which you can scan with the Expo Go application installed on your mobile device.



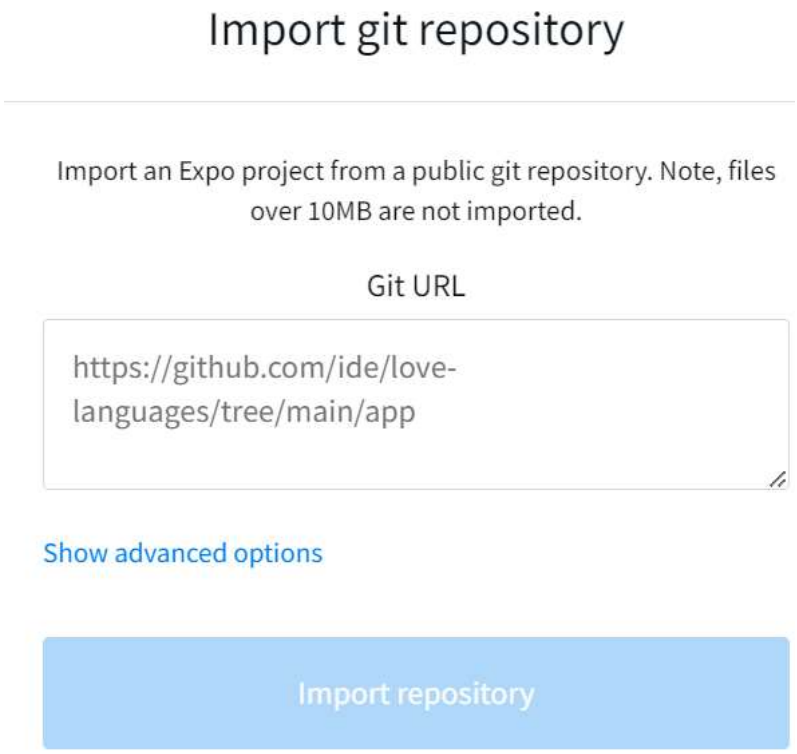
16. After scanning, the application will appear on your mobile device, allowing you to experience how it looks on mobile devices in real time.

Check Output From GitHub Repository

1. You can also check the output on **My Device**, **Android**, **iOS** and **Web** directly by importing code from the GitHub repository.
2. Now, import your GitHub repository by clicking the three dots and selecting **Import git repository**.



3. After clicking **Import git repository**, a pop-up will appear. Here, you need to paste your own GitHub repository link and then click on **Import repository**. This action will import the entire code as a Snack in this web development environment.



4. After this, you can check the output by selecting either of **My Device**, **Android**, **iOS**, or **Web** options.

Author(s)

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