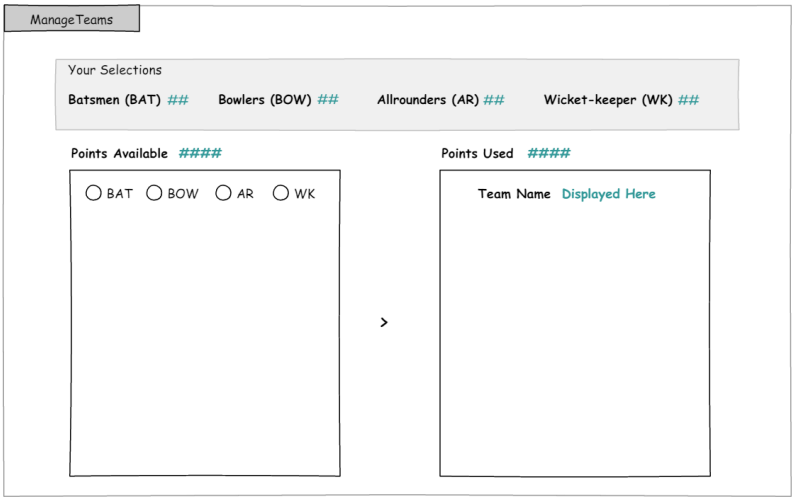
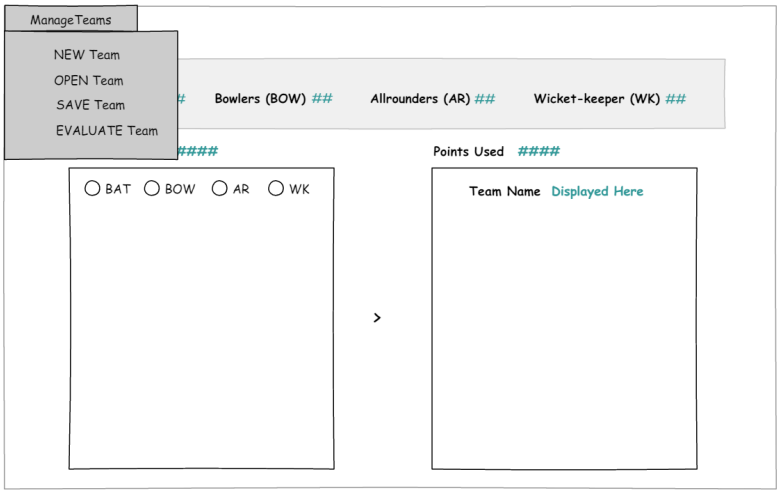
Introduction

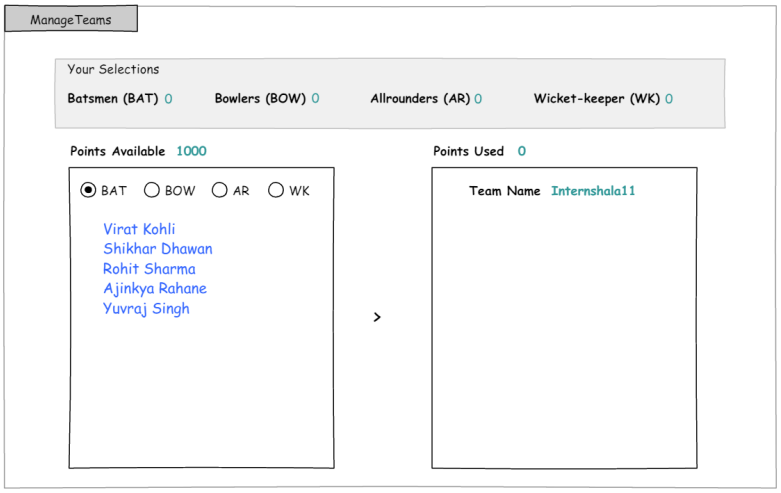
Fantasy Cricket is an online game where you create a virtual team of real cricket players and score points depending on how your chosen players perform in real-life matches. To win a tournament, you must try and get the maximum points and the No. 1 rank amongst other participants. Here's how a Fantasy Cricket game may look like.



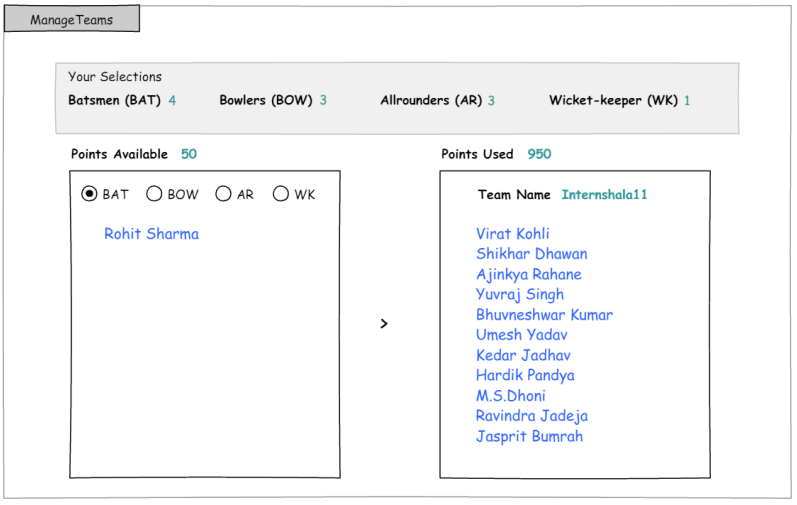
1 - Opening screen of the application. You can see the players of each category by selecting the category. To begin with, the selection is disabled until a new team is created from the Manage Teams menu. A pop up asking the name of the team appears.



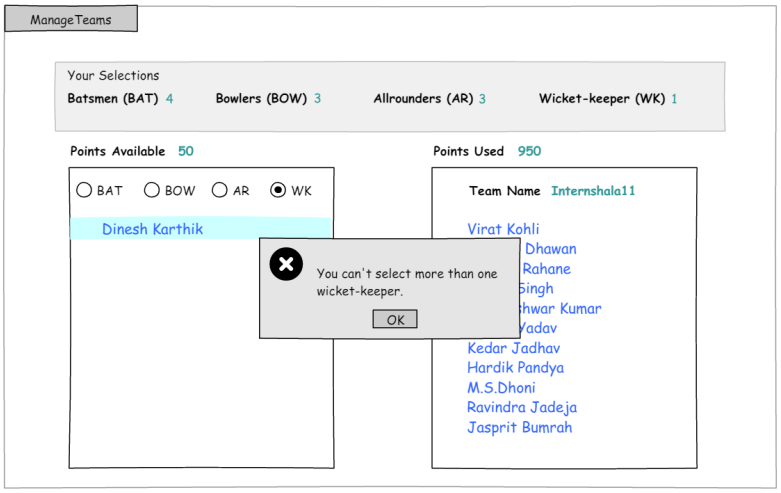
2 - The toolbar menu options which allow you to create a new team, open an existing team, save your team and finally evaluate the score of a saved team.



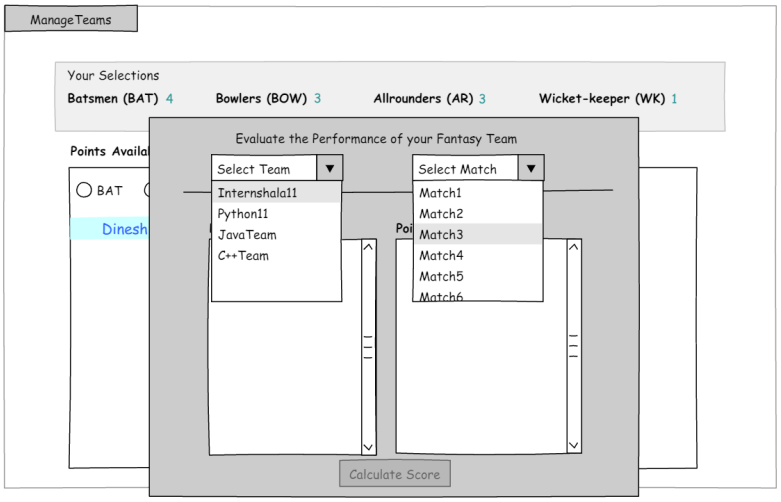
3 - After clicking New Team, the left box is populated with player names. As you select a different category, the corresponding list of players is displayed.



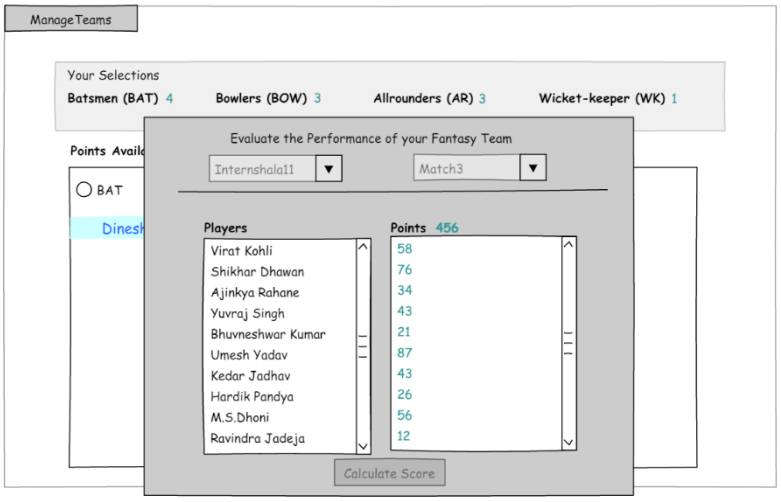
4 - On double-clicking each player name, the right box gets populated. Points available and used are displayed accordingly.



5 - Message if the game logic is not followed



6 - Pop-up on clicking Evaluate Score. You can select your team here and the match for which the players' performance is compared.



7 - The final score for your fantasy team based on the match selected.

Problem Statement

Create a Fantasy Cricket game in Python. The game should have all the features displayed in the mock-up screens in the scenario. To calculate the points for each player, you can use rules similar to the sample rules displayed below.

Sample of Rules

Batting

- 1 point for 2 runs scored
- Additional 5 points for half century
- Additional 10 points for century
- 2 points for strike rate (runs/balls faced) of 80-100
- Additional 4 points for strike rate>100
- 1 point for hitting a boundary (four) and 2 points for over boundary (six)

Bowling

- 10 points for each wicket
- Additional 5 points for three wickets per innings
- Additional 10 points for 5 wickets or more in innings
- 4 points for economy rate (runs given per over) between 3.5 and 4.5
- 7 points for economy rate between 2 and 3.5
- 10 points for economy rate less than 2

Fielding

- 10 points each for catch/stumping/run out

Database Design

For the database, you are required to use three tables – match, stats and teams.

match

Player	Scored	Faced	Fours	Sixes	Bowled	Maiden	Given	Wkts	Catches	Stumping	RO*

*Run Out

teams

name	players	value

stats

player	matches	runs	100s	50s	value	ctg

Note: The teams table will be populated after score calculation. The data to enter in the remaining two tables is given below:

player	scored	faced	fours	sixes	bowled	maiden	given	wkts	catches	stumping	ro	value	matches	runs	100s	50s	ctg
Kohli	102	98	8	2	0	0	0	0	0	0	1	120	189	8257	28	43	BAT
Yuvraj	12	20	1	0	48	0	36	1	0	0	0	100	86	3589	10	21	BAT
Rahane	49	75	3	0	0	0	0	0	1	0	0	100	158	5435	11	31	BAT
Dhawan	32	35	4	0	0	0	0	0	0	0	0	85	25	565	2	1	AR
Dhoni	56	45	3	1	0	0	0	0	3	2	0	75	78	2573	3	19	BAT
Axar	8	4	2	0	48	2	35	1	0	0	0	100	67	208	0	0	BWL
Pandya	42	36	3	3	30	0	25	0	1	0	0	75	70	77	0	0	BWL
Jadeja	18	10	1	1	60	3	50	2	1	0	1	85	16	1	0	0	BWL
Kedar	65	60	7	0	24	0	24	0	0	0	0	90	111	675	0	1	BWL
Ashwin	23	42	3	0	60	2	45	6	0	0	0	100	136	1914	0	10	AR
Umesh	0	0	0	0	54	0	50	4	1	0	0	110	296	9496	10	64	WK
Bumrah	0	0	0	0	60	2	49	1	0	0	0	60	73	1365	0	8	WK
Bhuwaneshwar	15	12	2	0	60	1	46	2	0	0	0	75	17	289	0	2	AR
Rohit	46	65	5	1	0	0	0	0	1	0	0	85	304	8701	14	52	BAT
Kartick	29	42	3	0	0	0	0	0	2	0	1	75	11	111	0	0	AR

Assignment Submission

Your submission should have fully functional code with the required modules, packages and database files. These should be submitted as an archive file. The key elements that should be present in your archive are:

i. The main application code
ii. A Database of cricket players and their relevant stats
iii. The application .ui file

All the Best :)