A

Project Report

On

Super Predictor of Indian Premier League (IPL)

Submitted by

JHDP Coders

Gaurav S. Patil 19686030704(GL)

Sujal N. Mistry 196860307037

Saqlen G. Godil 196860307022

Nitish M. Tiwari 196860307066

Jayvantrai Harrai Desai Polytechnic

Department Of Computer Engineering

At: Palsana, Ta: Palsana, Dist: Surat, Pin: 394315

INDEX

1. INTRODUCTION

1.1 Overview :

The use of analytical methods in various aspects of cricket including results prediction is very important. There is a huge demand for the algorithm that best predicts the result of cricket because of its popularity and huge amount of money involved in the game. Thus the analysis of IPL results becomes more important. Prediction of outcome of a match using machine learning algorithms is an important aspect in cricket. Records of the past performance of players and other related data can be analysed to create models that predicts the winning team. This model can be created using the machine learning algorithms such as Decision Tree, Naive Bayes and K-Nearest neighbour and their results can be compared based on the Evaluation Measures as accuracy, precision, recall, sensitivity and error rate.

1.2 Purpose

Data is the ultimate Wealth in today's world. With the enhancement of technology,data has become the most powerful input in every sector. Nowadays, sports managers and stakeholders are more emphasising on data for decision making. The main purpose of this system is to predict the probable result of match which will be play in future and analysis the data of past matches and players. By that data we can analysis the performance of player. Using this system we can also analysis the performance of the team. Comparison of players performance and taking decision will be easy using this system. It will be help to choose player in auction. There are above purpose of this system.

2. LITERATURE SURVEY

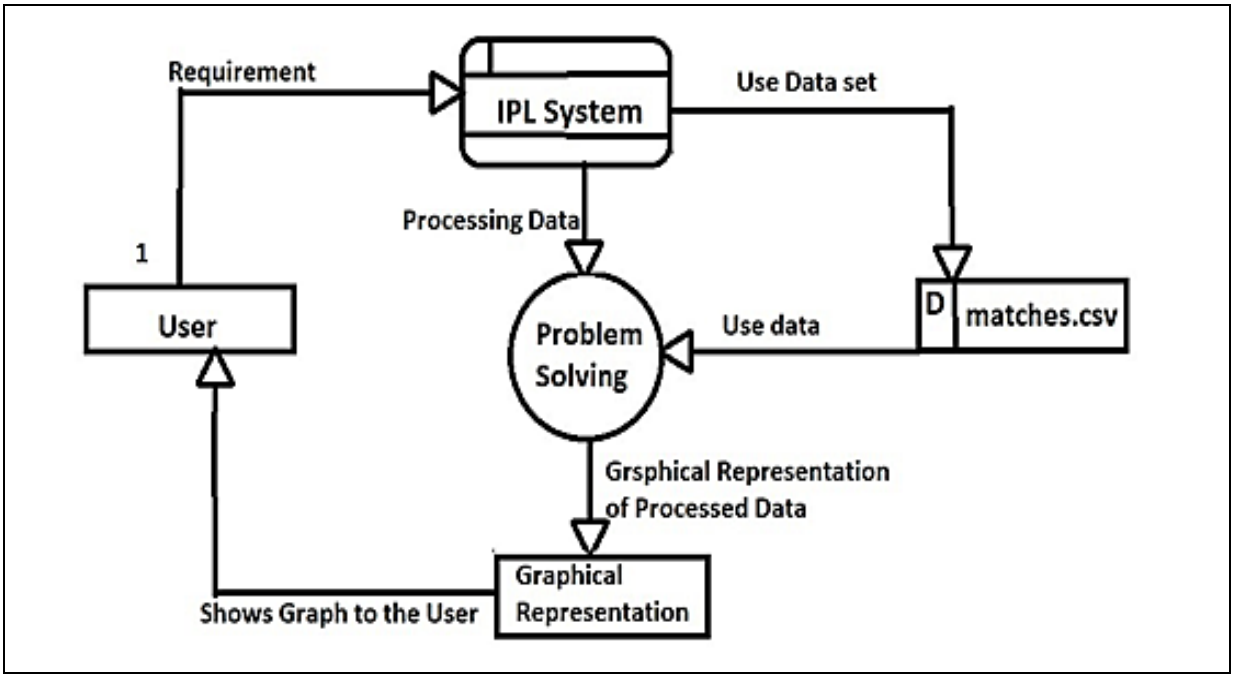
The work done on Data Mining of Cricket dataset describes the various data mining techniques viz Decision Tree, Naive Bayes, KNN, Random Forest applied on the IPL dataset, the model is built for predicting the results of the matches. The best attributes were selected using the Wrapper and Ranker method and then the classification has been done. This work was done with the help of WEKA (Waikato

Environment for Knowledge Analysis).

The selection of the best team is always required by the management for best outcome. The paper provides the optimal solution to select the best team using Data Mining Techniques rather than following the traditional method which is tedious. When we are declaring a time for the particular championship it is mandatory to select the best team and so the chance of the team to be the champion becomes easy.

In the authors proposes the fuzzy clustering logic. The results of the IPL batting Statistics were grouped into various clusters and it gave efficient and effective accurate results with the Data Mining Technique – Clustering. This work has been done with the help of MATLAB. The concept of clustering is used in order to classify batting statistics of the Indian Premier League which has the fuzzy data into appropriate clusters.

3. THEORITICAL ANALYSIS



Data Flow Diagram of System

Hardware Requirements:-

- **Developer side hardware requirements:**
  - **1.Processor** – Quad Core and Upgraded versions
  - **2.RAM required**– minimum 512MB
  - **3.Disk Space**– 1gb of free disk space

- **User side hardware requirements:**
  - **1.Processor –** Intel i3 or above
  - **2.RAM required–** 3gb minimum

Software Requirements:-

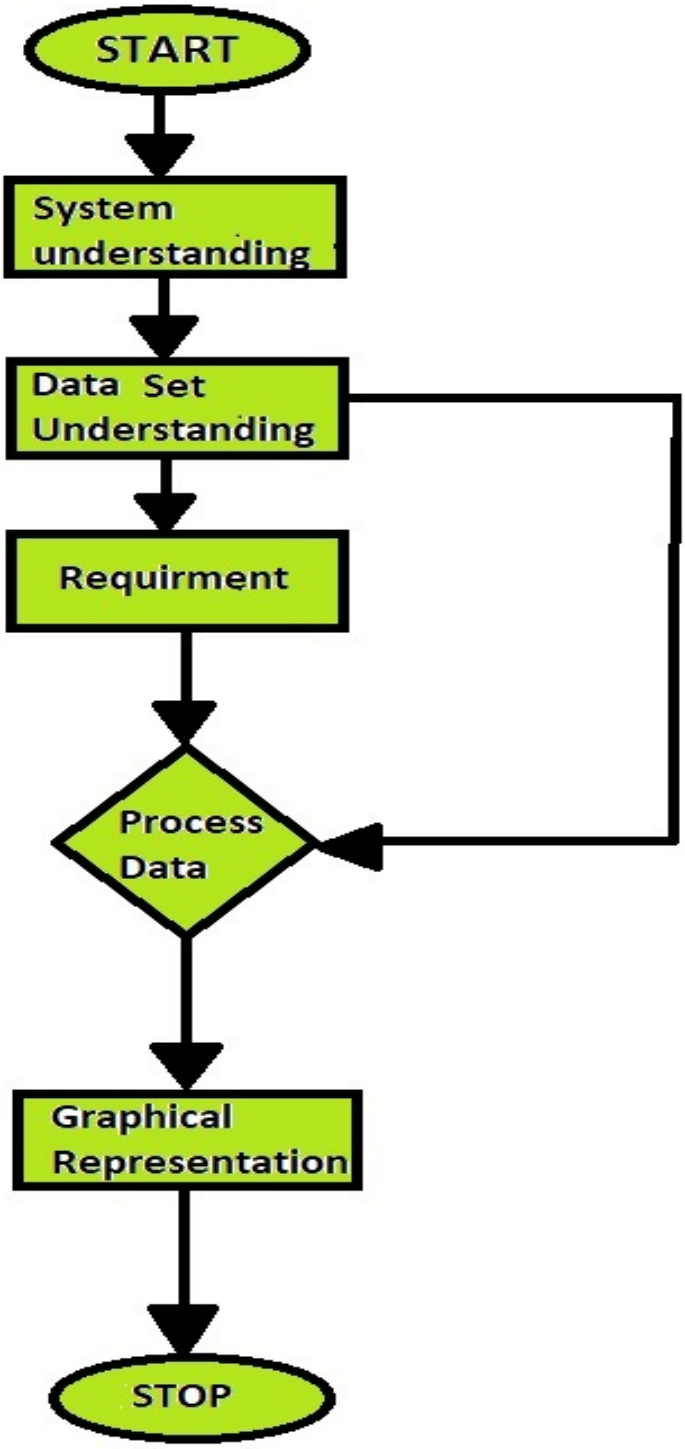
- **Developer side hardware requirements:**
  - **1.Operating System**– windows 7 onwards
  - **2.Browser**– Chrome, Internet explorer or Mozilla Firefox
  - **3.Resolution**– 1366 x 768
  - 4 Internet connectivity required

- **User side hardware requirements:**
  - **1.Operating System**– windows 7 onwards
  - **2.Browser**– Chrome, Internet explorer or Mozilla Firefox
  - **3.Resolution**– 1366 x 768
  - 4 Internet connectivity required

4. EXPERIMENTAL INVESTIGATIONS

We learn lots of thing in this ipl predictions .how to exploar data and how to manage the data and solve the complex problem and show it in graphical represent the graph and chart so user can understand easily players performance, and classify the players data and performance show the all data in graphical representation and attractive.

5. FLOWCHART


START
System understanding
Data Set Understanding
Requirment
Process Data
Graphical Representation
STOP

6.RESULT

1. To find the team that won the most number of matches in the entire IPL.
2. To find the team that lost the most number of matches in the entire IPL.
3. Does winning a toss increase the chances of victory.
4. To find the player with the most player of the match awards.
5. To find the city that hosted the maximum number of IPL matches.
6. To find the most winning team for each season.
7. To find the on-field umpire with the maximum number of IPL matches.
8. To find the biggest victories in IPL while defending a total and while chasing a total.
9. Which team won the most matches while batting first.
10. Which team won the most matches while batting second.
11. List of teams which have won matches by most runs cumulatively

SOLUTION OF THE ALL PROBLEM ARE GEVIN LINK.

☞ https://drive.google.com/file/d/1SF0naZEiRoRsYTFrYC4iw7Gr816aoEJ3/view?usp=sharing

7. ADVANTAGES & DISADVANTAGES:

Advantages.

1. This system is going to be helpful in analyzing the pastdata of the matches happened since the first edition of Indian Premiere League (IPL).

2. Such analysis will help franchises / team management in critical decision making given certain conditions.

3. Important aspect of any cricket match like decision making after winning a toss on certain venues will be easier.

4. At last, this system may be helpful in predicting winner/loser given the data based on past records.

Disadvantages.

1. prediction is just possible outcome.it may predict wrong information sometimes.

2. In this critical situation wrong prediction can spoil the match.

3. The Predictor use some people for betting(illegali in india and others countries).

8. APPLICATIONS

Apart from reporting a more accurate result, which helps the bettors get some help in the betting field. It helps the bettors to have a safe and secure platform for betting and especially allows the Indian bettors to gamble openly and also suggest or help to make your dream11 team or any other bettors application.it is helpful for franchises to check cricketers performance weak or strong.

9. CONCLUSION

Analytics can be used for Cricket match Prediction and it's analysis in very easy way. For IPL game, Teams, Venue, Winning Toss, Venue of the Match and Decision after winning the toss are important influencers to win a match. Different Machine Learning helps to predict outcome of a match. Right selection of Machine Learning Model helps to increase Accuracy of Prediction. From Different Classification Models, Support Vector Machine, Decision Tree and Random forest are best to predict outcome of an IPL games. All of the following gives almost 88% accuracy Level. With this we can predict the IPL match through machine learning models.

10. FUTURE SCOPE

Researchers have taken only few factors as a predictor .but in cricket there are many factors which could have impact on a Match result. Player is one of that influencer. Every year IPL teams use to change their players; lots of new cricketer gets chances to play for the teams. So, in future studies Player can be used as a Predictor. Another important factor is pitch, in future pitch can be used as predictor.

11. BIBILOGRAPHY

- https://www.kaggle.com/nowke9/ipldata?select=matches.csv
- https://www.cricbuzz.com/
- http://ictactjournals.in/paper/IJSC_Vol_11_Iss_1_Paper_2_2199_2204.pdf