



SwiftNotes

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MAIN OBJECTIVE

SwiftNotes is a web application dedicated to note/document-taking and collaboration. Its primary goal is to offer users an ideal platform for creating, editing, and sharing notes in real-time. The focus of the developers is to simplify the collaborative process, enabling users to effortlessly create, share, and modify documents together. Whether it's an individual organizing their thoughts or a team collaborating on a project.

APPLIED TECHNOLOGY

The application utilized technologies to make things work smoothly. **Firebase Authentication** and the **Quill Docs Editor API** were utilized to authenticate users, manage user sessions, and enable rich text editing capabilities, respectively. **React Vite** facilitated efficient frontend development, while **MongoDB** served as the backend database management system. **Axios** handled seamless HTTP requests between the frontend and backend, ensuring smooth communication. The frontend is crafted with **HTML, CSS, and Tailwind CSS** with **Framer Motion** used for animation, ensuring a responsive and visually appealing user interface. **Express.js** and **Socket.io** were utilized to establish connections for both the database and web sockets. Additionally, **Nodemon**, a utility that monitors changes in Node.js applications and automatically restarts the server, was used to streamline the development process.

PROGRAM STRUCTURE

- client: Contains all frontend-related files and folders.
- server: Contains all backend-related files and folders.

Main Components/Dependencies:

- **Firebase Authentication:** Manages user authentication and authorization.
- **Quill Docs Editor API:** Provides rich text editing functionality for note-taking.
- **React Vite:** Facilitates efficient development of the frontend React application.
- **Express.js:** Builds the backend server and handles HTTP requests.
- **MongoDB:** Manages data storage and retrieval for user notes.
- **Socket.io:** Enables real-time communication for collaborative editing.



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- HTML, CSS, Tailwind CSS, and Framer Motion: Craft the animation, responsive design, and visually appealing frontend user interface.

Libraries:

Within React.js and Express.js:

- Toastify: React-Toastify for displaying notifications (toasts) in React applications.
- useEffect: A built-in React Hook for handling side effects in functional components.
- Motion: Framer Motion is used for animating the user login.
- useNavigate: A hook provided by React Router v6 for programmatically navigating between different routes.
- Router: In Express.js, a built-in middleware used to create modular, mountable route handlers.
- Route: The basic building block of React Router, rendering a component based on the URL path.
- Routes: Introduced in React Router v6, a component used to define multiple routes in one place.
- Private Route: A custom route component that checks if the user is authenticated before rendering the specified component.

Within Firebase Authentication:

- Firebase Provider: Provider objects for different authentication methods supported by Firebase, used for configuring sign-in methods or linking accounts.
- auth: A key component of Firebase Authentication, providing access to various authentication-related methods and functionalities.
- onAuthStateChanged: Method used to set up a listener that triggers whenever the user's authentication state changes.

SETTING IT UP LOCALLY

1. Install Visual Studio Code:
 - Download and Install Visual Studio Code from code.visualstudio.com.
2. Install Node.js:
 - Ensure Node.js is installed on your system. Download it from nodejs.org.
3. Clone the Repository:



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- Sign in to GitHub, copy the repository link, and open Visual Studio Code.

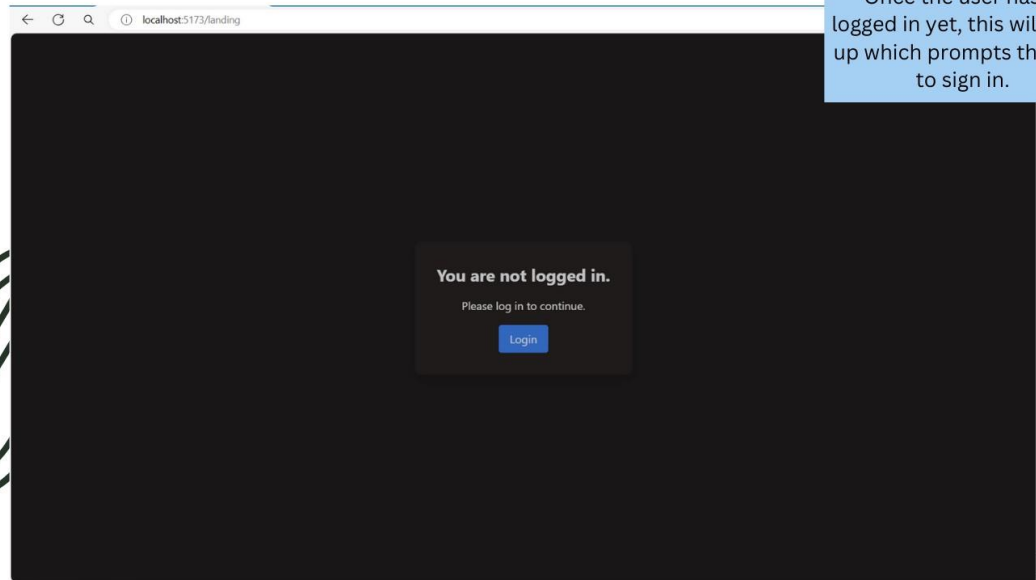
REPOSITORY LINK:

<https://github.com/john2772737/note-taking.git>

- Click Clone Repository and paste the link. Then, choose folder to clone the repository.
4. Run the Client: Open the terminal within Visual Studio Code and navigate to the client directory by typing '**cd client**'. Next, install the dependencies by running '**npm install -g yarn**'. Then, install Vite using '**yarn add vite**'. Finally, start the development server by running '**yarn run dev**'.
 5. Run the Server: Open another terminal within Visual Studio Code and navigate to the server directory by typing '**cd server**'. Install the dependencies by running '**npm install**'. Finally, start the server by running '**npm start**'.

Graphical User Interface

The graphical user interface of **SwiftNotes** a clean and intuitive interface welcomes you to effortlessly create, edit, and share documents in real-time. With a minimalist design, and it enables multiple users to work together at the same document with instant updates and synchronized changes. Say hello to a new era of productivity, where turning ideas into reality is as simple as SwiftNotes.



The image shows a side-by-side comparison of two web pages. On the left is a Google sign-in page in a browser window. The address bar shows 'accounts.google.com'. The page title is 'Mag-sign in sa Google'. The main heading is 'Pumili ng account' (Choose an account). Below it, there's a text input field with the placeholder 'upang magpatuloy sa notetaking-e1d7b.firebaseio.com'. Two account options are listed: 'Ralph Laurence De Guzman' with email 'deguzmanralphlaurence27@gmail.com' and 'Ralph Laurence De Guzman' with email 'ralphdoodle7@gmail.com'. At the bottom, there's a button 'Gumamit ng isa pang account' (Use another account). On the right is the SwiftNotes login page. It features a blue notepad icon with a white fish-like logo. The heading is 'SwiftNotes' with the subtext 'Join Today.' Below this is a white button with the text 'Sign in with Google'. A blue callout box on the right side of the image contains the text: 'user will be directed to sign up with google.' Another blue callout box at the bottom left of the image contains the text: 'once they click the button to sign in, the user will be asked to sign in an account'.

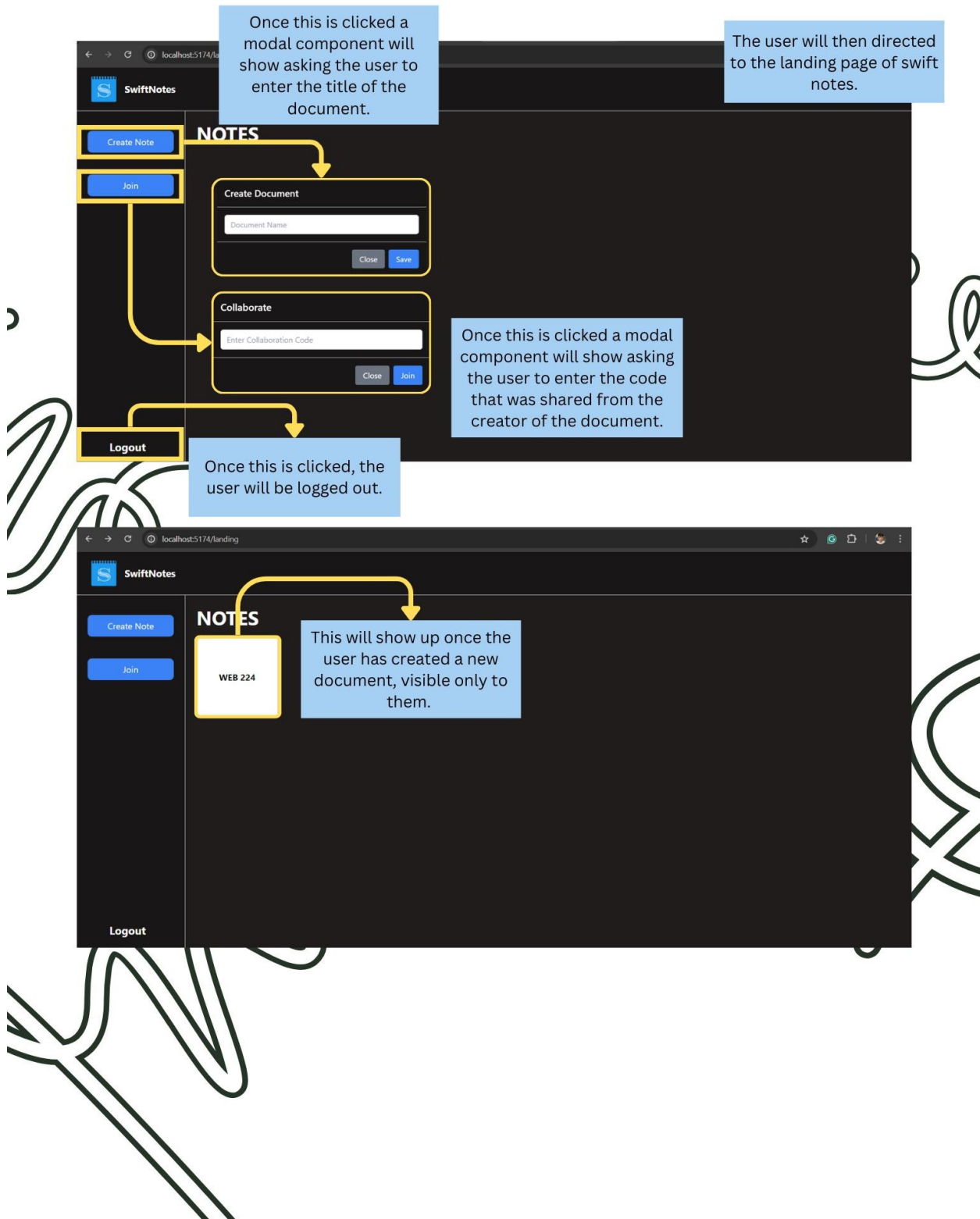
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