Cricket Yug: Predict Cricket Matches

Objective:

To enable users to predict individual player performance, team performance and match results

User Journey:

1. The user selects an upcoming match
2. Then the user selects the Playing IX of both the teams - this can be pre-fixed as well
3. The user clicks on the *"Predict Performance"* tab
4. The user gets to see the Match Result Prediction along with Team Predicted Score. Scrolling Down – the user can see individual performance of the players as well

UI / UX Design:

https://www.figma.com/proto/dAgp2cW247726iwbcAl6xY/Cricket-Yug?type=design&node-id=241-17311&t=9sXK739UpcTmFjL5-1&scaling=min-zoom&page-id=241%3A10908&starting-point-node-id=241%3A16036&show-proto-sidebar=1

Statistical Model:

Team 1: Batting Prediction Model

- Descriptive Statistics of the Team

Name	Total Runs Scored	Ball Faced	Total Outs	Matches Played
Rohit Sharma	2864	2062	88	111
KL Rahul	1557	1095	39	49
Virat Kohli	3159	2272	60	90
Suryakumar Yadav	139	82	3	4
Rishabh Pant (wk)	512	416	24	33
Hardik Pandya	484	333	25	49
Ravindra Jadeja	217	193	14	50
Shardul Thakur	69	35	2	22
Bhuvneshwar Kumar	52	72	5	51
Jasprit Bumrah	8	13	2	50
Varun Chakravarthy	0	2	1	3
Mohammad Shami	0	0	0	12
Ishan Kishan	80	55	2	3
Ravichandran Ashwin	123	115	4	46
Rahul Chahar	5	5	1	5

- Batting Model Prediction (Step 1)

Name	Total Ball Faced	Average Balls Faced (Total Balls / Total Outs)	% share of the balls played w.r.t the complete team	Balls Faced - Prediction (# of balls they shall play)
Rohit Sharma	2062	23.4	12%	14
KL Rahul	1095	28.1	14%	17
Virat Kohli	2272	37.9	19%	23
Suryakumar Yadav	82	27.3	14%	16
Rishabh Pant (wk)	416	17.3	9%	10
Hardik Pandya	333	13.3	7%	8
Ravindra Jadeja	193	13.8	7%	8
Shardul Thakur	35	17.5	9%	10
Bhuvneshwar Kumar	72	14.4	7%	9
Jasprit Bumrah	13	6.5	3%	4
Varun Chakravarthy	2	2.0	1%	1

- Batting Model Prediction (Step 2)

Name	Runs / Balls (Runs Multiplier)	Balls Faced - Prediction (# of balls they shall play)	Runs Predicted
Rohit Sharma	1	14	19
KL Rahul	1	17	24
Virat Kohli	1	23	31
Suryakumar Yadav	2	16	28
Rishabh Pant (wk)	1	10	13
Hardik Pandya	1	8	12
Ravindra Jadeja	1	8	9
Shardul Thakur	2	10	21
Bhuvneshwar Kumar	1	9	6
Jasprit Bumrah	1	4	2
Varun Chakravarthy	0	1	0
Total Runs by Team	165		

Team 1: Bowling Prediction Model

- Descriptive Statistics

Name	Total Wickets	Total Overs	Total Runs Conceded
Haris Rauf	28	78	702
Hasan Ali	52	135	1130
Imad Wasim	51	184	1178
Mohammad Hafeez	60	201	1313
Shadab Khan	58	180	1336
Shaheen Afridi	32	107	877
Shoaib Malik	28	93	659

- Bowling Model Prediction (Step 2)

Name	Wickets/4 Overs (Total Wickets / Total Overs) * 4 overs	Economy (Total Runs conceded / Total overs)
Haris Rauf	1	8.97
Hasan Ali	2	8.35
Imad Wasim	1	6.40
Mohammad Hafeez	1	6.54
Shadab Khan	1	7.44
Shaheen Afridi	1	8.21
Shoaib Malik	1	7.12

- Total Runs conceded

Bowler 1 (Economy * 4 overs) + Bowler 2 (Economy * 4 overs) + …… =

Predictions:

- India will score 156 to 165: based Indian batter performance and Pakistani bowlers runs conceded
- Pakistan will score 143 to 154: based on Pakistani batter performance and Indian bowlers runs conceded

Data Required:

- Individual innings data of every player of every team. Total teams 8 x 15 players = 120 total players
- Data Source: https://www.howstat.com/

Example: Rohit Sharma Detailed Innings Data

HOWSTAT Players Series Matches Statistics Milestones Ratings Search Quiz

											Progressive		
Match	Innings	Date	M/Inns	Versus	Ground	How Dismissed	Runs	B/F	S/R		Aggr	Avg	S/R
1		23/06/2007	2nd	Ireland	Civil Service Cricket Club	did not bat	-	-	-		0		-
2	1	26/06/2007	1st	South Africa	Civil Service Cricket Club	b J H Kallis	8	9	88.89		8	8.00	88.89
3	2	05/10/2007	2nd	Australia	Rajiv Gandhi International Stadium	c B Lee b J R Hopes	1	4	25.00		9	4.50	69.23
4	3	18/11/2007	2nd	Pakistan	Sawai Mansingh Stadium	c Yasir Hameed b Shoaib Malik	52	61	85.25		61	20.33	82.43
5	4	03/02/2008	1st	Australia	Brisbane Cricket Ground	c †A C Gilchrist b B Lee	29	43	67.44		90	22.50	76.92
6	5	04/02/2008	1st	Sri Lanka	Brisbane Cricket Ground	c †K C Sangakkara b M Muralitharan	0	2	0.00		90	18.00	75.63
7	6	10/02/2008	2nd	Australia	Melbourne Cricket Ground	not out	39*	61	63.93		129	25.80	71.67
8	7	12/02/2008	1st	Sri Lanka	Manuka Oval	not out	70*	64	109.38		199	39.80	81.56
9	8	17/02/2008	2nd	Australia	Adelaide Oval	c †A C Gilchrist b J R Hopes	1	3	33.33		200	33.33	80.97
10	9	19/02/2008	2nd	Sri Lanka	Adelaide Oval	c L P C Silva b M Muralitharan	24	36	66.67		224	32.00	79.15
11	10	24/02/2008	2nd	Australia	Sydney Cricket Ground	c †A C Gilchrist b N W Bracken	1	3	33.33		225	28.13	78.67
12	11	26/02/2008	2nd	Sri Lanka	Bellerive Oval	not out	3*	7	42.86		228	28.50	77.82
13	12	02/03/2008	2nd	Australia	Sydney Cricket Ground	b J R Hopes	66	87	75.86		294	32.67	77.37
14	13	04/03/2008	1st	Australia	Brisbane Cricket Ground	c A Symonds b M J Clarke	2	5	40.00		296	29.60	76.88
15	14	10/06/2008	1st	Pakistan	Shere Bangla National Stadium	b Shahid Afridi	9	27	33.33		305	27.73	74.03
16	15	12/06/2008	2nd	Bangladesh	Shere Bangla National Stadium	c Mashrafe Mortaza b Abdur Razzak	26	43	60.47		331	27.58	72.75
17	16	14/06/2008	2nd	Pakistan	Shere Bangla National Stadium	c sub b Umar Gul	24	27	88.89		355	27.31	73.65
18	17	25/06/2008	1st	Hong Kong	National Stadium (Karachi)	run out	11	29	37.93		366	26.14	71.62

http://www.howstat.com/cricket/statistics/players/PlayerProgressBat_ODI.asp?PlayerID=3474