Kanban Board Project Week 7 Deliverable

Week 7 Deliverables (September 23 - September 27, 2024)

Stage 4: Finalization and Launch

Objective: Finalize the application with security enhancements, user feedback integration, and performance optimization, preparing for the final launch.

Backend Team:

1. September 23-24: Security Enhancements

- Task 1: Implement secure communication using HTTPS across all backend services.
- Task 2: Implement data encryption for sensitive user information stored in the database.
- Task 3: Enhance security for API endpoints by applying stricter authentication and authorization protocols (e.g., stronger JWT validation, secure token storage).
- Task 4: Ensure all API endpoints comply with role-based access control (RBAC) policies, making sure that actions are only accessible to authorized users.

2. September 25: User Acceptance Testing (UAT)

- **Task 1:** Organize a User Acceptance Testing session with real users (Admins, Project Managers, and Volunteers).
- Task 2: Collect feedback on the application's usability, core functionalities, and overall performance.
- Task 3: Identify and prioritize any issues or bugs reported during UAT.

3. September 26: Bug Fixes and Performance Enhancements

- Task 1: Address critical bugs identified in UAT and resolve them promptly.
- Task 2: Optimize backend performance, including faster API response times and more efficient database queries.
- Task 3: Implement caching strategies for frequently accessed data to improve backend performance and scalability.

4. September 27: Final Deployment and Monitoring

- Task 1: Deploy the final version of the application on Google Cloud Platform (GCP) with full production-ready settings.
- Task 2: Set up application performance monitoring and alerting tools (e.g., Google Cloud Monitoring, Stackdriver) to track key metrics like CPU usage, memory, and latency.
- Task 3: Document all backend services, endpoints, and configurations for the launch and post-launch support.

Frontend Team:

1. September 23-24: Security Enhancements

- Task 1: Enable HTTPS for secure communication between the frontend and backend.
- Task 2: Ensure secure handling of JWT tokens in local storage or cookies to avoid XSS attacks.
- Task 3: Implement client-side data validation for all input forms to prevent malicious inputs.

2. September 25: User Acceptance Testing (UAT)

- Task 1: Conduct a UAT session with the frontend application, including task assignment, comments, notifications, and role-based functionalities.
- Task 2: Record and prioritize feedback on the user experience and user interface (UI).

3. September 26: Performance Optimization and Bug Fixes

- Task 1: Address critical frontend issues and bugs based on UAT feedback.
- Task 2: Optimize frontend performance, including faster loading times for key components (e.g., Task Board, Project Dashboard).
- Task 3: Test the frontend application for responsiveness across all devices (mobile, tablet, desktop).

4. September 27: Final Deployment and Launch

- **Task 1:** Deploy the final version of the frontend to GCP (Google Cloud Storage and Cloud CDN) with all performance and security enhancements in place.
- Task 2: Set up post-launch monitoring for frontend performance, focusing on page load speed and user engagement metrics.
- Task 3: Prepare detailed frontend documentation for users and administrators, including guidelines on navigating the application and key features.

UI/UX Team:

1. September 23-24: Final UI/UX Testing

- Task 1: Conduct final usability tests to ensure that the application's UI is intuitive and aligned with the design system.
- Task 2: Collect last-minute feedback on UI components and ensure that the designs are visually polished and meet user expectations.

2. September 25-26: Feedback Iteration

- Task 1: Make minor design adjustments based on UAT and feedback from usability testing.
- Task 2: Collaborate with the frontend team to ensure design changes are reflected in the final deployed version.

3. September 27: Final UI Sign-off

- **Task 1:** Sign off on the final design, ensuring it matches the initial wireframes and mockups.
- **Task 2:** Document UI/UX guidelines, including how to use the application and best practices for navigation and accessibility.