**Use Case Diagram:**

Create Tournament

Referee

Coach

Organizer

Register Team

View Bracket

View Schedule

View Published Scores

Register Account

Enter Score

Edit Score

Delete Team

Edit Schedule

Create Schedule

Edit Brackets

Create Brackets

**Use Cases:**

**Use Case 1**

**Name:**

Create a Tournament

**Description:**

This use case goes through the actions of the organizer setting up a new tournament. A new tournament is created, the type and timeframe of tournament is decided, and the timeframe for the coaches and referees to register is decided. This has value as it is the essence of the initialization process in the program. It is everything the organizer needs to do before everyone else can register for the tournament.

**Actor:**

* Organizer

**Basic Flow:**

1. Organizer signs into their account
2. Selects create new tournament
3. Selects type of tournament
4. Selects tournament start/end dates
5. Adds registration start/end dates
6. Confirms the new tournament to be created

**Alternate Flow:**

Scenario 1:

1. a) Organizer entered invalid tournament date (Start/End of tournament is in the past etc)

b) Organizer is notified by the program

c) Organizer re-enters date

Scenario 2:

1. a) Organizer entered invalid registration date (End of registration is before the start etc)

b) Organizer is notified by the program

c) Organizer re-enters date

Scenario 3:

1. a) Organizer is asked to confirm the details of the new tournament

b) Organizer sees they entered wrong data

c) Organizer does not confirm

d) Organizer re-enters data

e) Organizer confirms and the tournament is created

**Preconditions:**

* Organizer has registered for an account

**Postconditions:**

* Program successfully registered the tournament

**Use Case 2**

**Name:**

Creating a bracket

**Description:**This part of the software enables the tournament organizer with a registered account to create the brackets for the registered teams within the tournament. It is done by using a create bracket wizard which creates a bracket based on the type of the tournament decided and it also creates a schedule for each matches based on the starting date and the duration of the tournament – this create bracket wizard will only work if there are enough teams registered for the tournament based on the format. This process happens after the deadline of the registration to ensure all the participating teams will be included inside the brackets.

**Actor:**

* Organizer

**Basic Flow:**

1. Organizer signs into their account
2. Selects the existing tournament
3. Select the create bracket wizard
4. Confirms bracket creation
5. Brackets posted

**Alternate Flow:**

Scenario 1:

1. Not enough team registered for format

Scenario 2:

1. Organizer extends registration date

**Preconditions:**

* Teams are registered
* Registration date has passed
* Organizer has a registered account

**Postconditions:**

* Brackets will be created
* Each team will be assigned an opponent
* Each fixture will have a date and time

**Use Case 3**

**Name:**   
Register a team

**Description:**

The purpose of this use case is to register a team. Coach logs in with his id. Coach goes to register the team and enter details of the team including names and ages of all the players. The data is validated by the system and is recorded in the database and an email is sent to the coach of successfully registering the team. The team is now shown in the registered teams section as a final result.

**Actor:**

* Coach

**Basic Flow:**

1. Coach logs in.
2. Coach goes to register a team.
3. Coach enters details of the team including names and ages.
4. Coach submits the results.
5. System sends a confirmation email about the submission of team.
6. Coach logs out.

**Alternate Flow**:

Scenario 1:

1. The connection gets disconnected. Try again after the connection is back on.

**Preconditions:**

* Coach must log in before continuing.
* The registration time has started to enroll a team.
* The deadline has not passed for registering a team.

**Postconditions:**

* Submission successful and the data is stored in the database.

**Use Case 4**

**Name:**

Entering Scores

**Description:**

This allows the referee to enter the scores after a match has officially ended, where the scores upon entering are published into the scoreboard. This use case also allows the organizer to correct any wrong entries by the referee.

**Actor**

* Referee
* Organizer

**Basic Flow:**

1. Open software
2. Select match
3. Enter scores
4. Confirm scores
5. Submit

**Alternate Flow:**

1. Open software
2. Select match
3. Edit score
4. Confirm edited scores
5. Submit

**Preconditions:**

* Teams are registered
* Referees and organizer has a registered account
* Game of volleyball between teams to be played

**Postconditions:**

* Scores entered
* Points for winning teams awarded (if applicable)