Design Assignment

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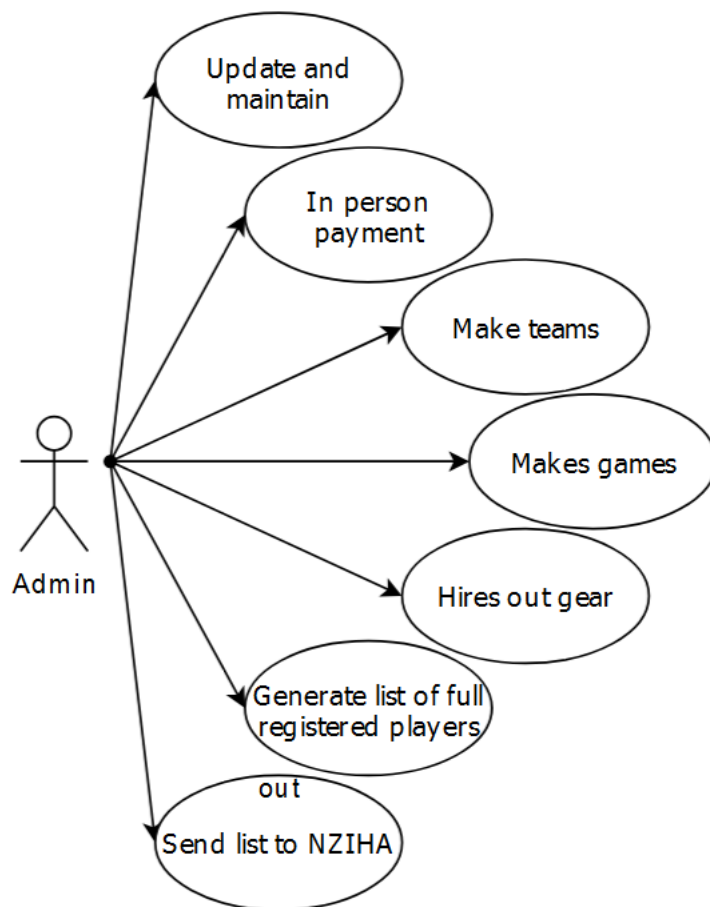
ID205 DB2

9/11/2024

Main Objectives

Currently the information for the Dunedin Ice Hockey Association (DIHA) is spread throughout many systems and is difficult and time consuming to navigate. The objective of this database is to centralise all information into one system and reduce issues with use.

Another objective is to automate sending a list of all fully registered players to NZIHA, as this is required by DIHA to complete each season.

The database information will include data on each person including name, contact and occupation (player, coach, or referee), players' registration type, coaches' qualification, referees' position, teams of players and coaches, leagues of teams and refereed games within leagues. The database will also track awards given to players and/or teams, gear owned by DIHA, and payments made to DIHA.
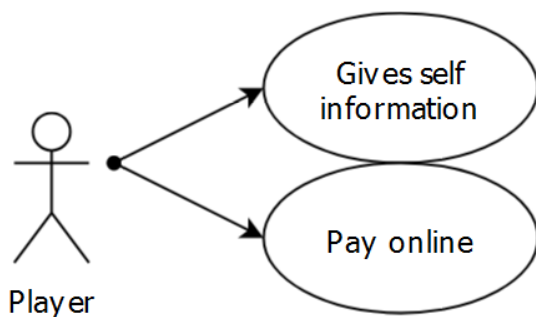
I have found that collecting info about penalty box and scoring box workers is out of scope. The way DIHA is currently assigning people is working well.

Use Cases

Update and maintain

In person payment

Make teams

Makes games

Hires out gear

Generate list of full registered players

out

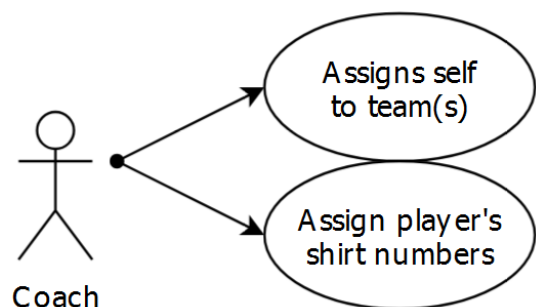Send list to NZIHA

Admin

Admin:

- Updates and maintains the database as needed

- Adds the payment to DB if the person has paid in person

- Makes teams based on count of players in each league

- Assigns games their date/time and people involved (teams, refs, etc)

- Tracks who hires what gear and the fee(s)

- Generates a report on all fully registered players
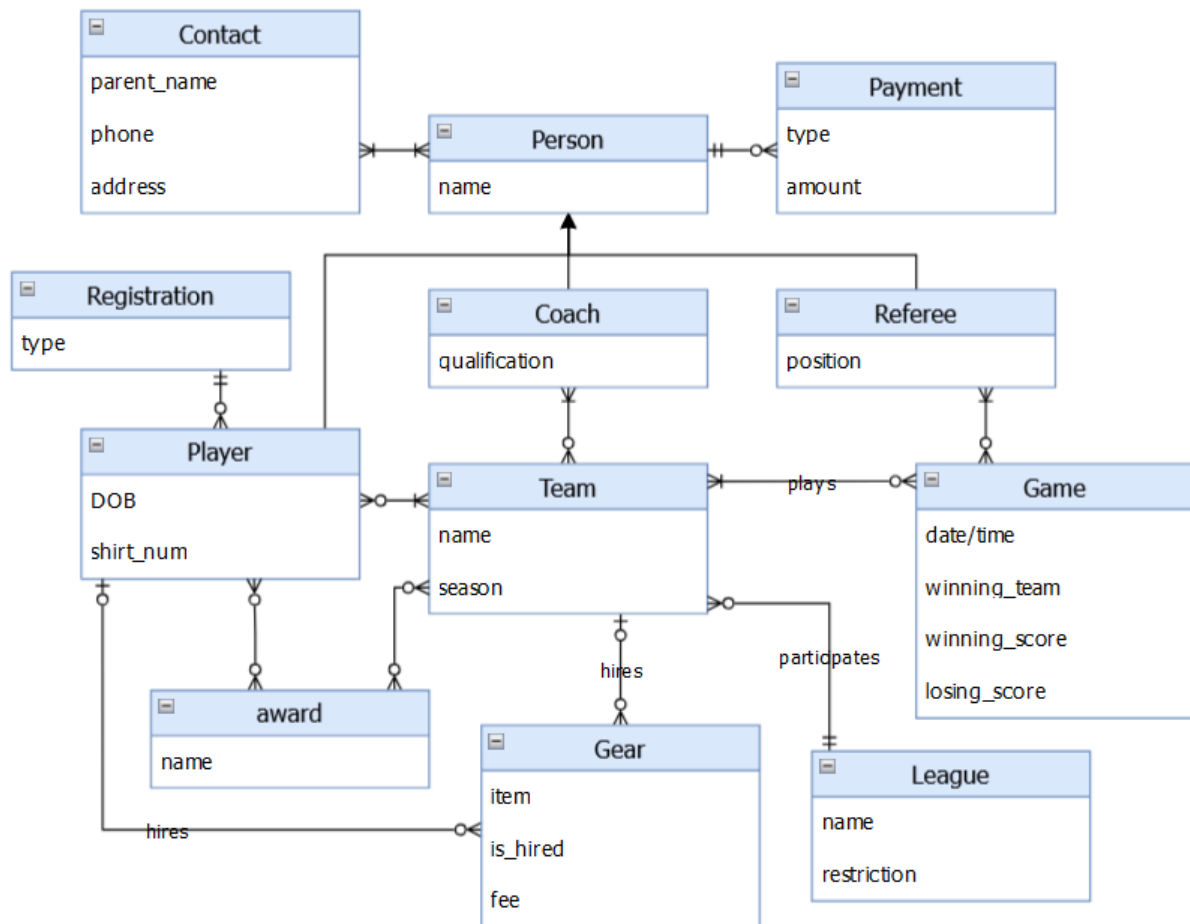
- Sends the report to NZIHA

Gives self information

Pay online

Player

Player:

- Gives their information (name, contact, etc)

- Pay online for their registrations and hire fees

Assigns self to team(s)

Assign player's shirt numbers

Coach

Coach:

- Assigns themselves to the team(s) they will be coaching

- Assigns players in their team(s) shirt numbers

Data Model

Data Dictionary

Person		
string	name	

Player		
date	DOB	date of birth
int	shirt_num	number on player shirt

Coach		
string	qualification	

Referee		
string	position	linesman or qualified

Contact		
string	parent_name	optional name of parent or caregiver
string	phone	
string	address	physical address, not mail

Payment		
string	type	cash or card
float	amount	

Registration		
string	type	social or full

Team		
string	name	
string	season	

Game		
date/time	schedule	when game is planned
string	winning_team	ID of
int	winning_score	score of winning team
int	losing_score	score of losing team

League		
string	name	
string	restriction	u16, open etc

Gear		
string	item	skates, kneepads etc
bool	is_hired	is currently hired or in storage
float	fee	cost for hire of season

Award		
string	name	