TagTeam Dashboard

Improving Team Collaboration

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Original Problem Statement

Client-based Projects

- Changing requirements
- Loose incentive to assist other teams

Pre Deployment Stage

- Disorganized tasks
- Uneven workloads
- Difficult to request additional help

Post Development Stage

Cluttered issue tickets







TagTeam Dashboard

• Tagging Feature: Identify and tag problematic code sections for peer assistance.



• GitHub Integration: Seamlessly sync code changes with GitHub.



• Reward System: Incentivize developers for helping peers.



• Task Assignment and Management: Efficiently distribute and track tasks.



Tagging

• What it does:

- Tag specific sections of code to request help from team members.
- Add descriptions to provide context for the issue.
- Receive team notifications when a new tag is created.

Why it matters:

- Encourages direct and specific collaboration.
- Speeds up problem resolution.



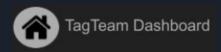
Github Integration

What It Does:

- Edit, commit, and push code directly from the dashboard.
- Real-time synchronization of task statuses with GitHub commits.
- Notifications for code changes and updates.

Why It Matters:

- Reduces context-switching between tools.
- Keeps project updates synchronized and transparent.







Reward System



What It Does:

- Tracks contributions for resolving tagged issues.
- Awards points and displays leaderboards.
- Recognizes and rewards developers for collaboration.

Why It Matters:

- Motivates teamwork and knowledge sharing.
- Creates a positive and collaborative environment.







Task Assignment and Management

What It Does:

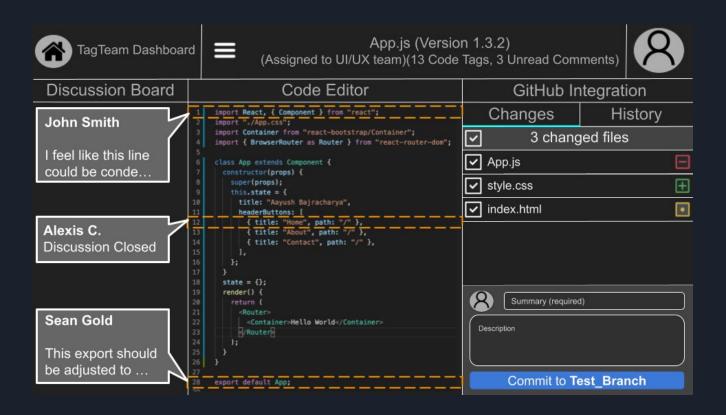
- Assign tasks to sub-teams with clear ownership.
- Track task progress in real time on a task board.
- Prevents uneven workload distribution.



• Why It Matters:

- Improves project organization and accountability.
- Ensures smooth task flow and efficient team performance.

Visual Representation



Course Concepts Used and Their Utility

1. Agile

- Most applicable concept from class
- Used throughout entire project
- Increased efficiency and overall team awareness

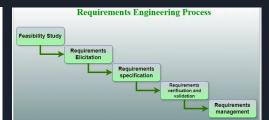
2. Requirements Engineering

- Requirements elicitation was somewhat useful since external input helped shape our project
- Requirements analysis was, because it organized the team's goals for what the product would look like
- Requirements specification was not useful since

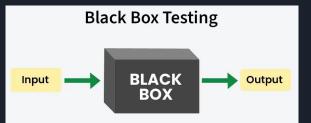
3. Wireframing

- Useful to visualize project after weeks of just working with words and concepts
- 4. Black Box Testing
 - Not useful since code wasn't implemented but interesting to think about testing









Limitations & Future Work

Limitations:

- Real-time Notifications: Delays can occur in high-traffic environments or under system load.
- File Types: Limited support for file types (maybe only PDFs, docs, and images).

Related Tools

1. Kanban Board for task tracking and collaboration.

2. Git for version control and code management.

3. Slack for team communication and announcements.





Things We Learned

- 1. Learned how to break the project down into smaller tasks (sprints) for agile development
 - a. Prevented us from falling behind
 - b. Helped us create priorities and stay on task
- 2. Learned how to conduct stand-up meetings during class time
 - a. Allowed us to communicate progress on milestones
 - b. Allowed us to distribute work and discuss strategies to implement and test the product
- 3. Learned how to conduct the process of requirements elicitation
 - a. Allowed us to understand what developers would want in the product to better tailor it
- 4. Learned how to document progress of a project through project milestones
 - Allowed us to track our progress and create records to go back and review milestones