Project Milestone 2

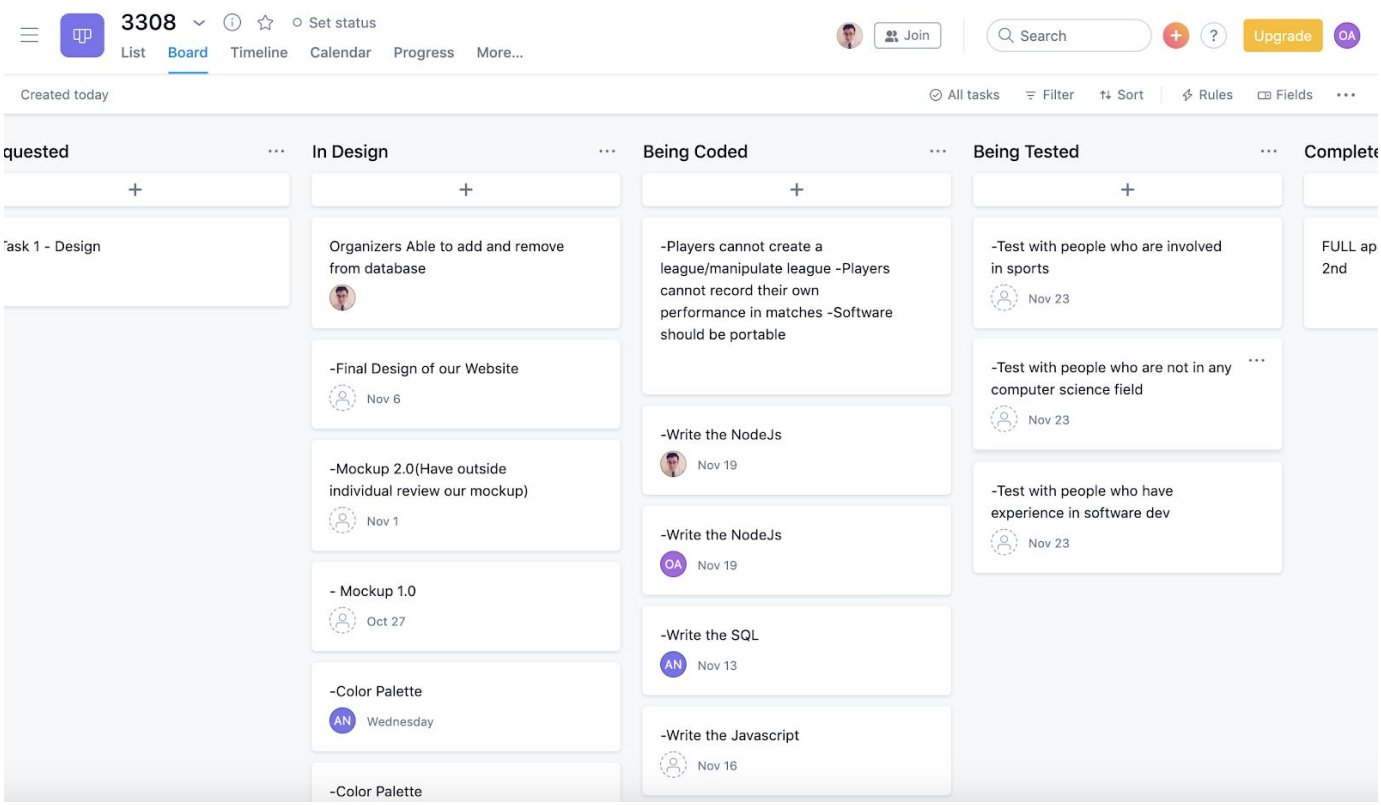
Group 5 - Depressed Umbrellas

- Project Features list
    - **Player account:**
        - Create an account
        - what league they are a part of(be able to sign-up to a league), cap on each team, so first come first serve
        - Edit their contact information, username, password.
    - **Organizer account:**
        - Be able to create a league where they can add players to it
        - Organizer has a choice to either assign a player to a specific league
        - Automate the process of recording matches by allowing the organizer to record the results
        - Sets team size
        - Organizers can deny or approve a team join request, and kick people off as needed
    - **Bracket Generation:**
        - Randomly generates brackets for team competitions, dynamic, so different numbers of teams can compete against them
        - Players choose a team to join or are randomly assigned
    - **Visualization (if time permits):**
        - Where teams are in their brackets. We will have a bracket image with the teams in their respective places.
    - **Have 2 types of login**
        - Player login
        - Organizer Login
- Requirements
    - Document the key FUNCTIONAL and NONFUNCTIONAL requirements for a minimum of SIX features.
      -https://www.guru99.com/functional-vs-non-functional-requirements.html
    - Follow one of the formats/templates provided in class.
    - Your application will likely have many more features, and you should create requirements documents for all the features.
    - But for this milestone, you need only turn in SIX requirements documents.

- https://dzone.com/articles/how-to-write-the-system-requirements-specification

    - **NON-FUNCTIONAL:**
        - Players cannot create a league/manipulate league
        - Players cannot record their own performance in matches
        - Software should be portable
    - **FUNCTIONAL:**
        - Only organizer accounts can manipulate game data/player statistics
        - Players can go and sign up for whatever team they want until the maximum amount of players has signed up
        - Players can leave team
        - Organizers accounts can assign/remove players to a team
        - Players can view their stats, stats of other players, and stats of teams including their own

- Project Plan
    - Create a Project Plan in your chosen Project Management tool. May be a GANTT chart, Kanban board, or other suitable formats.
    - The Project Plan should include each Feature that is to be developed.
    - The Project Plan should indicate the SEQUENCE of Sprints. That is, the plan should show in what order the features will be developed (designed, coded, tested, integrated.)
    - The Project Plan should show for each feature WHEN (by calendar date) the feature will be worked on.
    - The Project Plan should show for each feature WHO will be working on the development of the feature.
    - The Project Plan should result in a completed, working application that is ready to present by December 2, 2019



- Kanban board - Asana
  - Different categories
  - Included different task with due dates
  - We can assign each other to tasks

Project Requirement #1: Players cannot create a team/manipulate a team

Introduction: This software is meant to be used by sports players and coaches to keep track of their matches. This will allow players to choose their own teams which will form part of a competitive league. These teams will compete in bracket-style elimination tournaments to boost competition and fun.

General Description: A major goal of the software is to record which players are playing in a given match. The job of the organizers is to make sure that the correct players are playing on each team and therefore players should not be able to kick or add other players of any team; however, players will be able to join or leave a team as they wish. Players should not be able to manipulate what team other players are on, including joining or kicking players from teams. They should only be allowed to manipulate their own player account.

Specific Requirements: Players will not be able to manipulate the contents of a team. To validate that this feature has been implemented, a player account would be created and attempts to manipulate the players of team other than themselves should be unsuccessful.

Reference:
https://docs.microsoft.com/en-us/previous-versions/office/developer/sharepoint-2010/hh185004%28v=office.14%29

Project Requirement #2: Players can go and sign up for whatever team they want until the maximum amount of players has signed up

Introduction: This software is meant to be used by sports players and coaches to keep track of their matches. This will allow players to choose their own teams which will form part of a competitive league. These teams will compete in bracket-style elimination tournaments to boost competition and fun.

General Description: Players can search for any open teams on a web page that queries open teams and reports back on how many spaces are currently open. It then allows players to request joining a team, which will then be approved or disapproved by the team's organizer. The players can request to join a team by filling out their contact info and sending information about themselves to the organizers who can then decide whether or not that person would be a good fit for the team.

Specific Requirements:
We will need to build this on a SQL database where the data is queried to show the open teams along with how many spots are still open. There will be an HTML/CSS interface where a user can click buttons to submit their forms and request the ability the join. Javascript would also be used to build out the forms the players can fill out to request membership on a team. The form is then sent back to the SQL database where Coaches would then be notified of new join requests. If a coach approves of a player their info is added to a table of team info.

References:
https://stackoverflow.com/questions/47166835/how-can-i-create-a-sql-query-from-an-html-form-in-node-js

Project Requirement #3: Players cannot record their own performance in matches

This software is meant to be used by sports players and coaches to keep track of their matches. This will allow players to choose their own teams which will form part of a competitive league. These teams will compete in bracket-style elimination tournaments to boost competition and fun.

General Description: The scores for each team will be recorded by the organizer, and the teams/players cannot enter their own scores. Based on this, teams will continue through the bracket and there is no risk of cheating or breaking the honor code. This will be done with a SQL database that can only be accessed by the organizer through an HTML/CSS user interface.

Specific Requirements: Only the organizer will have access to the SQL Database which stores the performance of each team. The database will have all the teams in the tournament, and an HTML/CSS interface where the organizer can enter the score of each team. The program will then store these scores and the winner of each round.

References: https://www.w3schools.com/sql/sql_create_db.asp and the entire SQL Database section

Project Requirement #4: Players can view their stats, stats of other players, and stats of teams including their own

Introduction: This software is meant to be used by sports players and coaches to keep track of their matches. This will allow players to choose their own teams which will form part of a competitive league. These teams will compete in bracket-style elimination tournaments to boost competition and fun.

General Description: Players will be able to look at their stats from their Player's view side. From their home page, they will be able to navigate to a different window/page that will have different data/information. One button will lead to the player's own stats and if the player wants he will be able to look at their own team's stats. The stats will be able to be filtered by dates. Then if the players want they can make their stats public and let other players and other teams be able to look at their stats.

Specific Requirement: Statistics such as who won or lost games will be stored in a database. We will populate the stats page of each player according to their team and filter. The database will be SQL and it'll be linked to our HTML page through Node JS.

Reference: https://sqlbak.com/blog/update-statistics-sql-server
https://www.w3schools.com/nodejs/
https://nodejs.org/en/docs/

Project Requirement #5: Players and Organizers have login portals

Introduction: This software is meant to be used by sports players and coaches to keep track of their matches. This will allow players to choose their own teams which will form part of a competitive league. These teams will compete in bracket-style elimination tournaments to boost competition and fun.

General Description: A League has one Organizer. The organizer decides how many players can sign up to participate in the league by deciding how many teams are in the league and how many players are in each team (maximum number of players = team size * teams). The login portal has a sign in for existing users, and a signup portal for players. One login portal will exist and redirects based on the user role.

Specific Requirements: The user portal needs a front-end form using HTML and CSS that interacts with the database via a middle layer NodeJS and the backend will need to be able to hold usernames, passwords, and be able to add accounts (and relevant information) up until the maximum number of players).

Reference: https://www.youtube.com/watch?v=uOeTa7qQ8PA

Project Requirement #6: Organizers accounts can assign/remove players to a team

Introduction: This software is meant to be used by sports players and coaches to keep track of their matches. This will allow players to choose their own teams which will form part of a competitive league. These teams will compete in bracket-style elimination tournaments to boost competition and fun.

General Description: Organizers have the ability to determine how many teams they will have on their league. They can approve player requests to join a team, or assign them to a different team if they feel they would be a better fit elsewhere. They can also remove players from a team, either to reassign them or to kick them out of the league. Organizers will have the ultimate authority on these manners.

Specific Requirements:
We will layer an HTML/Javascript interface on a SQL database. This way the coaches can simply request changes through a form that will be pushed to a database that gets updated. We want this to happen relatively quickly as a coach may receive a lot of player requests at the beginning of a season. Thus, we want the tables to be updated within 30 seconds of completing the forms. We also want the page of requests to be loaded quickly, taking no longer than 10 seconds to be fully loaded and clickable.

Reference: https://www.w3schools.com/jsref/jsref_link.asp