

# IPL Database

Shrey Thapar E049

Jayant Singh E057

# INTRODUCTION

- ▶ The **Indian Premier League (IPL)** is a professional Twenty20 cricket league in India contested by eight teams representing eight different cities in India
- ▶ In the modern day of statistics and data proves to be very import. With this project, we resolve to satisfy the fans of these teams and analysts in the need of all time stats of players in the IPL
- ▶ In the given project we will be designing a SQL Database connected with Python using a *MySQL Connector* and which will help the user to analyse the statistics of each player playing for a team in IPL.

# LAYOUTS



The screenshot shows a web browser window titled "Login". The page has a dark blue background. At the top, there is a white silhouette of a batsman swinging a bat, followed by the text "INDIAN PREMIER LEAGUE" in white, bold, uppercase letters. Below this, there are two input fields: "ENTER USERNAME : shrey" and "ENTER PASSWORD : \*\*\*". A blue button labeled "LOGIN" is positioned below the password field. At the bottom, there is a white button labeled "NEW HERE? SIGNUP NOW!".

First page of the application



This screenshot is identical to the first one, showing the "Login" page with the Indian Premier League logo, username and password fields, a "LOGIN" button, and a "NEW HERE? SIGNUP NOW!" button.

Login Page



The screenshot shows a web browser window titled "SignUp Page". The page has a dark blue background. At the top, there is a white silhouette of a batsman swinging a bat, followed by the text "INDIAN PREMIER LEAGUE" in white, bold, uppercase letters. Below this, there are five input fields: "ENTER YOUR NAME\* :", "FAVOURITE TEAM\* :", "ENTER YOUR USERNAME\* :", "ENTER YOUR PASSWORD\* :", and "CONFIRM PASSWORD\* :". A blue button labeled "SUBMIT" is positioned below the "CONFIRM PASSWORD\*" field. At the bottom, there is a white button labeled "NEW HERE? SIGNUP NOW!".

Sign up Page

IPL Super Over Game



Statistics Database

Game - Database Navigation Page



Database First Page



→ IPL Super Over Game

COACH	TEAMS	HOME	PLAYER STATS		STADIUM	MATCHES
	Name	Team Name	Age	Year of Joining	Experience	
	Andrew McDonald	Rajasthan Royals	38	2020	4	
	Anil Kumble	Kings XI Punjab	49	2019	4	
	Brendon McCullum	Kolkata Knight Riders	38	2019	1	
	Mahela Jayawardene	Mumbai Indians	42	2017	5	
	Ricky Ponting	Delhi Capitals	45	2018	6	
	Simon Katich	Royal Challengers Bangalore	44	2019	5	
	Stephen Fleming	Chennai Super Kings	46	2009	10	
	Trevor Bayliss	Sunrisers Hyderabad	57	2020	16	



→ Coach Display



COACH	TEAMS	HOME	PLAYER STATS	STADIUM	MATCHES	
	Name	City	Titles	Year_Formed	Net_Worth	Seasons_Played
	Chennai Super Kings	Chennai	3	2008	732 million USD	10
	Delhi Capitals	Delhi	0	2008	369 million USD	12
	Kings XI Punjab	Mohali	0	2008	593 million USD	12
	Kolkata Knight Riders	Kolkata	2	2008	738 million USD	12
	Mumbai Indians	Mumbai	4	2008	809 million USD	12
	Rajasthan Royals	Jaipur	1	2008	305 million USD	10
	Royal Challengers Bangalore	Bangalore	0	2008	695 million USD	12
	Sunrisers Hyderabad	Hyderabad	1	2013	497 million USD	7



Team Display

COACH	TEAMS	HOME	PLAYER STATS	STADIUM	MATCHES
	Name	Team Name	Address	Capacity	Avg_Score
•	M. A. Chidambaram Stadium	Chennai Super Kings	Wallajah Road, Chepauk, Chennai, Tamil Nadu	33500	158
•	Arun Jaitley Stadium	Delhi Capitals	Bakshkar Shuk Zafar Marg, Delhi	41829	155
•	PCA Stadium, Mohali	Kings XI Punjab	I.S. Bindra Stadium, Sector 61, Sukhbirada Ajit Singh Nagar	26000	188
•	Eden Gardens	Kolkata Knight Riders	B.B.D. Bagh, Kolkata, West Bengal 700021	68000	185
•	Wankhede Stadium	Mumbai Indians	Vasco Mankad Rd, Chembur, Mumbai, Maharashtra 400028	33100	198
•	Sawai Mansingh Stadium	Rajasthan Royals	Jaipur Nagar Nigam, Lalbath, Jaipur, Rajasthan 302005	38000	165
•	M. Chinnaswamy Stadium	Royal Challengers Bangalore	Cobbler Rd, Shivaji Nagar, Bangalore, Karnataka 560001	40000	188
•	Rajiv Gandhi International Stadium	Sunrisers Hyderabad	Lippl, Hyderabad, Telangana 500029	35000	175



Nicknamed the Chepauk, it was established in 1916. It is the second oldest cricket stadium in the country after Eden Gardens in Kolkata.

Stadium Display



Statistics Homepage

Batting Stats

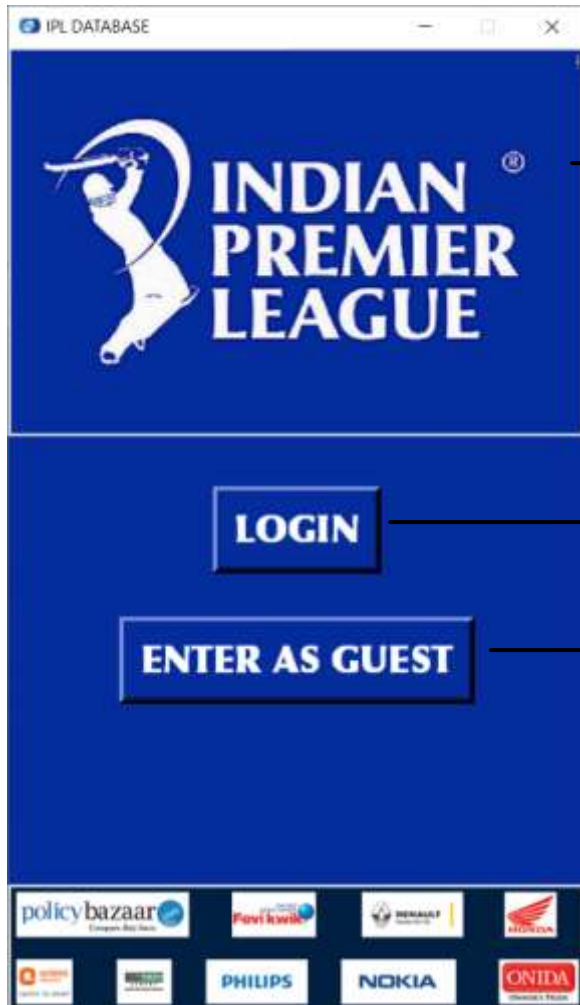
Bowler Stats

# TECHNICAL CONTENT

- ▶ Software -
  - ▶ Pycharm Community Edition 2019.3.1
  - ▶ MySQL Workbench 8.0 CE
  - ▶ Adobe Photoshop CC 2015
- ▶ Libraries -
  - ▶ Tkinter - For GUI
  - ▶ From Tkinter import messagebox - for message box
  - ▶ MySQL-connector - For connecting GUI and MySQL
  - ▶ Import webbrowser - For interface to allow displaying Web-based documents
  - ▶ Import random - For implementing pseudo-random number generators for various distributions.



# IMPLEMENTATION



First Page of Application

Login Button

Guest Button  
Allows the user to enter the Database  
without any Login/Sign-up



Login

**INDIAN PREMIER LEAGUE**

**ENTER USERNAME :**

**ENTER PASSWORD :**

**LOGIN**

**NEW HERE? SIGNUP NOW!**

## Login Page

The user can enter their Username and password to enter the application

The User gets to enter their unique username while logging in

The privacy of the user is protected by the use of \*

The user can Sign-Up if they are not registered into the database

SignUp Page



# INDIAN PREMIER LEAGUE®

**ENTER YOUR NAME\* :**

**FAVOURITE TEAM\* :**

**ENTER YOUR USERNAME\* :**

**ENTER YOUR PASSWORD\* :**

**CONFIRM PASSWORD\* :**

\* Marked fields are mandatory

**SUBMIT** **All fields are mandatory.**

## Sign-Up Page

If the User is not registered, he/she can enter the details and click on submit to and login to the application

The User has to enter his/her Name

The User can pick a favourite team from the dropdown menu

The User must pick a unique username

The User must enter all fields and then click on submit to register their ID

The user is greeted in the top right corner of the window

## Navigation Page

General Trivia is provided to the user of their favourite team



### Super Over Game

By clicking this button, the user is taken to Super over Face off Game

The Background of Navigation Page is changed as per the User's favourite team

### Statistics Database

By clicking this button, the user taken to Statistics Database of IPL

On the placement of mouse over a button, description of the button is hovered above it

The User can navigate through the database application through the buttons present on the top of the window

COACH

TEAMS

HOME

PLAYER STATS

STADIUM

MATCHES

FAN COUNT: 300M and counting...



For more fun, click and join the IPL Family :



FOLLOW #IPL:



Facebook,  
Instagram,  
Twitter Links

On the click of each button,  
the link of IPL in respective  
Social Media Platform  
will be executed  
in the Web Browser

Database Homepage

This Button is used  
to back to the navigation page






By clicking the Facebook button, the Facebook page of IPL is opened in a browser



Name of the Coach      Team which they are coaching      Age of the coach      The year they joined the current team      Years of Coaching Experience

COACH	TEAMS	HOME	PLAYER STATS		STADIUM	MATCHES
Name	Team Name	Age	Year of Joining	Experience		
Andrew McDonald	Rajasthan Royals	38	2020	4		
Anil Kumble	Kings XI Punjab	49	2019	4		
Brendon McCullum	Kolkata Knight Riders	38	2019	1		
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Stephen Fleming	Chennai Super Kings	46	2009	10		
Trevor Bayliss	Sunrisers Hyderabad	57	2020	16		



## Coach Display

By Clicking the Coach Button present on the Navigation bar,  
the user is shown the details of IPL Coaches  
of the current 8 teams

Team Name      Team's Home City      Number of titles won      Year Formed      Net worth      Number of seasons played by each team

COACH	TEAMS	HOME	PLAYER STATS		STADIUM	MATCHES
	Name	City	Titles	Year_Formed	Net_Worth	Seasons_Played
	Chennai Super Kings	Chennai	3	2008	732 million USD	10
	Delhi Capitals	Delhi	0	2008	369 million USD	12
	Kings XI Punjab	Mohali	0	2008	593 million USD	12
	Kolkata Knight Riders	Kolkata	2	2008	738 million USD	12
	Mumbai Indians	Mumbai	4	2008	809 million USD	12
	Rajasthan Royals	Jaipur	1	2008	305 million USD	10
	Royal Challengers Bangalore	Bangalore	0	2008	695 million USD	12
	Sunrisers Hyderabad	Hyderabad	1	2013	497 million USD	7



## Teams Display

By Clicking the Team Button present on the Navigation bar, the user is shown the details of all the current teams in the IPL



COACH	TEAMS	HOME	PLAYER STATS	STADIUM	MATCHES
Name	Team Name	Address	Capacity	Avg_Score	
◦ M. A. Chidambaram Stadium	Chennai Super Kings	Wallajah Road, Chepauk, Chennai, Tamil Nadu	33500	150	
• Arun Jaitley Stadium	Delhi Capitals	Bahadur Shah Zafar Marg, Delhi	41820	155	
• PCA Stadium, Mohali	Kings XI Punjab	I.S. Bindra Stadium, Sector 63, Sahibzada Ajit Singh Nagar	26000	180	
• Eden Gardens	Kolkata Knight Riders	B.B.D. Bagh, Kolkata, West Bengal 700021	68000	185	
• Wankhede Stadium	Mumbai Indians	Vinoo Mankad Rd, Churchgate, Mumbai, Maharashtra 400020	33108	190	
• Sawai Mansingh Stadium	Rajasthan Royals	Jaipur Nagar Nigam, Lalkothi, Jaipur, Rajasthan 302005	30000	165	
• M. Chinnaswamy Stadium	Royal Challengers Bangalore	Cubbon Rd, Shivaji Nagar, Bengaluru, Karnataka 560001	40000	190	
• Rajiv Gandhi Intl Stadium	Sunrisers Hyderabad	Uppal, Hyderabad, Telangana 500039	55000	175	



Nicknamed the Chepauk, it was established in 1916. It is the second oldest cricket stadium in the country after Eden Gardens in Kolkata.

Stadium Image

## Stadium Display

By Clicking the Stadium Button present on the Navigation bar, the user is shown the details of every stadium used by teams in the IPL

General Stadium Trivia

# Statistics Homepage



The Orange Colour represents the Orange cap winner awarded to the player with most runs

The Purple Colour represents the Purple Cap Winner awarded to the player with most wickets

Every Statistics has a base requirement, described in the hover box while selecting a statistics i.e. Best Strike Rate in this case



Every Stats has multiple player records,  
which can be browsed through using  
Next and Back buttons

COACH	TEAMS	HOME	PLAYER STATS	STADIUM	MATCHES
BACK	MATCHES	NAME	RUNS	AVERAGE	S.R
	177	Virat Kohli	5412	37.84	131.61
	193	Suresh Raina	5368	33.34	137.14
	188	Rohit Sharma	4898	31.6	130.82
	126	David Warner	4706	43.17	142.39
	159	Shikhar Dhawan	4579	33.42	124.80
	125	Chris Gayle	4484	41.13	151.02
	190	MS Dhoni	4432	42.2	137.85
	177	Robin Uthappa	4411	28.83	130.50
	154	AB de Villiers	4395	39.95	151.23
	140	Ajinkya Rahane	3820	32.93	121.92
	182	Dinesh Karthik	3654	27.06	129.80
	134	Shane Watson	3575	31.08	139.53
	147	Ambati Rayudu	3300	28.69	125.95
	139	Parthiv Patel	2848	22.6	120.78

Implementation of Stats button to get most runs

Every Stats of the button pressed is shown in the first row

COACH	TEAMS	HOME	PLAYER STATS	STADIUM	MATCHES	
BACK	MATCHES	NAME	S.R.	AVERAGE	RUNS	NEXT
	64	Andre Russell	186.41	33.33	1400	
	110	Sunil Narine	168.34	17.52	771	
	54	Rishabh Pant	162.69	36.16	1736	
	69	Glenn Maxwell	161.13	22.9	1397	
	61	Chris Morris	157.62	27.21	517	
	10	Jonny Bairstow	157.24	55.62	445	
	66	Hardik Pandya	154.78	28.86	1068	
	154	AB de Villiers	151.23	39.95	4395	
	125	Chris Gayle	151.02	41.13	4484	
	45	Jos Buttler	150.81	35.53	1386	
	148	Kieron Pollard	146.77	28.69	2755	
	55	Krunal Pandya	146.06	26.2	891	
	33	Sarfaraz Khan	142.65	27.2	408	
	126	David Warner	142.39	43.17	4706	

Implementation of Stats button to get highest Strike Rate

COACH	TEAMS	HOME	PLAYER STATS	STADIUM	MATCHES
BACK	MATCHES	NAME	WICKETS	AVERAGE	S.R
	122	Lasith Malinga	170	19.8	16.62
	147	Amit Mishra	157	24.19	19.75
	160	Harbhajan Singh	150	26.44	22.49
	157	Piyush Chawla	150	27.14	20.82
	134	Dwayne Bravo	147	24.6	17.59
	117	Bhuvneshwar Kumar	133	23.71	19.63
	139	Ravichandran Ashwin	125	26.48	23.39
	110	Sunil Narine	122	23.31	20.96
	119	Umesh Yadav	119	29.37	20.84
	170	Ravindra Jadeja	108	29.18	23.1
	84	Yuzvendra Chahal	100	23.18	17.87
	92	Dale Steyn	96	24.73	21.93
	79	Sandeep Sharma	95	23.91	18.36
	134	Shane Watson	92	29.15	22.05
					NEXT

Implementation of Stats button to get most wickets

COACH	TEAMS	HOME	PLAYER STATS	STADIUM	MATCHES
<b>BACK</b>	<b>MATCHES</b>	<b>NAME</b>	<b>ECONOMY</b>	<b>WICKETS</b>	<b>NEXT</b>
	7	Lungi Ngidi	6.0	11	
	46	Rashid Khan	6.55	55	
	110	Sunil Narine	6.67	122	
	92	Dale Steyn	6.76	96	
	139	Ravichandran Ashwin	6.79	125	
	16	Moeen Ali	6.96	9	
	160	Harbhajan Singh	7.05	150	
	122	Lasith Malinga	7.14	170	
	55	Krunal Pandya	7.16	40	
	117	Bhuvneshwar Kumar	7.24	133	
	147	Amit Mishra	7.35	157	
	193	Suresh Raina	7.38	25	
	82	Axar Patel	7.45	71	
	64	Shabaz Nadeem	7.48	42	

Implementation of Stats button to get best Economy



All the matches are divided according to the couple weeks in which they are played, each button in this page, when clicked will show the 14 matches played in the respective weeks.



Playoff Button consists of matches played between the top 4 teams qualified to decide the winner of IPL

Matches Display



COACH

TEAMS

HOME

PLAYER STATS

STADIUM

MATCHES

BACK

NO.	WINNER	LOSER	RESULT	VENUE
37	Mumbai Indians	Chennai Super Kings	Mumbai Indians won by 6 wickets	M. A. Chidambaram Stadium
38	Delhi Capitals	Sunrisers Hyderabad	Delhi Capitals won by 2 wickets	ACA-VDCA Cricket Stadium
39	Chennai Super Kings	Delhi Capitals	Chennai Super Kings won by 6 wickets	ACA-VDCA Cricket Stadium
40	Mumbai Indians	Chennai Super Kings	Mumbai Indians won by 1 run	Rajiv Gandhi International Cricket Stadium



#OneFamily

#Believe

CHAMPIONS

Playoff Button Display

Week 5 & 6 Display

COACH

TEAMS

HOME

PLAYER STATS

STADIUM

MATCHES

BACK

NO.	WINNER	LOSER	RESULT	VENUE
29	Chennai Super Kings	Kolkata Knight Riders	Chennai Super Kings won by 5 wickets	Eden Gardens
30	Delhi Capitals	Sunrisers Hyderabad	Delhi Capitals won by 39 runs	Rajiv Gandhi International Cricket Stadium
31	Mumbai Indians	Royal Challengers Bangalore	Mumbai Indians won by 5 wickets	Wankhede Stadium
32	Kings XI Punjab	Rajasthan Royals	Kings XI Punjab won by 12 runs	PCA Stadium, Mohali
33	Sunrisers Hyderabad	Chennai Super Kings	Sunrisers Hyderabad won by 6 wickets	Rajiv Gandhi International Cricket Stadium
34	Mumbai Indians	Delhi Capitals	Mumbai Indians won by 40 runs	Aruna Jaitley Stadium
35	Royal Challengers Bangalore	Kolkata Knight Riders	Royal Challengers Bangalore won by 10 runs	Eden Gardens
36	Rajasthan Royals	Mumbai Indians	Rajasthan Royals won by 5 wickets	Sawai Mansingh Stadium
37	Delhi Capitals	Kings XI Punjab	Delhi Capitals won by 5 wickets	Aruna Jaitley Stadium
38	Sunrisers Hyderabad	Kolkata Knight Riders	Sunrisers Hyderabad won by 9 wickets	Rajiv Gandhi International Cricket Stadium
39	Royal Challengers Bangalore	Chennai Super Kings	Royal Challengers Bangalore won by 1 run	M. Chinnaswamy Stadium
40	Delhi Capitals	Rajasthan Royals	Delhi Capitals won by 6 wickets	Sawai Mansingh Stadium
41	Chennai Super Kings	Sunrisers Hyderabad	Chennai Super Kings won by 6 wickets	M. A. Chidambaram Stadium
42	Royal Challengers Bangalore	Kings XI Punjab	Royal Challengers Bangalore won by 17 runs	M. Chinnaswamy Stadium



The user is given an option to select their team to play with.  
The user also gets the option of picking up an opponent team →  
to play the game.

However, the user cannot pick the same team twice  
i.e. as their own team and rival team



A New window “Toss” is created for the user to choose between batting or bowling first



Bowling Icon

Batting Icon



## Player Selection Function

### Players Drop Down Menu:

The user gets to pick the players with which they want to play from the drop down menu

The User must proceed once the players have been selected



Rules of the Game are placed in a hover box


Batting & Bowling Icons

Selected Players

**RULES**

**PITCH REPORT**

**WEATHER INFO**

 **D.Y. PATIL STADIUM**

The Computer generates a random outcome  
-If Predicted Outcome = Generated Outcome,  
    > Player Out  
-If Predicted Outcome ≠ Generated Outcome,  
    > Predicted Runs awarded  
Each team has only 2 Wickets

**Ambati Rayudu**

**Jofra Archer**

**CHENNAI SUPER KINGS**

**RAJASTHAN ROYALS**


1

2

3

4

6



**IPL SUPER-6 FACE-OFF**

Super Over Game  
Function



**RULES**

**PITCH REPORT**

**WEATHER INFO**



**D.Y. PATIL STADIUM**

**Ambati Rayudu**



**CHENNAI SUPER KINGS**

**Jofra Archer**



**RAJASTHAN ROYALS**

**1**

**2**

**3**

**4**

**6**

1 Runs

1 Runs

6 Runs

4 Runs

6 Runs

2 Runs

Total 1 runs scored.

Total 2 runs scored.

Total 8 runs scored.

Total 12 runs scored.

Total 18 runs scored.

Total 20 runs scored.

**IPL SUPER 6 FACE-OFF**

Runs scored on  
each ball

Total runs scored after  
each ball

Innings Break Window is generated for the user to switch sides, i.e. Batting in this case



Batting Icon/Bowling Icon  
this icon is the opposite of  
what they chose first

Weather info is placed in a hover box

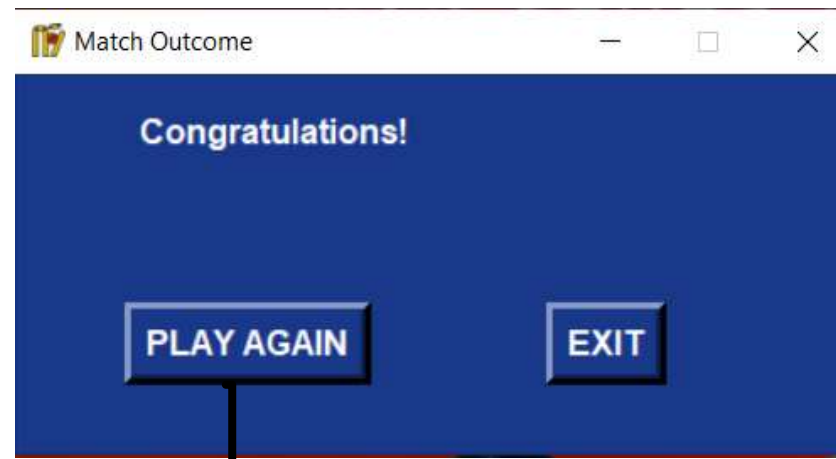


In this case, the Computer generated number matched with the user's predicted number causing a wicket

The Background of the Canvas changes according to user's choice of batting or bowling

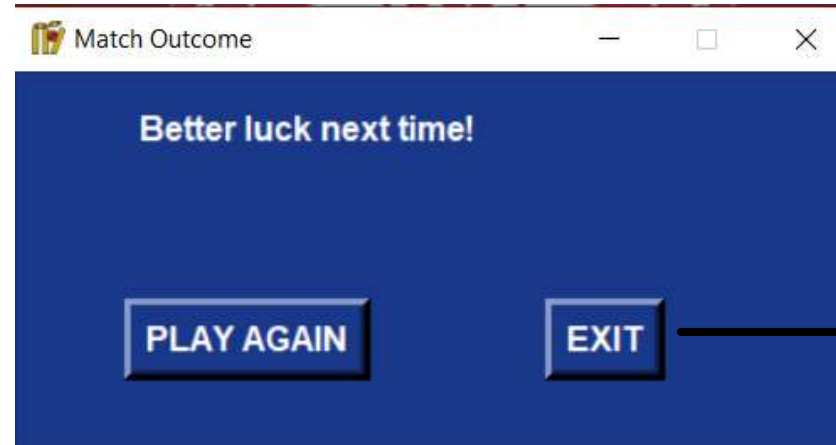
- According to the Scores, the Match outcome is predicted by:

If the User outscores the Computer:



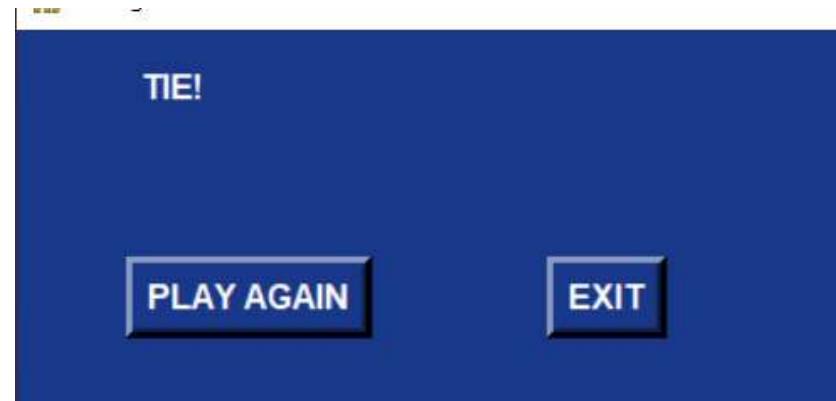
The User is given an option to play again

If the User cannot score more than the Computer:



The User can exit the game using this button

If both User and Computer scores are level:



# CONCLUSION

- ▶ We designed an application for the Indian Premier League with the goal of displaying the statistical data of all the players currently playing for an IPL team and also to display the previous season's match schedule and results.
- ▶ This database should be able to satisfy our user's need of and becomes a benchmark for further improvement/addition.
- ▶ The project has scope of adding various other leagues and in depth statistical parameters