

Deckard

Parker Morrissey, Hamza Ouboukhlik, Mackenzie Laurisden, and Alex Xayachanla

Problem Statement

The problem we are trying to solve for TourneySoft is to create a robust league and tournament management system which will benefit all tournament organizers. The users will be volleyball tournament organizers who want a faster system to manage tournaments.

Overview

Tournament organizers need a reliable way to handle pools, schedule matches and brackets without spending hours on the manual work. The current methods now with paper or spreadsheets are slow, confusing and lead to a lot of errors that will disrupt the event. The goal of TourneySoft is to provide a service to volleyball tournament organizers to manage their tournaments faster and more efficiently. For the MVP, tournament organizers will be able to add 16 teams which will then be put in groups of 4 for pool play. The software will keep track of scores and standings in pool play in order to assign each team a seed. The teams will then be able to be added to a single elimination bracket based on their seeds. After the completion of the bracket, the software will display the final results, showing 1st, 2nd, and 3rd place.

For beyond the MVP, the tournament organizers will still want to do everything that the MVP does. But the soccer tournament organizers will have to check the weather status in case there should be a delay or if there needs to be any breaks. Matches are also one-and-dones, which

means you play one game and that's the match. Soccer games will also be played for ninety minutes plus stoppage time.

MVP Limitations

The first release of TourneySoft will focus on a very narrow scope so it can be delivered quickly and used reliably:

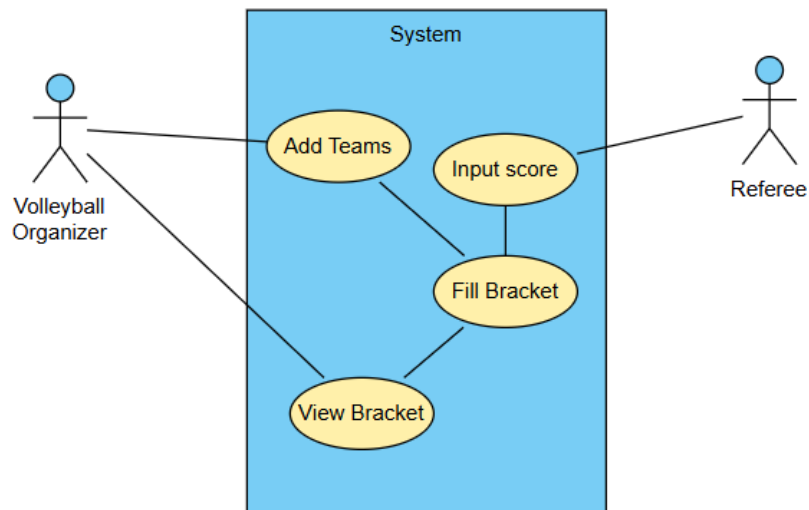
- Supports **only volleyball tournaments**.
- Fixed at **16 teams**, divided into **4 pools of 4**.
- Only **single-elimination playoff brackets** are available.
- Team information is limited to the **team name only**.
- No player rosters, statistics, or individual tracking are included.

Future Scope

Later versions may expand beyond these limits to:

- Support **multiple sports** in addition to volleyball.
- Allow **any number of teams** and flexible group sizes.
- Offer **different bracket formats** (double-elimination, round robin playoffs, etc.).
- Add **team rosters and player statistics** for deeper tracking.

Diagram



Non-Functional Requirements

1. Must be able to handle 2 tournament organizers.
2. The user interface must be clearly labeled for creating a new tournament.
3. All changes (scores, teams, schedules) are auto-saved within 2 seconds, so no data is lost if the page refreshes.
4. Common actions (saving a score, generating a bracket) are completed in under 2 seconds.
5. Handle cases where an even number of teams were not entered.

Backlog

MVP

1. As a volleyball organizer, I can create a new tournament.
2. As a volleyball tournament organizer, I want to input the teams by name.

3. As a volleyball tournament organizer, I want to split 16 teams into groups of 4.
4. As a volleyball tournament organizer, I want to assign a referee to each pool group.
5. As a volleyball tournament organizer, I want to assign a referee to each elimination match.
6. As a referee, I want to enter match results.
7. As a volleyball tournament organizer, I want to assign a court to each pool group.
8. As a volleyball tournament organizer, I want to schedule the order of games in each pool.
9. As a volleyball tournament organizer, I want to assign a court to each elimination match.
10. As a volleyball tournament organizer, I want to calculate the win/loss ratio for each team in pool play.
11. As a volleyball tournament organizer, I want to see the win/loss ratio for each team in pool play
12. As a volleyball tournament organizer, I want to seed teams based on win/loss ratio.
13. As a volleyball tournament organizer, I want to assign teams a spot in a single elimination bracket based on seed.
14. As a volleyball tournament organizer, I want to see the full bracket.
15. As a volleyball tournament organizer, I want to place the losers of the semi-finals match to play for third place.
16. As a volleyball tournament organizer, I want to review the scores of the game
17. As a volleyball tournament organizer, I want to adjust the scores of the game.

Outside MVP

18. As a tournament organizer, I want to view player rosters.

19. As a tournament organizer, I can choose which bracket system I want to use.
20. As a soccer tournament organizer, I want to track the penalty shots if the teams are tied at the end of their game (only in elimination matches).
21. As a soccer tournament organizer, I want to display how many yellow cards teams have, if applicable.
22. As a soccer tournament organizer, I want to assign a field doctor to each tournament game.
23. As a soccer tournament organizer, I want to track the timestamps of when goals are made.
24. As a soccer tournament organizer, I want to track the extra time that was added.
25. As a soccer tournament organizer, I want to track the weather.
26. As a soccer tournament organizer, I want to track the minutes played by every player.
27. As a soccer tournament organizer, I want to show which player holds a red card (if applicable).
28. As a soccer tournament organizer, I want to track which team held possession for each match.