

Testing Categories

Functional Testing

- Unit Testing
- Integration Testing

Experience Testing

- User Acceptance Testing

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- Risk Considerations

Functional Testing

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Unit Testing

Registration Page

- Forms That need to be Validated
 - Username
 - **Acceptance Criteria:**
As a user I should be able to create a unique identifier that allows me to sign in and be utilized as my gamer tag/primary keys in the tables
 - Password
 - **Acceptance Criteria:**
As a user, my password should satisfy the rules of password given by the host.(length 8, 1 capital letter,1 special char, etc)
 - Country
 - **Acceptance Criteria:**
As a user I should be able to type and search a country, with a drop down menu that will come up and then I can select a country. The Form should update the database and then be reflected as a flag in the profile page and profile canvas
 - Email address
 - **Acceptance Criteria:**
As a user, I should be able to input a unique email address, and it has never been used on this website. (Use RegEx pattern to verify that the email has the correct form)
- Submit buttons
 - Ability to be clickable and has the ability to submit properly
 - **Acceptance Criteria:**
As a user, all my information is submitted and able to see the successful message.

Login Page

- Forms that should be validated:
 - Username

- **Acceptance Criteria:**

As user i should be able to use my username to provide one of the security identifiers to log in

- Password/Email (needs to ensure proper RegEx pattern)
- Submit buttons
 - Ability to be clickable and has the ability to submit properly
- Ensure Validation of Credentials

Intermediate Page

- Forms that should be validated:
 - Properly loading all previous match history

- **Acceptance Criteria:**

As a user,I should be able to see the scrolling window for previous match history and all match history are shown.

- Modal functionality for login renders in properly(same criteria as Login Page)
- Button functionality

- **Acceptance Criteria:**

As a user I should be able to have a clickable button that registers the user to be able submit the form in the modal and to pop up the modal in the first place. The button should then switch its text for player two and then be user to customize the player profile

Profile Page

- Picture Processing

- **Acceptance Criteria:**

As a user, I should be able to edit the picture for my account.

- Be able to display the number of friends of the user, money, name
- Redirect to the intermediate page

GamePlay Page:

- **Acceptance Criteria:**

- Two players are shown in the page
- Separate Control Panels(WASD and arrows)
- HP decrease if one player is attacked by the another,

- Portraits of two player
- Be able to determine the victor from each game (Higher HP wins)
- Timer Countdown(60s)

Integration Testing

Login Page:

■ **Acceptance Criteria:**

The username and password are successfully retrieved from the database. And they are matched with the user's inputs.

Register Page:

■ **Acceptance Criteria:**

The username, password, country and email address are sent into the database successfully.

Email and username should be unique in the database.

Profile Page:

■ **Acceptance Criteria:**

All user information that needs to be displayed in the profile are shown in the profile page, successfully retrieved from the database.

Friend connection are added to the friends list (# + 1) if the user is trying to add a friend. "#friends +1" is sent to the database.

Intermediate Page:

■ **Acceptance Criteria:**

1. Previous match history is shown in the page and it is scrolling. Match history retrieved from the database.
2. Able to redirect to the game play page
3. Able to redirect to the profile page
4. Able to redirect to show the login modal for second user
5. Able to check if two user are ready to play. Compare two users' ready status

Experience Testing

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User Acceptance Testing:

Login Page:

- Users should be able to login with correct credentials.
- User authentication fails when the user provides invalid credentials.
- The form provides the user with specific feedback about the error.
 - Specifies what 8 length is necessary for the password as well as at least one Capital character(Some common rules for password)

Register Page:

- Check if the username has already been used. (Repeated name)
- Check to see if the password is valid (meaning one Capital letter and at 8 characters)

Intermediate Page:

- Modal functionality (Same criteria as Login Page)
- View/Redirect to the Profile page
- Button Text for player two should change when logged in
- Be able to specify the bet (ensure that the user has enough money to place bet)
- Be able to view the previous match history(scrolling window)
- Show the instruction manual(To do list before the game etc)

GamePlay Page:

- Two players are shown in the page
- Separate Control Panels(WASD and arrows)
- HP decrease if one player is attacked by the another,
- Portraits of two player
- Be able to determine the victor from each game (Higher HP wins)
- Timer Countdown(60s)

Performance Testing

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Risks:

1. Organizational Risks

- Time Bound Considerations:
 - We will need to account for the fact that game development is lengthy and complex
 - Are project should focus on the functionality built around the game as opposed to the game itself
 - When choosing the game we need to consider game development with a correct licensing
- Skill Considerations
 - Our team is pretty well balanced but we need to ensure that we have clear communication with our teammates, so we are not writing code that could be potentially breaking

-(Risk averse strategy is to implement branching merge so we do not mess up the main production code)
- Organization Consideration
 - There is one member of our team who we have not had contact with whatsoever, therefore we are running development with one member short.

Definition

A future, uncertain event with a probability of occurrence and a potential for loss.

Types of Project Risks

- Organizational Risks: Occurs due to lack of resources to complete the project on time, lack of skilled members in the team, etc.
- Technical Risks: Occurs due to untested code, improper implementation of test cases, limited test data, etc.
- Business Risks: External risk (i.e., from company / customer not from your project) like budget issues, etc.