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DATE :12-09-2025

Completed the project named as phase_02_ReactJS routing with login protection

NAME : ReactJS routing with login protection

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Phase 2 Title Slide

Phase 2: Technical Design & Architecture

- 🔷 Tech stack, UI structure, Data flow, and Diagrams

TECH STACK SELECTION (PART1)

- Frontend
- React.js → component-based UI, fast rendering
- React Router → seamless navigation between pages
- Tailwind CSS (optional) → clean, modern styling

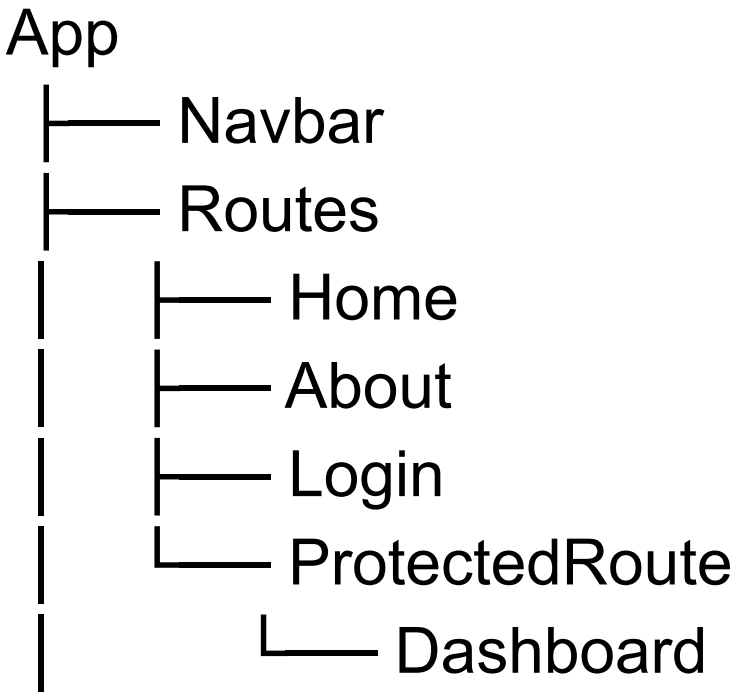
TECH STACK SELECTION(PART 2)

- State & Authentication
- React useState/useContext → manage login state
- localStorage → (future) persist login sessions
- Backend (Future Plan)
- Node.js + Express for APIs
- JWT (JSON Web Tokens) for secure authentication

UI STUCTURE OVERVIEW

- Navigation Bar → links to Home, About, Dashboard, Login/Logout
- Home Page → public welcome page
- About Page → static information page
- Login Page → authentication entry point
- Dashboard Page → private area for logged-in users

UI STUCTURE(HIERARCHY VIEW)



API SCHEMA DESIGN(FUTURE READY)

- POST /login → Validate credentials, return token
- POST /logout → End session
- GET /dashboard → Fetch user-specific data
- Error Handling → Unauthorized access returns 401

DATA HANDLING APPROACH(PART1)

- Authentication Flow
- On login → state changes to logged-in
- On logout → state resets, redirect to home
- Future: store auth token in localStorage for persistence

COMPONENT /MODULE DIAGRAM

- Modules
- App.js → central router + layout
- ProtectedRoute.js → guards private routes
- Pages/ → Home, About, Dashboard, Login
- AuthContext.js (future) → global auth state management

BASIC FLOW DIAGRAM(STEP BY STEP)

User Journey:

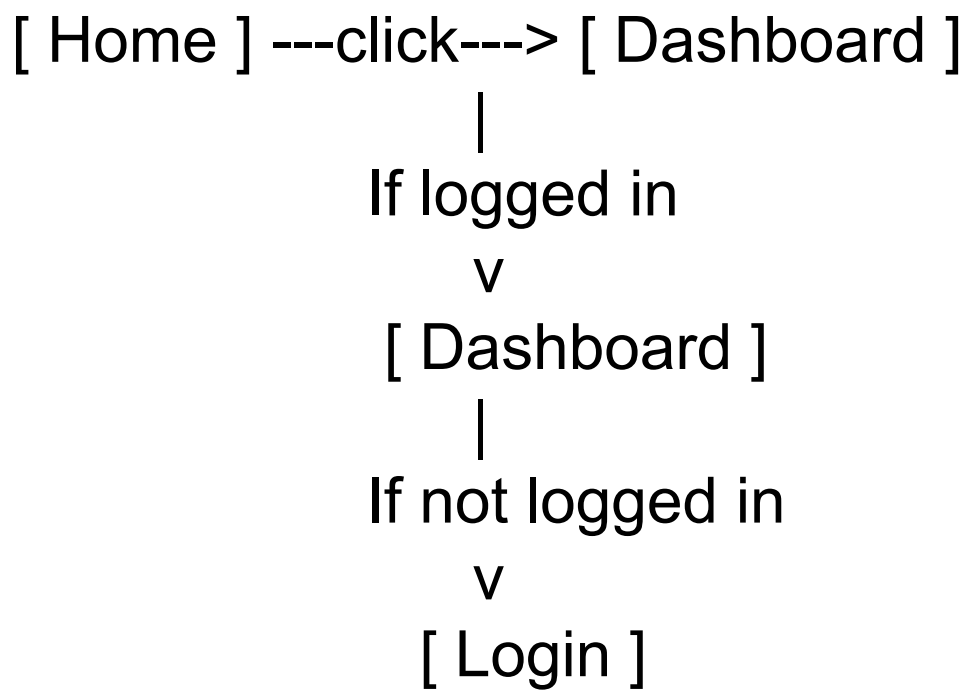
1. User opens app → lands on Home page
2. Navigates using Navbar
3. Tries accessing Dashboard →

If logged in → show Dashboard

If not → redirect to Login

4. Login success → redirect to Dashboard
5. Logout → back to public pages

FLOW DIAGRAM(VISUAL)



PHASE 2 CLOSING SLIDE

Key Outcomes:

- Tech stack finalized (React, Router, optional backend)
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- Clear UI structure & future API schema
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- Data handling strategy defined
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- Component and flow diagrams ensure clarity