Future Features

Stage 1: Elicitation

Questions
1. In multiplayer quizzing software, would you prefer any alternative ways of presenting the questions to guests other than simply showing the question and recording their answer?
2. How could we leverage the competition aspect of quizzes to improve player engagement and participation?
3. In contrast, how could we minimise the competition aspect of multiplayer quizzes?
4. In what contexts would you use quizzes and how could it be customised to these unique contexts?
5. How do you think we can improve the existing method of writing quizzes?

Participant #1
Name: Angie Thomas
E-mail: rievangeline64@gmail.com

Responses
1.
   - Would prefer game modes, like those found in Kahoot. There is an overarching goal that guests must accomplish, either in teams or individually, through answering quiz questions correctly. E.g. Players receive money for each question they get correct and can use this to purchase power-ups.
2.
   - Keeping a record of the leaderboard and updating players' scores or rankings after each quiz they participate in can enhance competition and promote long-term use of application. Especially in educational contexts, where progress can be tracked throughout a school year.
3.
   - When the administrator starts a quiz, a new session starts for each player. This can reduce anxiety arising from multiplayer competition and allow each player to progress at their own speed. This would allow the platform to be used as a self-testing tool for revising information.
4.
   - As a student, they would benefit from the ability to play existing quizzes made by others instead of having to write their own.
5.
   - Would like the ability for admins to share quizzes with each other so that multiple admins can edit and run the same quiz.

Participant #2
Name: Dayle Pagaduan

E-mail: daylepagaduan@gmail.com

Responses
1.

- ○ Would like multimedia question formats such as videos and music, believes that as a high school tutor, these formats can immensely help in teaching subjects like English, where videos can be used to quiz students on cinematic features/techniques. Additionally, music can be creatively employed for trivia quizzes such as 'Guess that song', hence adding an element of fun to the learning process.

2.

- ○ Proposes providing a variety of different question types, including multiple correct answers and yes/no questions. This inclusion would cater to students with diverse strengths and increase overall engagement with the quizzes.

3.

- ○ Advocates for either removing time limits on questions or introducing an option to allow students to play in teams. This approach could reduce stress amongst students and encourage collaborative learning, fostering a more relaxed and conducive learning environment.

4.

- ○ Sees potential application of the quizzing software in workplace training scenarios. Suggests the option of answering questions in teams instead of individually to promote rapport between co-workers and improve workplace culture, turning learning into a bonding experience.

5.

- ○ As an educator, he expresses a keen interest in using quizzes made by co-workers, and similarly, being able to share his quizzes with others. Extending this idea, he sees the potential for collaborative quiz writing where multiple educators can work together on the same quiz, enhancing the quality of the quizzes while sharing the workload.

Participant #3
Name: Amitabh Kumar
Responses

1.

- ○ Advocates for a more interactive way of presenting questions and recording answers, such as drag and drop or matching type questions. He believes that such types of questions can make quizzes more engaging and fun.

2.

- ○ Suggests leveraging the competition aspect by providing an option to share individual or team results on social media platforms. This could potentially drive player engagement and participation by introducing a familiar social element to the quizzes.

3.

- ○ Expresses interest in an anonymous participation mode to minimise the competition aspect of quizzes. He believes that this feature could help to alleviate the pressure associated with quizzes, making them a more enjoyable learning experience rather than a stress-inducing competition.
4.
- ○ Envisions the application of the quizzing tool in the context of social gatherings and parties. Thinks that adding a feature to customize quizzes based on various themes or current events would add a fun and engaging element to these gatherings.
5.
- ○ Suggests a feature that allows admins to import questions from external sources, such as .csv or .txt files. This would simplify the process of writing quizzes and make the tool more user-friendly, particularly for those looking to create large and extensive quizzes.

Stage 2: Analysis & Specification - Use Cases

User story #1
As a student, I want to be able to play my friend's organic chemistry quiz on my own account, so that I can revise the topic without spending time making a similar quiz.

Acceptance criteria:
1. User navigates to their quiz library
2. User picks the organic chemistry quiz they want to share and selects 'Share quiz' option
3. User enters email of friend they want to send the quiz to
4. Program creates a copy of the quiz in the receiver user's quiz library
5. Receiver user logs into their account and can play the organic chemistry quiz

User story #2
As a tutor, I want to share a quiz I made for my year 3 class with my fellow year 3 tutors, so that their students have access to the resource as well.

Acceptance criteria:
1. User navigates to their quiz library
2. User picks the year 3 quiz they want to share and selects 'Share quiz' option
3. User enters email of co-worker they want to send the quiz to
4. Program creates a copy of the quiz in the co-worker's quiz library
5. User can repeat steps 2-4 multiple times for each co-worker they want to share quiz with
6. Co-worker logs into their account and can play the year 3 quiz

User story #3
As a tutor, I want to be able to edit a year 7 math quiz made by my co-worker, so that the questions are better suited to the abilities of my students.

Acceptance criteria:
1. User navigates to their quiz library
2. User picks the year 7 math quiz they want to share and selects 'Share quiz' option
3. User enters email of co-worker they want to send the quiz to
4. Program creates a copy of the quiz in the co-worker's quiz library
5. Co-worker logs into their account and can edit the math quiz

Use Case
1. User navigates to their quiz library
2. User clicks on 'Share quiz' option of quiz they want to share
3. Program asks for email of user to share quiz with
4. User provides e-mail
5. Program verifies whether a user with the given email exists.
6. If the user exists, the program creates a copy of the selected quiz in the receiver user's library
7. Program prints a message indicating whether sharing was successful or unsuccessful

Stage 3: Validation

Participant 1
Name: Angie Thomas

Comments:
- Affirms that the use case aligns with her expectations and solves the problem
- Approves the addition of game modes and rewards system to improve student engagement
- Supports the feature allowing admins to share quizzes amongst each other to streamline content creation

Participant 2
Name: Dayle Pagaduan

Comments:
- Confirms the alignment of use case with the problem
- Enthusiastic about the inclusion of multimedia elements for diversifying content delivery methods, making the quizzes more engaging for students
- Welcomes more flexibility in terms of time limit and team participation

Participant 3
Name: Amitabh Kumar
- Validates that the use case aligns with his problem

- Applauds customization of the tool to cater to different social contexts and learning needs
- Finds the ability to import questions from external sources beneficial for efficient quiz creation

Stage 4: Interface Design

The proposed solution is to create a functionality which allows admin users to share their quizzes with other admins, by creating a copy of the quiz in the receiver's quizzes library. This solution would also integrate multimedia elements, different types of questions, and social features, as per user feedback.

To interact with this feature, users could navigate to their quiz library, choose a quiz, and click on a 'Share Quiz' button. A pop-up would then ask for the receiver's email. Upon successful share, a notification would be sent to both the sender and receiver, confirming the transfer.

Furthermore, users would be given options to include multimedia elements in their quizzes, choose different types of questions, import questions from external files, and more, via intuitive controls in the quiz creation interface.

HTTP endpoints for these features would be defined in the swagger.yaml file.

Stage 5: Conceptual Modelling - State Diagrams

Attached is the state diagram.
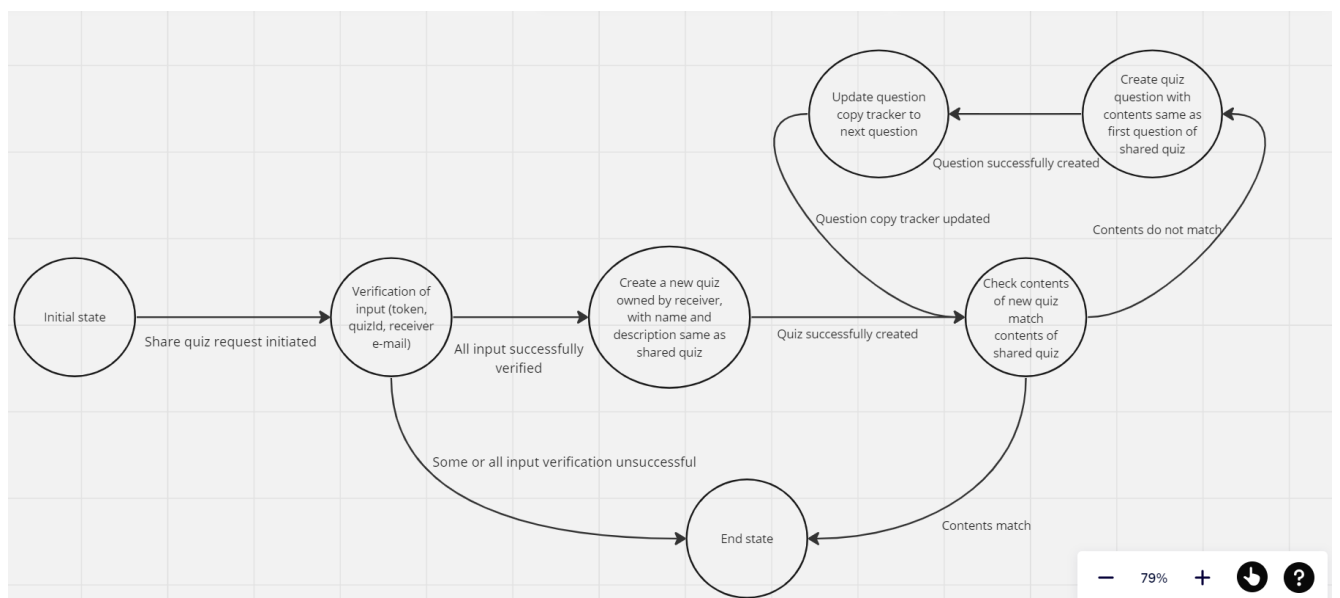
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