Analyze and Explore State-of-the-art Legacy System

Legacy Kanban Project Management System Upgrade

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1. Description:

The Legacy Kanban Project Management System is a web application designed for managing software development projects using the Kanban methodology. However, the current system lacks several crucial features and optimizations that are essential for modern software development practices. The goal of this project is to upgrade the legacy system to meet contemporary standards and address the shortcomings identified in the original implementation.

2. Stated Technologies in the Project:

1) Frontend:

- Angular: Framework for building single-page applications.
- TypeScript: Superset of JavaScript.
- angular/cdk/drag-drop: Provides drag-and-drop interfaces.

2) Backend:

- NestJS: Node.js framework for building server-side applications.
- MongoDB: NoSQL database..

3. Stakeholders Involved in the Project:

- **Developers:** Responsible for implementing the upgrades and enhancements.
- **Project Managers:** Oversee the project's progress and ensure alignment with business objectives.
- **Users:** Individuals who utilize the Kanban Project Management System for managing software development projects.
- **Quality Assurance Team:** Responsible for testing the upgraded system to ensure functionality and reliability.
- **IT Operations Team**: Responsible for deployment and maintenance of the system in production environments.

4. Scope:

The scope of the project includes:

- Identifying and addressing limitations and deficiencies in the current system.
- Implementing an Authentication and Authorization System to enhance security.
- Enhancing accessibility features to improve usability for users.
- Writing unit and integration tests to ensure robustness and reliability.
- Upgrading dependencies and libraries to their latest versions for compatibility and performance improvements.
- Implementing additional features and optimizations based on user feedback and industry best practices.

5. Features of the Project:

1. CRUD Operations:

- Create, read, update, and delete projects.
- Create, read, update, and delete issues within projects.
- Create, read, update, and delete comments for each issue.

2. Project Management:

- Filter and sort projects.
- Assign users to projects.

3. Issue Management:

- Filter issues.
- Assign issues to users.
- Drag and drop issues onto the Kanban board.

4. Authentication and Authorization:

- Implement user authentication and authorization mechanisms.
- Allow users to register and participate in project management activities.

5. Testing and Quality Assurance:

- Write unit and integration tests to ensure software quality.
- Perform thorough testing to identify and fix any issues.

6. Accessibility Improvements:

- Enhance accessibility features to ensure compliance with accessibility standards.
- Improve usability for users with disabilities.

6. Code Repository:

https://github.com/sldiaz04us/kanban-project-management

7. Conclusion:

In summary, the proposed project aims to upgrade the Legacy Kanban Project Management System by addressing its deficiencies, implementing new features, and ensuring compatibility with modern software development practices and standards.