

# Route Group Layouts in Next.js

## Route Group Layout

A Route Group Layout is a concept used to organize a project's routes and apply layouts selectively to specific segments of the application without affecting the URL structure. It allows developers to structure their project in a way that maintains clarity and separation of concerns while still providing flexibility in applying layouts.

## Purpose of Route Group Layouts

Route Group Layouts are utilized for various purposes:

### **Organization:**

They help in organizing routes and layouts within a project, making it easier to manage and maintain the codebase.

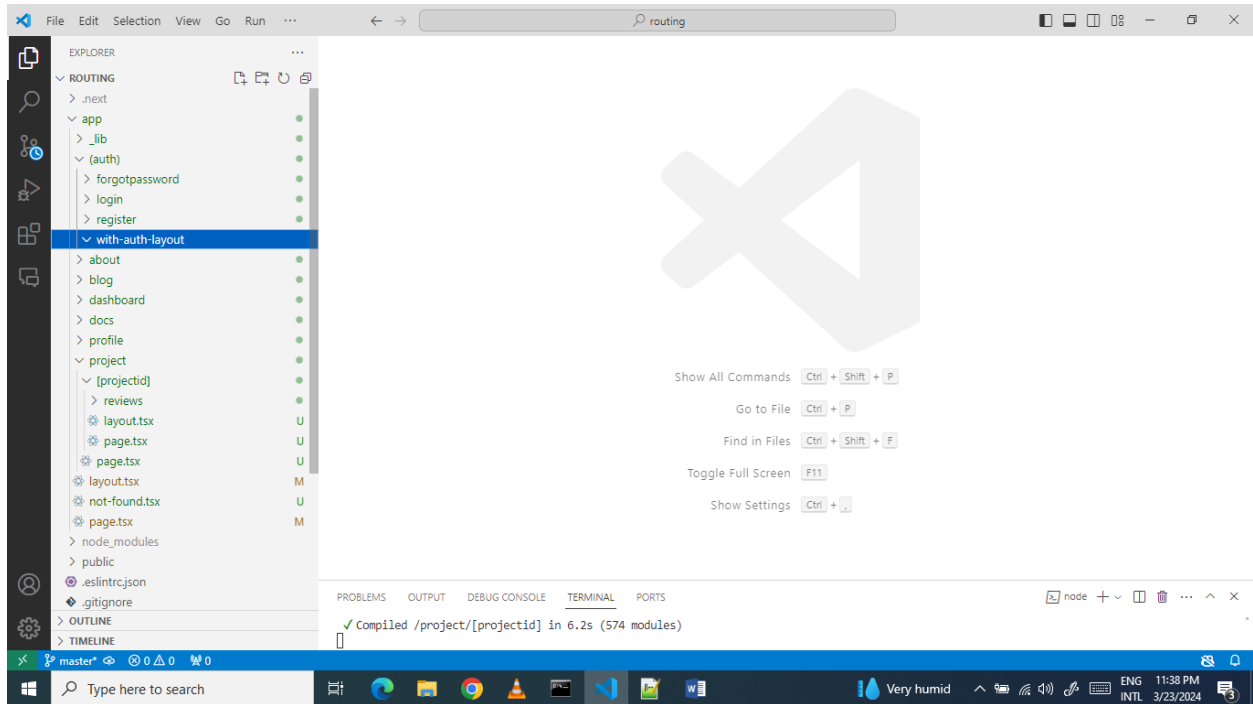
### **Selective Layout Application:**

Route Group Layouts allow developers to apply layouts selectively to certain segments of the application while leaving others unchanged. This flexibility enables customization of the user interface based on specific requirements or user roles.

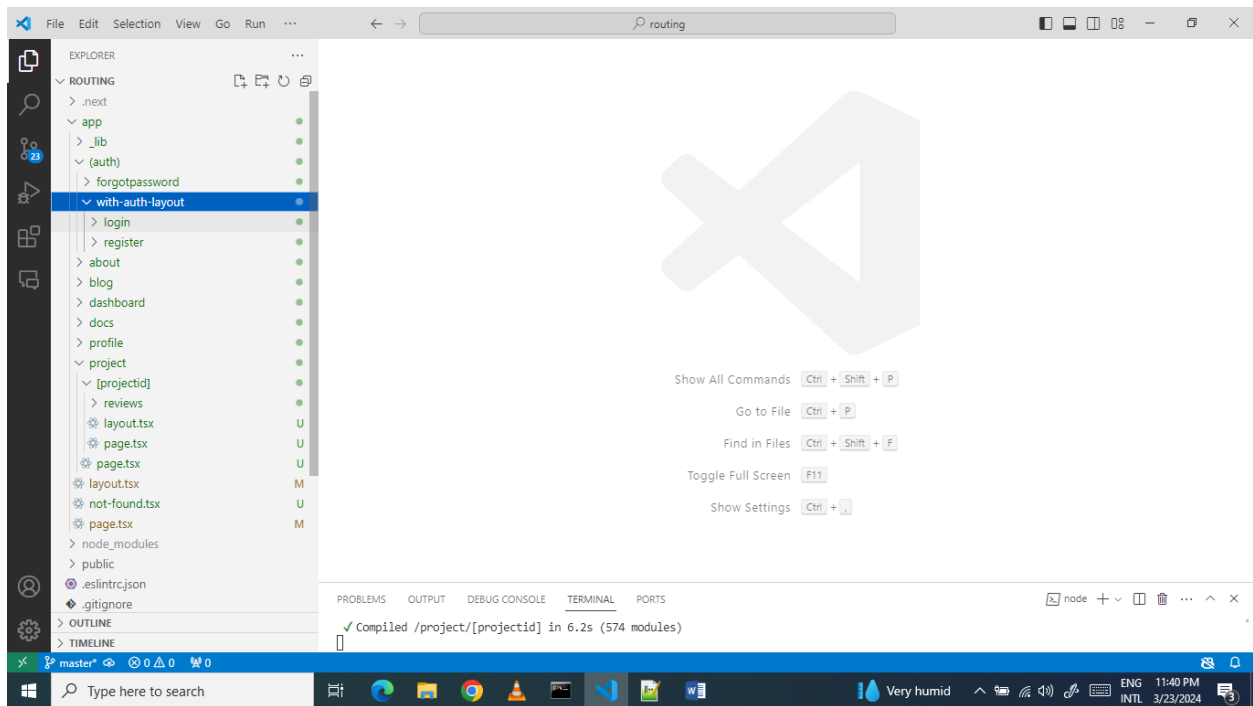
### **URL Independence:**

By decoupling layout application from URL structure, Route Group Layouts ensure that changes to the layout do not impact the URL paths of the application. This separation enhances code modularity and makes it easier to refactor or extend the application in the future.

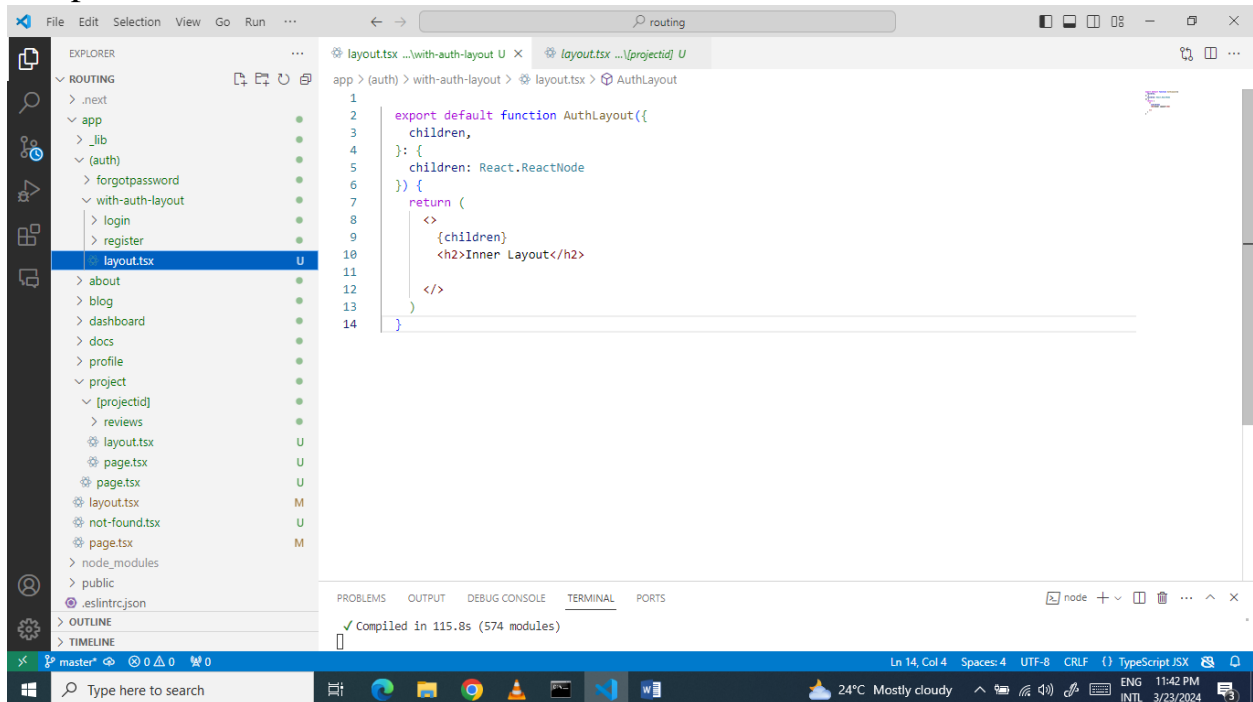
## Create a folder with name with-auth-layout inside the (auth) folder



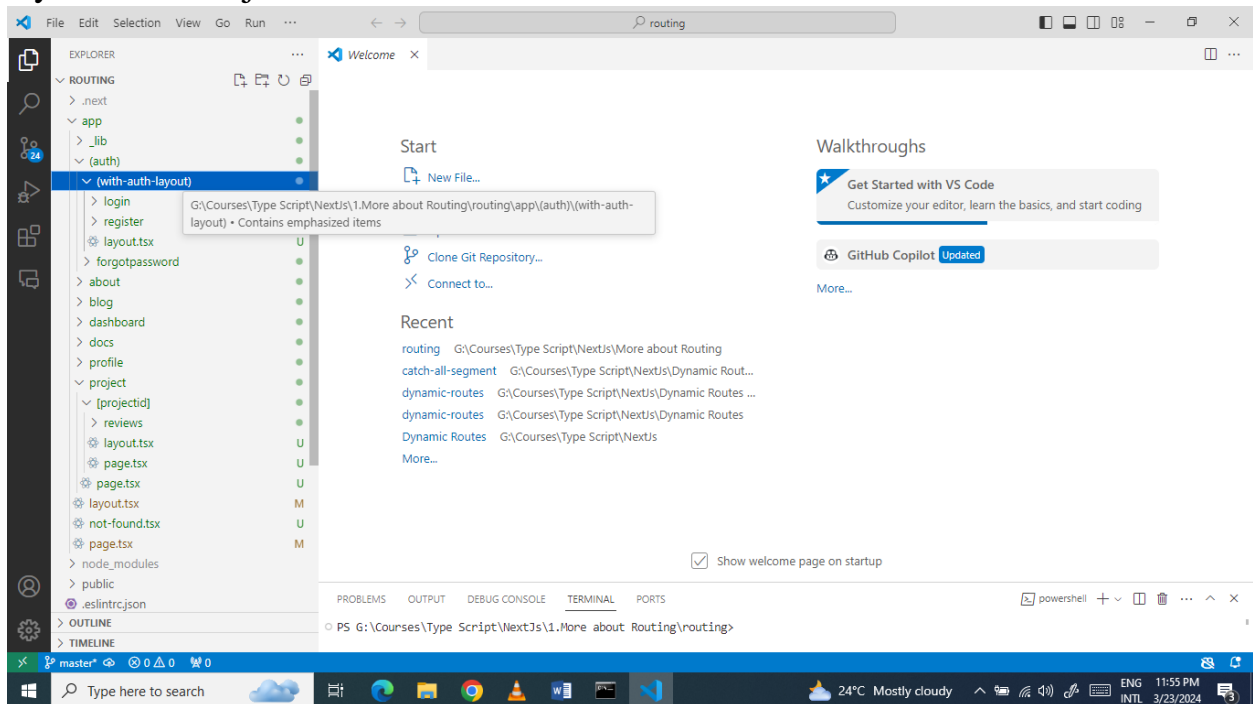
## Now move login and register folder into with-auth-folder



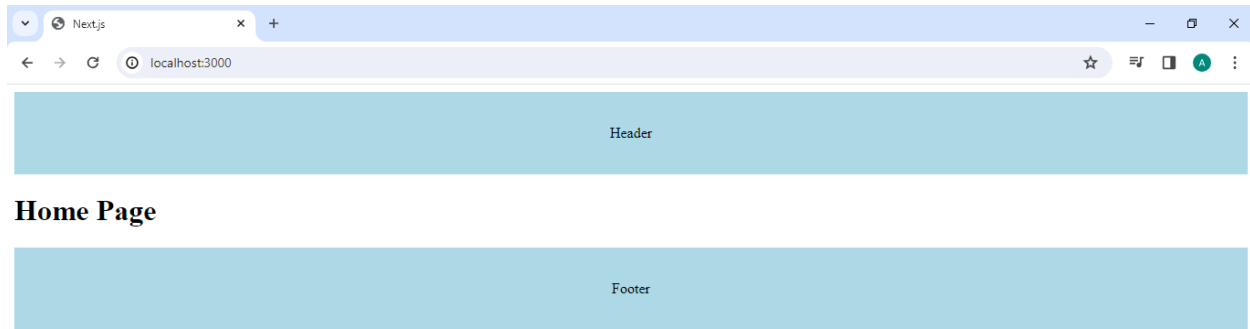
Create a layout.tsx file inside the with-auth-layout folder and add a React component.



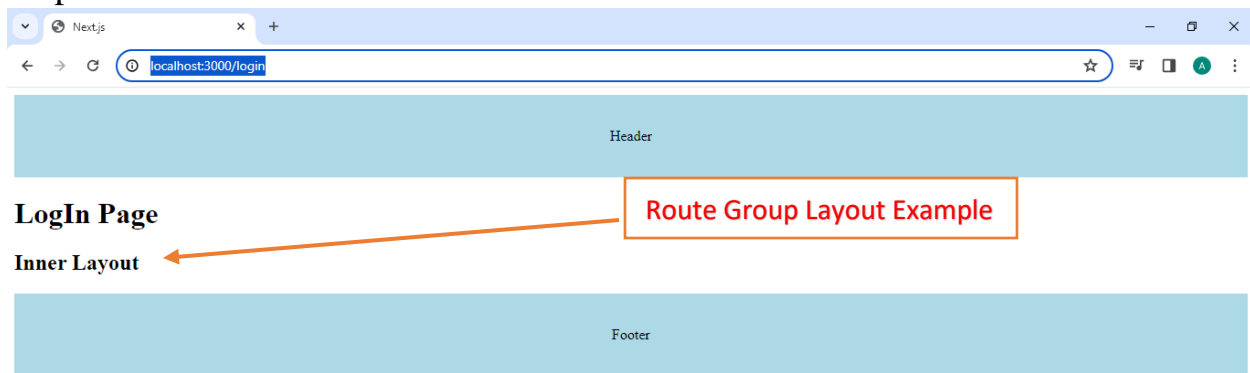
Rename the folder "with-auth-layout" to "(with-auth-layout)" for grouping layouts in Next.js.

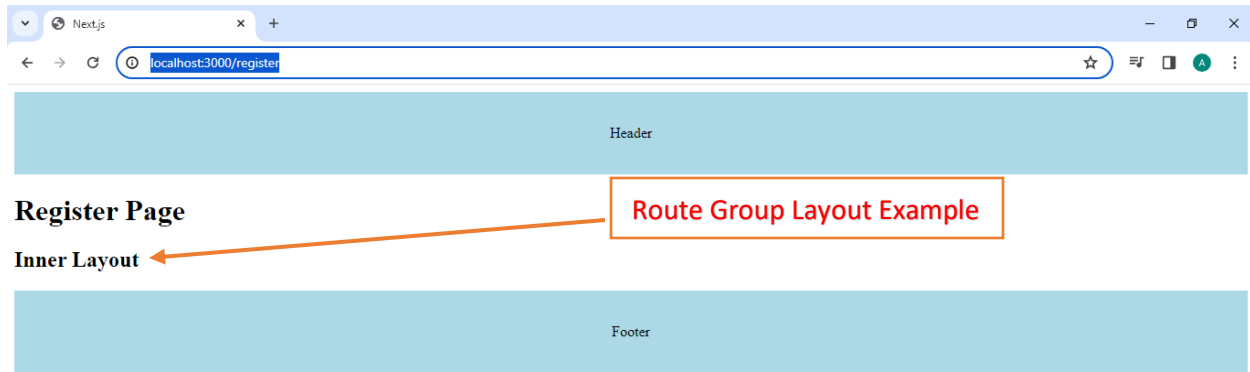


Now, if we navigate the browser to <http://localhost:3000>, it will display the main application layout output.



Now, if we navigate to <http://localhost:3000/login> and <http://localhost:3000/register> one by one, they will display the Route Group layout output.





If we navigate to `http://localhost:3000/forgotpassword`, it will display the Main Application Layout instead of the Route Group Layout output because it is not within the (with-auth-layout) group; it is outside the (with-auth-layout) folder.

