**miniQonnections Hackathon Use Case**

**IPL Auction House**

Cricket is described more of a religion than sport for average Indian. The Indian Premier League has increased the enthusiasm exponentially. Cricket is a bat-and-ball game played between two teams of eleven players each on a cricket field, at the centre of which is a rectangular 20-metre (22-yard) pitch with a target at each end called the wicket (a set of three wooden stumps upon which two bails sit). Each phase of play is called an innings, during which one team bats, attempting to score as many runs as possible, whilst their opponents bowl and field, attempting to minimise the number of runs scored. When each innings ends, the teams usually swap roles for the next innings (i.e. the team that previously batted will bowl/field, and vice versa). The teams each bat for one inning. The winning team is the one that scores the most runs, including any extras gained (except when the result is not a win/loss result).

Source: https://en.wikipedia.org/wiki/Cricket

**Business Use Case:**

At the start of the season, each team is given a budget of INR 80 Crores (as of 2018 season) and have to utilize this in the most optimum way to bid for players. Each team is allowed to keep a few players against some budgeted amount they lose for each retained player. The rest of the budget is available to bid for players from the unallocated pool.

**Data Dictionary:**

All Indian Premier League Cricket matches between 2008 and 2016.

This is the ball by ball data of all the IPL cricket matches till season 9.

The dataset contains 2 files: deliveries.csv and matches.csv.

matches.csv contains details related to the match such as location, contesting teams, umpires, results, etc.

deliveries.csv is the ball-by-ball data of all the IPL matches including data of the batting team, batsman, bowler, non-striker, runs scored, etc.

**Approach:**

The approach to the case study will be of “role playing”. The participant team must assume the identity of one of the entities involved in the scenario. For this use case, the participant must assume the identity of the selection committee of one of the teams sitting in the auction house. The participant is free to choose the team. During the presentation, the participants are to represent the chosen team and explain how they will go about analyzing the players for selection.

Tip: Kindly note the players retained by all the teams as these players are fixed competition. You can get list of retailed players at <http://sport360.com/article/cricket/ipl/264007/ipl-auction-2018-when-is-it-how-it-works-and-team-budgets> . Also, note the available budget for the team you have chosen in the same url.

Tip: It is found that the stadium / city also affects the player performance. It may be a good idea to source geocodes for the stadium and build geo-maps based visuals.