Training Day-25 report

21 July, 2025

Today, I began work on a new project — a **Polling Application**. The task appears relatively complex at first glance, and today's focus was on **laying the foundational architecture**, including schema design, authentication, and initial controller logic.

Work Undertaken:

1. Schema Design:

- Drafted the initial **MongoDB schemas** for polls, users, and votes.
- Found the schema design to be **confusing**, possibly due to uncertainty around how polls, options, and user votes should relate.
- Despite the confusion, made progress in establishing a basic data structure to support poll creation and user interaction.

2. Authentication Setup:

- Developed a **basic authentication system** using JWTs and middleware to protect certain routes.
- Ensured that only authenticated users can create polls or vote.

3. Initial Controllers:

- Created controller functions to:
 - Create a new poll
 - Fetch all polls to be displayed to users
- This formed the **initial backend logic** for managing poll-related data.

Challenges Faced:

- Struggled with **clarity in project flow**—the overall architecture and direction of the app is not yet fully clear.
- The relational design between polls, options, and users felt ambiguous, which added difficulty to the schema creation process.
- Acknowledged that as the project progresses, the current foundation might require updates or rework.

Key-Learnings:

- Reinforced the importance of **designing flexible and scalable schemas** early in the development.process.
- Understood that **foundational clarity** is crucial to reduce rework and technical debt later.
- Gained initial experience in **designing voting systems**, which involve dynamic data relationships.

Conclusion:

Today was about **building the groundwork** for the polling application. While some areas are still unclear, the authentication and poll creation systems are in place. The next step will be to define a clearer user flow and refine the data model if necessary.