

OPT Portal Project Week 7 Deliverables

Week 7 Deliverables (October 21 - October 25, 2024)

Stage: Finalizing Time Entry and Work Tracker Integration

Objective: Ensure seamless time entry and Work Tracker functionalities across backend, frontend, and UI/UX layers. Focus on performance, security, and usability improvements while refining documentation and preparing the portal for stabilization. Conduct end-to-end testing to ensure smooth user experience and alignment with system requirements.

Backend Team:

October 21, 2024: Database Optimization and API Load Balancing

- **Task:** Perform database indexing for frequently queried tables to enhance search performance.
- **Task:** Implement **AWS RDS Auto Scaling** to ensure optimal database performance under varying loads.
- **Task:** Set up **API Gateway** throttling to handle request limits efficiently.

October 22, 2024: Work Tracker Enhancements and Error Handling

- **Task:** Integrate **automated email notifications** for missed time entries or incomplete progress updates.
- **Task:** Implement **retry mechanisms** for failed API calls to improve error handling.
- **Task:** Expand **time entry validation rules** (e.g., limit working hours per day) to align with OPT guidelines.

October 23, 2024: Role-based Access Control (RBAC) Enhancements

- **Task:** Refine role-based access for Admins, Coordinators, and Students using **AWS IAM policies**.
- **Task:** Implement audit logging to track **privileged actions** (e.g., status changes by Admins).
- **Task:** Conduct **API penetration testing** to ensure no role escalation vulnerabilities exist.

October 24, 2024: System Health and Logging Review

- **Task:** Set up **AWS CloudWatch alarms** to notify developers about backend system anomalies.
- **Task:** Consolidate logs from **CloudTrail** and application services for easier debugging.
- **Task:** Perform **post-optimization testing** to validate the latest changes in backend performance.

October 25, 2024: Final Backend Testing and Documentation

- **Task:** Perform **end-to-end testing** of all backend functionalities integrated with Work Tracker.
 - **Task:** Document all **API endpoint modifications**, validation rules, and logging policies.
 - **Task:** Finalize backend team's **retrospective report** for week 7 deliverables.
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Frontend Team:

October 21, 2024: UI Optimization and Data Visualization Enhancements

- **Task:** Add **progress bar indicators** to the Work Tracker for better task status visibility.
- **Task:** Optimize data rendering in **time entry components** to ensure smooth UX for large data sets.
- **Task:** Minify and bundle frontend assets for faster page loading using **Webpack**.

October 22, 2024: Kanban Board Synchronization and Fixes

- **Task:** Fix bugs related to **drag-and-drop tasks** on the Kanban board.
- **Task:** Ensure **real-time updates** reflect correctly between frontend and backend APIs.
- **Task:** Implement **visual cues** (e.g., color changes) for overdue tasks on the dashboard.

October 23, 2024: Session Management and Security Testing

- **Task:** Implement **secure logout functionality** and session timeout notifications.
- **Task:** Perform **cross-site scripting (XSS) testing** to ensure no vulnerabilities in user input fields.
- **Task:** Integrate **token renewal logic** to prevent token expiration from disrupting user sessions.

October 24, 2024: Frontend Usability Testing and Bug Fixes

- **Task:** Conduct usability tests to validate **time entry workflows** and collect user feedback.
- **Task:** Fix cross-browser compatibility issues identified during the testing phase.
- **Task:** Validate **mobile responsiveness** for Work Tracker and Kanban Board interfaces.

October 25, 2024: Documentation and Deployment Readiness

- **Task:** Prepare **user guides and tutorials** for students and coordinators explaining time entry and task management.
- **Task:** Conduct a **final code review** and clean up redundant frontend components.
- **Task:** Coordinate with the backend team to ensure all features are synced before deployment.

UI/UX Team:

October 21, 2024: Design Review and Accessibility Improvements

- **Task:** Review and enhance the **color contrast** of UI elements to improve accessibility.
- **Task:** Ensure all **interactive elements** (buttons, forms) are accessible via keyboard navigation.
- **Task:** Conduct a **WCAG compliance check** to align with accessibility standards.

October 22, 2024: Feedback Integration and Usability Refinements

- **Task:** Implement design changes based on **user feedback** from the previous week.
- **Task:** Enhance **workflow visibility** by adding progress trackers to task boards and forms.
- **Task:** Validate UI consistency with branding guidelines across all screens.

October 23, 2024: Mobile UI Refinements and Error Messaging Improvements

- **Task:** Adjust **UI layouts** to ensure optimal viewing on smaller screens.
- **Task:** Ensure consistent **error/success messages** are displayed across mobile and web platforms.
- **Task:** Test **mobile usability** for time entries and task management workflows.

October 24, 2024: Prototype Testing and User Walkthroughs

- **Task:** Collaborate with the frontend team to test new UI prototypes.
- **Task:** Host **user walkthrough sessions** to gather feedback on usability and pain points.
- **Task:** Identify and document **potential areas of improvement** based on user feedback.

October 25, 2024: Final UI Review and Documentation

- **Task:** Conduct a **final review of all design elements** before deployment.
 - **Task:** Document the **user journey maps** for the Work Tracker and Kanban Board interfaces.
 - **Task:** Prepare a **post-launch UI improvement plan** for future sprints.
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Focus Areas for Week 7:

1. Work Tracker Completion:

- Ensure **seamless time entry workflows** with backend and frontend synchronization.
- Automate **email reminders** for missing or incomplete progress logs.

2. **API and Security Audits:**

- Perform **security testing** for both frontend and backend components to ensure data integrity.
- Refine **token management and RBAC policies** for enhanced security.

3. **Deployment Readiness:**

- Coordinate final checks between **frontend and backend teams**.
- Document **deployment steps** and prepare user-facing documentation.