

Assignment 2: Software Requirements Specification

Team: Educational Platform

Project Title: Uniq-quiz

Members:

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2. Yiduo Chen
3. Keegan Miller
4. Paul Mann
5. Trevor Harris

Meetings date	Participants
1/18/25	Hayley, Keegan, Yiduo, Paul, Trevor

Stakeholders	Requirements
Players	FR1: Create, view, save decks FR2: Publish, share, search decks FR3: Study Decks FR4: Create card FR5: Host game FR6: Join game FR7: Answer Question FR8: Follow Profile FR9: Customize your Profile FR10: Add timer FR11: Host kicking players from game FR12: Form groups, display on profile

	FR13: Mark profile as public/private FR14: Discover live join lobbies (Non-school account) FR16: Join lobbies anonymously via code FR18: Join group FR19: View group leaderboard FR20: Search for deck in group FR24: Delete Deck FR25: View live leaderboard FR26: Create/Delete Account
Admin/Maintenance	FR21: Ban user accounts FR23: User management
All	NR1: Securely store passwords NR2: User can only edit their own decks NR3: Do not store personal information. NR4: New user can navigate to join screen in 10 seconds. NR5: Answers are graded fairly relative to when the player responds NR6: Players can rejoin games with progress remembered. NR7: Servers available 99.99% of the time NR8: Server receives answer in 100ms NR9: Server sends question or confirmation in 100ms

FR1. Create, view, save decks

Goal: User is capable of creating and manipulating decks of question cards

Stakeholders: Players		
From the nav bar, a customer can navigate to a decks interface. Decks interface displays a list of the most recent user decks and decks by people they followed. User can click a button to view all decks. User can click a button to create a new deck, which takes the user to a deck-creation page. User can select existing decks to browse and save to a library of liked decks. User can clone a deck to edit it.		
<u>Origin:</u> Based on initial project specification document, team members came up with this description during the first meeting.		
<u>Version:</u> 1.0	<u>Date:</u> 01/18/2025	<u>Priority:</u> Must Have

FR2. Publish, share, search decks		
Goal: User can navigate existing decks and set their own deck as public.		
Stakeholders: Players		
The search menu is accessible from the host setup screen and from the deck screen. Users can browse through available trending decks based on keyword. Users can also navigate to their decks and mark them as public. Users can share decks to other users.		
<u>Origin:</u> Based on initial project specification document, team members came up with this description during the first meeting.		
<u>Version:</u> 1.0	<u>Date:</u> 01/18/2025	<u>Priority:</u> Should Have

FR3. Study Decks		
Goal: User can select an existing deck and go through each question to study		
Stakeholders: Players		
Users can host a solo game by selecting a deck and clicking study. The study system uses the spatial repetition system.		
<u>Origin:</u> Based on initial project specification document, team members came up with this description during the first meeting.		

<u>Version:</u> 1.0	<u>Date:</u> 01/18/2025	<u>Priority:</u> Could Have
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FR4. Create card		
Goal: User can create a card to be added to a given deck.		
Stakeholders: Players		
<p>During the deck creation process, users can select a button to create a new card. Users then fill out a form to populate the card data. Users can save cards to a deck to exit the card creation menu.</p> <p>A card is defined as a question, correct answer, incorrect answer, and the option to include an image.</p>		
<u>Origin:</u> Based on initial project specification document, team members came up with this description during the first meeting.		
<u>Version:</u> 1.0	<u>Date:</u> 01/18/2025	<u>Priority:</u> Must Have

FR5. Host game		
Goal: User can create a game that players can join.		
Stakeholders: Players		
<p>Players select an option from the home screen or nav bar to host a game. Players select from a searchable drop-down menu which deck to include. Players can then share a join code with other players, or set the room as visible to strangers.</p>		
<u>Origin:</u> Based on initial project specification document, team members came up with this description during the first meeting.		
<u>Version:</u> 1.0	<u>Date:</u> 01/18/2025	<u>Priority:</u> Must Have

FR6. Join game		
Goal: User can join an existing game using a join code or discover menu.		

Stakeholders: Players		
Players can navigate to a join screen. There, they can choose to enter a join code in a specific section, or search / browse current live, public hosted lobbies.		
<u>Origin:</u> Based on initial project specification document, team members came up with this description during the first meeting.		
<u>Version:</u> 1.0	<u>Date:</u> 01/18/2025	<u>Priority:</u> Must Have

FR7. Submit answer in live game		
Goal: During a hosted game, user can submit an answer.		
Stakeholders: Players		
During a hosted game, a player will be hosted one of 2-4 options to select as a correct answer. Player can select the option and it will be sent with information on how quickly the answer was selected.		
<u>Origin:</u> Based on initial project specification document, team members came up with this description during the first meeting.		
<u>Version:</u> 1.0	<u>Date:</u> 01/18/2025	<u>Priority:</u> Must Have

FR8. Follow Profile		
Goal: User can follow other users from browsing other decks		
Stakeholders: Players		
When a deck is searched and discovered, users can view the other user's profile and follow them. Users can navigate to other followed users from their own profile.		
<u>Origin:</u> Based on initial project specification document, team members came up with this description during the first meeting.		
<u>Version:</u> 1.0	<u>Date:</u> 01/18/2025	<u>Priority:</u> Could Have

FR9. Customize profile		
Goal: User can customize their user profile		
Stakeholders: Players		
User can navigate to their user profile. There will be an option to edit their profile, allowing them to change information like profile picture, username and password		
<u>Origin:</u> Based on initial project specification document, team members came up with this description during the first meeting.		
<u>Version:</u> 1.0	<u>Date:</u> 01/18/2025	<u>Priority:</u> Must Have

FR10. Enable timer during live game		
Goal: User can toggle a timer during a live game		
Stakeholders: Players		
During a live game setup, user can toggle whether a timer applies to their deck and how long it is. A live game is defined as hosted gameplay or a self-study game.		
<u>Origin:</u> Based on initial project specification document, team members came up with this description during the first meeting.		
<u>Version:</u> 1.0	<u>Date:</u> 01/18/2025	<u>Priority:</u> Could Have

FR11. Remove players		
Goal: Host can remove players from a game		
Stakeholders: Players		
If the host wishes, they can select a player from the hosting screen and select a button to remove them from the game.		
<u>Origin:</u> Based on initial project specification document, team members came up with this description during the first meeting.		

<u>Version:</u> 1.0	<u>Date:</u> 01/18/2025	<u>Priority:</u> Could Have
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FR12: Form groups		
Goal: Users can create study groups with other players.		
Stakeholders: Players		
Groups will display on profile. From viewing another user's profile, a user can invite another user to a study group, either creating one or adding to an existing one. Users can navigate to the group page and join any ongoing games. Group games will also show up prioritized in the live games browse.		
<u>Origin:</u> Based on initial project specification document, team members came up with this description during the first meeting.		
<u>Version:</u> 1.0	<u>Date:</u> 01/18/2025	<u>Priority:</u> Could Have

FR13. Mark Profile as Public or Private		
Goal: User can select whether their profile is discoverable by other profiles.		
Stakeholders: Players		
Players can customize their profile to specify whether it can be viewed by other players. They do this through navigating to their profile and toggling a menu option.		
<u>Origin:</u> Based on initial project specification document, team members came up with this description during the first meeting.		
<u>Version:</u> 1.0	<u>Date:</u> 01/18/2025	<u>Priority:</u> Could Have

FR14. Discover Live-join lobbies		
Goal: User can see publicly available lobbies to join.		
Stakeholders: Players		

From the home page, users can browse through available lobbies, or search for lobbies by type. In addition, users can view active lobbies by group, by navigating to the group page. Users can then join lobbies through the link that they discover them through.		
<u>Origin:</u> Based on initial project specification document, team members came up with this description during the first meeting.		
<u>Version:</u> 1.0	<u>Date:</u> 01/18/2025	<u>Priority:</u> Should Have

FR16. Join Lobbies Anonymously via Code		
Goal: User can enter as an anonymous user and join lobby		
Stakeholders: Players		
If a user does not have an account, the user should still be able to join a lobby and compete. However, no data will be saved.		
<u>Origin:</u> Based on initial project specification document, team members came up with this description during the first meeting.		
<u>Version:</u> 1.0	<u>Date:</u> 01/18/2025	<u>Priority:</u> Must Have

FR18. Join Group		
Goal: User can join a group with other users.		
Stakeholders: Players		
User can navigate to a “Join Group” page. On this page, they will enter a password given by the person/teacher who owns the group to join the group. A group is a collection of users whose games are prioritized in search results and can access a group leaderboard.		
<u>Origin:</u> Based on initial project specification document, team members came up with this description during the first meeting.		
<u>Version:</u> 1.0	<u>Date:</u> 01/18/2025	<u>Priority:</u> Could Have

FR19. View Group Leaderboard		
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Goal: User can access a leaderboard with all members in a group		
Stakeholders: Players		
User can navigate to a page for any group they have joined. On this page a leaderboard will be displayed, showing the relative rankings of all members of that group. Leaderboards will be based on points awarded for results of quizzes. Points are awarded as follows: +3 for 1st Place, +2 for 2nd Place, +1 for 3rd Place, -1 for 4th Place, ..., -(n-3) for nth Place; where n is the number of students in the live quiz.		
<u>Origin:</u> Based on initial project specification document, team members came up with this description during the first meeting.		
<u>Version:</u> 1.0	<u>Date:</u> 01/18/2025	<u>Priority:</u> Could Have

FR20. Search for deck in group		
Goal: User can search for decks set as available to them.		
Stakeholders: Players		
If an account is a student account, then they should be able to search for decks created specifically for the classrooms that they are part of.		
<u>Origin:</u> Based on initial project specification document, team members came up with this description during the first meeting.		
<u>Version:</u> 1.0	<u>Date:</u> 01/18/2025	<u>Priority:</u> Could Have

FR21. Ban User Accounts		
Goal: Aiming for a more non-toxic environment.		
Stakeholders: System Admin		
Allows for System Admins to ban different user accounts on counts of violating policy.		
<u>Origin:</u> Based on initial project specification document, team members came up with this description during the first meeting.		

<u>Version:</u> 1.0	<u>Date:</u> 01/18/2025	<u>Priority:</u> Should Have
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FR23. User Management

Goal: Admin can alter information about users.

Stakeholders: System Admin

Admin can select users and change user information, and add or remove their decks and cards.

Origin: Based on initial project specification document, team members came up with this description during the first meeting.

<u>Version:</u> 1.0	<u>Date:</u> 01/18/2025	<u>Priority:</u> Must Have
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FR24. Delete Decks

Goal: User can remove a deck

Stakeholders: Players

Users can navigate to their page and select a deck to delete it. This will remove the deck, but not the clone of the deck.

Origin: Based on initial project specification document, team members came up with this description during the first meeting.

<u>Version:</u> 1.0	<u>Date:</u> 01/18/2025	<u>Priority:</u> Must Have
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FR25. View live leaderboard

Goal: Users can view their rankings after each game round

Stakeholders: Players

After each round, a leaderboard is displayed to rank each member's performance. Performance is ranked based on how quickly a question is answered. Times are summed and the lowest score gets the highest rank.

Origin: Based on initial project specification document, team members came up with this description during the first meeting.

Version: 1.0

Date: 01/18/2025

Priority: Must Have

FR26. Create/Delete Account

Goal: Users can create and delete their own account

Stakeholders: Players

On the home page, the user can navigate to a new page to create an account. After creating the account, they will be able to delete their account if they choose to. Must include user authentication through username/password.

Origin: Based on initial project specification document, team members came up with this description during the first meeting.

Version: 1.0

Date: 01/18/2025

Priority: Must Have

NR1. Securely Store Passwords

Goal: Passwords are protected.

Stakeholders: All

Passwords are well-protected via hashing when stored in database.

Origin: Based on initial project specification document, team members came up with this description during the first meeting.

Version: 1.0

Date: 01/18/2025

Priority: Must Have

NR2. User can only edit their own decks

Goal: Users are only permitted to edit their decks.

Stakeholders: All		
Users can access and edit their own decks. Users can access other decks but cannot edit them. Users must clone a deck in order to edit it.		
<u>Origin:</u> Based on initial project specification document, team members came up with this description during the first meeting.		
<u>Version:</u> 1.0	<u>Date:</u> 01/18/2025	<u>Priority:</u> Should Have

NR3. Do not store personal information		
Goal: Decrease the amount of unnecessary user information stored.		
Stakeholders: All		
Personal information includes but is not limited to: date of birth, social security, full name, demographic information, or government identification.		
<u>Origin:</u> Based on initial project specification document, team members came up with this description during the first meeting.		
<u>Version:</u> 1.0	<u>Date:</u> 01/18/2025	<u>Priority:</u> Must Have

NR4. New user can navigate to join screen within 10 seconds		
Goal: Clear UI and non-confusing website		
Stakeholders: All		
When a user opens the website, they should be able to find the join button and either join anonymously or through saved login information. This should be completed in a quick manner. Users should not struggle to find the basic function of the website.		
<u>Origin:</u> Based on initial project specification document, team members came up with this description during the first meeting.		
<u>Version:</u> 1.0	<u>Date:</u> 01/18/2025	<u>Priority:</u> Should Have

NR5. Answers are graded fairly relative to when the player responds.		
Goal: User can submit answers and the system grades it fairly.		
Stakeholders: All		
When a user selects an answer, it sends the time relative to when the question appeared on the user's screen. The answer is graded relative to the user's timing, not to the app's timing.		
<u>Origin:</u> Based on initial project specification document, team members came up with this description during the first meeting.		
<u>Version:</u> 1.0	<u>Date:</u> 01/18/2025	<u>Priority:</u> Should Have

NR6. Players can rejoin games with progress remembered.		
Goal: If a user accidentally leaves the game, this is not penalized.		
Stakeholders: All		
If a user accidentally disconnects for whatever reason, the user can rejoin and if it is the same game being hosted, it will retain their scoring information until the game ends.		
<u>Origin:</u> Based on initial project specification document, team members came up with this description during the first meeting.		
<u>Version:</u> 1.0	<u>Date:</u> 01/18/2025	<u>Priority:</u> Could Have

NR7. Servers available 99.99% of the time		
Goal: Servers are widely available and do not often fail.		
Stakeholders: All		
The server is regularly available.		
<u>Origin:</u> Based on initial project specification document, team members came up with this description during the first meeting.		

<u>Version:</u> 1.0	<u>Date:</u> 01/18/2025	<u>Priority:</u> Should Have
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NR8. Server receives answer in 100ms		
Goal: User input is received in a timely manner		
Stakeholders: All		
When a game is running, and a user selects an answer, the server must be able to receive this information and process it within 100ms		
<u>Origin:</u> Based on initial project specification document, team members came up with this description during the first meeting.		
<u>Version:</u> 1.0	<u>Date:</u> 01/18/2025	<u>Priority:</u> Should Have

NR9. Server sends question/confirmation to player in 100ms		
Goal: User receives questions and confirmations from the server in a timely manner		
Stakeholders: All		
When a game is running, the user must receive and see the current question within 100ms, as well as receive confirmation on their answer's correctness within 100ms		
<u>Origin:</u> Based on initial project specification document, team members came up with this description during the first meeting.		
<u>Version:</u> 1.0	<u>Date:</u> 01/18/2025	<u>Priority:</u> Should Have