

Justyne Phan (40278509) - Individual Log 180min

MongoDB Implementation Log

1. Setting Up MongoDB

- MongoDB Atlas was chosen as the database solution to provide a scalable and remotely accessible storage system.
- A new cluster was created, and a database was set up with the necessary authentication credentials.
- The IP whitelist was configured to allow secure access while preventing unauthorized connections.

2. Backend Integration

- The database connection was configured to use an environment variable for security purposes.
- Initially, there were issues with connecting to the database due to incorrect environment variable configurations and missing dependencies. This was resolved by ensuring the connection string was correctly formatted and the required packages were properly installed.

3. Testing & Debugging

- During local testing, the backend failed to connect to MongoDB due to missing the .env file.
- This issue was resolved by manually adding the file and ensuring it was correctly loaded.
- Additionally, connection timeouts occurred due to incorrect IP configurations in MongoDB Atlas, which were fixed by adjusting the network access settings.

4. Conclusion

- After resolving the connection and schema validation issues, MongoDB was successfully integrated into the backend. The system was tested locally, and the database handled data operations as expected. Moving forward, additional optimizations may be needed to improve query performance and ensure scalability.

React Next.js Environment Setup Log

1. Project Initialization

- A Next.js environment was set up for the frontend. The project was initialized using the Next.js framework to ensure server-side rendering and optimized performance. The necessary dependencies were installed to support development.