

WEEK 6 HANDS ON

Create a new React Application with the name “myfirstreact”, Run the application to print “welcome to the first session of React” as heading of that page.

1. To create a new React app, Install Nodejs and Npm from the following link:

<https://nodejs.org/en/download/>

2. Install Create-react-app by running the following command in the command prompt:

```
C:>npm install -g create-react-app
```

3. To create a React Application with the name of “myfirstreact”, type the following command:

```
C:>npx create-react-app myfirstreact
```

4. Once the App is created, navigate into the folder of myfirstreact by typing the following command:

```
C:>cd myfirstreact
```

5. Open the folder of myfirstreact in Visual Studio Code
6. Open the App.js file in Src Folder of myfirstreact
7. Remove the current content of “App.js”
8. Replace it with the following:

```
function App() {  
  return (  
    <h1> Welcome the first session of React </h1>  
  );  
}
```

9. Run the following command to execute the React application:

```
C:\myfirstreact>npm start
```

10. Open a new browser window and type “localhost:3000” in the address bar

OUTPUT:

```
Microsoft Windows [Version 10.0.26100.4652]
(c) Microsoft Corporation. All rights reserved.

C:\Users\bhats>node -v
v22.17.1

C:\Users\bhats>npm -v
10.9.2

C:\Users\bhats>npx create-react-app myfirstreact

Creating a new React app in C:\Users\bhats\myfirstreact.

Installing packages. This might take a couple of minutes.
Installing react, react-dom, and react-scripts with cra-template...

added 1323 packages in 3m
269 packages are looking for funding
  run 'npm fund' for details

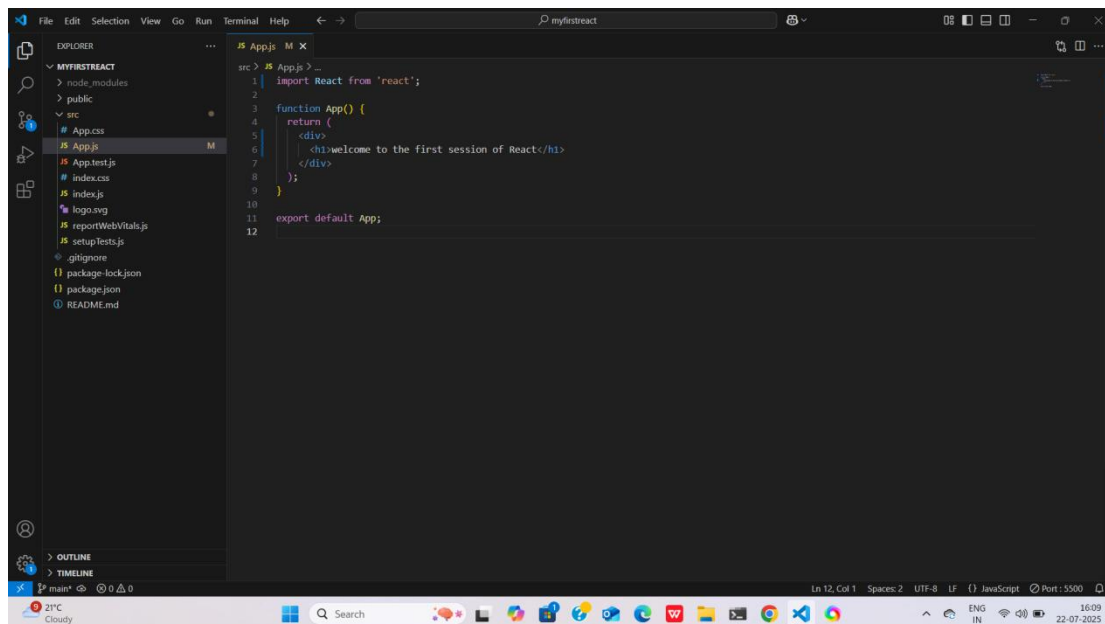
Initialized a git repository.

Installing template dependencies using npm...

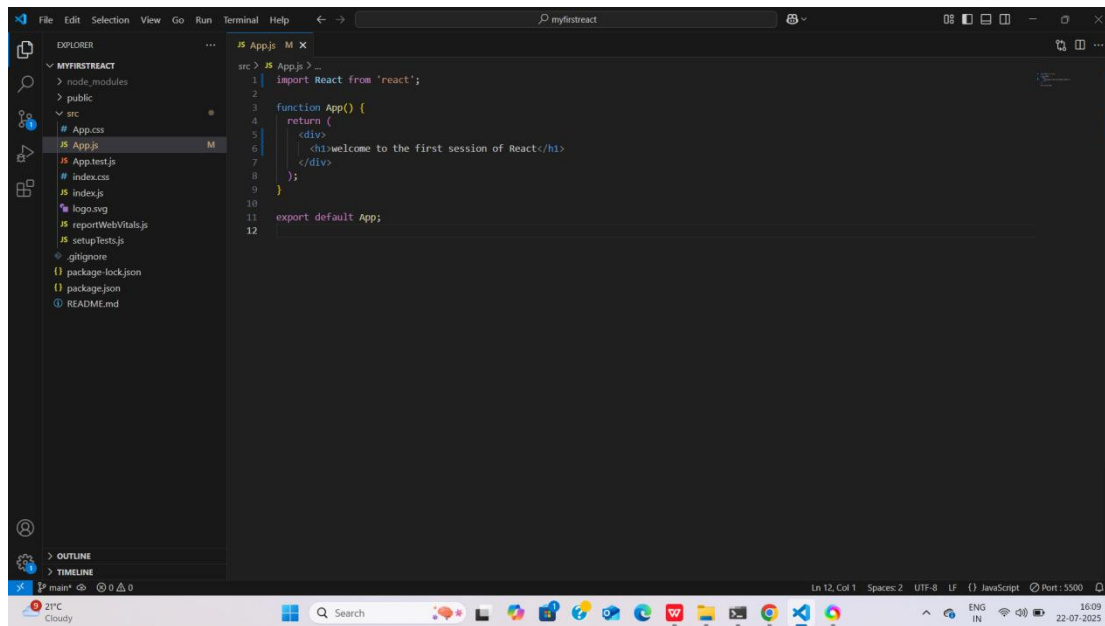
added 18 packages, and changed 1 package in 1m
269 packages are looking for funding
  run 'npm fund' for details
Removing template package using npm...

removed 1 package, and audited 1341 packages in 5s
269 packages are looking for funding
  run 'npm fund' for details

9 vulnerabilities (3 moderate, 6 high)
To address all issues (including breaking changes), run:
```



```
src > JS App.js > ...
1 | import React from 'react';
2 |
3 | function App() {
4 |   return (
5 |     <div>
6 |       <h1>welcome to the first session of React</h1>
7 |     </div>
8 |   );
9 | }
10 |
11 | export default App;
12 |
```



2. Create a react app for Student Management Portal named StudentApp and create a component named Home which will display the Message “Welcome to the Home page of Student Management Portal”. Create another component named About and display the Message “Welcome to the About page of the Student Management Portal”. Create a third component named Contact and display the Message

“Welcome to the Contact page of the Student Management Portal”. Call all the three components.

1. Create a React project named “StudentApp” type the following command in terminal of Visual studio:

```
C:>npx create-react-app StudentApp
```

2. Create a new folder under Src folder with the name “Components”. Add a new file named “Home.js”
3. Type the following code in Home.js
4. Under Src folder add another file named “About.js”
5. Repeat the same steps for Creating “About” and “Contact” component by adding a new file as “About.js”, “Contact.js” under “Src” folder and edit the code as mentioned for “Home” Component.
6. Edit the App.js to invoke the Home, About and Contact component as follows:
7. In command Prompt, navigate into StudentApp and execute the code by typing the following command:

```
C:\studentapp>npm start
```
8. Open browser and type “localhost:3000” in the address bar:

OUTPUTS:

```
Windows PowerShell
Microsoft Windows [Version 10.0.26100.4652]
(c) Microsoft Corporation. All rights reserved.

C:\Users\bhats>node -v
v22.17.1

C:\Users\bhats>npm -v
10.9.2

C:\Users\bhats>npx create-react-app studentapp

Creating a new React app in C:\Users\bhats\studentapp.

Installing packages. This might take a couple of minutes.
Installing react, react-dom, and react-scripts with cra-template...

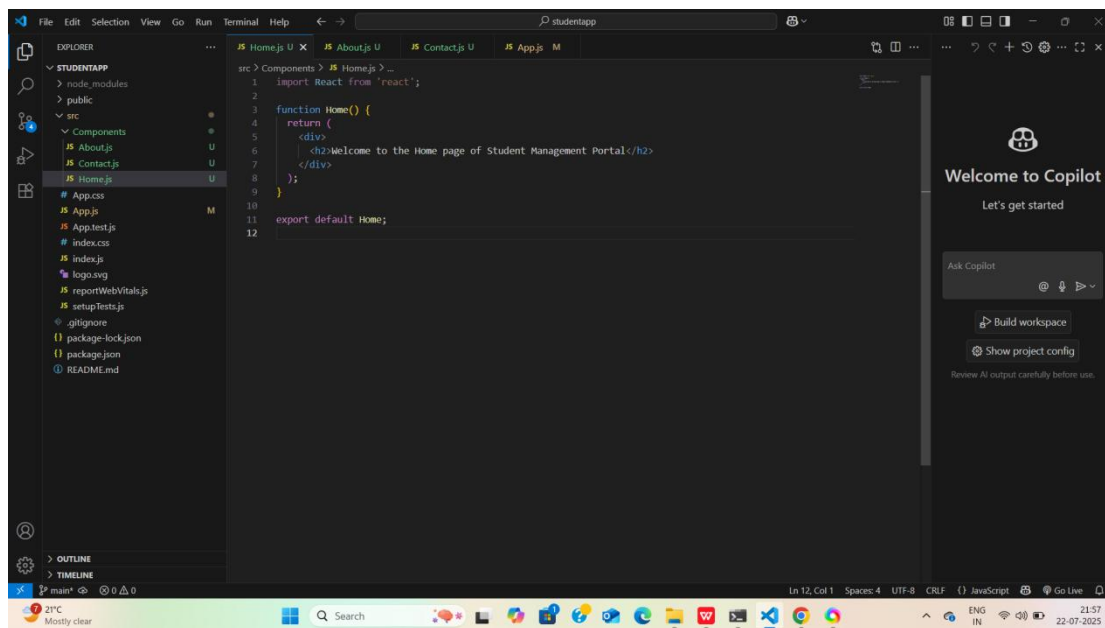
added 1323 packages in 1m
269 packages are looking for funding
  run 'npm fund' for details

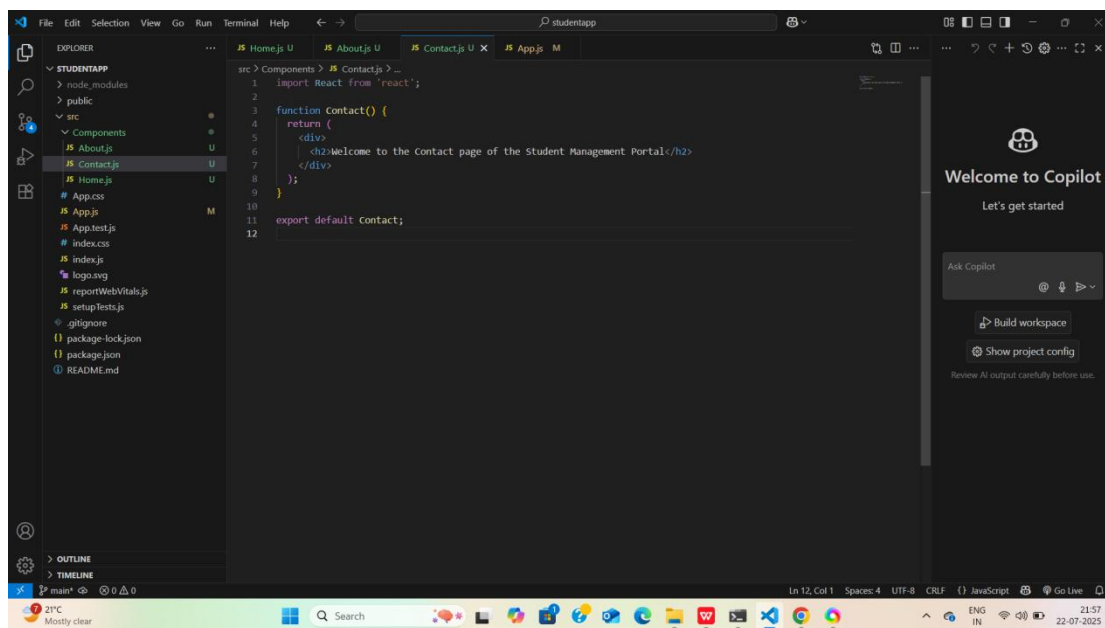
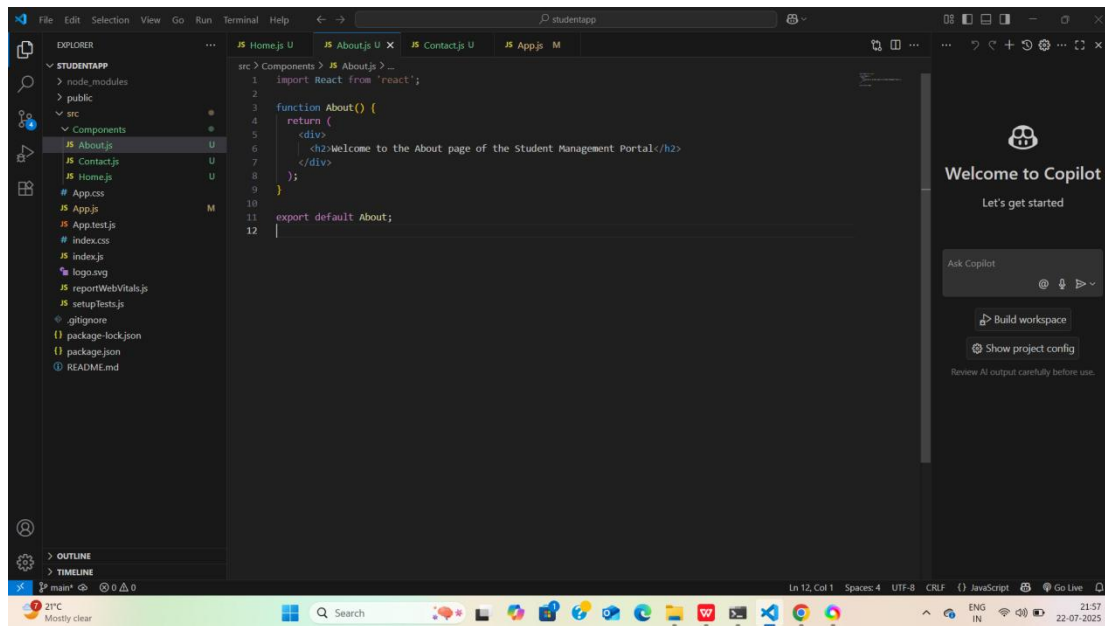
Initialized a git repository.

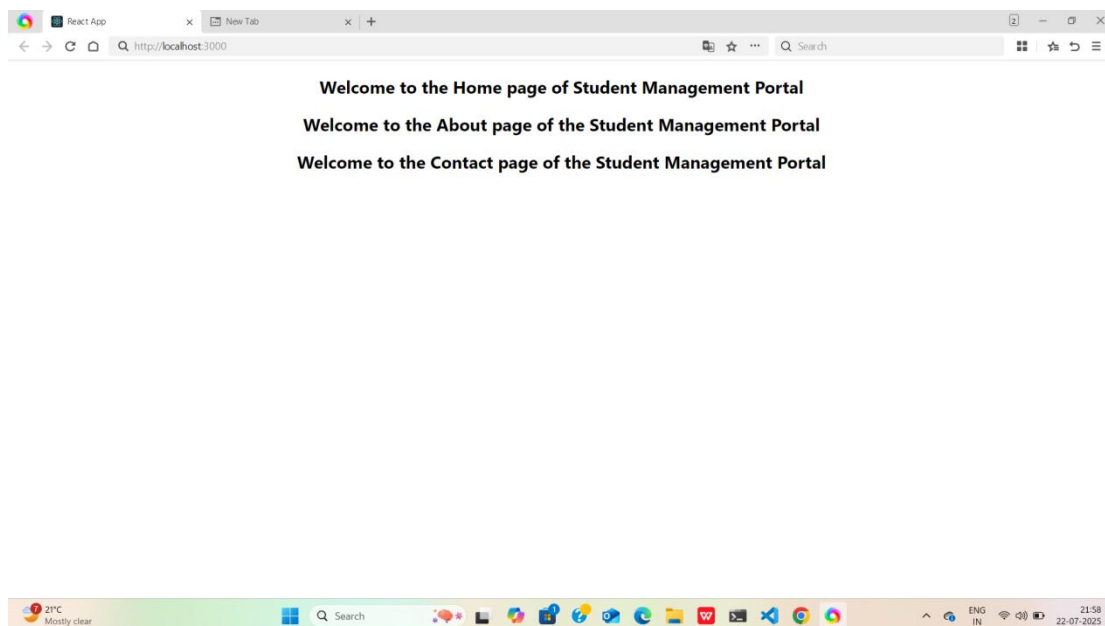
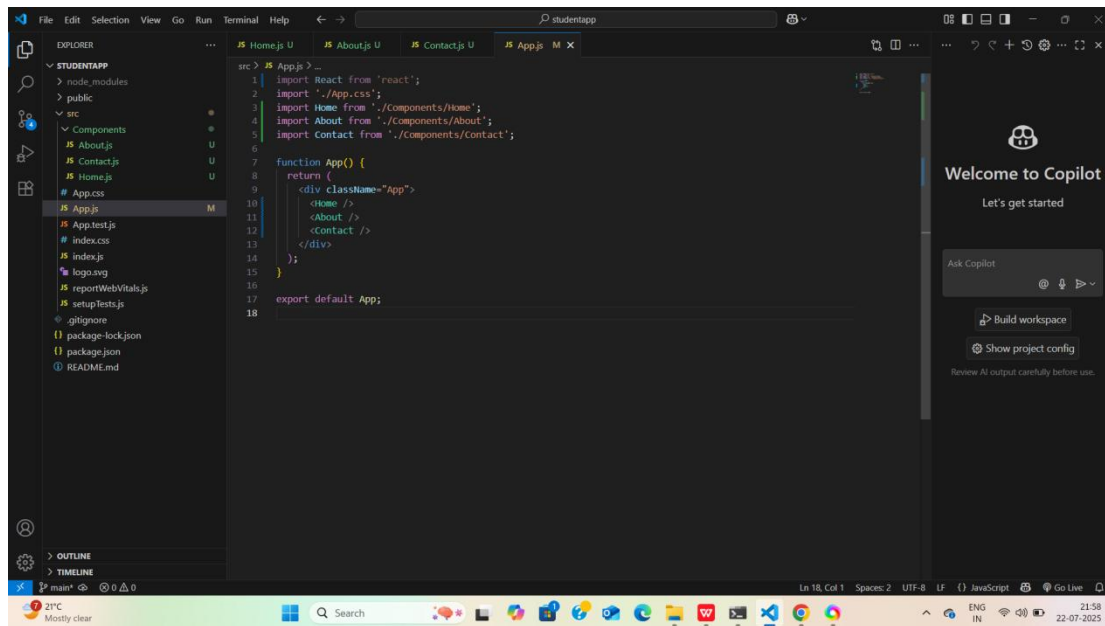
Installing template dependencies using npm...
added 18 packages, and changed 1 package in 7s
269 packages are looking for funding
  run 'npm fund' for details
Removing template package using npm...

removed 1 package, and audited 1341 packages in 4s
269 packages are looking for funding
  run 'npm fund' for details
9 vulnerabilities (3 moderate, 6 high)

To address all issues (including breaking changes), run:
```







3. Create a react app for Student Management Portal named scorecalculatorapp and create a function component named “CalculateScore” which will accept Name, School, Total and goal in order to calculate the average score of a student and display the same.

1.Create a React project named “scorecalculatorapp” type the following command in terminal of Visual studio:

```
C:>npx create-react-app scorecalculatorapp
```

2.Create a new folder under Src folder with the name “Components”. Add a new file named “CalculateScore.js”

Type the following code in CalculateScore.js

Create a Folder named Stylesheets and add a file named “mystyle.css” in order to add some styles to the components:

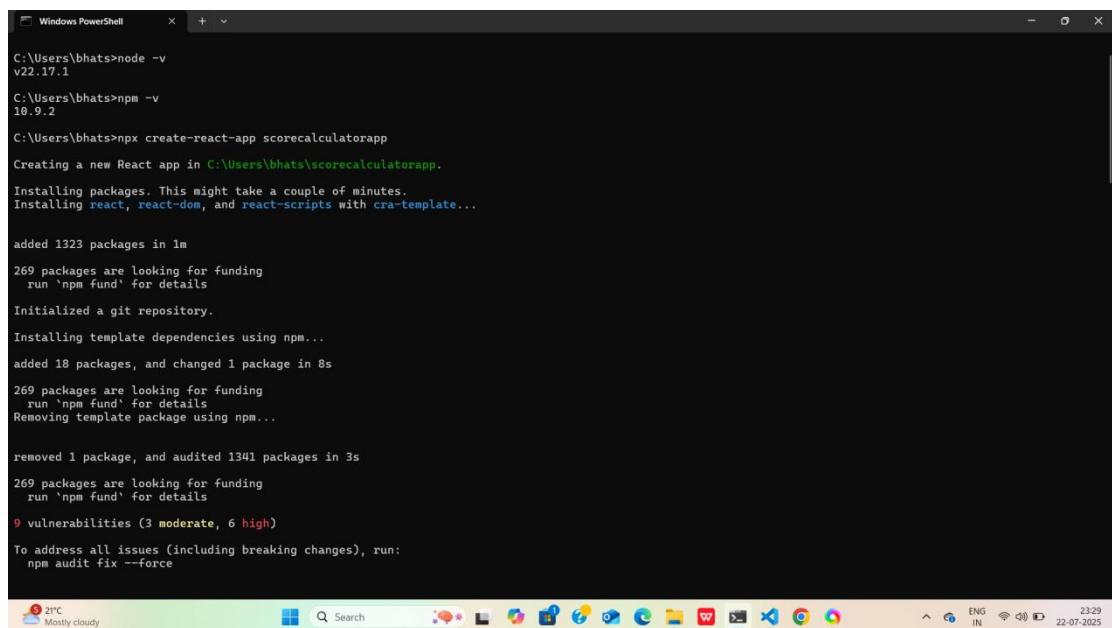
Edit the App.js to invoke the CalculateScore functional component as follows:

In command Prompt, navigate into scorecalculatorapp and execute the code by typing the following command:

```
C:\scorecalculatorapp>npm start
```

Open browser and type “localhost:3000” in the address bar:

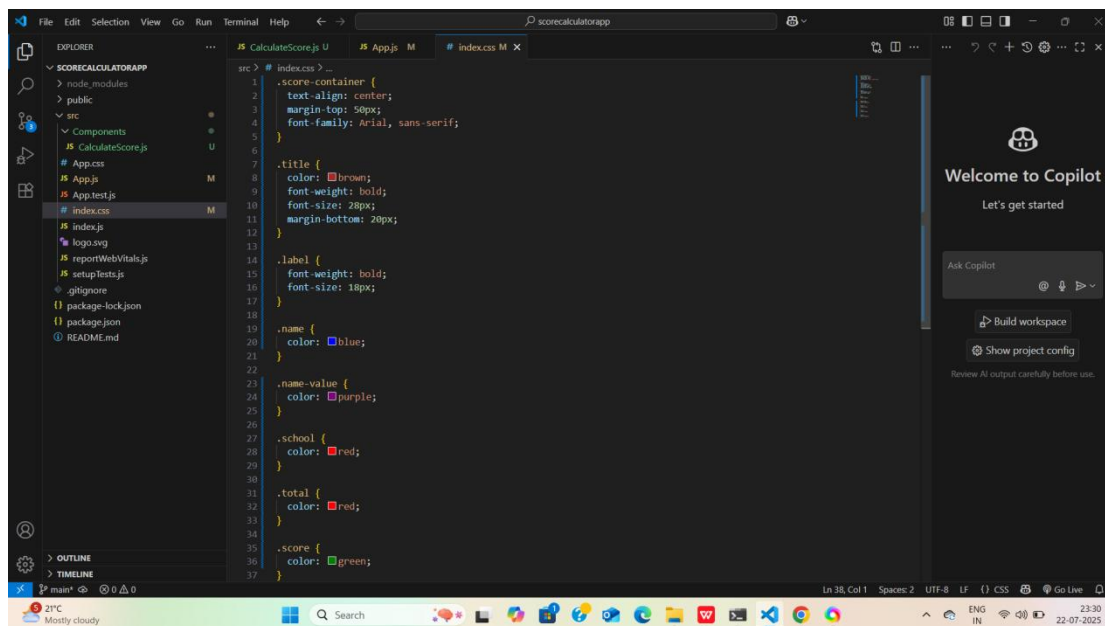
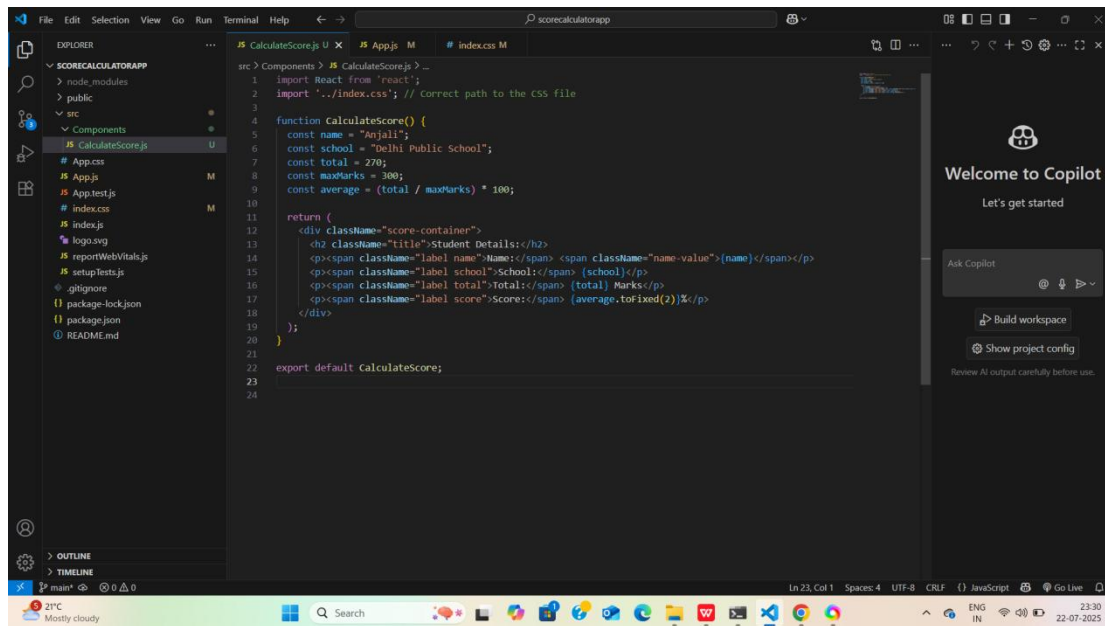
OUTPUTS:

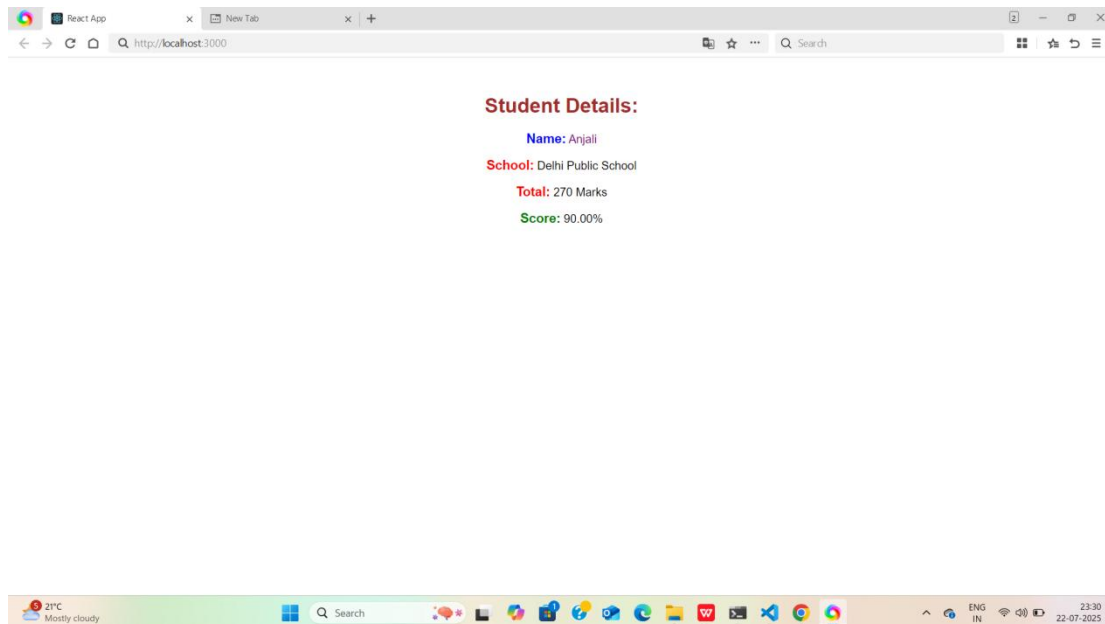


```
Windows PowerShell
C:\Users\bhats>node -v
v22.17.1
C:\Users\bhats>npm -v
10.9.2
C:\Users\bhats>npx create-react-app scorecalculatorapp
Creating a new React app in C:\Users\bhats\scorecalculatorapp.
Installing packages. This might take a couple of minutes.
Installing react, react-dom, and react-scripts with cra-template...

added 1323 packages in 1m
269 packages are looking for funding
  run `npm fund` for details
Initialized a git repository.
Installing template dependencies using npm...
added 18 packages, and changed 1 package in 8s
269 packages are looking for funding
  run `npm fund` for details
Removing template package using npm...

removed 1 package, and audited 1341 packages in 3s
269 packages are looking for funding
  run `npm fund` for details
9 vulnerabilities (3 moderate, 6 high)
To address all issues (including breaking changes), run:
  npm audit fix --force
```



4.

1. Create a new react application using *create-react-app* tool with the name as “blogapp”
2. Open the application using VS Code
3. Create a new file named as **Post.js** in **src folder** with following properties
4. Create a new class based component named as **Posts** inside **Posts.js** file

Figure 3: Posts Component

5. Initialize the component with a list of Post in state of the component using the constructor
6. Create a new method in component with the name as **loadPosts()** which will be responsible for using Fetch API and assign it to the component state created earlier. To get the posts use the url (<https://jsonplaceholder.typicode.com/posts>)

```
JS Posts.js U X
1 class Posts extends React.Component {
2   constructor(props){
3     super(props);
4     //code
5   }
6   loadPosts() {
7     //code
8   }
9 }
```

Figure 4: loadPosts() method

7. Implement the **componentDidMount()** hook to make calls to **loadPosts()** which will fetch the posts
8. Define a **componentDidCatch()** method which will be responsible for displaying any error happening in the component as alert messages.
9. Add the Posts component to App component.
10. Build and Run the application using *npm start* command.

OUTPUTS:

```
C:\WINDOWS\system32\cmd. X +
Microsoft Windows [Version 10.0.26100.4652]
(c) Microsoft Corporation. All rights reserved.

C:\Users\bhats>node -v
v22.17.1

C:\Users\bhats>npm -v
10.9.2

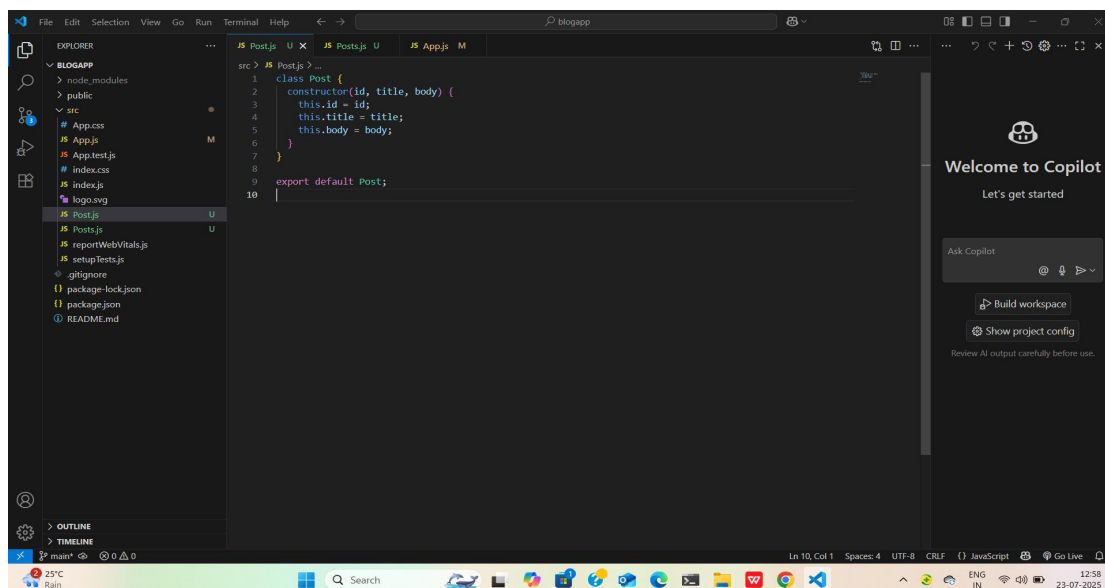
C:\Users\bhats>npx create-react-app blogapp

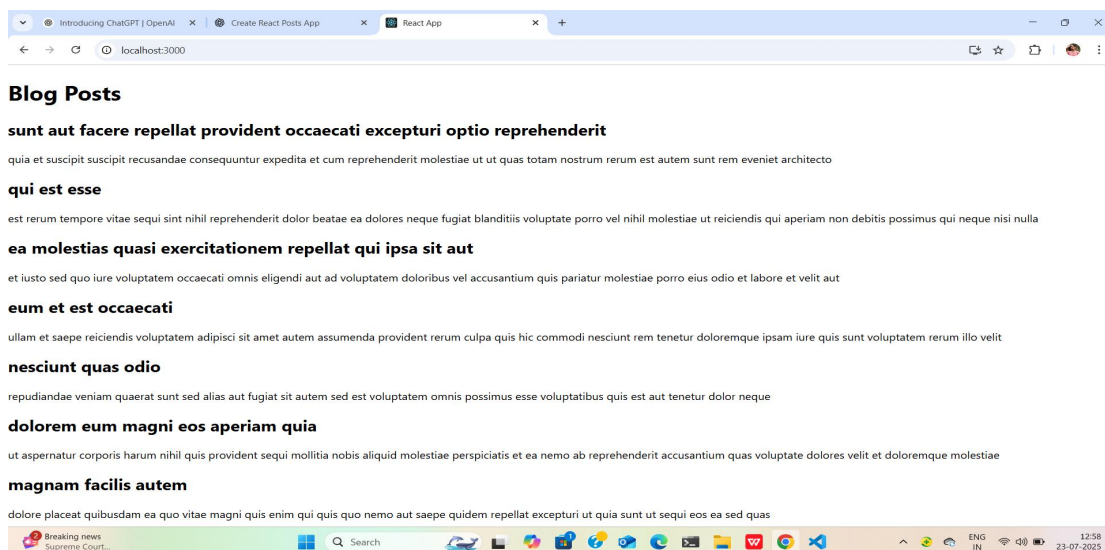
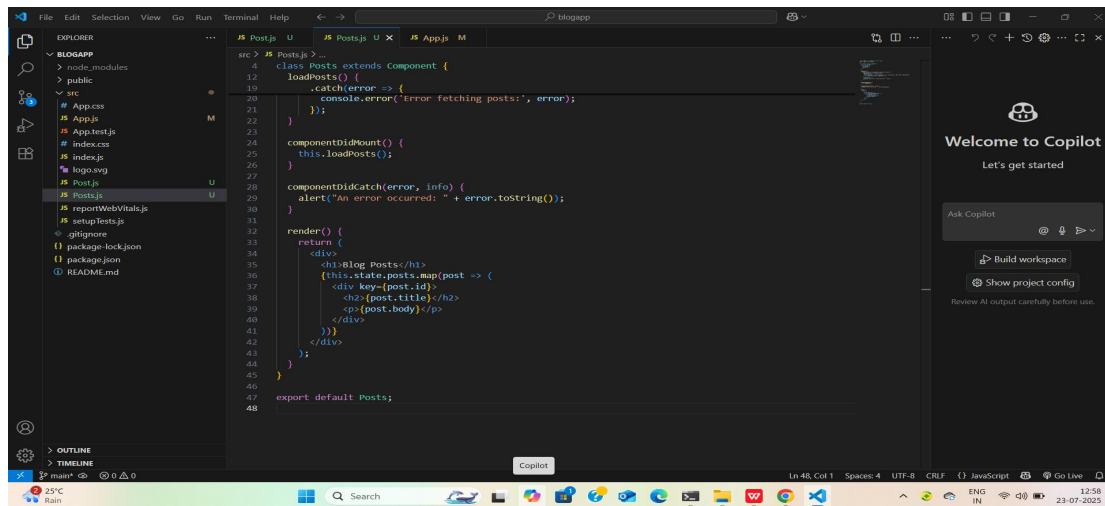
Creating a new React app in C:\Users\bhats\blogapp.

Installing packages. This might take a couple of minutes.
Installing react, react-dom, and react-scripts with cra-template...

added 1323 packages in 2m
269 packages are looking for funding
  run 'npm fund' for details
Initialized a git repository.
Installing template dependencies using npm...
added 18 packages, and changed 1 package in 57s
269 packages are looking for funding
  run 'npm fund' for details
Removing template package using npm...

removed 1 package, and audited 1341 packages in 9s
269 packages are looking for funding
  run 'npm fund' for details
9 vulnerabilities (3 moderate, 6 high)
To address all issues (including breaking changes), run:
```





5.

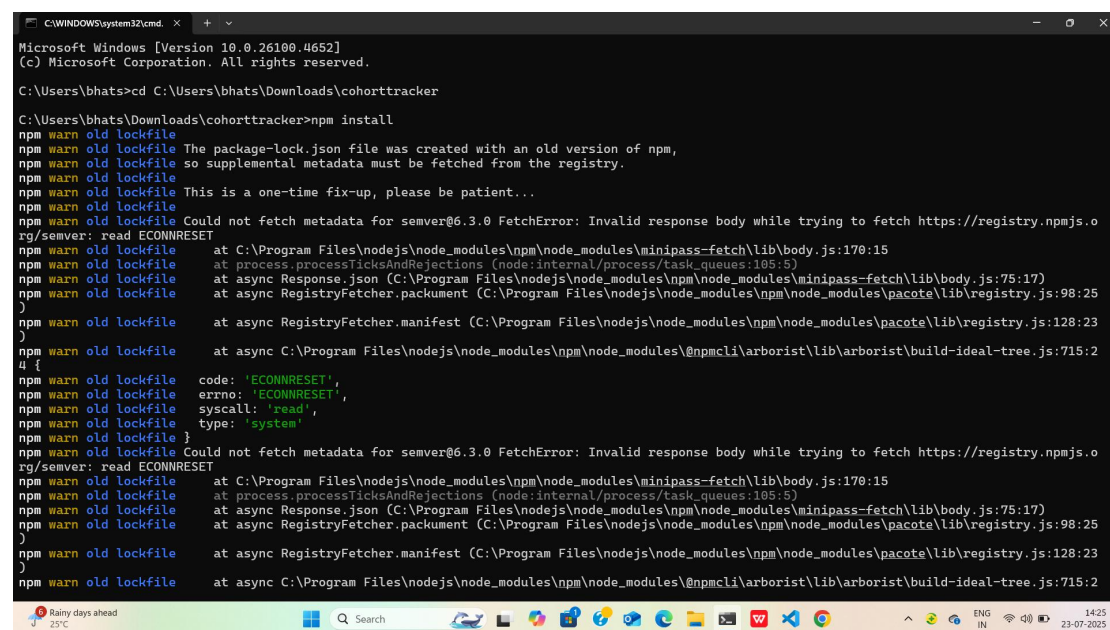
My Academy team at Cognizant want to create a dashboard containing the details of ongoing and completed cohorts. A react application is created which displays the detail of the cohorts using react component. You are assigned the task of styling these react components.

Download and build the attached react application.

1. Unzip the react application in a folder
2. Open command prompt and switch to the react application folder
3. Restore the node packages using the following commands

4. Open the application using VS Code
5. Create a new CSS Module in a file called “CohortDetails.module.css”
6. Define a css class with the name as “box” with following properties
 - Width = 300px;*
 - Display = inline block;*
 - Overall 10px margin*
 - Top and bottom padding as 10px*
 - Left and right padding as 20px*
 - 1 px border in black color*
 - A border radius of 10px*
7. Define a css style for html <dt> element using tag selector. Set the font weight to 500.
8. Open the cohort details component and import the CSS Module
9. Apply the box class to the container div
10. Define the style for <h3> element to use “green” color font when cohort status is “ongoing” and “blue” color in all other scenarios.
11. Final result should look similar to the below image

OUTPUTS:



```
C:\WINDOWS\system32\cmd. x + v
Microsoft Windows [Version 10.0.26100.4652]
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C:\Users\bhats>cd C:\Users\bhats\Downloads\cohorttracker

C:\Users\bhats\Downloads\cohorttracker>npm install
npm warn old lockfile
npm warn old lockfile The package-lock.json file was created with an old version of npm,
npm warn old lockfile so supplemental metadata must be fetched from the registry.
npm warn old lockfile This is a one-time fix-up, please be patient...
npm warn old lockfile Could not fetch metadata for semver@6.3.0 FetchError: Invalid response body while trying to fetch https://registry.npmjs.org/semver: read ECONNRESET
npm warn old lockfile   at C:\Program Files\nodejs\node_modules\npm\node_modules\minipass-fetch\lib\body.js:170:15
npm warn old lockfile   at process.processTicksAndRejections (node:internal/process/task_queues:105:5)
npm warn old lockfile   at async Response.json (C:\Program Files\nodejs\node_modules\npm\node_modules\minipass-fetch\lib\body.js:75:17)
npm warn old lockfile   at async RegistryFetcher.packument (C:\Program Files\nodejs\node_modules\npm\node_modules\pacote\lib\registry.js:98:25)
npm warn old lockfile   at async RegistryFetcher.manifest (C:\Program Files\nodejs\node_modules\npm\node_modules\pacote\lib\registry.js:128:23)
npm warn old lockfile   at async C:\Program Files\nodejs\node_modules\npm\node_modules\@npmcli\arborist\lib\arborist\build-ideal-tree.js:715:2
4 {
  code: 'ECONNRESET',
  errno: 'ECONNRESET',
  syscall: 'read',
  type: 'system'
}
npm warn old lockfile Could not fetch metadata for semver@6.3.0 FetchError: Invalid response body while trying to fetch https://registry.npmjs.org/semver: read ECONNRESET
npm warn old lockfile   at C:\Program Files\nodejs\node_modules\npm\node_modules\minipass-fetch\lib\body.js:170:15
npm warn old lockfile   at process.processTicksAndRejections (node:internal/process/task_queues:105:5)
npm warn old lockfile   at async Response.json (C:\Program Files\nodejs\node_modules\npm\node_modules\minipass-fetch\lib\body.js:75:17)
npm warn old lockfile   at async RegistryFetcher.packument (C:\Program Files\nodejs\node_modules\npm\node_modules\pacote\lib\registry.js:98:25)
npm warn old lockfile   at async RegistryFetcher.manifest (C:\Program Files\nodejs\node_modules\npm\node_modules\pacote\lib\registry.js:128:23)
npm warn old lockfile   at async C:\Program Files\nodejs\node_modules\npm\node_modules\@npmcli\arborist\lib\arborist\build-ideal-tree.js:715:2
```

