[Brackets] Use Cases

1. Create an Account

Scope: Bracket-Boys Tournament Bracket Generator

Level: User Goal

Primary Actor: Tournament organizer, tournament participant

Stakeholders and Interests:

 Tournament organizer: may create an account to log past tournament results and keep current tournaments organized.

Description:

New users of the Bracket-Boys web application may create an account through the website to track the progress of their tournaments.

Preconditions:

- The user has accessed the web page from their browser.
- The user has clicked the "Create Account" button.

Basic Flow:

- 1. The user enters a unique username in the "Username" field of the HTML form.
- 2. The user enters a password which is at least 8 characters and appropriately complex.
- 3. The user presses "Sign up" and may now proceed to log into their account.

Alternate Flows:

None

Exception Flows:

- If the user chooses a username which is already registered, they will be taken back to the HTML form and informed that the username is already taken. A message will display telling the user to choose another username.
- 2. If the user chooses a password which is not at least 8 characters, they will be taken back to the HTML form and a message will display requesting they choose a password which is at least 8 characters.

Post Conditions:

 The user's account will be added to the database and a table will be created which automatically stores their results from any tournaments they compete in under that name.

2. User Login

Scope: Bracket-Boys Tournament Bracket Generator

Level: User Goal

Primary Actor: Tournament organizer, tournament participant

Stakeholders and Interests:

- Tournament organizer: may create an account to log results from tournaments.
- Users may create an account to reserve a username for tournaments they appear in.

Description:

Users may log into their accounts by pressing the Login button at the top of the page. Username and password verification is performed to ensure the user is logging in through a valid account.

Preconditions:

• The user has accessed the web page from their browser.

Basic Flow:

- 1. The user clicks the "Login" button.
- 2. The user types their username and password into the username and password fields of the login form.
- 3. The user clicks the "login" button at the bottom of the form.

Alternate Flows:

None

Exception Flows:

1. If the user enters a username and password combination which does not correspond to an account listed on the database, they will be taken back to the login form. A message will be displayed informing them that the username and password they entered does not match any accounts and they will be asked to re-enter their login information.

Post Conditions:

• The user will be signed into their account and able to sign up for or create tournaments.

3. Create a Tournament Bracket

Scope: Bracket-Boys Tournament Bracket Generator

Level: User Goal

Primary Actor: Tournament organizer, tournament participant

Stakeholders and Interests:

- **Tournament organizer:** wants to create a bracket for tournament with a variable number of participants.
- **Tournament participant:** wants to appear in tournaments as a username of their choice.

Description:

This use case describes the steps which a user follows to create a tournament using the Bracket-Boys web application. A user may log into their account if they choose, but this is not required to create a tournament. They may then create a tournament bracket by pressing the "create" button and entering the tournament name and participants. They may manually add all participants and/or share a link which other users may follow to independently join the tournament.

Preconditions:

- The user has accessed the web page from their browser.
- (optional) The user is logged into an account through the website.

Basic Flow:

- 1. The user presses the "[Brackets]" button to go to the homepage and begin creating a tournament bracket.
- 2. The user is taken to a menu which prompts them to enter the user names of tournament participants.
- 3. The user enters a tournament name in an HTML form input called "name".

- 4. The user may optionally enter a password to make their tournament private.
- 5. The user presses the "create" button to go to the tournament creation page.
- 6. The user may then add people to the tournament by hand.
- 7. Once all participants are entered, the user may press the "Start Tournament" button to generate the bracket.

Alternate Flows:

• The user may also add people to the tournament by copying a code from the tournament page. Other users with accounts may input this code to register for the tournament and the bracket will be updated to include them.

Exception Flows:

none

Post Conditions:

• A balanced bracket is created which includes all tournament participants. This bracket can be modified by the tournament organizer to add or remove players.

4. Tournament Progress

Scope: Bracket-Boys Tournament Bracket Generator

Level: User Goal

Primary Actor: Tournament organizer, tournament participant

Stakeholders and Interests:

- Tournament organizer: match progress will be stored in the bracket on the tournament page and can be updated by the tournament organizer.
- Tournament participant: the participant's matches and results through the tournament are displayed on the bracket on the tournament page.

Description:

Tournament organizers and players can record match results by clicking the name of the winning player and confirming the result. This will cause the bracket to display the winner by highlighting their name and advancing them to the next round of the bracket.

Preconditions:

- The participant has joined the tournament.
- A match has been played and the tournament organizer has a result to input into the bracket.

Basic Flow:

- 1. The tournament organizer or participant selects the name of the match winner.
- 2. The result is committed to the bracket.

Alternate Flows:

none

Exception Flows:

1. If no winner is chosen for a match, the opponent scheduled to face the winner will progress to the next round automatically. This strategy will also be used to balance the bracket in the case of an odd number of players.

Post Conditions:

• The winner's name is highlighted in the match cell and their name is added to the next match in the bracket.