Assignment 2: Component Structure Context API
Awareness, Application, Mastery, Influence

Gaurab Wagle

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Overview of the Assignment

For this assignment, Participants will learn to set up multi-page React applications using React Router. They will understand routing, navigation, route parameters, and nested routes.

GitHub Repository Link

Get the complete code and project details on my GitHub repository:
`https://github.com/gxaurab/Tangible/tree/main/Ass2/ContextAPIInfluence`
   I have done the Influence part such that it includes all the concepts of the Awareness, Mastery and Application.

1 Influence

- **Rubric:** Design scalable Context architecture for large apps, separating contexts into multiple providers.

- **Proof of Work:** Organize multiple contexts into folders and combine them in the main app to support a complex application.

1.1 Approach

Features included in the task:

- Dark/Light Mode

- Dynamic Navigation Bar

- Authorization state using Context API

- Protected Route

1.2   Workflow/ Approach towards the problem

- I first included the dark/light mode toggling option via the Contex API. Context Api is simple but not that simple like Zustand.

- Created two context, *AuthContext, ThemeContext* .

  - **ThemeContext**: Theme context included a "theme" state and function to update it. It also included a custom hook named "useTheme" which included the context and made code simpler to use.

  - **AuthContext**: Auth Context included username, isLoggedIn states and two functions to update it, login and logout. I also made a custom hook to make the code more reproducable.

- After the integration of authcontext, i then made a protected route, which prevented me access to dashboard named route which displays the name, by saying: Hello "username".

1.3   Outcome

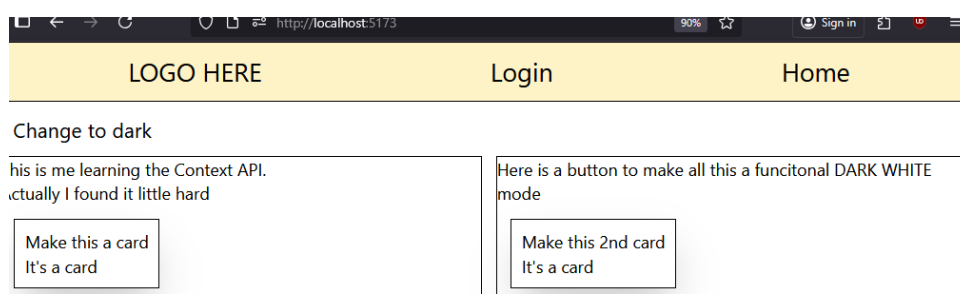: Below is the Screenshot of the working Influence component.
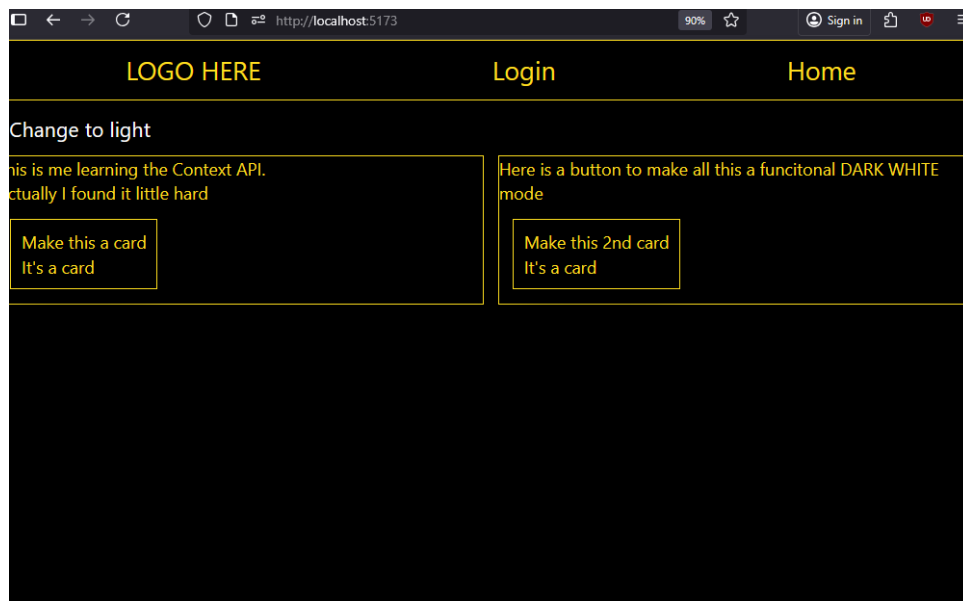

Figure 1: Just a Light mode

Figure 2:   Dark Mode Included with yellow texts

Figure 3:   Protected Navbar, that shows the dashboard only when logged in and also a dynamic greeting of Hello Username.

1.4   Conclusion:

I understood the contextAPI and now I am comfortable using it. But I would prefer zustand over ContextAPI.