Title: Schedule for QuiZone

Team Name: QuiZone

Project Description: QuiZone is a quiz platform that allows users to create, take, and review quizzes with customizable features like question randomization, timers, and instant feedback.

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Sprint 3 Goals:

- **Objective:** Enhance the platform by implementing automatic grading, certificate generation, setting difficulty levels, and adding bookmarking functionality to create a more personalized user experience.
- Participants: All team members contributed fully.

Tickets and Tasks:

Ticket 1: Certificate of Completion

- Assigned to: Shaqayeq
- **Aligned with User Story:** As a user, I want to receive a certificate upon completing quizzes with a high score so that I can share my achievement with others.
 - o **Task 1.1:** Create a static certificate template using HTML/CSS with placeholders for dynamic data (Name, Quiz Title, Score).
 - **Task 1.2:** Enable certificate display after quiz submission. Add a "View Certificate" button on the Quiz History page for quizzes with scores above 80%.
 - Task 1.3: Implement a simple certificate generator that replaces placeholders with actual quiz data.

Ticket 2: Set Difficulty Levels

- Assigned to: Tejleen
- Aligned with User Story: As a quiz enthusiast, I want to set difficulty levels for my quizzes so that users can choose the challenge that suits them best.
 - o **Task 2.1:** Add a difficulty level field in the quiz creation form with options such as "Easy," "Medium," and "Hard."
 - o **Task 2.2:** Update the backend to save the difficulty level for each quiz in the quiz data model.
 - o **Task 2.3:** Display the difficulty level on the quiz flashcards page with tags indicating the difficulty (e.g., "Difficulty: Medium").

Ticket 3: Bookmark Favorite Quizzes

- Assigned to: Karine
- Aligned with User Story: As a user, I want to bookmark my favorite quizzes so that I can access them quickly later.
 - o **Task 3.1:** Add a "Bookmark" button for each quiz on the Quiz History page to allow users to bookmark quizzes.
 - Task 3.2: Save bookmarked quizzes in local storage, ensuring persistence across sessions.
 - o **Task 3.3:** Create a "Favorites" section on the Flashcards page to display bookmarked quizzes.

Task 3.4: Implement "Remove from Favorites" functionality, allowing users to unbookmark quizzes from the "Favorites" section.

Network Diagram

```
Start

[Task 1.1] -----> [Task 1.2] -----> [Task 1.3]

[Task 2.1] ----> [Task 2.2] ----> [Task 2.3]

[Task 3.1] ----> [Task 3.2] ----> [Task 3.3] ----> [Task 3.4]

End
```

Explanation:

- Task 1.1, Task 2.1, and Task 3.1 can start concurrently.
- Tasks such as **Task 1.3**, **Task 2.3**, and **Task 3.4** cannot be completed until all previous dependent tasks in their respective tickets are finished.
- Critical Path includes all tasks since each ticket's tasks are sequential and essential for the completion of Sprint 3.

Critical Path Analysis:

- **Ticket 1:** Task $1.1 \rightarrow \text{Task } 1.2 \rightarrow \text{Task } 1.3$
- **Ticket 2:** Task $2.1 \rightarrow$ Task $2.2 \rightarrow$ Task 2.3
- Ticket 3: Task 3.1 → Task 3.2 → Task 3.3 → Task 3.4
 All tasks are critical as delays in any ticket would delay the entire sprint's completion.

Strategies to Stay on Schedule:

- **Daily Check-Ins:** The team conducted daily standups to report progress and address blockers immediately.
- Parallel Execution: Tasks that were independent, such as Task 1.1, Task 2.1, and Task 3.1, were started concurrently to make the best use of time.
- **Peer Reviews:** Team members reviewed each other's work to maintain quality and resolve issues early in the process.

Learnings: Breaking larger tasks into smaller subtasks for better estimation and adding buffer time for critical tasks helped manage potential risks effectively.

Sprint Summary:

We have fully implemented the planned features, including the bookmarking functionality, difficulty level setting, and certificate generation. These enhancements mark the completion of Sprint 3, effectively improving QuiZone's user experience and customization features.

With the successful implementation of this sprint, QuiZone has reached a significant milestone, completing the foundational structure and core functionalities outlined in the project's initial scope. The system is robust, extendable, and ready to accommodate future enhancements, which will further solidify its position as a versatile educational tool. This sprint not only marks the completion of the planned architecture but also sets the stage for continuous improvement and innovation in the future.