Project Proposal

Project Title : Visualization of Indian Cricket Premier League

Team Members: Zeeshan Hakim (u1143824) , Abishek Penujuri Nataraj (u1080870)

Link to Project Repository: https://github.com/zeeshanhakim/dataviscourse-pr-2017

Our project idea is based on “Visualizing Indian Premier League” dataset.

Background and Motivation:

Almost every kid in India and Pakistan grew up playing cricket and idolizes its players. It is one of the most loved games in the world. USA has football, Europe has Soccer and we have Cricket.

After introducing T20 format, the craze for it increased. One of the most successful premier league based on this format is IPL (Indian Premier League). IPL brought together players from all the countries to play in different teams. The Dream of seeing players from different countries playing for the same team came true.

So, while deciding on the Project, our main interest was to find something interesting related to Cricket. We found a dataset related to IPL and after going through its features and asking opinion from TA’s, we decided to go with this Project.

Our goal here is to visualize various trends covering 9 seasons of the IPL. The data has lot of features which can be used to generate good visualizations, the preliminary designs are shown in the upcoming sections. we also show interesting insights such as how participants from global countries change with respect to years especially in the context of India and Pakistan.

Project Objectives:

The main objective of our project is to visualize the trends and season, match, and player specifics of IPL.

Things we are going to answer with our visualization are:

1. One is visualizing the number of matches played throughout the country, showing on the map (maybe by using google API). We can learn where most number of matches are being played.

We can also find the change is trends from each season by observing where the most games have been played for the season

2. From the map, using hover feature we can see other important details regarding the matches.

3. We are also going to visualize various statistics of the IPL, for example player is awarded Orange Cap and Purple Cap based on their performances in the season, we would like to visualize these for every season and other statistics like Man of series, number of sixes and number of fours etc.

4. Also, we like to find out about player skills, like which all players are Right-Handed batsman or Left-Handed and their bowling skills, whether they were captains or not, whether they umpired or not, etc.

5. One of the important things which we try to understand is the trend in international players in the IPL, like how many players are there for each country in the given season.

There may be many other things, which can be answered using our visualizations, on forward we hope to convey many interesting trends and visualizations and answer many questions in this project

Data:

we collected our data set from Kaggle

https://www.kaggle.com/harsha547/indian-premier-league-csv-dataset

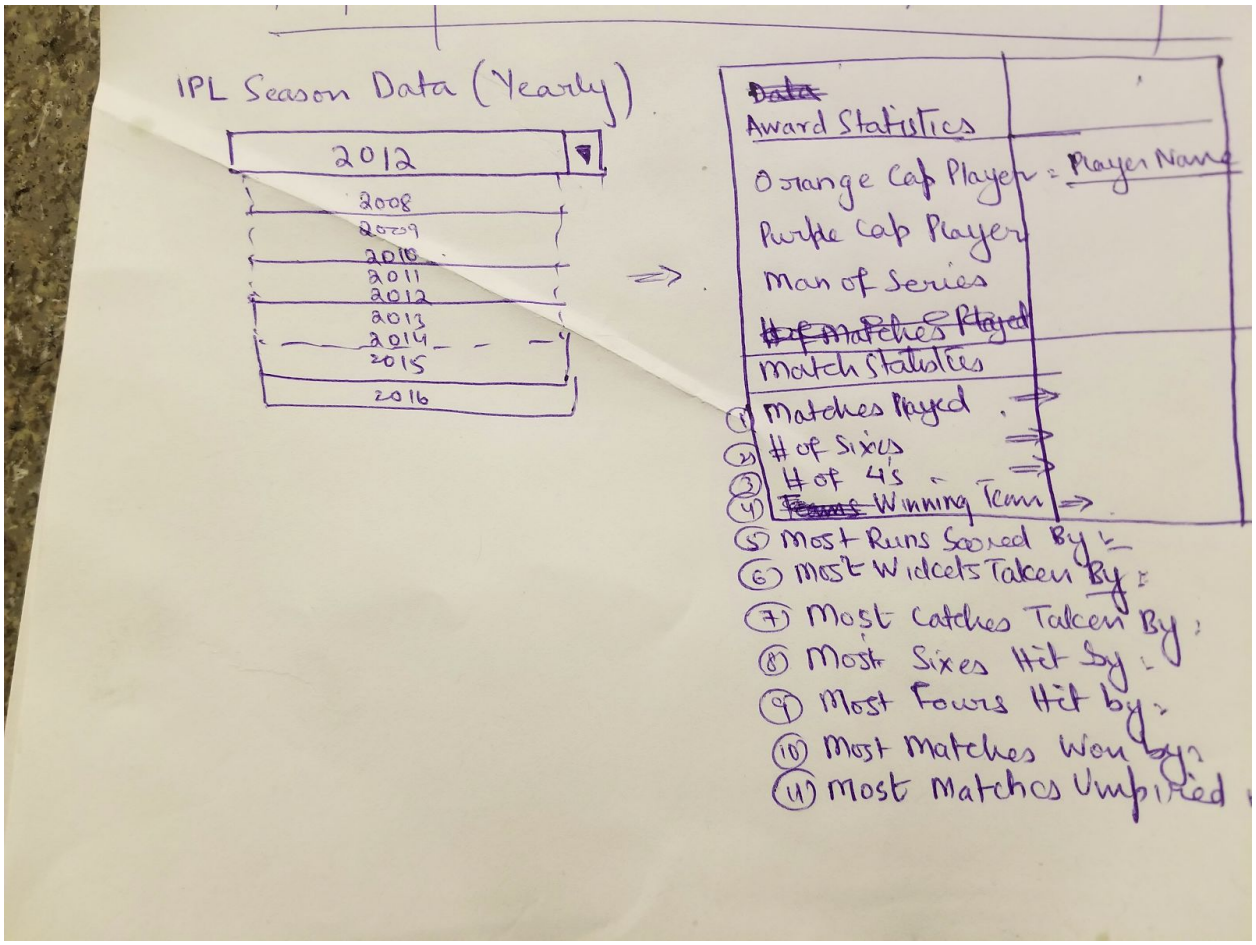
Data Processing:

Yes, we may need to do some data cleaning to remove unwanted elements.

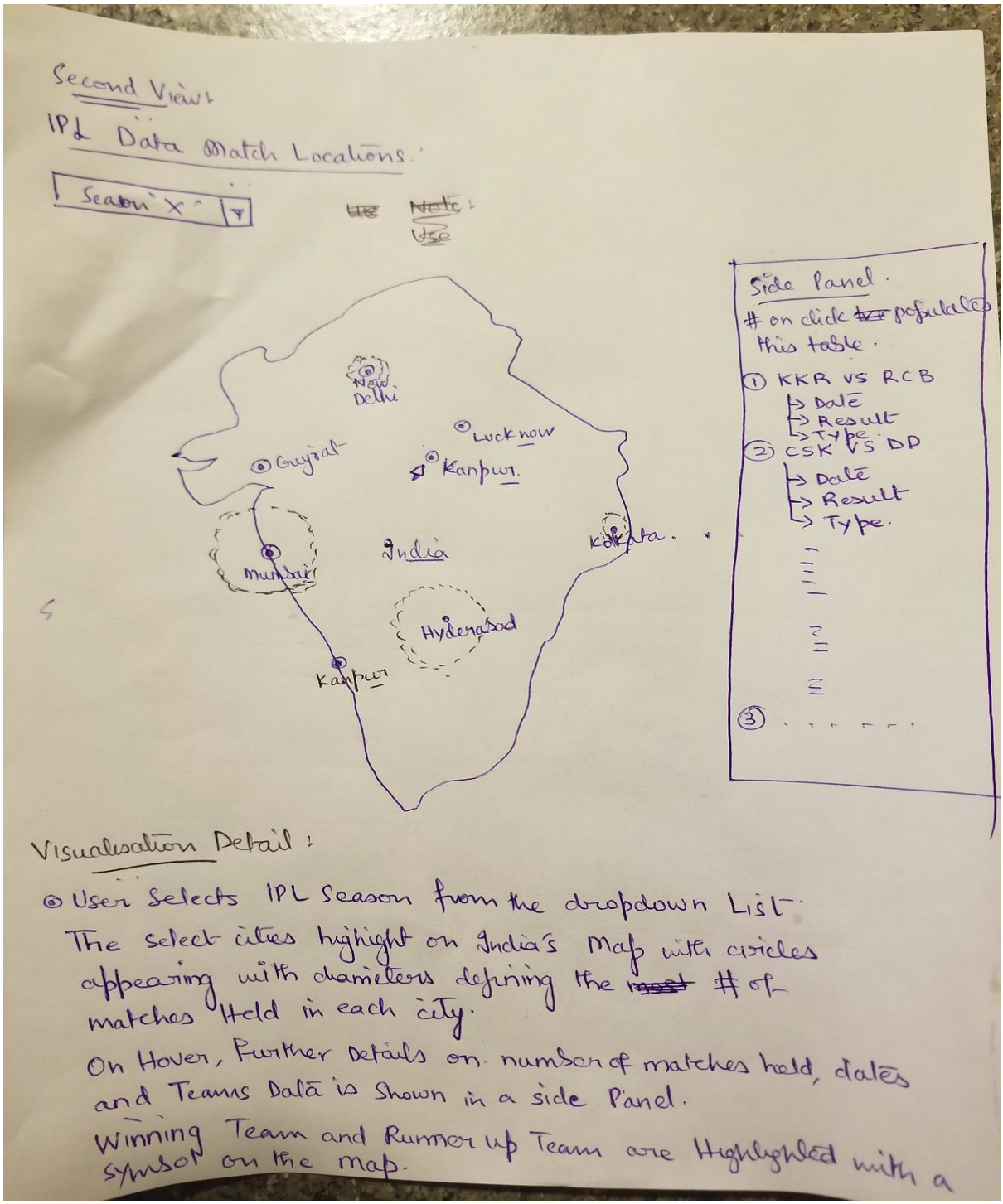
We have the data in the CSV files, we may need to data processing to convert some of the data into JSON Files. In total we have 6 data files covering all the data related to 9 seasons. There is player data, match data, season data and team data. All these data files are interlinked with common id’s

Visualization Design:

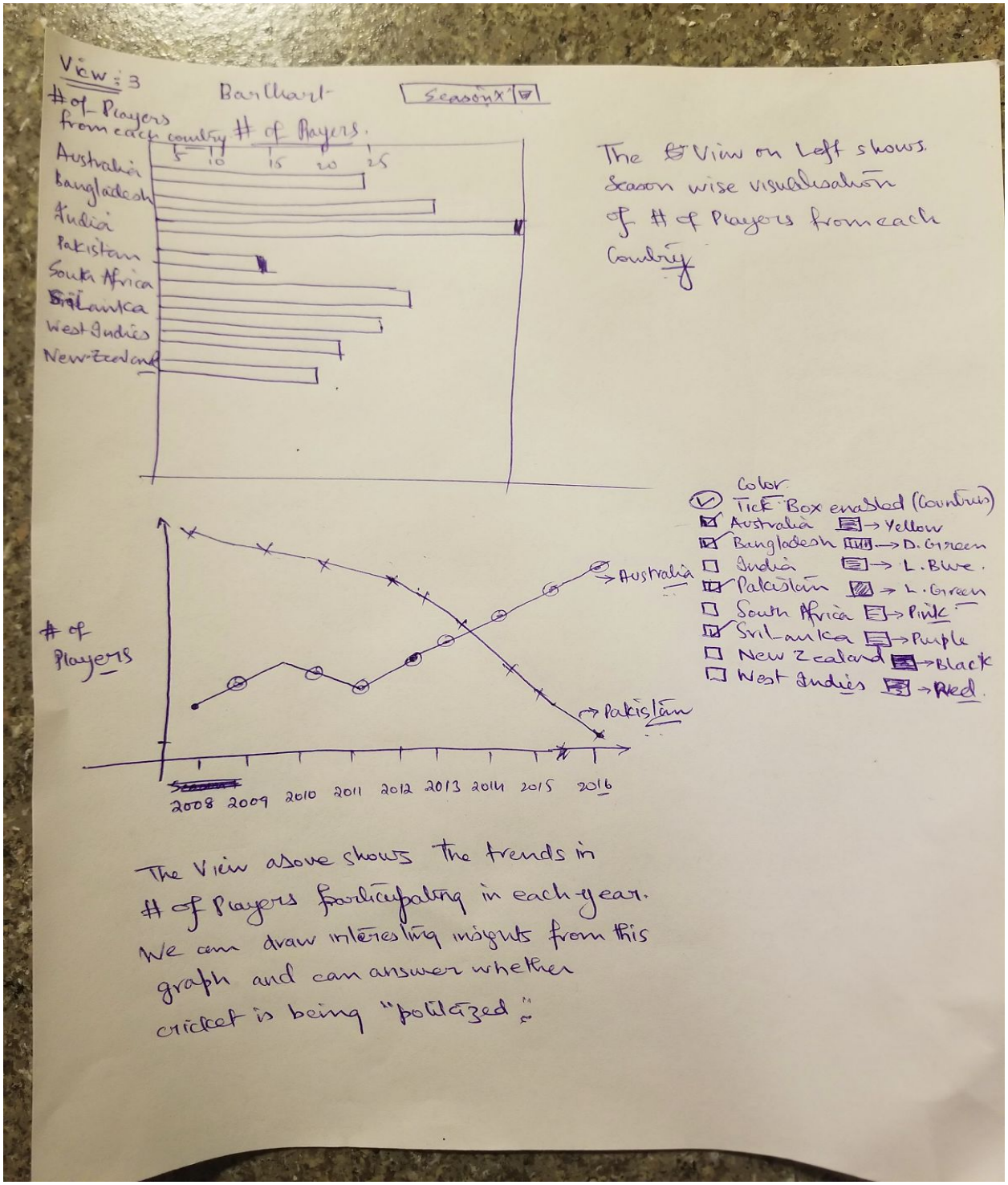
VIEW 1 : Showing the IPL Seasons Statistics



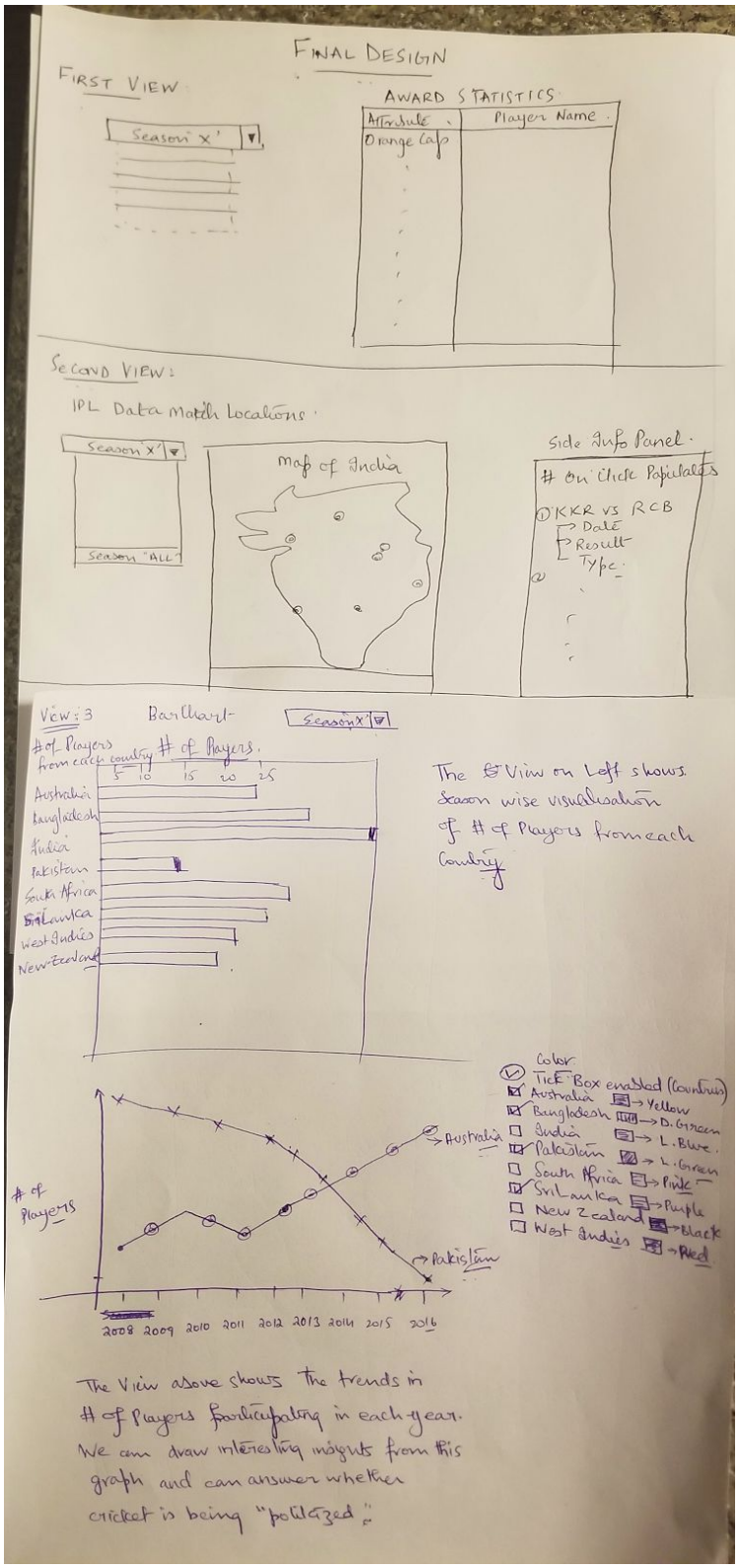
VIEW 2 : Showing the Season Matches Venues



VIEW 3 : Global Countries Participation In IPL Seasons



Final Design:



MUST-HAVE / NICE TO HAVE FEATURES:

- The View 1 showing season's statistics should have basic information about each season.
  A Nice to have feature in this visualization would be displaying more interesting options for users to choose from. From Example, a similar drop down list of showing each team would display team specific data.
- The View 2 would have a map of India showing each venue and the circles' diameter representing the # of matches played in each venue for the Season.
  A Nice to have feature would have a side panel in the side which shows venue specific match details for the season i.e. What matches played? Between which teams ? and Winning Team. This side panel can contain more interesting information for the visualization.
- The View 3 is the Star of the project. This visualization shows the global countries participation in the events and how the trend changes with respect to years/season.
  A nice to have feature would be drawing further trends showing the performance of players from each country like Avg runs scored by players from each country, Which Country's players scored most 6's etc.

Project Schedule:

We are planning to commit around 10 hours per week.

Week1: Data Cleaning, Data Processing, Initial Setup

Week2: View 1 and View 2

Week3: View 3 and Process book

Week4: Final design and Process book