Kanban Board Project Week 13 Deliverable

Week 13 Deliverables (November 4 - November 8, 2024)
Stage: Continued Phase Two Development and Enhanced User Experience
Objective: Build on Phase Two foundations by developing advanced task analytics, improving user feedback loops, and solidifying integrations across components.

Backend Team:

November 4-5: Advanced Task Analytics and API Improvements

- **Develop Task Analytics API Endpoints:**
  - Create endpoints to retrieve task analytics data, such as task completion rates, average time to complete tasks, and overdue task counts.
  - Introduce filtering options in the analytics API to allow for customizable data retrieval (e.g., by date range, priority, or assignee).
- **Optimize Database for Analytics Queries:**
  - Ensure data aggregation is efficient for analytics by optimizing queries and implementing additional indexing.
  - Implement caching for frequently accessed analytics data to minimize database load and improve response times.

November 6: Alerting and Health Monitoring Expansion

- **Automate Alert Configuration:**
  - Enhance the alerting system to include task analytics thresholds (e.g., high overdue task count).
  - Set up notifications for specific performance thresholds, like high query latency, to ensure proactive backend management.

November 7-8: API Documentation and Integration

- **Documentation Update for Analytics Endpoints:**
  - Document new analytics APIs, detailing endpoint usage, available filters, and expected response structures.
  - Collaborate with frontend and UI/UX teams to align on analytics presentation and usability expectations.

Frontend Team:

November 4-5: Analytics Dashboard Development

- **Develop Task Analytics Dashboard:**
    - Design and build components to visualize task analytics data (e.g., bar charts for task counts, line graphs for completion rates).
    - Integrate analytics API to display real-time metrics on task performance and trends.
- **Implement User Configurations for Analytics:**
    - Add filters and toggles within the dashboard, allowing users to customize their data view (e.g., selecting priority levels or date ranges).

November 6: Error Logging and User Feedback Enhancements

- **User Feedback Loop:**
    - Integrate feedback collection tools (e.g., pop-up surveys) to gather real-time user feedback on new analytics features.
    - Improve error logging to track issues specific to the analytics dashboard and Kanban components.

November 7-8: Performance and Cross-Component Consistency

- **Refine Performance:**
    - Ensure smooth interactions and loading within the analytics dashboard by implementing lazy loading and optimizing data rendering.
    - Review and ensure visual consistency across analytics, Kanban boards, and other components.

UI/UX Team:

November 4-5: Analytics Dashboard Design Finalization

- **Design Interactive Analytics Components:**
    - Finalize interactive visuals for analytics data, focusing on accessibility and clarity (e.g., color schemes, data point tooltips).
    - Provide stakeholders with clickable prototypes of the analytics dashboard for final review.

November 6: Usability Testing and Iterations

- **Usability Testing for Analytics and Kanban Features:**
    - Conduct usability testing sessions focused on new analytics components and recent Kanban enhancements.

    - Collect user feedback on ease of use, functionality, and data clarity, iterating on design based on findings.

November 7-8: Documentation and Component Guidelines

- **Component Style Guide and Documentation:**
    - Document component specifications for the analytics dashboard, including color schemes, interaction patterns, and accessibility standards.
    - Share finalized design guidelines with frontend and backend teams to ensure consistency across all feature updates.

Summary of Week 13 Deliverables:

- **Backend:** Develop task analytics APIs, optimize database and caching for analytics data, and expand alerting for data monitoring.
- **Frontend:** Build task analytics dashboard with real-time data, implement user feedback mechanisms, and ensure cross-component consistency.
- **UI/UX:** Finalize analytics dashboard design, conduct usability testing, and create documentation for consistent component design.