

- refine ERD
- generators
- relationships/validations
- app

faker  
factory girl

gens  
for loading data  
(good and bad)

## Team Management Vision

### Revision History:

9/22/16 — First version with high-level vision and requirements

## 1 Vision

We'd like to create a web application from managing all aspects of youth-level athletic organizations. The app will provide a number of functionalities, described in the Requirements section below, along with the ability to accept "plug-in" functionalities supplied by third party vendors. The vision is that by using this application, an organization will be able to more efficiently communicate with its members, better track performance at all levels of the organization, and provide feedback, in the form of evaluations, that can be used to improve performance.

## 2 Requirements

The app should support multiple organizations, but one organization should *not* be able to see another organization's private information; however, an organization may have public information, e.g., team schedules and player bios, that they would like to publish (make public).

### 2.1 Team Management Functions

These requirements deal with the ability to keep track of and manage the various teams affiliated with the organization, and include:

- Player information: first name, last name, DOB, gender, contact information (address, phone numbers, email addresses), jersey number, player bio, and physical statistics (height, weight, etc).
- The parents/guardians of a player, along with their contact information.
- Ability to identify all siblings in the organization through their parents/guardians.
- Ability to message players through any medium provided as contact information, including SMS.
- Team information: name, age group,
- Ability to assign players to teams.
- Coach information: first name, last name, contact information, coaching licenses.
- Ability to assign coaches to teams. A coach may serve as a head coach, assistant coach, age-group coach, director of coaching, etc. A coach may be assigned, with varying roles, to multiple teams. E.g., the director of coaching generally has coaching-level responsibilities for all teams in an organization
- Ability to specify a parent/guardian, or possibly a staff member, as a team manager (with perhaps more than one manager per team, where the manager responsibilities in this case may be divided).
- Ability to create a roster, composed of team members, for a given game.
- Ability to archive (and later retrieve) all team information for a given year.

- Calendars, at the various levels within the organization, of upcoming training sessions, competitions, events, etc.
- Player and team accounting related to fees.
- Ability to communicate with:
  - All athletes, or all athletes associated with a particular group of teams (e.g., competitive teams, versus recreational teams).
  - All parents or groups of parents (as in the previous bullet).
  - All coaches or groups of coaches (as in the previous bullet).
  - Everyone in the organization.
  - Any individual in the organization.

Appropriate user interfaces should be provided that allow the information described above to be

## 2.2 Statistics

These requirements deal with the performance of players and teams, and in particular the set of statistics related to performance (e.g., won-loss records, who scored, minutes played by player, etc.). As each sport has its own types of statistics, the app should support the ability to select a sport. The minimal requirements include:

- Ability to display sport-relevant statistics at the individual, team, age-group and organization levels.
- Ability to apply analytics to the statistics in order to provide useful reports to players, parents, coaches, etc.

The first sport we would like to implement is soccer. An example of the types of statistics that apply to this sport is attached in Appendix ??.

## 2.3 Evaluations

These requirements deal with player, team and coaching evaluations. The statistics described in the previous section should be used to inform evaluations. The minimal requirements include:

- User-friendly interface that allows coaches to conduct player evaluations, including notification to parents when evaluations are available, and the ability to supply feedback or clarifying questions.
- Ability to provide reminders to coaches when evaluations are due, and when evaluations have been completed.
- Ability of a coaching director to evaluate a coach.
- Ability of a coaching director to evaluate a game.

## 2.4 Training Sessions

These requirements deal with the ability to store training session descriptions, including:

- Ability to document a training session.
- Ability to track the training sessions that occurred on a give day for a given team.
- Ability for coaches to add notes to stored training sessions.

## 2.5 Other Issues

Appropriate user authentication and authorization capabilities should be provided.

At the organization level, those with the appropriate “rights” (e.g., organization-level administrators and coaches) should be able to view all of the teams in the organization (which includes all of the athletes and their parents/guardians, coaches, managers, etc.), as well as all data associated with the team, e.g., team performance, training sessions, etc. This will also include the ability to communicate with all of the members of the organization (mail, email, SMS, or phone), broken down according to groups:

At the team level, it is assumed that a coach or team manger will enter information about the team, and the athletes associated with that team. A coach may want access to particular information that should not be available to managers or team members, e.g., athlete evaluations, fees and scholarships, etc.