

Team 15 Project Charter

Team Members:

Jack Doherty, Avik Singh, Hank Krutulis, Neel Chaudhari, Joseph Schmidt

Project Title:

LTMS.io (LEGO Tournament Management System): A robust FIRST LEGO League scorekeeping and tournament management system.

Problem Statement:

FIRST LEGO League is a middle school robotics competition league that has many teams and students from around the world with events run by decentralized teams of volunteers. In order to keep the quality and transparency of events consistent across the globe, an event management system should be created to help tournament directors run their events. LTMS.io is a web application that helps the tournament coordinators keep track of their statistics and agendas for the event. Similar systems exist but suffer from platform or general usability limitations whereas this app will provide a comprehensive and accessible to the target users and focuses on improving the user experience.

Project Objectives:

1. Provide a robust scoring interface for competition volunteers to track team progress
2. Provide a hierarchical authorization system for event coordinators to manage users (volunteers) they are overseeing
3. Provide a convenient system that quickly compiles and manages scores for each team in each event.
4. Provide a schedule generator to semi-randomize team assignments
5. Allow a central user to display a tournament screen to the tournament audience; including:
 - a. Current ranking, upcoming schedule, and overall scores for the competition
 - b. A match timer, including sound effects for indicating match progress
6. Allow export of print-friendly documents and CSV of tournament data including match schedule, score results, and judging documents.

Stakeholders:

Users: Volunteers of the Lego Tournament FIRST including the head referee and his/her supporting judges.

Developers: Avik Singh, Hank Krutulis, Jack Doherty, Neel Chaudhari, Joseph Schmidt

Project Manager: Christopher J Rosenblatt

Project Owners: Avik Singh, Hank Krutulis, Jack Doherty, Neel Chaudhari, Joseph Schmidt

Project Deliverables:

- Web application that helps judges and referees track the progress of the tournament using react.
 - Website hosted on heroku.
- A robust backend built in Node that will contain the scores for each team and various other statistics.
- A comprehensive timer that is accessed to all users.
- A database built using mongodb which stores all relevant statistics/data.