

Figure 1: UML Model of assignment 1 user stories.

# A. Appendix

### **Stakeholders**

There are several stakeholders that will be active within the system.

First off there is the IFA itself. Differentiation is made by splitting this into just "the IFA" meaning the IFA as a company and "IFA employee" meaning any employee that works within the system on behalf of the IFA. These employees can be administrators, managers or budget auditors. Aside from the IFA, team managers also use the system intensively. For the purpose of clarity, team managers will be seen within the user stories as the people responsible for managing a team's finance as well as managing other employees.

Team staff member is the term used for grouping the rest of a team's employees. For the purpose of these user stories this mostly includes players and coaching staff.

Match officials are also an important part of the users within the system. The match officials include the main referee as well as the rest of the officiating team like the linesmen or fourth official.

Finally, fans are also taken into account when designing the system. The word fans includes both casual and dedicated, matchgoing fans.

#### General:

- As the IFA, I want to bring different existing systems together, so that I can avoid having to save redundant data.
- As the IFA, I want the system to be able to handle multiple languages, so that I can service leagues in different countries.
- As the IFA, I want the system to be reliable while being used by at least 50.000 people at the same time, so that the user experience will be satisfactory.
- As a fan, I want to access the system on my phone, so that I can access it wherever I am.
- As a match official, I want to access the system on my phone, so that I can access it on the field or while I am traveling to the game.
- As an IFA employee, I want to be able to access the system from a desktop, so that I can more easily enter new data into the system.
- As a team manager, I want to be able to access the system from a desktop, so that I make fewer mistakes when managing my assets.
- As a team staff member, I want to be able to access the system from a desktop, so that I
  more easily work together with other staff members.
- As the IFA, I want system users to only gain access to tools that are relevant for them, so that the system is less confusing.

### League management

- As the IFA, I want to manage leagues within the system, so that I have one place to access all necessary data.
- As the IFA, I want to be able to input different rulesets for different competitions, so that no mistakes will be made in updating leaderboards, scheduling matches or auditing budgets.
- As the IFA administrator, I want to be able to add new leagues to the system, so that I can keep the system up to date.
- As the IFA administrator, I want to be able to register new teams for the system, so that I can keep the system up to date.
- As the IFA manager, I want to be able to approve new teams that are registered in the IFA system, so that I can maintain integrity.
- As the IFA manager, I want to be able to approve new leagues that are added to the system, so that I can maintain integrity.

### **Automatic scheduling**

- As an IFA employee, I want the scheduling of games to be automated, so that I can relieve some of my workload.
- As the IFA, I want to avoid bias like giving teams a lighter schedule, so that I can avoid any claims of unfair advantages.
- As an IFA employee, I want to automate the allocating of match officials to games, so that I can relieve some of my workload.
- As the IFA, I want to automatically apply league rules like not allowing the same match officials to officiate the same team multiple times, so that I can avoid claims about match officials causing an unfair advantage.
- As the IFA, I want to avoid conflicts between the game schedules and the match officials' personal schedules, so that I will not have to reschedule games as a result of this.
- As a match official, I want to have my preferred time slots, dates and locations for officiating games taken into consideration when making my schedule, so that I will not have to work at a time that is inconvenient for me.
- As the IFA, I want the overriding of a generated schedule to need at least two certified IFA employees, so that I can avoid mistakes.

## **Budget management**

- As an IFA budget auditor, I want to be able to control and audit a team's budget management within the system, so that I can reduce my workload.
- As the IFA, I want the teams to input every transaction they make into the system so that I can make sure the team is following their league's rules.
- As an IFA budget auditor, I want to be able to quickly obtain a system-generated report about a team's budget management, so that I can easily read up on their situation.
- As a team manager, I want to manage my team's finances directly within the system, so that I will not have to do unnecessary work.
- As a team manager, I want to be able to assign roles and system privileges to different members on my team, so that I can delegate tasks and save time.

#### **Notifications**

- As a fan, I want to be notified as soon as possible about important schedule changes like a delayed kick-off, so that I can plan accordingly.
- As a match official, I want to be notified as soon as possible about important schedule changes like a delayed kick-off, so that I can plan accordingly.
- As the IFA, I want all different stakeholders of a game event to be notified in the same way and at the same time, so that I can be more efficient.
- As a fan, I want to be able to choose which game events I will be notified of, so that I do not get too many notifications for my liking.

#### **Statistics**

- As a fan, I want to check statistics of different matches and statistics of different players, so that I can be more engaged in their respective league.
- As a team staff member, I want to access statistics about different matches and different players, so that I can strategize better.
- As a match official, I want to report on match events live during the match, so that I do not have to register events twice.
- As a fan, I want game events to be reported live so that I can keep track of what is happening as closely as possible.
- As the IFA, I want the match officials to directly report on game events, so that I can prevent unauthorized data sources being relevant.
- As the IFA, I want player and match statistics to be derived directly from the reported match events, so that no extra work needs to be done.