

5 Functional Requirements

- **Player/TO Account login and Management** – The system must allow users to create an account, log in, and manage their profile with a unique username. Tournament organizers must have additional privileges for creating and managing tournaments.
- **TO Tournament Creation and Setup** – Organizers must be able to create tournaments, set rules (single/double elimination, match formats), set start times, and manage seed participants.
- **Player Tournament Registration and Matchmaking** – Players must be able to register for tournaments, view their bracket, and see their upcoming matches. They should also be able to remove themselves from the tournament
- **Player/TO Score Reporting and Verification** – Players must be able to report match results, while organizers should have the ability to verify or override reported scores if necessary.
- **T/O Bracket Management** – The system should automatically generate brackets based on the chosen format and update them as matches are completed, Should be able to put the specific matches on hold and should be able to remove players from the tournament.

5 Non-functional Requirements

- **Scalability** – The system should be able to handle multiple tournaments with numerous participants simultaneously without performance issues.
- **Security** – User data (including login credentials) must be securely stored and protected against unauthorized access, restrict entry to certain regions .
- **Usability** – The interface should be user-friendly and intuitive, allowing both players and organizers to navigate easily.
- **Performance** – The website should have fast response times, ensuring minimal delays in loading tournament data and updating brackets.
- **Reliability** – The system must be stable, preventing crashes or data loss, ensuring that tournament progress is always recorded accurately.

TOURNAMENT CREATION AND MANAGEMNT	<ul style="list-style-type: none"> -Organizers must enter tournament details (name, format, start time, rules). - System stores tournament details in the database. - Organizers can modify or delete tournaments before they start. - System displays a list of all active and upcoming tournaments.
ACCOUNT LOGIN AND MANAGEMENT	<ul style="list-style-type: none"> - Users (players and organizers) must create an account with a unique username and password. - System sends authentication request to the database to verify login credentials. - Successful login grants access to the user dashboard. - Organizers have additional privileges to create and manage tournaments
TOURNAMENT REGISTRATION AND MATCHMAKING	<ul style="list-style-type: none"> -Players can browse and register for available tournaments. - System verifies player eligibility(location, age) and stores registration in the database. - Brackets are automatically generated based on registered participants. - Players can view their upcoming matchups.
SCORE REPORTING AND VERIFICATION	<ul style="list-style-type: none"> -Players must be able to report match results - TO should be able to verify the results and modify it -System checks if the score matches
BRACKET MANAGEMENT	<ul style="list-style-type: none"> -TO should be able to delay certain matches or even cancel tournaments -TO should be able to restrict certain players from participating in the tournament

