An Organization that Provides Intramural Sport Services

Profiles:

The organization maintains the profiles of associated people. The athletic organization keeps track of its profiles through the ID. Each profile also stores the first name, last name, address, phone number, email address, date of birth, medical conditions, emergency contact first name, emergency contact last name, emergency contact phone number and emergency contact relationship for the given profile as well as the date when the profile was created. Each profile is either a player, an official or a coordinator. There is no overlap between these three "subclasses."

Player:

While the gender of the general profile is irrelevant and therefore not stored, since some leagues are gender specific, all players must additionally store their gender. A player may also be a Captain. Players may play for many teams, as long as those teams are from different seasons. A player can only play for a team if they are of the proper gender for that season and if the team is not at its maximum capacity as determined by the season.

Captain:

The captain is the player who first registers a team. Registering of a team involves paying the team registration fee. Therefore, the captain must provide a billing address, credit card number, credit card type, cardholder and credit card expiration date. A captain can create many teams, but only one team per season. The captain recruits players to the teams that he creates respecting capacity and gender constraints.

Team:

The team is identified by its name, which must be unique within the season. Once a team has been registered, and the minimum number of players have been added to it, then the team is ready to play. The coordinator can now assign the team to games.

Game:

Games are identified by their time and date. They are scheduled by the coordinator, and they must be assigned the correct number of officials and exactly 2 teams of the appropriate season.

Official:

There are many officials employed by the organization. There is an hourly salary associated with each official, and this salary depends on how long the official has been working for the organization (e.g. the time since the official's profile was created). Officials may officiate games as either time-keepers or as referees, as required for the game.

Coordinator:

The organization also employs several coordinators. Coordinators are more permanent employees and therefore have a yearly salary. The coordinator can coordinate seasons of leagues for various sports and various levels. Afterward, the coordinator will have to schedule games for that season, assigning 2 teams registered for that season. In addition, the coordinator has the power to suspend players. Each suspension is accompanied by the number of games for which the player is suspended. The dates of games scheduled must be later than the registration deadline of the season. The coordinator has the responsibility to inform captains of any issues that arise during the season (e.g. game cancellations) via messages. If 4 teams do not register for a season by the season's registration deadline, then the coordinator will cancel the season.

League:

A league is defined by a sport (e.g. Soccer, Volleyball, etc) and a level (e.g. Men's – Recreational, Women's – Competitive). A league also determines the maximum/minimum number of players that can be on a team, since this depends on the sport associated with the league. The league also determines the minimum number of teams require

Season:

A season is an "instance" of a league. If a coordinator is available, and there is public demand, then for a given year, a season of a given league may be coordinated. The season is defined by its year of occurrence. The season determines the maximum number of teams that can register for it, since this may depend on the number of officials available, as well as previous public demand for this league. As well, the season determines the proper number of officials required for its games, since the number of officials can depend on availability in the given year, as well as the sport. Seasons have a registration deadline after which captains can no longer make new teams.