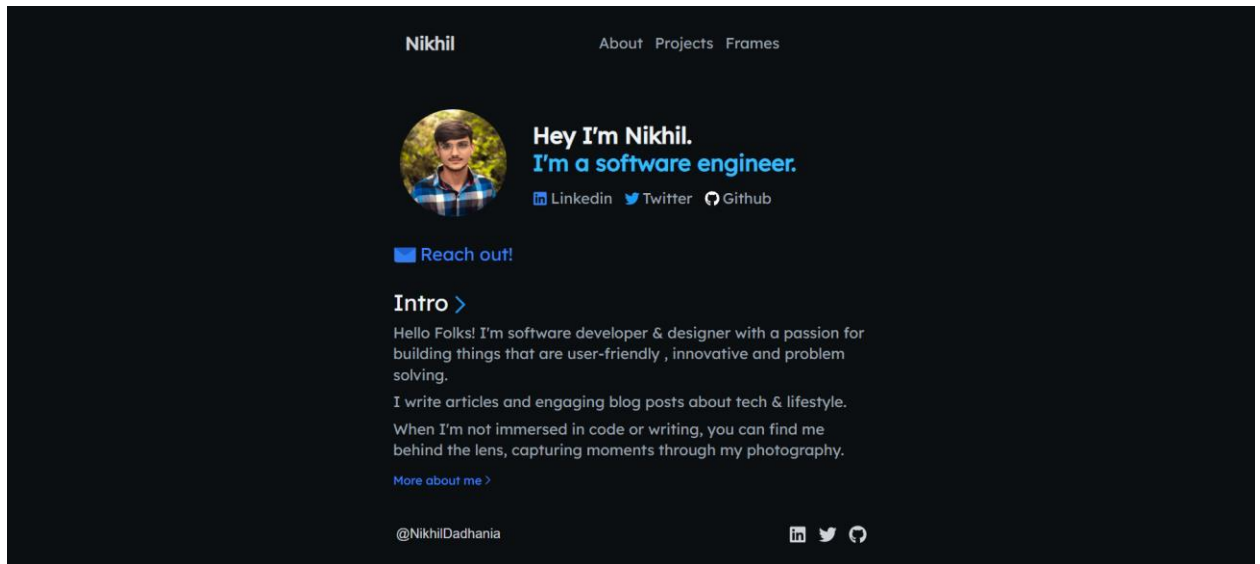


1. Task Description

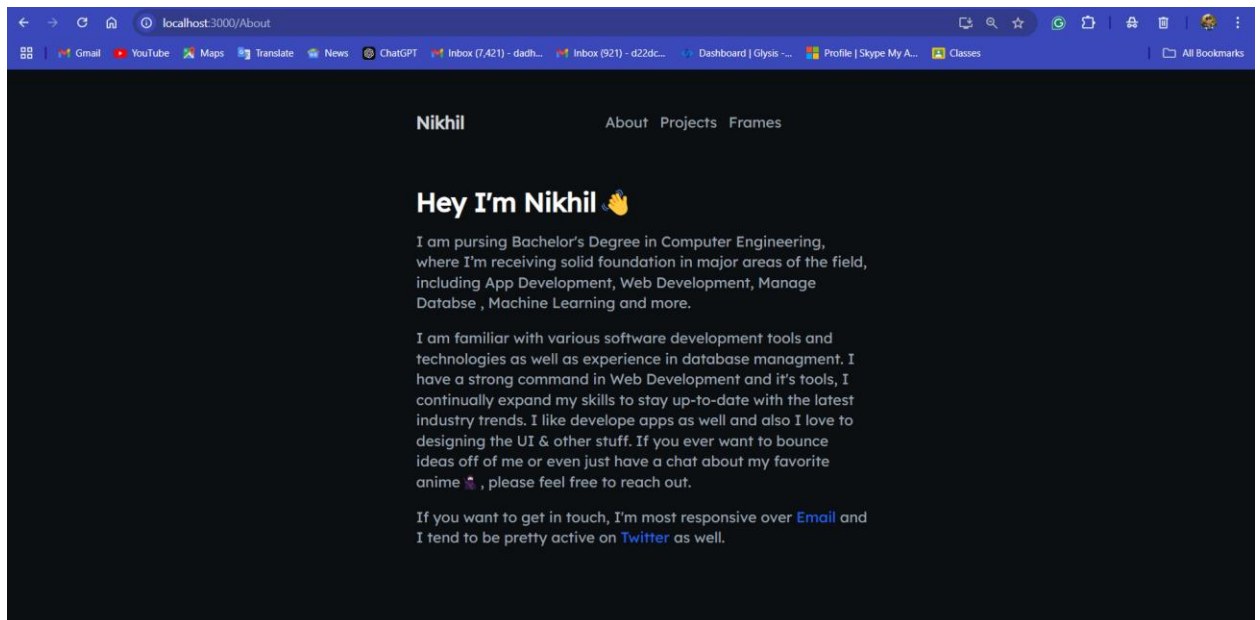
Set up nested routes using React Router for a multi-level menu.

2. Task Output Screenshot

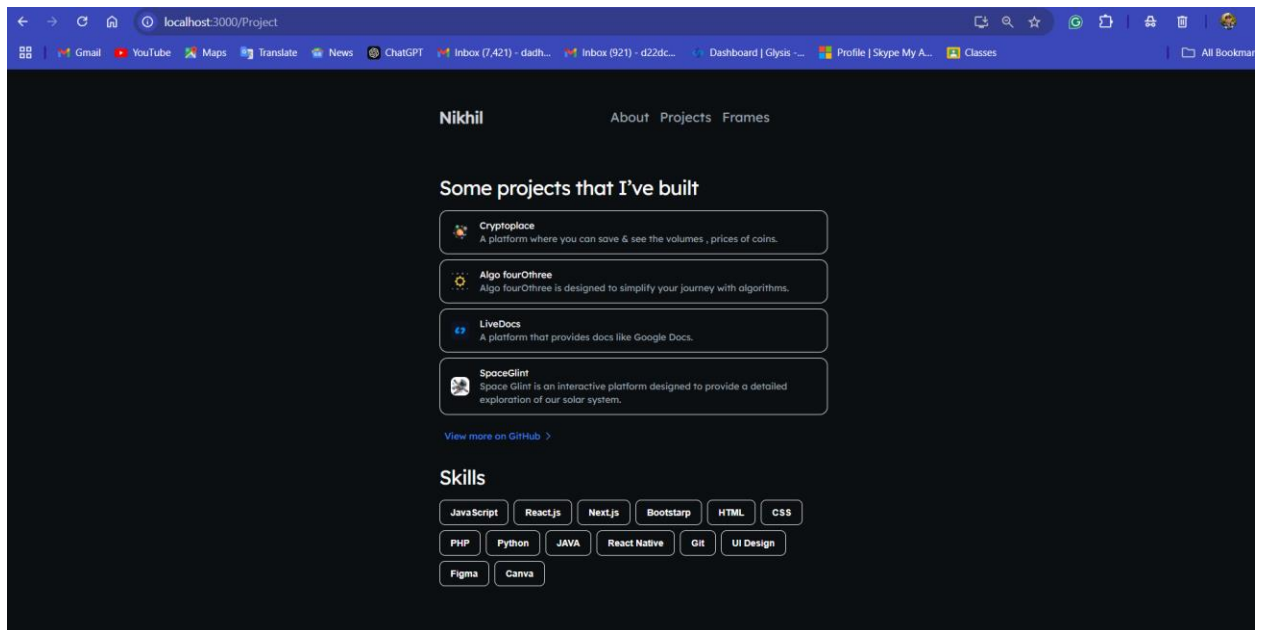
HOME PAGE –



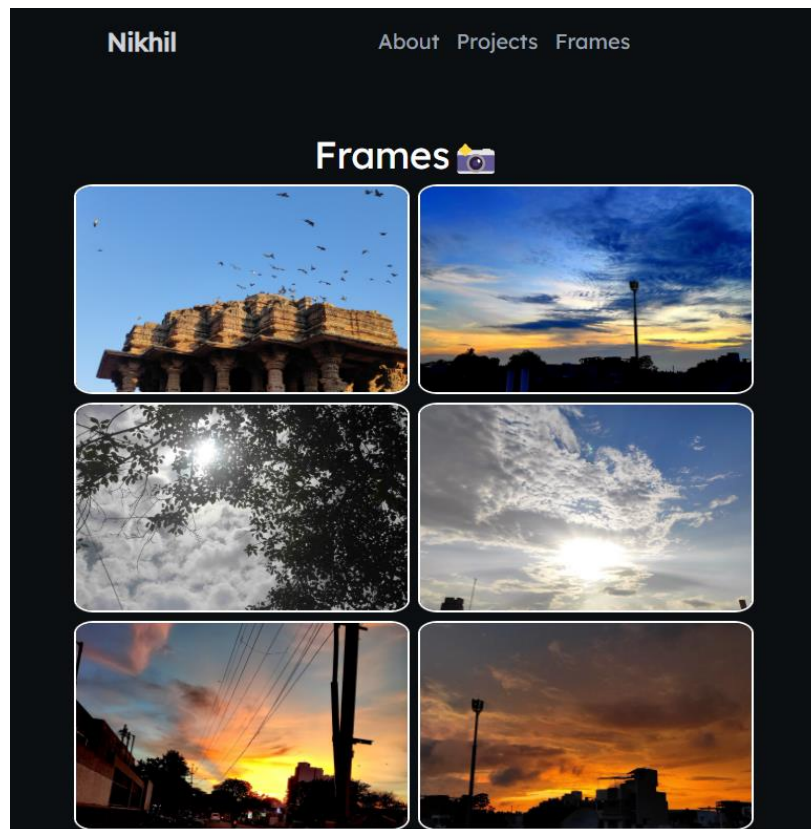
ABOUT PAGE –



PROJECT PAGE –



FRAME PAGE –



3. Widget/Algorithm Used In Task

Components Used:

- **BrowserRouter (from react-router-dom):**

Wraps the application to enable routing functionality.

Ensures that the routes are managed via the React Router.

- **Routes (from react-router-dom):**

A container for all the Route components. It matches the current URL path to a specific component.

- **Route (from react-router-dom):**

Defines individual routes. Each route specifies:

Path: The URL path to match.

Element: The component to render when the path matches.

- **Custom Components:**

Blog, About, Project, Projectlist, Photo, and Navbar are React components imported from their respective files. These represent different pages or UI sections of the application.

Algorithm Used:

➤ **Routing Algorithm (Pattern Matching):**

1. BrowserRouter captures the URL path from the browser.
2. Routes iterates over all the child Route components to find a match.
3. The first Route with a matching path renders its corresponding element.
4. If no match is found, no component is rendered

➤ **Component Rendering Algorithm:**

1. Each Route specifies an element prop, which is the component to render.
2. When a route matches, React renders the component specified in element.
3. Components are rendered as React elements in the virtual DOM for efficient updates.