

Data Science

Dashboard using Python

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Batch-3CSE5

Dataset used – FIFA dataset

Documentation

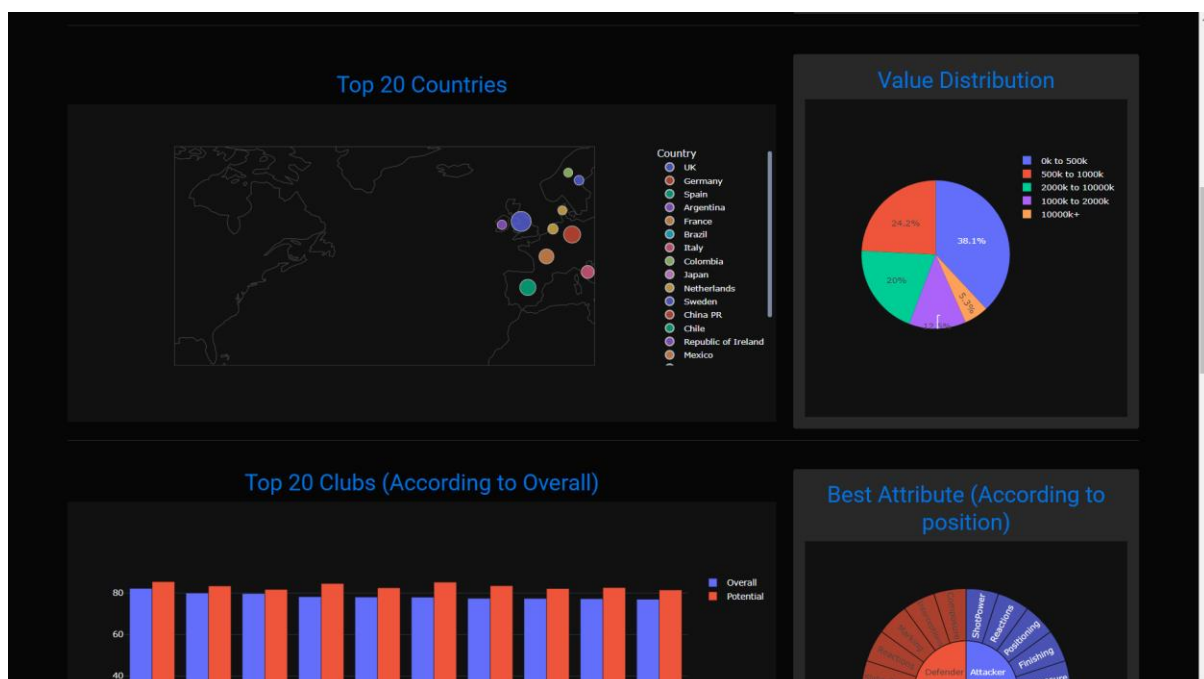
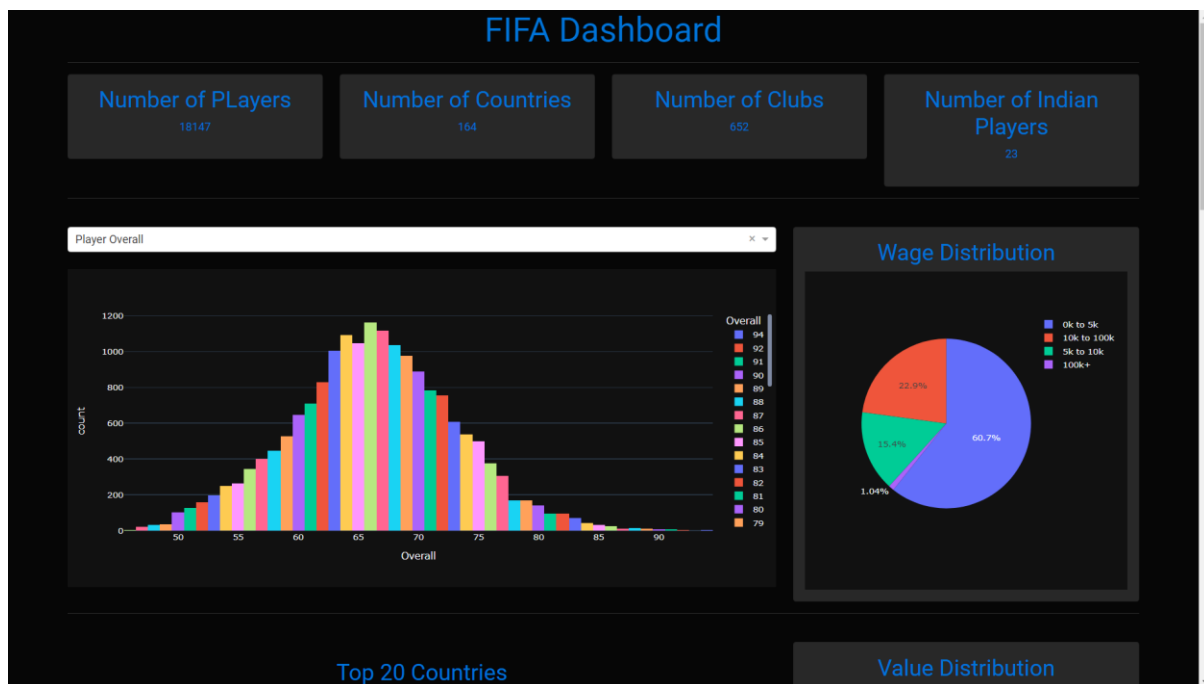
About the dataset

The FIFA dataset contains information about the various players that are present in the video game FIFA 19. The important features present are->

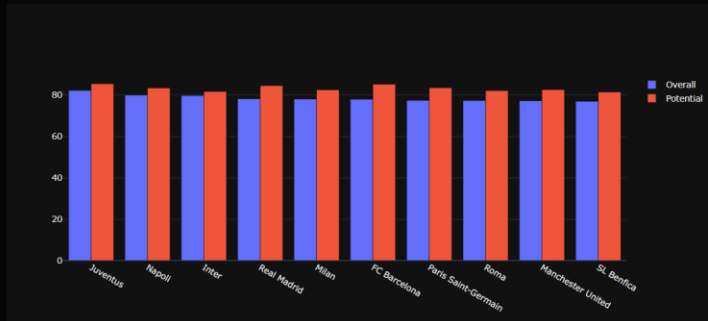
1. Name
2. Age
3. Club of the Player
4. Nationality
5. Wage
6. Value
7. Overall (Rating between 0 and 100 depicted how good a player is)
8. Potential (Rating between 0 and 100 depicted how good a player can be.)

And other various ratings (out of hundred) about the players such as ShotPower, Passing stats, Shooting etc.

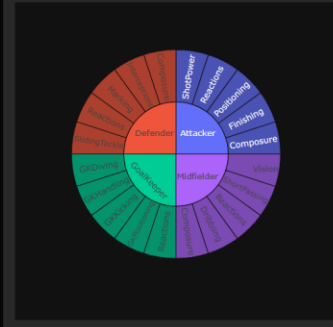
Screenshots of the dashboard



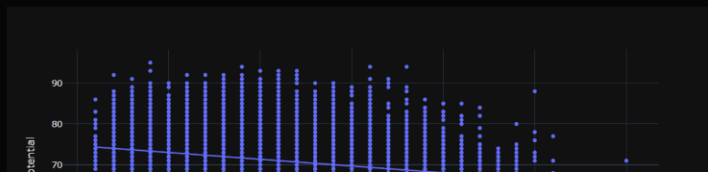
Top 20 Clubs (According to Overall)



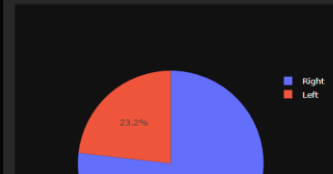
Best Attribute (According to position)



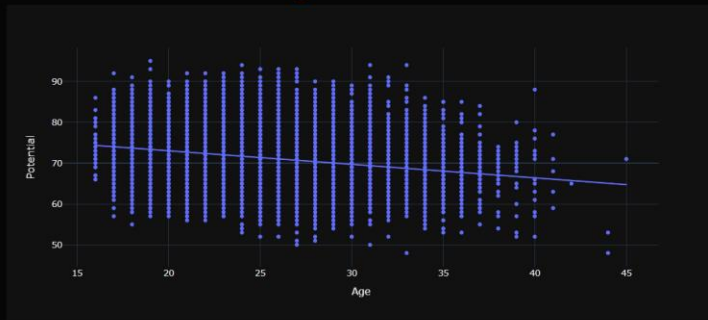
Age vs Potential



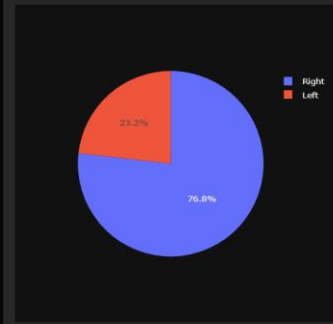
Preferred Foot



Age vs Potential



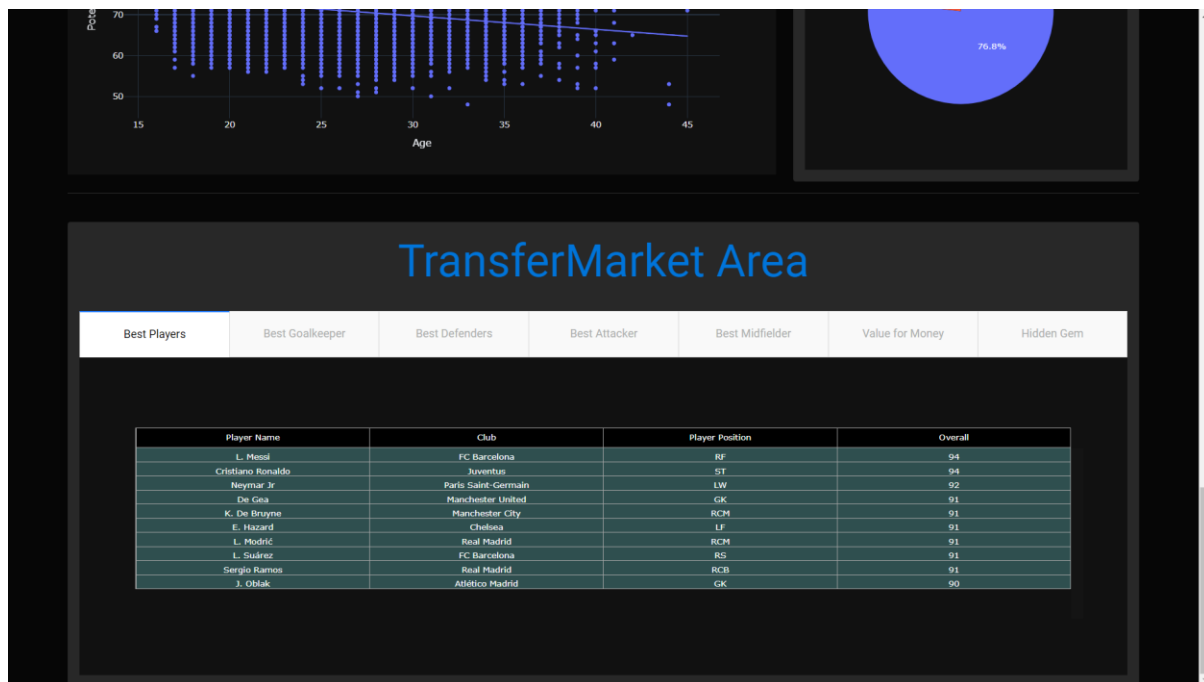
Preferred Foot



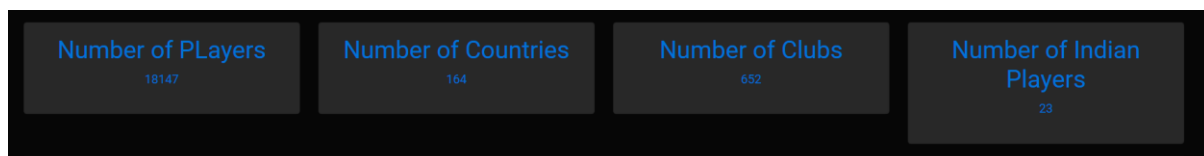
TransferMarket Area

Best Players	Best Goalkeeper	Best Defenders	Best Attacker	Best Midfielder	Value for Money	Hidden Gem
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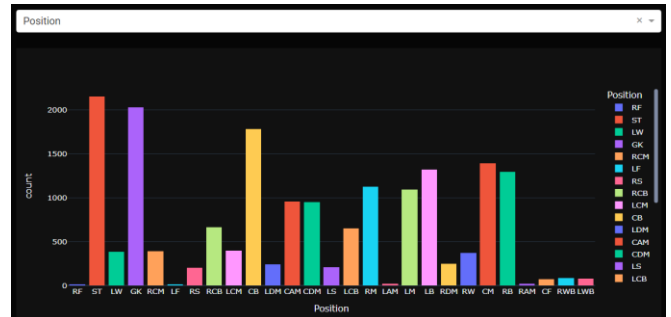
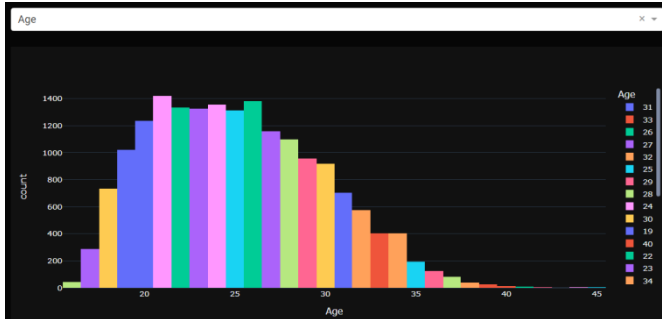
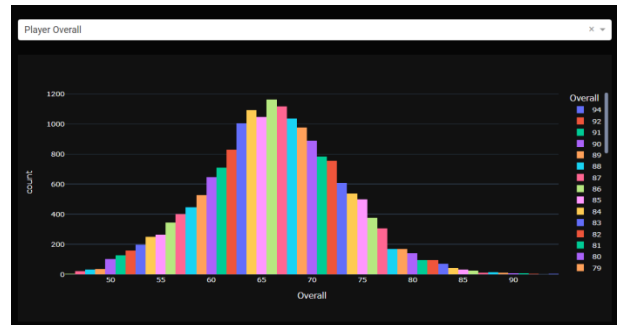
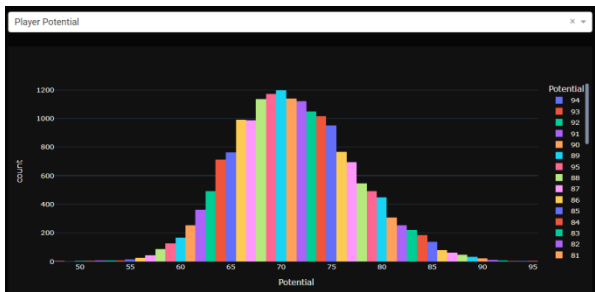
Player Name	Club	Player Position	Overall
L. Messi	FC Barcelona	BF	94



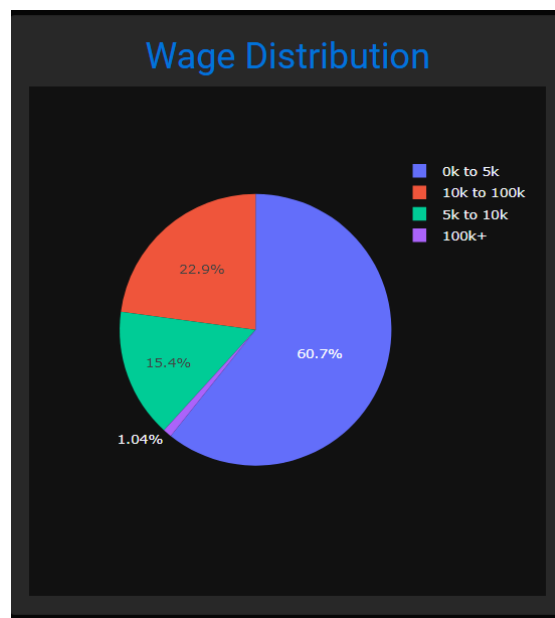
Explaining the Dashboard



This is the first row of the dashboard and is just the basic information of the data like the number of player, clubs, countries present in the data.



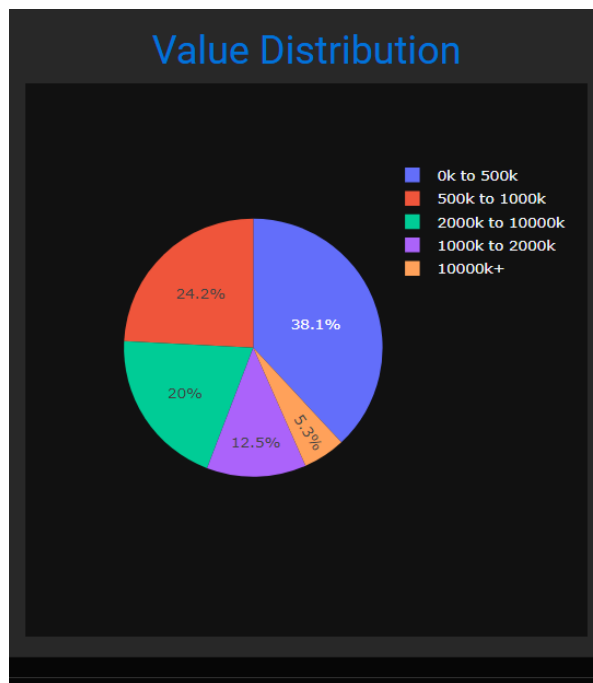
This is the part of the dashboard which represents the distribution of data in 4 different columns – Player Potential, Player Overall, Age, and Player Position respectively. It can be seen that Overall and Age is a normally distributed as most players are usually average and there are only a few professional players that are very bad or very good. But if we see the age histogram, we see that is positively skewed as when players tend to get older they and are unable to play they retire.



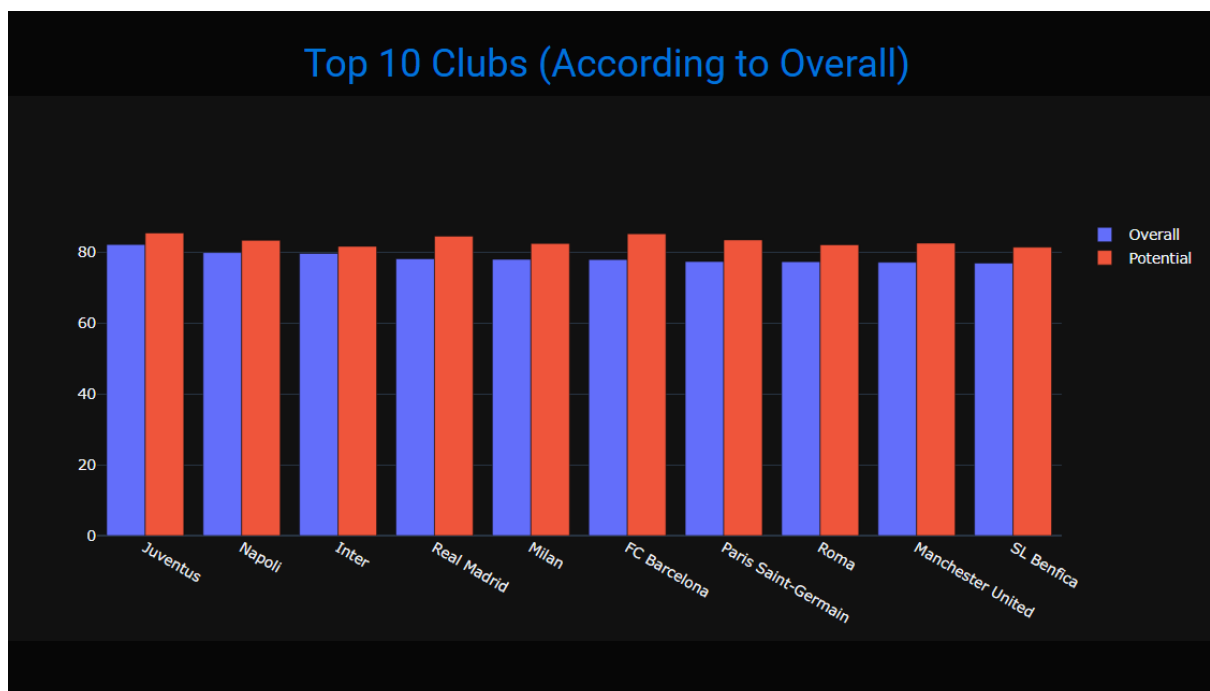
The above is a Pie chart representing the player wage distribution. We can see that most of the players don't receive that high a wage that we think football players receive. Only 1% of the players receive wages that exceed 100 thousand. Most receive wages between 1 and 10 thousand.



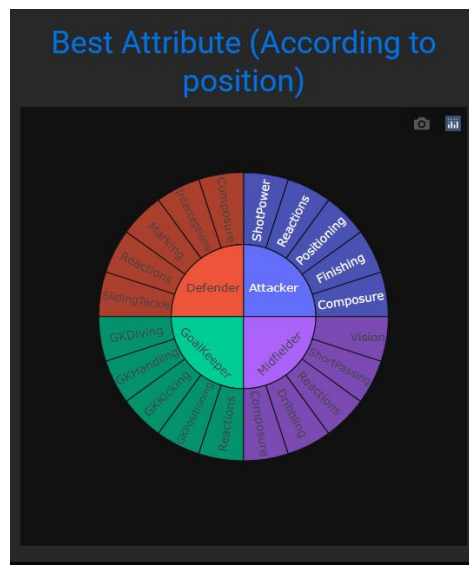
This is a geographic scatter plot representing the countries with the most FIFA players and their count. It can be seen that football is mostly popular in the continent of Europe where 11 of the 20 countries displayed lie.



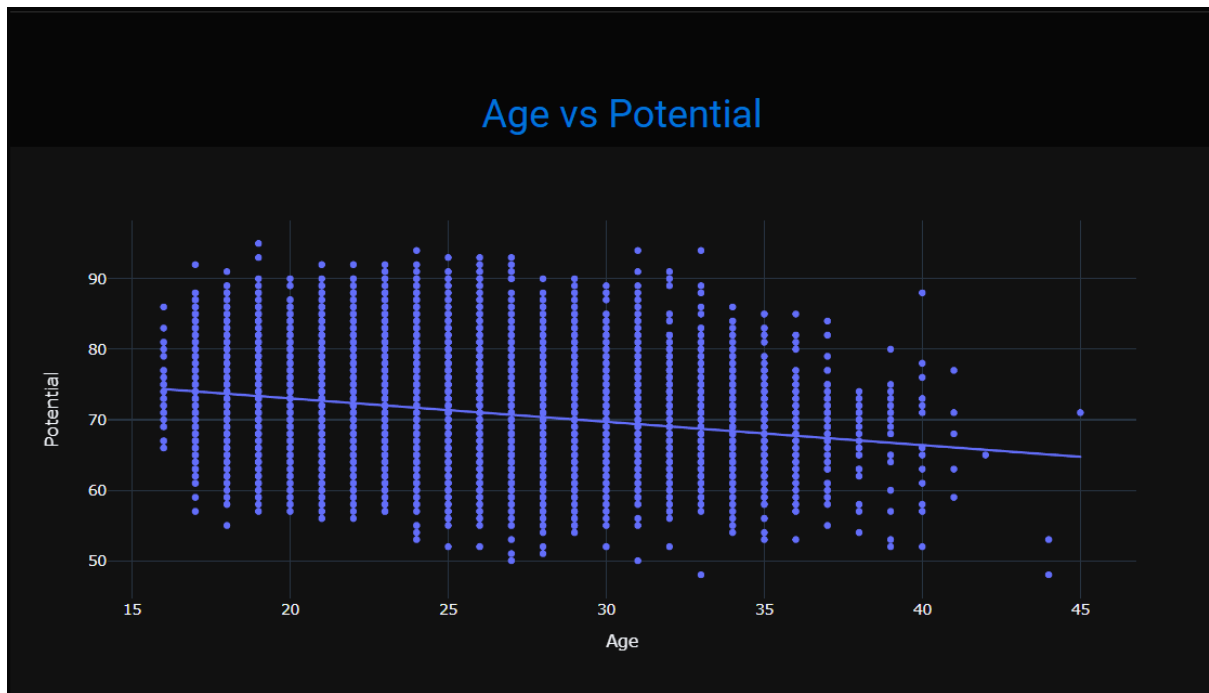
The above is a Pie chart representing the player Value distribution. We can see that only 5.3% of the players have a value within a million euros that, but only about 1% of the 5.3% of players are recognized by many.



This is a bar chart of the top 10 teams according to the average overall of the players. The overall is plotted with the Potential which is the value of what the overall can be in the future. We can see that even though Barcelona have a lesser overall compared to Milan, Napoli, Inter and Real Madrid, their potential is greater than all of them.



The above is a sunburst Chart of the representing what all attributes are the most important for each position. It was found by finding the highest correlation values with overall for each respective position.



This is a pie chart representing the right footed and the left footed players in FIFA game. It can be seen that almost 77% of players in FIFA are right footed and left footed players are scarce. This is the reason why left footed players are actually payed more than the right footed players.

TransferMarket Area			
Best Players	Best Goalkeeper	Best Defenders	Best Attacker
Best Midfielder	Value for Money	Hidden Gem	
Player Name	Club	Player Position	Overall
L. Messi	FC Barcelona	RF	94
Cristiano Ronaldo	Juventus	ST	94
Neymar Jr	Paris Saint-Germain	LW	92
De Gea	Manchester United	GK	91
K. De Bruyne	Manchester City	RCM	91
E. Hazard	Chelsea	LF	91
L. Modrić	Real Madrid	RCM	91
L. Suárez	FC Barcelona	RS	91
Sergio Ramos	Real Madrid	RCB	91
J. Oblak	Atlético Madrid	GK	90

TransferMarket Area			
Best Players	Best Goalkeeper	Best Defenders	Best Attacker
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Player Name	Club	Player Position	Overall
De Gea	Manchester United	GK	91
J. Oblak	Atlético Madrid	GK	90
M. ter Stegen	FC Barcelona	GK	89
T. Courtois	Real Madrid	GK	89
M. Neuer	FC Bayern München	GK	89
H. Lloris	Tottenham Hotspur	GK	88
S. Handanović	Inter	GK	88
G. Buffon	Paris Saint-Germain	GK	88
K. Navas	Real Madrid	GK	87
Ederson	Manchester City	GK	86

TransferMarket Area			
Best Players	Best Goalkeeper	Best Defenders	Best Attacker
Best Midfielder	Value for Money	Hidden Gem	
Player Name	Club	Player Position	Overall
Sergio Ramos	Real Madrid	RCB	91
D. Godin	Atlético Madrid	CB	90
G. Chiellini	Juventus	LCB	89
M. Hummels	FC Bayern München	LCB	88
Marcelo	Real Madrid	LB	88
Thiago Silva	Paris Saint-Germain	RCB	88
S. Umтитi	FC Barcelona	CB	87
K. Koulibaly	Napoli	LCB	87
Jordi Alba	FC Barcelona	LB	87
J. Vertonghen	Tottenham Hotspur	LCB	87

TransferMarket Area

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Neymar Jr	Paris Saint-Germain	LW	92
E. Hazard	Chelsea	LF	91
L. Suárez	FC Barcelona	RS	91
R. Lewandowski	FC Bayern München	ST	90
P. Dybala	Juventus	LF	89
H. Kane	Tottenham Hotspur	ST	89
E. Cavani	Paris Saint-Germain	LS	89
S. Agüero	Manchester City	ST	89

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TransferMarket Area

Best Players	Best Goalkeeper	Best Defenders	Best Attacker	Best Midfielder	Value for Money	Hidden Gem
K. De Bruyne	L. Modrić	T. Kroos	David Silva	N. Kanté	A. Griezmann	Sergio Busquets
K. Mbappé	M. Salah	Casemiro				

Player Name	Club	Player Position	Overall
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L. Modrić	Real Madrid	RCM	91
T. Kroos	Real Madrid	LCM	90
David Silva	Manchester City	LCM	90
N. Kanté	Chelsea	LDL	89
A. Griezmann	Atlético Madrid	CAM	89
Sergio Busquets	FC Barcelona	CDM	89
K. Mbappé	Paris Saint-Germain	RM	88
M. Salah	Liverpool	RM	88
Casemiro	Real Madrid	CDM	88

TransferMarket Area

Best Players	Best Goalkeeper	Best Defenders	Best Attacker	Best Midfielder	Value for Money	Hidden Gem			
D. Sma	A. Barzaqli	Dani Alves	P. Jaqielka	J. Pinola	Pepe	Naldo	J. Holebas	Maike! Catarino	S. Lichtsteiner
Cagliari	Juventus	Paris Saint-Germain	Everton	River Plate	Begiktag JK	FC Schalke 04	Watford	Atlético Mineiro	Arsenal
RB	CB	RB	CB	LCB	RCB	CB	LB	RB	RB
80	84	82	77	77	85	85	78	79	79

Player Name	Club	Player Position	Overall
D. Srna	Cagliari	RB	80
A. Barzagli	Juventus	CB	84
Dani Alves	Paris Saint-Germain	RB	82
P. Jagielka	Everton	CB	77
J. Pinola	River Plate	LCB	77
Pepe	Besiktas JK	RCB	85
Naldo	FC Schalke 04	CB	85
J. Holebas	Watford	LB	78
Maikel Catarino	Atlético Mineiro	RB	79
S. Lichtsteiner	Arsenal	RB	79

TransferMarket Area

Best Players	Best Goalkeeper	Best Defenders	Best Attacker	Best Midfielder	Value for Money	Hidden Gem
Player Name	Club	Player Position	Overall	Potential		
A. Dabo	FC Nantes	LM	62	86		
W. Geubbels	AS Monaco	ST	64	86		
P. Pellegrini	AS Monaco	ST	67	88		
E. Ampadu	Chelsea	LDM	65	86		
C. Fruchtl	FC Bayern München	GK	65	86		
S. Diop	AS Monaco	CAM	66	87		
S. Tonali	Brescia	CDM	68	89		
Riqui Puig	FC Barcelona	CM	69	89		
A. Bastoni	Parma	CB	67	87		
A. Gomes	Manchester United	CAM	67	87		

This is the Transfer market Area. Here we can see the best overall players or the best players for a particular position or the best value for money players or even the hidden gems who are players which are not so good at the moment but might become great in the future. The value for money tab gives us players which are available for a price lesser than they should be. We can see that most of these players are defenders which show that in these days defenders are usually not given the importance they deserve as most teams now are very attack minded.