**Twitter Clone – Concept Notes**

**Objective:**

To develop a social media platform similar to Twitter. It is a full-stack web development using MERN stack.

**Features:**

* **User Authentication**
* Register, login and logout functionalities.
* JWT based authentication.
* **Profile Management**
* User can create and update their profile with info and profile picture.
* Can view and follow other users.
* **Tweet Management**
* User can post tweets with text and image.
* **Follow/Unfollow**
* User can follow/unfollow other users.
* Count of followers and following to be displayed in profile.
* **Like, Comment & Retweet**
* User can like and comment a tweet or reply.
* Count of likes and comments to be displayed.
* User can also retweet a post.

**Tech Stack:**

* **Frontend**
* Component based architecture.
* State management using React hooks and context API.
* Axios for making HTTP request to the backend.
* React router for managing routes.
* **Backend**
* RESTful API to handle client request.
* JWT for authentication and authorization.
* Express for routing and middleware.
* **MongoDB**
* For storing user data, tweets and other related data.
* Mongoose for object data modeling and schema validation.
* **More Libraries**
* ‘react-toastify’ for notification.
* ‘moment’ for date formatting.
* ‘react-fontawesome’ for icons.

While preparing this dynamic project, I faced a challenge with the like button not retaining the red color after someone likes a post. Despite the challenge, the project showcases robust CRUD operations, user authentication, and real time updates using react hooks and Axios for API interactions.

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