#### Interviewees – Naihan Ling, Low Khye Jac, Louis

Question1\_ What new features would u like to see in Toohak to make it more engaging?

Question 2 What problems did u encounter when using the interface?

Question3\_What current features of Toohak do you think needs to be improved to give the user a smoother experience overall?

Question4\_Do you use Toohak for educational purposes?

Question5\_How often do you use Toohak?

Name: Naihan Ling

Email: Naihanq2003@gmail.com

Response from Naihan: A new feature I would like implemented is to be able to check and review my previous quiz results. As of right now, when you end the quiz, the quiz results get deleted as well.

#### **User Story 1:**

As a frequent player, I would like to be able to review the results of past quizzes so that I can review my errors and see where I can improve on my skills.

# **Acceptance Criteria:**

- A new data store is implemented.
- This new data store takes records of the players past quizzes and its data.
- This data store should be made easily accessible in the frontend by the player any time they want.
- The data store should give detailed results for each individual quiz that the specific player has completed.
- New section in frontend displays user's past quiz results when it is clicked.
- The text 'No quiz has been attempted so far by current user' will be displayed in the section if user has not attempted any quizzes.

Name: Khye Jac Low

Email: lowkhyejac@gmail.com

Response from Khye Jac: I would like for Toohak to have more diverse quizzes that are then separated into categories such as History/Science/etc. so that players can make and answer different type of quizzes or a specific category of quizzes they want.

#### **User Story 2:**

As a player, I would like Toohak to have more diverse and categorised quizzes so that a player can have a wider variety of quizzes to choose from.

# **Acceptance Criteria:**

- The frontend interface provides categories and adds an extra step in making quizzes where the user has to place their quiz in one of the categories.
- The frontend allows for players to choose one or more categories of quizzes to answer from.
- Allows for a 'random' option that involves quizzes from all categories.

Name: Louis

Email: louis33@gmail.com

Response from Louis: I think maybe it might be a good idea for the users to have levels and stages to answering the quizzes. For example, the user can adjust the difficulty of the quizzes.

#### User story 3:

As a user, I would like to create and answer quizzes with different levels so that I can check how much I have improved.

#### **Acceptance Criteria:**

- An extra step is added when making quizzes where the quiz maker decides the difficulty of the specific quiz.
- The difficulty scales from 1 5 stars with 1 being the easiest and 5 the hardest level.
- Before answering the quizzes, the player can choose which difficulty they want to answer.
- The player will only be provided with quizzes that are of the level they have chosen.

## **Use Case1- Review Past Results**

Name	Review Past Results
Summary	Users given access to all their results for past quizzes.
Rationale	Users have expressed that they would like permanent access to the results of all quizzes they have completed. Currently, when they end a quiz, they can no longer go back to check their results. This prevents the users from getting information that they need to improve and learn from the quizzes.
Users	All Users.
Preconditions	User has logged in.

Step1-User login.

Step2-User clicks on newly added 'Past Results' section in frontend.

Step3-Toohak retrieves history stored in newly made datastore for past quiz results for particular user Id.

Step4-Past Results is displayed on frontend. If user has not attempted any quizzes, The text 'No quiz has been attempted so far by current user' will be displayed.

#### **Use Case2-Quiz Categories**

Name	Diverse Quiz Categories
Summary	Toohak should have a wider diversity of quizzes.
Rationale	Users have suggested that Toohak will be more popular among the
	community if it involved a wider variety and range of questions. These
	questions can be further categorised so that players can choose
	whichever category of question they prefer to answer. This will tend to
	users of different taste and different enthusiasts. For example, science-
	enthusiasts may prefer to answer questions related to science and such.
Users	All Users.
Preconditions	User has logged in.

#### Validation

Comment by Interviewee Naihan Ling:

"I think the proposed solution satisfies my request for the feature. With this newly implemented Review Past Results feature, I will be able to check which areas I need to improve in and how much I have improved so far."

Comment by Interviewee Khye Jac Low:

"It surely seems like it could be a great add for Toohak to make it more a more fun and enjoyable experience."

Comment by Interviewee Louis:

"Perhaps difficulty of quiz can also be determined by the percentage of players that answered correctly as well. This way, Toohak can make sure that the difficulty level that the quiz creator has set for the quiz is suitable."

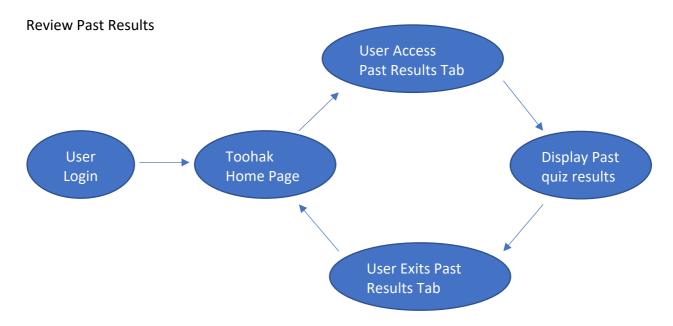
## **Interface Design**

What http endpoints would be necessary?

The following is a list of http endpoints I believe would be necessary:

- GET /v1/player/{playerid}/question/{questionposition}
- POST /v1/player/join
- PUT /v1/player/{playerid}/question/{questionposition}/answer
- GET /v1/admin/quiz/{quizid}/session/{sessionid}
- GET /v1/admin/quiz/{quizid}/session/{sessionid}/results
- POST /v2/admin/quiz

# **State Diagrams**



# **Diverse Quiz Categories**

