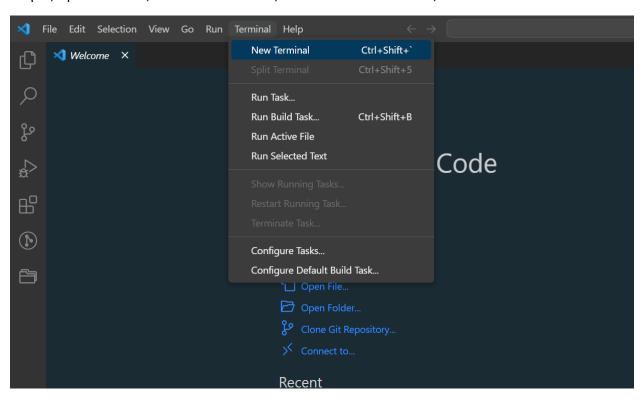
S01 REACT HOME PAGE

1. Setup Frontend Project

Step 1, open VS code, click on "Terminal", choose "New Terminal",



Step 2, In the Terminal, cd to your project folder, and type: "npx create-react-app boot-react-project --template typescript"



After you can see this page:

```
npm start
Starts the development server.

npm run build
Bundles the app into static files for production.

npm test
Starts the test runner.

npm run eject
Removes this tool and copies build dependencies, configuration files and scripts into the app directory. If you do this, you can't go back!

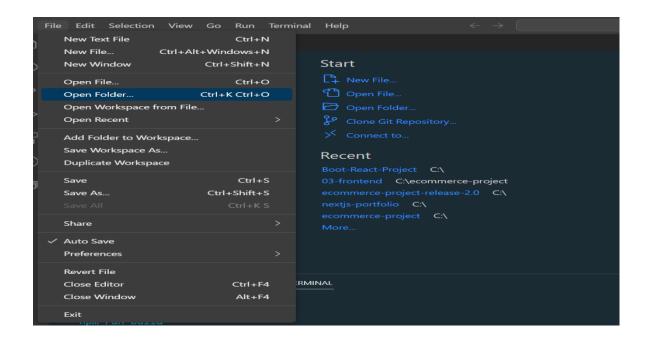
We suggest that you begin by typing:

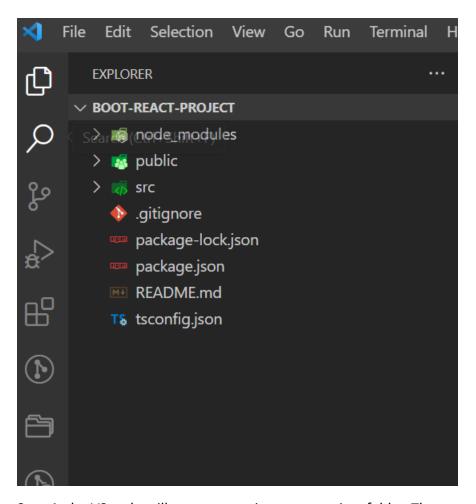
cd boot-react-project
npm start

Happy hacking!
```

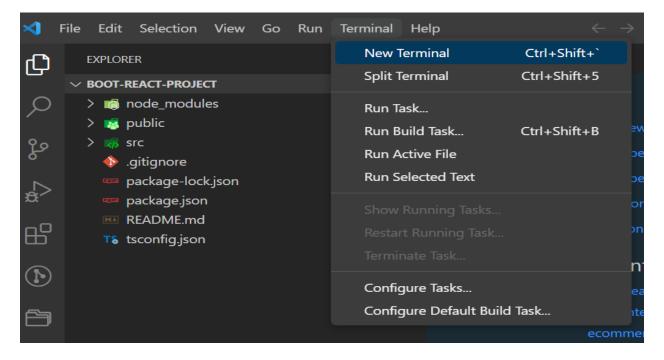
Go to our setup folder, we will find a new created folder "spring-react-project" as we specified in the command.

Step 3, go to VS code, click on "File", choose "open folder", Choose our new created "spring-react-project" folder.





Step 4, the VS code will open our spring-react-project folder. Then we click on the "Terminal", "new Terminal".

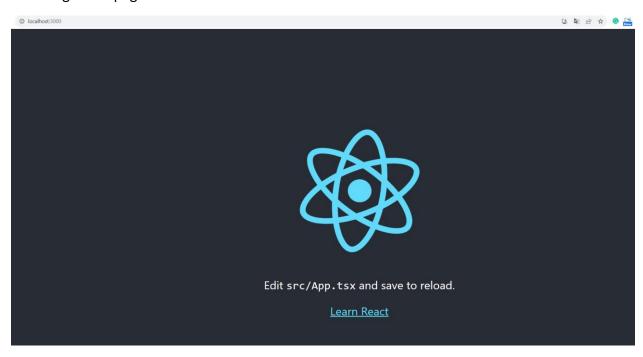


In terminal console, type "npm start" to run our app.

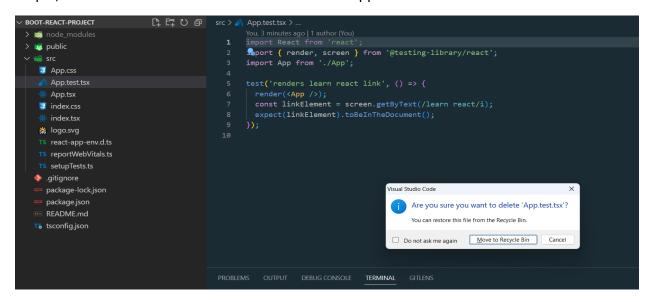
```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL GITLENS

PS C:\Boot-React-Project\boot-react-project> npm start
```

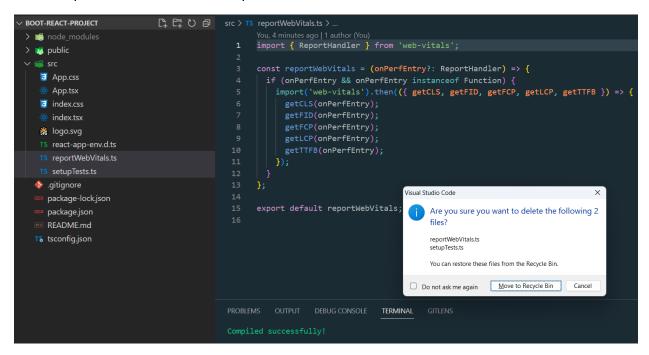
We will get this page.



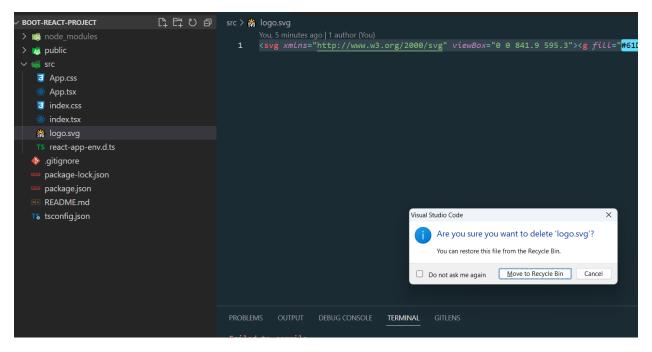
Step 5, Delete the default files that we don't need: App.test.tsx.



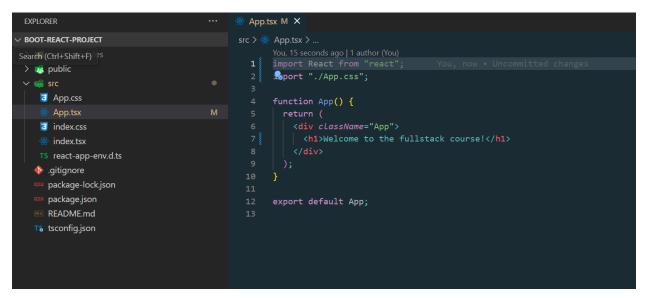
Delete reportWebVitals.ts and setupTest.ts too.



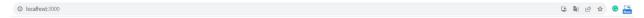
Then delete logo.svg.



Now, let's test our app. Open App.tsx file, in App() return part, insert a div which contains a h1 tag, which says "Welcome to fullstack course!"



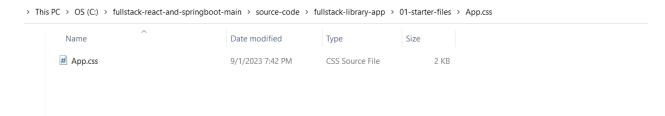
Refresh http://localhost:3000, we will see our the content of h1 tag showing:



Welcome to the fullstack course!

2. IMPORT CSS AND IMAGES

Copy the App.css file in the Starter-files folder



Paste it into VS code, replace the original file.

```
App.css
                                                                           .App-Logo {
 height: 40vmin;
 pointer-events: none;
 index.css
    index.tsx
   s react-app-env.d.ts
  .gitignore
   package-lock.json
                                                                               animation: App-logo-spin infinite 20s linear;
   README.md
T& tsconfig.json
                                                                          .App-header {
background-color: □#282c34;
min-height: 100vh;
display: flex;
flex-direction: column;
                                                                                                                                A file or folder with the name 'App.css'
                                                                                                                                        already exists in the destination folder. Do
                                                                                                                                       you want to replace it?
                                                                            align-items: center;
justify-content: center;
font-size: calc(10px + 2vmin);
                                                                                                                                                              Replace Cancel
```

The same process to copy folder "Images" in our starter-files into our app under "src" directory.

```
回の哲却
                                            src > 🗧 App.css > ધ :root
BOOT-REACT-PROJECT
> node modules
> 🕦 public
                                                        --mainOpacity: 🗆 rgba(0, 0, 0, 0.55);
🗸 📹 src
 🗸 📻 Images

✓ 

■ BooksImages

     book-luv2code-1000.png
                                                       background-image: linear-gradient( ☐ rgba(0,
     mew-book-1.png
                                                        height: 25em !important;
     new-book-2.png
  v 📹 PublicImages
     image-1.jpg
     image-2.jpg
                                                      background-color: ☐rgba(0, 0, 0, 0.35);
     image-3.jpg
                                                       top: 0;
left: 0;
     image-4.jpg
   App.css
                                                       width: 100%;
     App.tsx
                                                        height: 100%;
   index.css
     index.tsx
   TS react-app-env.d.ts
                                                   background-color: ☐#0e76a8 ;
    package-lock.json
    package.json
    README.md
                                                                               TERMINAL
  T& tsconfig.json
```

3. BOOTSTRAP

Bring Bootstrap's CSS and JS into our application

Go to https://getbootstrap.com/docs/5.3/getting-started/introduction/

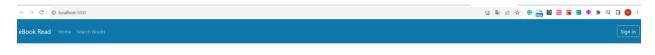
Copy these two pieces of code into index.html

4. NAVIGATION BAR COMPONENT

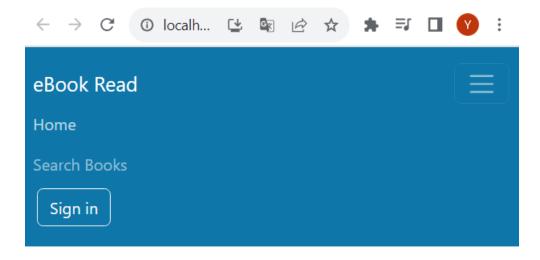
First, let me delete everything in the return part of App.tsx

Step1, go to App.tsx, in App(), return part, create a bootstrap navbar code.

Then use command "npm start" run the application.

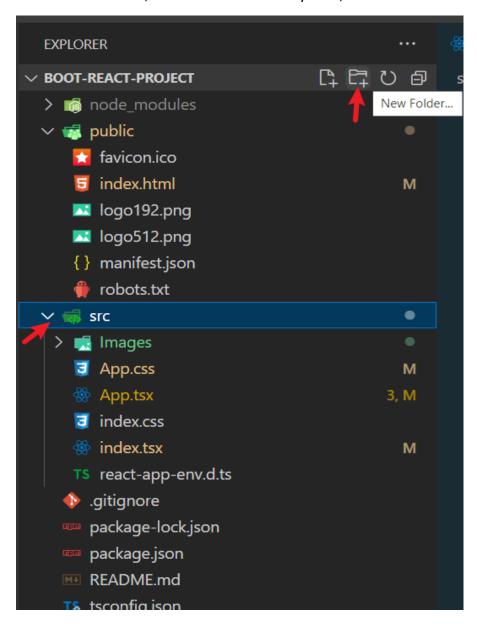


Navigation bar mobile version:

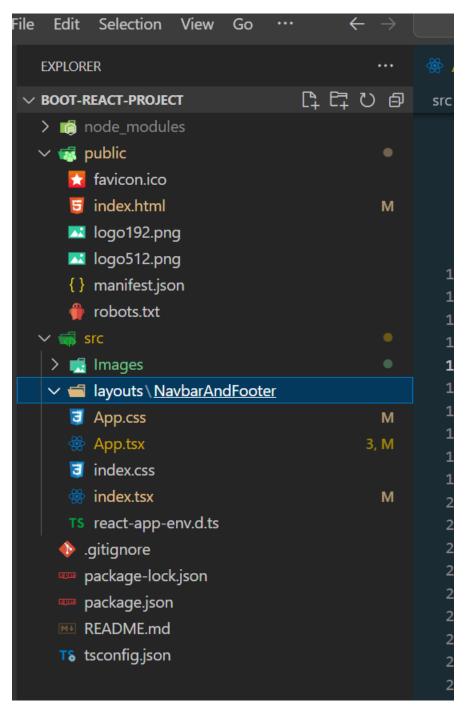


5. EXPLORE TOP BOOKS COMPONENT

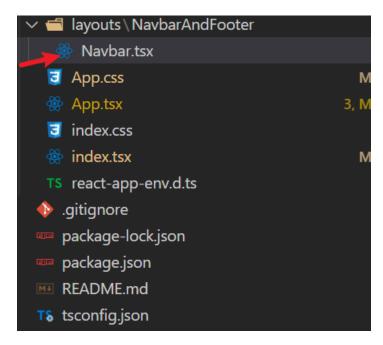
Under the src folder, create a new folder "layouts",



And under the layouts directory create a new folder "NavbarAndFooter"



Then create a new file "Navbar.tsx"



In Navbar.tsx, create a export const function structure as below:

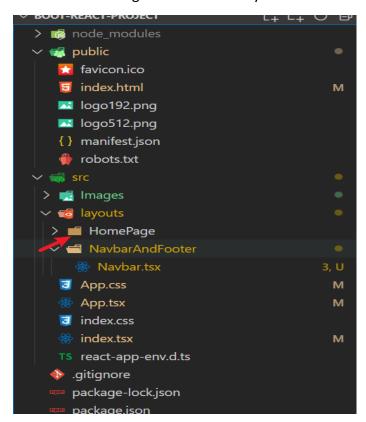
copy the nav bar code we have created in App.tsx, and paste it into this return part

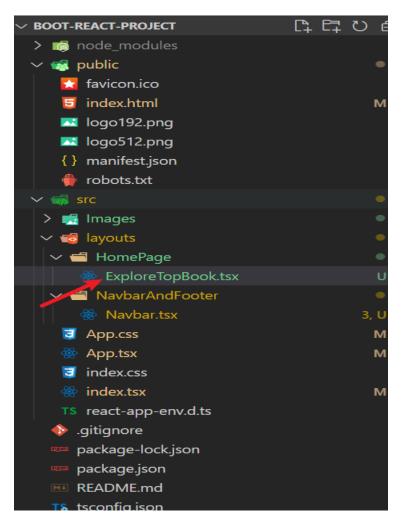
```
export const Navbar = () => {
   //create a bootstrap nav bar
   <nav className="navbar navbar-expand-lg navbar-dark main-color py-3">
    <div className="container-fluid">
      <span className="navbar-brand">JAC Read</span>
       className="navbar-toggler"
       data-bs-toggle="collapse"
       data-bs-target="#navbarNavDropdown"
       aria-controls="navbarNavDropdown"
       aria-expanded="false"
       aria-label="Toggle Navigation"
        <span className="navbar-toggler-icon"></span>
      </button>
      <div className="collapse navbar-collapse" id="navbarNavDropdown">
        <a className="nav-link" href="#">
            Home
           <a className="nav-link" href="#">
             Search Books
        <a type="button" className="btn btn-outline-light" href="#">
             Sign in
```

In App.tsx, we add Navbar component.

```
App.tsx M X
                                                   index.html M
             🤗 Navbar.tsx 3, U
                                   App.css M
                                                                     index.
src > 👺 App.tsx > ...
       import React from "react";
       import "./App.css";
  3
       import { Navbar } from "./layouts/NavbarAndFooter/Navbar";
       function App() {
  6
        // create a bootstrap navbar
         return <Navbar />;
       export default App;
 11
```

Create a "HomePage" folder under layouts folder.



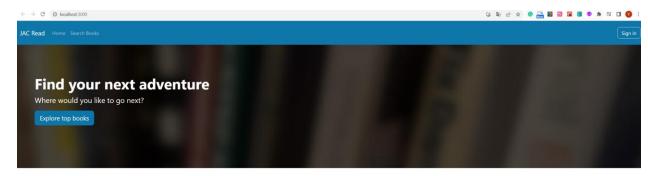


create ExploreTopBooks component code.

go to App.tsx, and add ExploreTopBooks component in it. Make sure we add a div as the parent element to both the Navbar and ExpolreTopBooks component.

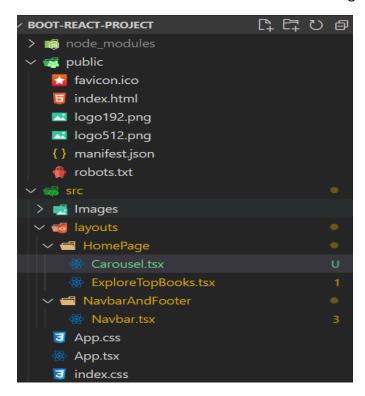
```
App.tsx M X
                                                            ፱ App.c ᡃ᠑ წე ↔ ↔ ↔ (
src > 🞡 App.tsx > 🕅 App
       import "./App.css";
  3
       import { Navbar } from "./layouts/NavbarAndFooter/Navbar";
  4
       import { ExploreTopBooks } from "./layouts/HomePage/ExploreTopBooks";
       function App() {
  7
         // create a bootstrap navbar
            <Navbar />
            <ExploreTopBooks />
 11
          </div>
       export default App;
```

Run the application. We can see the result like this.



6. CAROUSEL COMPONENT

Create a new file "Carousel.tsx" under the HomePage folder.

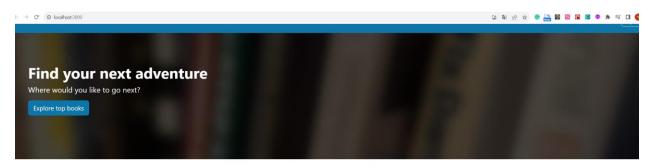


In Carousel.tsx, add three carousel items code.

Add Carousel component in the App.tsx.

```
Carousel.tsx 5, U
                                   ExploreTopBooks.tsx 1
  App.tsx M X
                                                                              App.css
src > ∰ App.tsx > 分 App
      import "./App.css";
      import { Navbar } from "./layouts/NavbarAndFooter/Navbar";
      import { ExploreTopBooks } from "./layouts/HomePage/ExploreTopBooks";
  5
      import { Carousel } from "./layouts/HomePage/Carousel";
      function App() {
        // create a bootstrap navbar
        return (
            <Navbar />
            <ExploreTopBooks />
 13
        </div>
      export default App;
```

Then we run the application, we can get this page

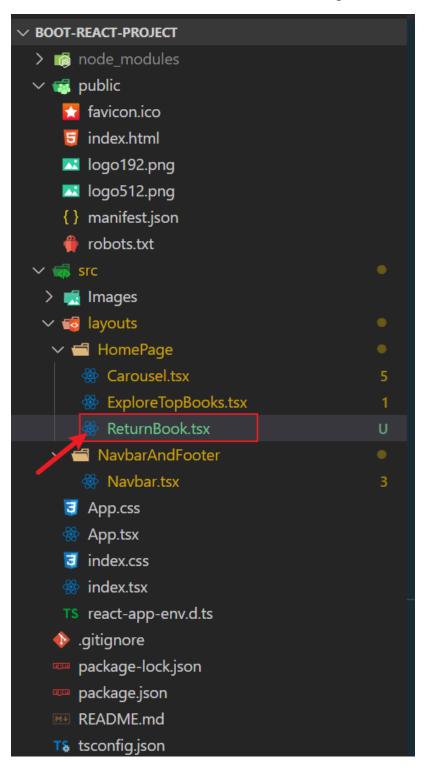


Find your next "I stayed up too late reading" book



7. RETURN BOOK COMPONENT

Create a new file "ReturnBook.tsx" in the HomePage folder



Cut the carousel item code from the Carousel.tsx and paste it in the ReturnBook.tsx

Go back to Carousel.tsx, replace the carousel item code with ReturnBook Component.

Replace all the carousel items codes with three ReturnBook Components.

Rerun the application, we can get the same page:

<

Find your next "I stayed up too late reading" book



copy ReturnBook component two times in each carousel item part in desktop section, so now we have three carousel items, in each carousel item part, we have three ReturnBook components.

```
rc > layouts > HomePage > 🎡 Carousel.tsx > 囪 Carousel
              <div className="carousel-inner">
               <div className="carousel-item active">
                 <div className="row d-flex justify-content-center align-item-center">
                   <ReturnBook />
                   <ReturnBook />
                   <ReturnBook />
                <div className="carousel-item active">
                  <div className="row d-flex justify-content-center align-item-center">
                   <ReturnBook />
                   <ReturnBook />
                   <ReturnBook />
                 </div>
                <div className="carousel-item active">
                  <div className="row d-flex justify-content-center align-item-center">
                    <ReturnBook />
                    <ReturnBook />
36
                    <ReturnBook />
                  </div>
```

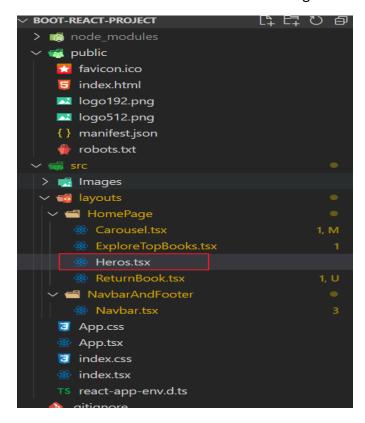
Refresh the page:

Find your next "I stayed up too late reading" book



8. HEROS COMPONENT

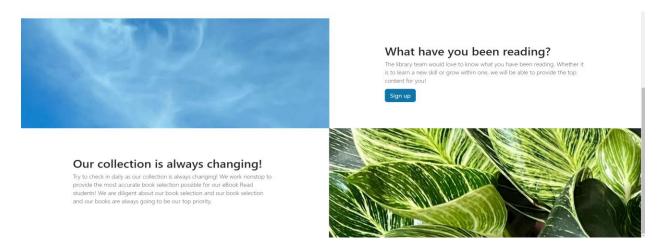
Create a new file "Heros.tsx" in the HomePage directory.



Write the Heros component code.

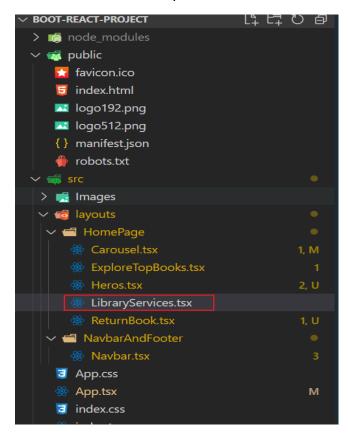
Then add the Heros component in the App.tsx file.

Run the application.



9. LIBRARY SERVICE COMPONENT

Create a new file "LibraryServices.tsx" in the HomePage directory.

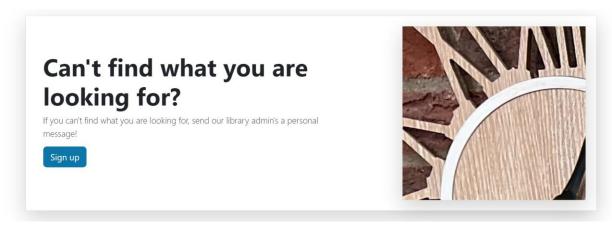


Write the LibraryServices component code.

Add LibraryServices component in the App.tsx file.

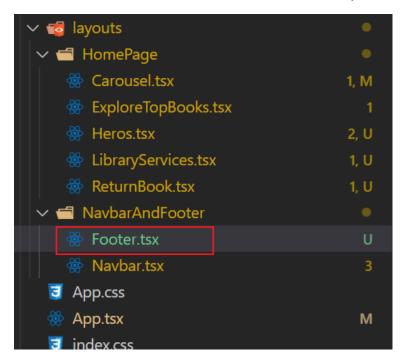
```
App.tsx > ♥ App
     import "./App.css";
     import { Navbar } from "./layouts/NavbarAndFooter/Navbar";
     import { ExploreTopBooks } from "./layouts/HomePage/ExploreTopBooks";
     import { Carousel } from "./layouts/HomePage/Carousel";
     import { Heros } from "./layouts/HomePage/Heros";
6
     import { LibraryServices } from "./layouts/HomePage/LibraryServices";
     function App() {
     // create a bootstrap navbar
          <Navbar />
          <ExploreTopBooks />
          <Carousel />
         <Heros />
         <LibraryServices />
17
     export default App;
```

Then run the application. We can get this page.



10. FOOTER COMPONENT

Create a Footer.tsx in the NavbarAndFooter directory.

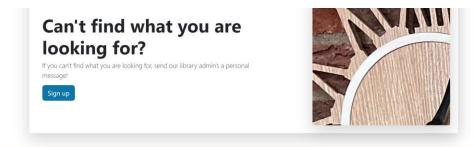


Write the Footer component code:

Add the Footer component in the App.tsx

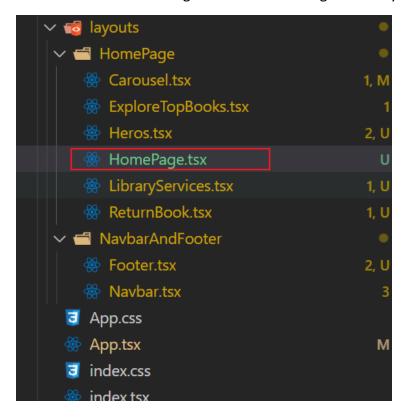
```
App.tsx M X
               Footer.tsx 2, U
                                   ReturnBook.tsx 1, U
                                                          Carousel.tsx 1, M
                                                                               Heros.ts
src > 🎡 App.tsx > 🕥 App
       You, 2 minutes ago | 1 author (You)
       import React from "react";
       import "./App.css";
       import { Navbar } from "./layouts/NavbarAndFooter/Navbar";
       import { ExploreTopBooks } from "./layouts/HomePage/ExploreTopBooks";
       import { Carousel } from "./layouts/HomePage/Carousel";
       import { Heros } from "./layouts/HomePage/Heros";
       import { LibraryServices } from "./layouts/HomePage/LibraryServices";
       import { Footer } from "./layouts/NavbarAndFooter/Footer";
       function App() {
         // create a bootstrap navbar
 11
 12
         return (
             <Navbar />
             <ExploreTopBooks />
             <Carousel />
             <Heros />
             <LibraryServices />
 19
            <Footer />
           </div>
 20
       export default App;
```

Run the application, we can get the page like this:

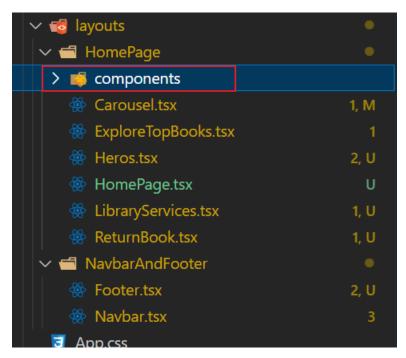


11. HOME PAGE CODE CLEAN UP

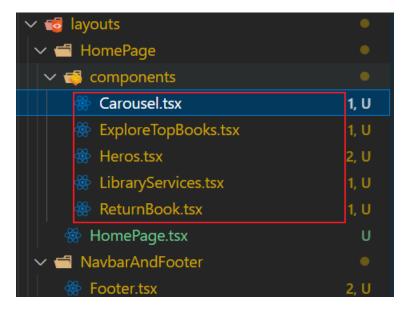
Create a new file HomePage.tsx in the HomePage directory.



Create another directory "components" in the HomePage directory.



Move all the components we created before in the HomePage directory except HomePage.tsx.



Go to HomePage.tsx, create export const HomePage() structure.

Go to App.tsx, move ExploreTopBooks, Carousel, Heros and LibraryServices component into our HomePage.tsx.

```
percentage of the second second
```

Paste them into return part. And we add a pair of empty tag to wrap all these four components.

```
src > layouts > HomePage > ∰ HomePage.tsx > [❷] HomePage
  1 \rightarrow import { Carousel } from "./components/Carousel";
       import { ExploreTopBooks } from "./components/ExploreTopBooks";
       import { Heros } from "./components/Heros";
       import { LibraryServices } from "./components/LibraryServices";
       export const HomePage = () => {
         return (
           <>
             <ExploreTopBooks />
             <Carousel />
 11
             <Heros />
             <LibraryServices />
 12
 13
         );
 15
       };
```

Go back to App.tsx, we remove all the import paths for the four components.

```
App.tsx 7, M X 🎡 HomePage.tsx U
                                    Footer.tsx 2, U
                                                      src > 🎡 App.tsx > ...
      You, 16 seconds ago | 1 author (You)
      import React from "react";
      import "./App.css";
      🌄port { Navbar } from "./layouts/NavbarAndFooter/Navbar";
      import { ExploreTopBooks } from "./layouts/HomePage/ExploreTopBooks";
  4
      import { Carousel } from "./layouts/HomePage/components/Carousel";
  5
      import { Heros } from "./layouts/HomePage/Heros";
      import { LibraryServices } from "./layouts/HomePage/LibraryServices";
      import { Footer } from "./layouts/NavbarAndFooter/Footer";
      function App() {
 11
        // create a bootstrap navbar
        return (
 12
 13
            <Navbar />
            <Footer />
          </div>
        );
      export default App;
```

Then add the HomePage component in App.tsx

```
App.tsx > ♥ App
     You, 1 second ago | 1 author (You)
 1 ∨ import React from "react";
     import "./App.css";
     import { Navbar } from "./layouts/NavbarAndFooter/Navbar";
     import { Footer } from "./layouts/NavbarAndFooter/Footer";
 4
     import { HomePage } from "./layouts/HomePage/HomePage";
 7 \vee function App() {
       // create a bootstrap navbar
       return (
          <div>
           <Navbar />
11
12
            <HomePage />
           <Footer />
13
          </div>
14
15
17
     export default App;
```

In App.tsx, change function App() into export const App arrow function.

Go to index.tsx, add "{ }" to "app" in the App import path

```
src > 🌼 index.tsx > ...
       You, 1 second ago | 1 author (You)
  1 ∨ import React from "react";
       import ReactDOM from "react-dom/client";
       import "./index.css";
       import { App } from "./App";
  4
  6 ∨ const root = ReactDOM.createRoot(
         document.getElementById("root") as HTMLElement
       );
    v root.render(
         <React.StrictMode>
           <App />
 11
 12
         </React.StrictMode>
 13
       );
```

Then there will be an error.

```
ERROR in ./src/layouts/HomePage/components/ReturnBook.tsx 12:13-73

Module not found: Error: Can't resolve './../../Images/BooksImages/book-luv2code-1000.png' in 'C:\Boot-React-Project\boot-react-project\src\layouts\HomePage\components'
```

So go to the ReturnBook.tsx.

```
LibraryServices.tsx 1, U
                                        Heros.tsx 2. U
                                                                                    ExploreTopBo
src > layouts > HomePage > components > 🎡 ReturnBook.tsx > 💋 ReturnBook
  3 ∨ export const ReturnBook = () => {
        return (
          <div className="col-xs-6 col-sm-6 col-md-4 col-lg-3 mb-3">
            <div className="text-center">
                src={require("./../../Images/BooksImages/book-luv2code-1000.png")}
                alt="book"
                width="151"
                height="233"
              <h6 className="mt-2">Book</h6>
              Luv2Code
              <a className="btn main-color text-white" href="#">
                Reserve
              </a>
20
```

Then run the application. We can see the page.

