Group 52 Project Proposal

Michael Card, 30089891

Alejandro Escobar, 30080381

Tyler Thain, 30090565

Tournaments are very common events seen throughout all sports, but amateur sports often lack organizations that plan and organize them, and so often go without. Tournaments are complex and interconnected events that require tracking a large amount of information, and sharing that information with the appropriate parties, which makes them more difficult to put on. To solve this problem, a database system will be created which will hold all of the information needed to organize a sports tournament. This system will allow for these events to be much more easily planned, allow for the necessary updates as the tournament progresses, and allows the players to access information about the tournament. Our group has attended and played in many amateur sports tournaments, and poor planning and a lack of information quickly sours what is supposed to be a fun and competitive experience. We wish to design a system that allows for more convenient and efficient organization of these competitions, and for information to be easily accessed by the relevant parties. The next sections of this proposal will discuss the problem definition, the problem solution, our motivation, a conclusion, and references.

Tournaments have been held throughout almost all of recorded human history. The Olympics are a tradition that originated in Greece in 776 BC, and the modern Olympics were first competed in in 1896. These competitions have large organizations that plan and host the tournaments, and are responsible for keeping track of all of the data, as well as updating standings, games, and other things as the event continues. Many smaller amateur sports in many places throughout the world are not afforded this luxury. Tournaments must be put on through the effort of a few people, who must personally keep track of all the data in spreadsheets and on paper, and release this information to the players and teams. This is an interesting problem to solve because of the sheer number of people who participate in these tournaments, or wish they could participate in these tournaments, but lack the planning and organizational resources to keep track of the large number of moving parts involved. This problem occurs whenever a smaller organization or group of people is trying to put on a tournament. There are many different elements that need to come together at specific times, and many pieces of information that need to be available to the players throughout the tournament. Without a central database, this coordination of saving and updating large amounts of data, and giving easy access to the necessary data becomes very difficult. This problem has already been solved to an extent. Central database systems are available for

creating, organizing, and advertising tournaments for sporting events. These services, such as SportsEngine HQ allow you to create tournaments, edit the games, insert teams and players, and update the database as the tournament progresses. Possible improvements to the current solution would mainly have to do with generating better reports. A better set of queries would allow for better analysis of the games in the tournament, and the outcome of the tournament as a whole.

Our project will allow for the creation and organization of sports tournaments by tournament organizers, and allow for those organizers to conveniently store and update all of the necessary information. It will also allow players to view information about other teams and games. Smaller, poorly funded, and less organized groups will be able to more effectively set up sporting events. Our project will produce a database system and interface that allows for the creation, storage, editing, and retrieval of information associated with a tournament. The tournament organizers will be able to log in to the system, and from there will be able to create, update, and delete information. They will be able to insert teams, and their players, schedule games and their locations, as well as assign referees. Players will be able to view their games, as well as opposing teams and players participating in the tournament.

The solution will be valuable to smaller, more independent organizations that require additional tools to facilitate the creation of a sports tournament, but lack the funding for more expensive software. Our solution will also be able to be utilized by less popular sports that lack mainstream tournament planning solutions, and that lack larger governing bodies that take on the responsibility of running tournaments. The uniqueness of our project comes from the catering towards the above-mentioned sports which are overlooked by companies that wish to appeal to a larger market. Our project gives people the tools to be able to organize sports tournaments where the work required to keep track of the information, and distribute the information would be prohibitively burdensome. Dealing with this problem without a computerized database system would be a very inefficient and time consuming endeavor, with plenty of opportunity for making mistakes. Our system will ease that burden and allow for these tournaments to be more easily organized, supporting smaller sports and the people who play them.

Sports tournaments are very complicated, interconnected systems. Organizing such a tournament takes a lot of effort, and requires that the organizer keeps track of a tremendous amount of information. Participating in a tournament which is poorly planned, and where information is difficult to find quickly ruins what should be a good experience. Our proposed solution helps these organizers better keep track of data, and more easily plan the tournament. It also helps athletes find the information they need, such as when and where their games are,

and who they are playing. These outcomes all come together to make the entire tournament experience better for everyone involved. This project consists of a number of deliverables, all of which incrementally build up to a fully functional database API system. We intend to have an extended entity relationship diagram of our database completed by October 18. Following that, we intend to have the initial relational model completed by November 1. Then, we will have an initial draft design of the functional portion of the project, as well as the initial web design, completed by November 22. We intend on presenting our solution to our TA during the last week of class. Finally, we will complete our final report for the last day of classes.

Reference:

Olympic Games - https://www.history.com/topics/sports/olympic-games

SportsEngine HQ - https://www.sportsengine.com/solutions/capabilities/organize/tournaments