SE Group 10 Project 1 Essay

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Repo Link:
https://github.com/manan-T/SE_group10

1. Introduction

This report provides an overview of the issues encountered during the setup of the development environment for Project *Poll Me*, as well as the positive aspects, shortcomings, and potential future scope of the project. The aim is to identify areas that require improvement and outline recommendations for enhancing the project's development process.

2. Issues Encountered

2.1 Lack of Clear Instructions for Alternate Database Setup

One of the primary issues faced during the setup of the development environment for Project *Poll Me* is the absence of clear instructions on how to set up an alternate database, such as Postgres. While the documentation provides guidance on the default database setup, it lacks explicit information on configuring other databases. This can be limiting for developers who prefer or need to work with different database systems.

2.2 Missing Guidance on Running the Server on Alternative Ports

Another significant challenge is the absence of instructions on how to run the server on alternative ports, especially when the default ports are already occupied by other frontend and backend services. This lack of guidance can result in conflicts and hinder the development process.

2.3 Prisma Installation Documentation Gaps

The documentation for Prisma installation is incomplete and lacks essential information. Specifically, it fails to mention that certain commands must be executed to add the schema to the database properly. This omission can lead to confusion for developers attempting to set up the database schema.

2.4 Hardcoded Database URL Despite “env file” Presence

Although Project *Poll Me* includes an environment variables file (.env), the database URL is hardcoded in the codebase. This contradicts best practices, as sensitive information like database credentials should be stored in the environment variables file for security and configurability.

2.5 Lack of Database Explanation in Documentation

The documentation does not adequately explain the database structure, schema, or how it interacts with the project. This omission can be problematic for developers trying to understand and work with the database.

2.6 Incomplete Dockerization of the Project

The project's Dockerization is incomplete and lacks proper configuration. The Docker-compose file is missing essential components, and the Dockerfiles do not install dependencies correctly. This deficiency makes it challenging to containerize the project effectively and deploy it in different environments.

3. Positive Aspects

3.1 Clear and Concise Project Scope Explanation

One commendable aspect of Project *Poll Me* is the provision of clear and concise videos that explain the project's scope and usability. These videos serve as valuable resources for both new and experienced developers, helping them understand the project's objectives and potential.

3.2 Good Documentation for Local Setup and Deployment

Project *Poll Me* excels in providing comprehensive documentation for setting up a local development environment as well as deployment setup. This ensures that developers can easily replicate the project's environment and deploy it in a production setting, contributing to a seamless development process.

3.3 Strong Code Coverage and Test Cases

The project demonstrates good development practices with its strong code coverage and the existence of test cases. This commitment to testing enhances code reliability and stability, reducing the likelihood of critical issues reaching the production environment.

4. Areas Requiring Improvement

4.1 Licensing Issues

One critical issue that requires immediate attention is the lack of license information in all project files. Clear and appropriate licensing is essential for the legal and ethical use of the project. It is imperative that the project maintainers add the necessary license information to all relevant files.

4.2 Inconsistent Test Case Execution

While test cases exist, it is essential to routinely execute them to ensure ongoing code quality and functionality. The sporadic execution of test cases can lead to undetected regressions and issues, undermining the reliability of the codebase.

5. Future Scope

5.1 User Authentication Feature

A promising future scope for Project *Poll Me* includes the implementation of a user authentication feature. This addition can enhance the project's functionality and security, allowing for personalized user experiences and access control.

5.2 Templates for Users

Creating various templates for users and enabling them to save templates for future use can make the project more user-friendly and versatile. This feature can enhance the project's usability and appeal to a broader user base.

5.3 Robust Dockerization

To make Project *Poll Me* deployment-ready and adaptable to different environments, a robust Dockerization process should be pursued. This involves thoroughly configuring the Dockerfiles and Docker-compose files, ensuring that the project can be easily containerized and deployed.

6. Conclusion

In conclusion, Project *Poll Me* demonstrates both positive aspects and areas requiring improvement in its development environment setup. While the project provides clear scope explanations, excellent setup documentation, and strong testing practices, it faces challenges in areas such as database configuration, Dockerization, licensing, and test case execution.

To enhance the project's development experience, maintain legal compliance, and realize its future potential, it is crucial for the project maintainers to address the identified issues and pursue the recommended future scope initiatives. By doing so, Project *Poll Me* can become a more accessible, user-friendly, and robust software solution.