

IPL Player Price Predictor

Abstract:

The Indian Premier League (IPL) is a professional Twenty20 cricket league in India contested during April and May of every year by 8 teams representing Indian cities. Every year an auction is held prior to the start of tournament where all the 8 IPL team owners bid for the players. IPL Player Predictor is a rule based expert system built on JESS that is designed to predict a player's price in IPL auction. The system based on the player's various statistics like matches, age, runs scored, batting average, strike rate, wickets and economy predicts the cost of the player.

Rules:

The 18 rules are divided into 3 sets of 6 rules each based on the player's specialties (Batsman, Allrounder or Bowler). In each specialty the player is again rated among 6 levels with increase in level implies in a better skilled player. A price range is set for each level meaning a player belonging to a level determines his price for the auction.

Rule Name	Price range
Level One	10 Lakhs to 120 Lakhs (\$0.01 to \$0.18 Million)
Level Two	120 Lakhs to 240 Lakhs (\$0.18 to \$0.37 Million)
Level Three	240 Lakhs to 450 Lakhs (\$0.37 to \$0.70 Million)
Level Four	450 Lakhs to 900 Lakhs (\$0.70 to \$1.40 Million)
Level Five	900 Lakhs to 1200 Lakhs (\$1.40 to \$1.87 Million)
Level Six	1200 Lakhs to 1800 Lakhs (\$1.87 to \$2.80 Million)

Instructions:

Copy the file "IPL_PLAYER_VALUE.clp" into the bin folder of the JESS directory.

Run the command "(batch IPL_PLAYER_VALUE.clp)" inside the JESS

Various statistics of the player are asked as input

Sample Outputs

```
C:\WINDOWS\system32\cmd.exe

Jess, the Rule Engine for the Java Platform
Copyright (C) 2008 Sandia Corporation
Jess Version 7.1p2 11/5/2008

This copy of Jess will expire in 1820 day(s).
Jess> (batch IPL_PLAYER_VALUE.clp)
f-0 (MAIN::initial-fact)
For a total of 1 facts in module MAIN.
Please enter player's name:
Virat Kohli
Please enter player's age:
29
Please enter type of player(batsman or allrounder or bowler):
batsman
Overseas player(yes or no):
no
Matches played:
226
Runs scored:
7068
Batting average:
40.85
No. of 100's scored:
4
No. of 50's scored:
52
Batting strikerate:
133.28
Player's value in IPL Auction : INR 1510 Lakhs or USD 2352580
```

```
C:\WINDOWS\system32\cmd.exe

This copy of Jess will expire in 1820 day(s).
Jess> (batch IPL_PLAYER_VALUE)
Jess reported an error in routine batch
    while executing (batch IPL_PLAYER_VALUE).
    Message: Cannot open file.
    Program text: ( batch IPL_PLAYER_VALUE ) at line 1.

Nested exception is:
IPL_PLAYER_VALUE (The system cannot find the file specified)
Jess> (batch IPL_PLAYER_VALUE.clp)
f-0 (MAIN::initial-fact)
For a total of 1 facts in module MAIN.
Please enter player's name:
Rashid Khan
Please enter player's age:
19
Please enter type of player(batsman or allrounder or bowler):
bowler
Overseas player(yes or no):
yes
Matches played:
91
Wickets taken:
135
Bowling economy rate:
5.8
Player's value in IPL Auction : INR 657 Lakhs or USD 1023606
```

Test Cases:

Try giving in the following inputs all the stats taken from [EspnCricinfo](#)

Name	Age	Type	Overseas Player	Matches	Runs	Batting Average	No. of 100's	No. of 50's	Strike Rate
Virat Kohli	29	Batsman	No	226	7068	40.85	4	52	133.28
Steve Smith	28	Batsman	Yes	155	3124	30.03	1	11	125.36

Name	Age	Type	Overseas Player	Matches	Runs	Batting Average	No. of 100's	No. of 50's	Wickets	Strike Rate
Ravinder Jadeja	29	Allrounder	No	196	2058	21.89	0	0	124	123.08
Ben Stokes	26	Allrounder	Yes	92	1721	24.94	1	7	46	138.12

Name	Age	Type	Overseas Player	Matches	Wickets	Economy Rate
Rashid Khan	19	Bowler	Yes	91	135	5.8
Mohammed Siraj	23	Bowler	No	23	38	8.4