Kanban Board Project Week 12 Deliverable

Week 12 Deliverables (October 28 - November 1, 2024)
Stage: Transition to Phase Two Development
Objective: Begin developing key Phase Two features, focusing on visual Kanban charts, advanced task management, and performance optimization. This week bridges the final stabilization efforts with new feature development to meet the evolving project scope.

Backend Team:

October 28-29:

1. **Visual Kanban API Development:**
   - Create initial API endpoints for visual Kanban charts (drag-and-drop tasks, progress indicators).
   - Develop APIs to support task clustering (e.g., by priority or due date) within visual components.
2. **Database Optimization:**
   - Implement caching strategies for Kanban chart data to minimize backend query load.
   - Improve query indexing for faster retrieval of task status and dependencies.

October 30:

1. **Monitoring Setup and Alert Tuning:**
   - Refine existing alerts for critical API issues (timeouts, failed syncs).
   - Automate weekly health reports summarizing system performance and user activity.
2. **Security Enhancements:**
   - Conduct a security review to ensure all new APIs align with best practices (e.g., data encryption, token validation).

October 31 - November 1:

1. **Phase Two Planning and Documentation:**
   - Finalize the API design for new Phase Two functionalities (e.g., Kanban charts, advanced task analytics).
   - Create a detailed API usage guide for frontend teams, ensuring smooth development and integration.

Frontend Team:

October 28-29:

1. **Visual Kanban Components Development:**
    - Build basic components for Kanban charts, supporting drag-and-drop task updates and real-time status tracking.
    - Integrate the backend APIs for task clustering and visualization.
2. **Performance Optimizations:**
    - Implement lazy loading for large data sets to enhance UI responsiveness.
    - Refactor components to reduce rendering delays during updates.

October 30:

1. **User Interaction and Error Tracking:**
    - Enable frontend monitoring tools to capture user interactions with new Kanban features.
    - Configure error tracking to detect and log any frontend issues proactively.

October 31 - November 1:

1. **Design Alignment and Phase Two Collaboration:**
    - Collaborate with the UI/UX team to align the frontend components with wireframes and mockups.
    - Develop and document frontend patterns for reusable components to support ongoing Phase Two efforts.

UI/UX Team:

October 28-29:

1. **Kanban Chart Design Finalization:**
    - Refine visual designs and interaction flows for Kanban charts.
    - Create design prototypes to gather feedback from key stakeholders.
2. **Accessibility Review for New Features:**
    - Ensure the Kanban chart components meet WCAG standards for accessibility.
    - Adjust color schemes and labels to improve usability for users with impairments.

October 30:

1. **Usability Testing:**
    - Conduct quick usability tests on visual Kanban prototypes with a small group of users.
    - Gather feedback and iterate on designs based on user behavior and preferences.

October 31 - November 1:

1. **Documentation and Phase Two Wireframes:**
   ○ Complete wireframes for advanced task management features (e.g., task grouping, analytics dashboards).
   ○ Share design documentation with the frontend and backend teams to maintain alignment across future developments.

Summary of Week 12 Deliverables:

- **Backend:** Begin API development for visual Kanban charts, optimize database queries, and finalize Phase Two architecture planning.
- **Frontend:** Develop Kanban components, improve performance, and align new features with the backend.
- **UI/UX:** Refine Kanban chart designs, conduct usability testing, and prepare wireframes for upcoming features.

This week serves as a transition into Phase Two by laying the foundation for advanced visual components while continuing to optimize the system for scalability and usability.