

Fantasy Cricket

1. Introduction

Fantasy Cricket is a game developed to simplify the task of gaming for users. The game provides an effective team selection. It is an online game where we can create a virtual team of real cricket players. Users can score points depending on the chosen players performance in real-life matches. The participant with the maximum points among all the users wins the tournament. The application can also be used as a selection process for the Data Analyst job. Data Analysts' job is to study the given data and find out some useful insights from it and this game satisfies all the requirements.

This project is user-friendly and requires minimum human intervention. Individuals just have to click on the required players to create their teams. The teams created by the users are stored and the users can evaluate his/her team's performance in matches.

2. Problem

Young people are now days mostly busy with the games that don't lead to the development of analytical skills. Children below the age of 10 can't play games because of their difficulty level.

3. About the Project

Fantasy Cricket is a game that can be played by young people. Individuals can create their own team and evaluate their teams' performance on the basis of real-life matches. Users can modify their teams by changing players and calculating their performances. The team with the most points wins the game. Children can play this game and develop their analytical skills. It reduces eye strain.

4. Uses:

- The game can be used for developing the analytical skills of the children.
- It can be used as a selection process for the job of Data Analyst. Data Analysts' job is mostly concerned with finding some useful insights from the given data. An individual can be given 3 chances and can be asked to create the best team from the given players. He needs to use his data analysis skills for the creation of the best team.
- It helps people in understanding basic cricket rules.
- It helps in making users more computer-friendly by teaching them the method of using the hardware and software.

5. Advantages:

- Simple and user-friendly interface.
- Requires least human intervention.
- Helps in learning cricket concepts.
- Ease in creating our teams and evaluating players' performance.
- Reduces tedious work in thinking and is convenient for users.
- Provides quick access and is easily accessible.
- Free of Cost
- Sometimes can be used without an internet connection.
- Saves Time

6. Disadvantages:

Sometimes data needs to be added into the database for the real-life matches which can be used for evaluating the performance of the teams.

7. Applications:

- It can be used by young children.
- It can be used by people who want to improve their data analysis skills.
- It can be used for recruiting Data Analysts' by the Companies.

PROJECT DETAILS

Project Name: **Fantasy Cricket**

Project File Name: **Fantasy_Cricket.py**

Database Name: **fantasy.db**

Qt Designer File Name: **Fantasy_Cricket.ui**

Supporting Project File Name: evaluation.py

Supporting Qt Designer File Name: evaluation.ui

Components of the Project:

- **New Team:** Users need to create their team and select the players from the given list as per their choice.
- **Open Team:** Users can open an existing team. They can view the details of an existing team or change/modify the players in their team.
- **Save Team:** Users can save their team with the players into the database for future reference. The saving feature can be used in the future for modification. The saved players can be evaluated on their performance in the matches.
- **Evaluate Team:** Users can evaluate their team's performance in the matches. They can select the team and the match number and the team's performance can be calculated in the given match.

Software Requirements:

- Windows 7/8/8.1/10
- Python 3.6 or above

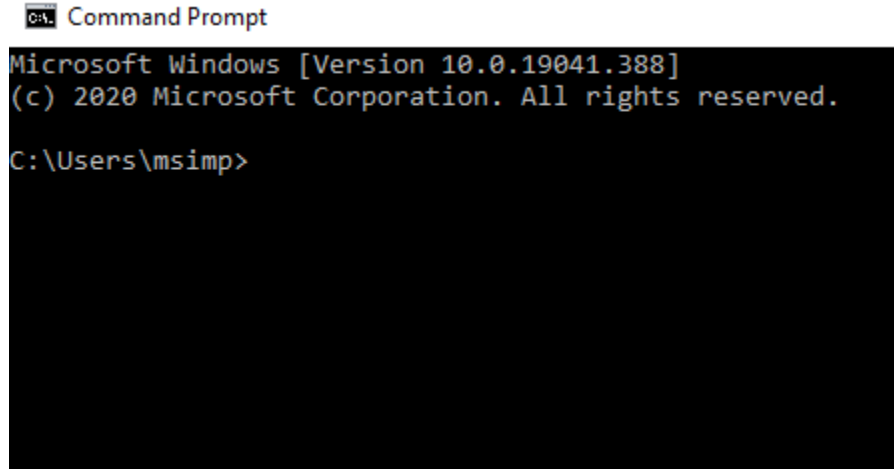
Basic Hardware Components:

- Processor – Intel Atom® processor or above
- Hard Disk – 100 MB of free space
- RAM – 1GB RAM or more

Note: You need to have python installed in your workstation for playing the game.

Steps for running the game:

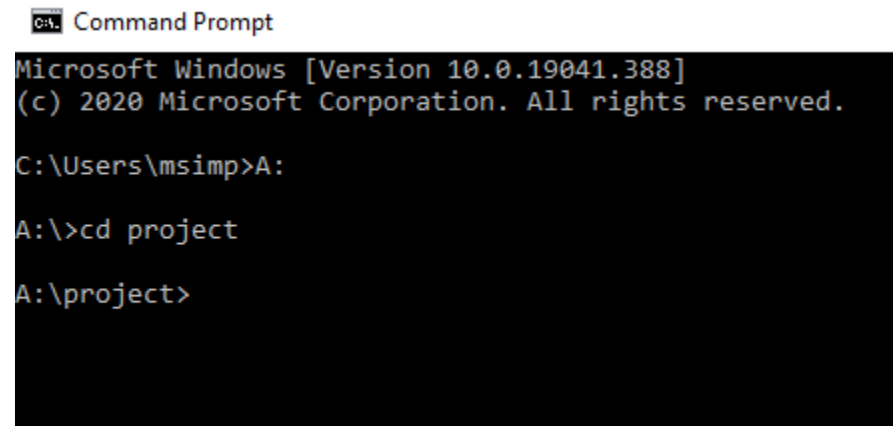
1. Unzip the project file.
2. Open the command prompt.



```
Command Prompt
Microsoft Windows [Version 10.0.19041.388]
(c) 2020 Microsoft Corporation. All rights reserved.

C:\Users\msimp>
```

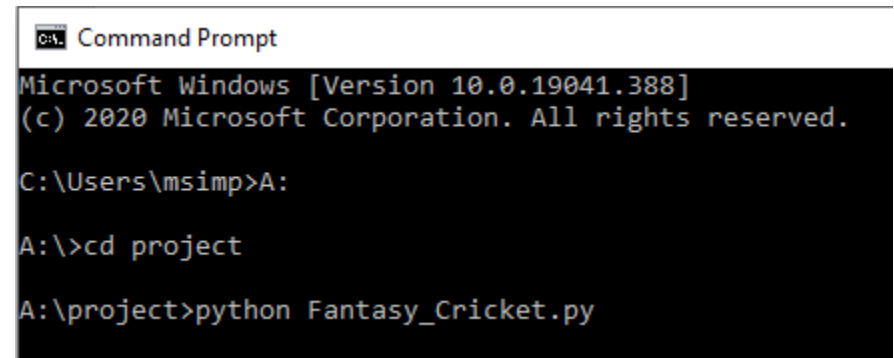
3. Navigate to the project file location in the command prompt. E.g. the location of the project file is: A:\project.



```
Command Prompt
Microsoft Windows [Version 10.0.19041.388]
(c) 2020 Microsoft Corporation. All rights reserved.

C:\Users\msimp>A:
A:\>cd project
A:\project>
```

4. Use the given command to run the game. It will start the game and you can start playing.



```
Command Prompt
Microsoft Windows [Version 10.0.19041.388]
(c) 2020 Microsoft Corporation. All rights reserved.

C:\Users\msimp>A:
A:\>cd project
A:\project>python Fantasy_Cricket.py
```

Rules for the game:

1. Batting

- a) 1 point for 2 runs scored.
- b) Additional 5 points for a half-century.
- c) Additional 10 points for a century.
- d) 2 points for the strike rate of 80-100.
- e) 4 points for strike rate more than 100.
- f) 1 point for hitting a boundary(four) and 2 points for an over boundary(six).

2. Bowling

- a) 10 points for each wicket.
- b) Additional 5 points for three wickets per innings
- c) Additional 10 points for five wickets or more in innings
- d) 4 points for an economy rate between 3.5 and 4.5
- e) 7 points for an economy rate between 2 and 3.5
- f) 10 points for an economy rate less than 2

3. Fielding

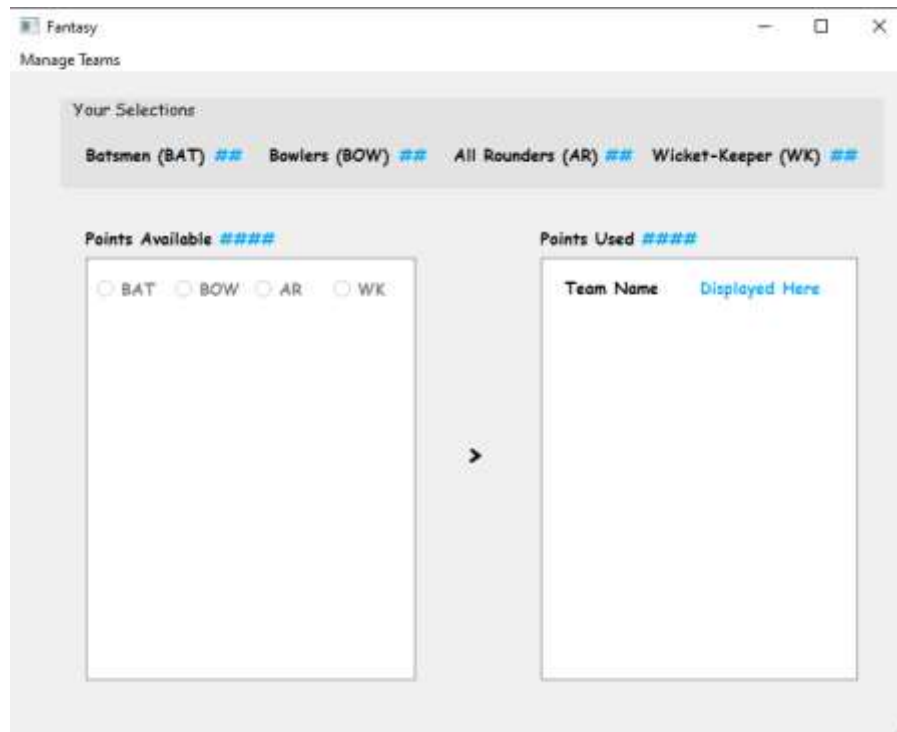
- a) 10 points each for catch/stumping/runout

4. Player Selection

- a) You can select at least 3 batsmen and at most 5 batsmen.
- b) You can select at least 3 bowlers and at most 5 bowlers.
- c) You can select at most 3 all-rounders.
- d) You need to select 1 wicket-keeper.

How to play the game:

1. Open the game using the command prompt. It will show the window as shown below.



2. Create a new team using the menu bar and click on a new team option.



3. Give a suitable name for your team and start selecting players based on their category.

Fantasy Manage Teams

Your Selections

Batsmen (BAT) 1 Bowlers (BOW) 0 All Rounders (AR) 0 Wicket-Keeper (WK) 0

Points Available 880 Points Used 120

☒ BAT ☐ BOW ☐ AR ☐ WK

Yuvraj Singh
Ajinkya Rahane
M.S. Dhoni
Rohit Sharma

>

Team Name RR

Virat Kohli

4. Select 11 players of different categories as per your choice.

Fantasy Manage Teams

Your Selections

Batsmen (BAT) 4 Bowlers (BOW) 4 All Rounders (AR) 2 Wicket-Keeper (WK) 1

Points Available 35 Points Used 965

☐ BAT ☐ BOW ☐ AR ☒ WK

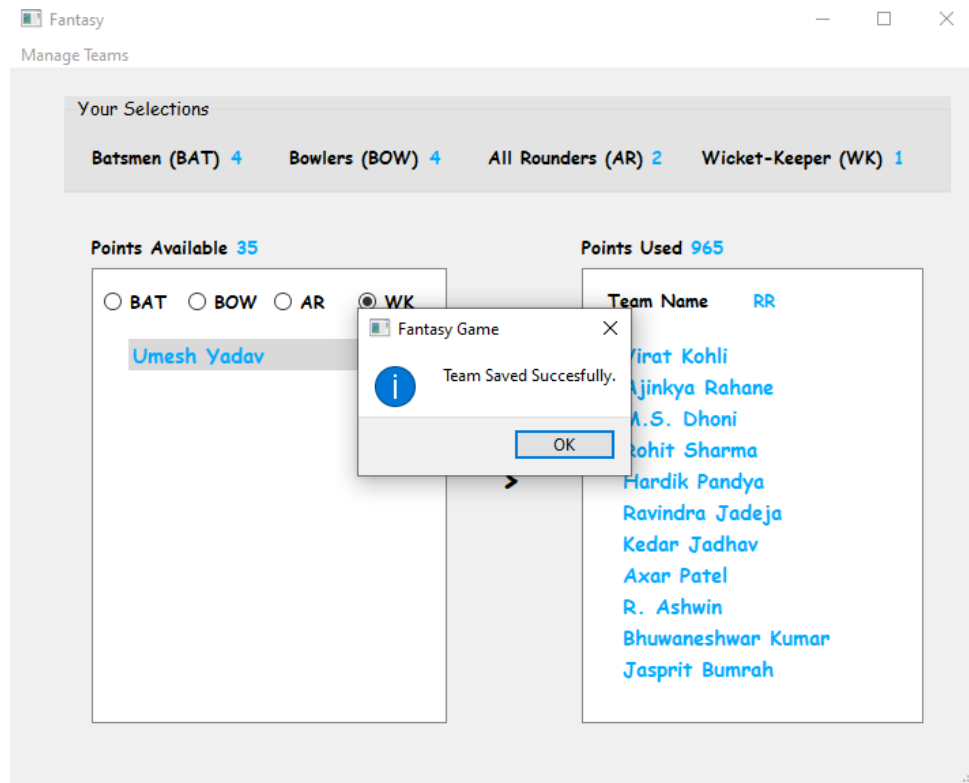
Umesh Yadav

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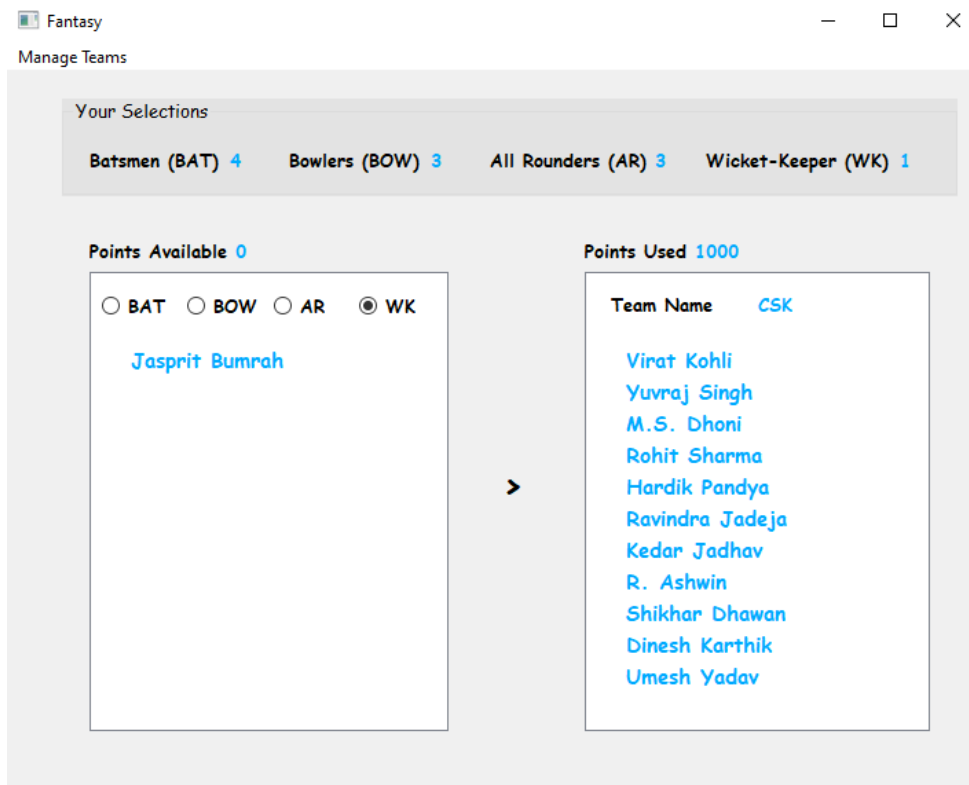
Team Name RR

Virat Kohli
Ajinkya Rahane
M.S. Dhoni
Rohit Sharma
Hardik Pandya
Ravindra Jadeja
Kedar Jadhav
Axar Patel
R. Ashwin
Bhuvaneshwar Kumar
Jasprit Bumrah

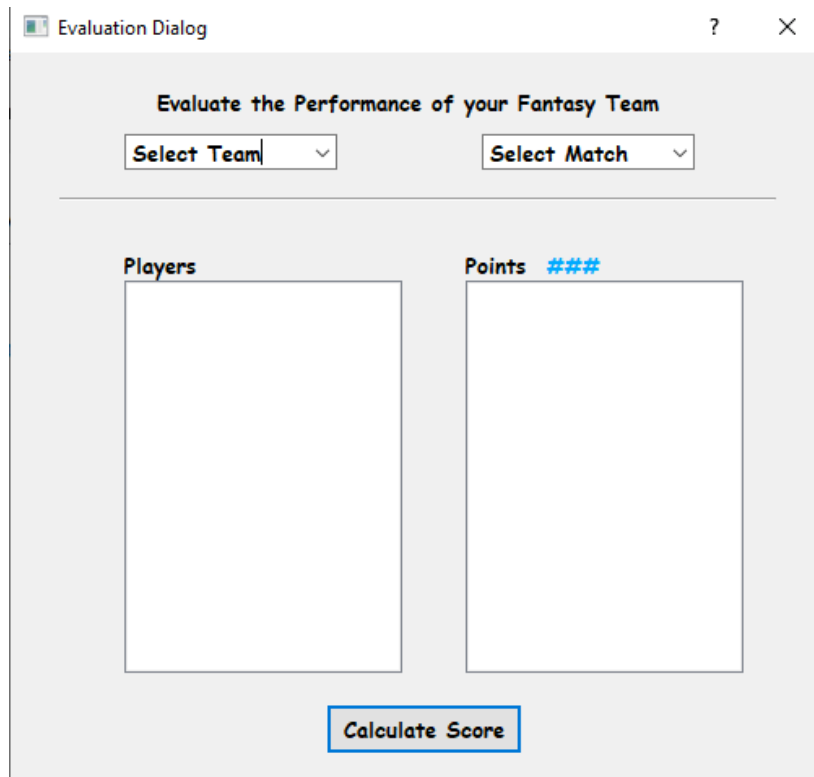
5. Select the menu option and save the team using the save menu option. The team will be saved in the database.



6. You can also open an existing team and modify the players in it.

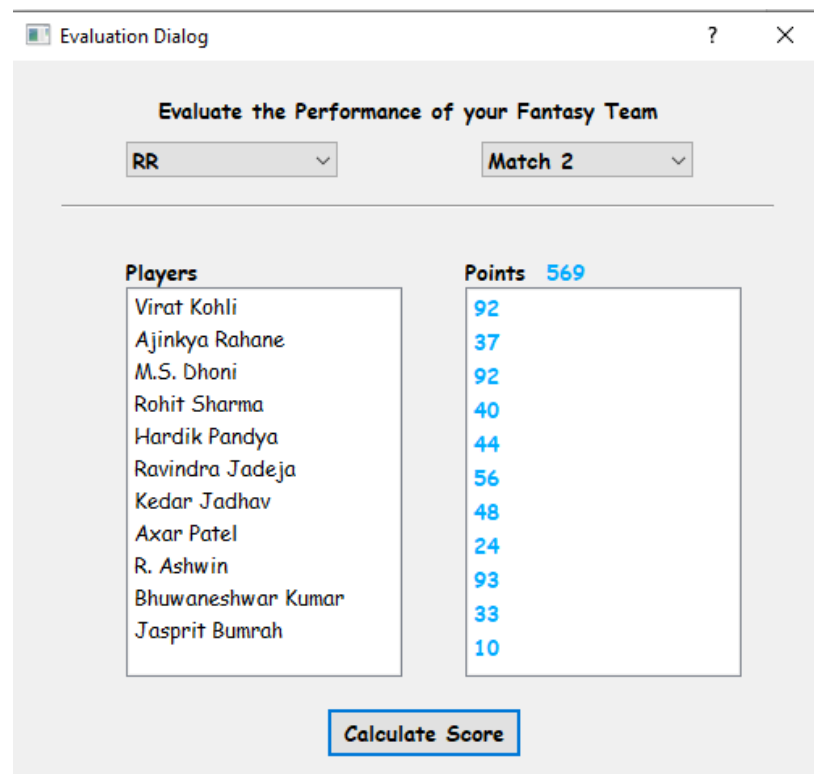


- Click on the Manage Teams Menu and select the Evaluate option. You can evaluate your team's performance here.



The 'Evaluation Dialog' window is titled 'Evaluate the Performance of your Fantasy Team'. It features two dropdown menus: 'Select Team' and 'Select Match'. Below these are two empty rectangular boxes labeled 'Players' and 'Points ###'. At the bottom is a 'Calculate Score' button.

- Select your team and match the number for which you want to evaluate the performance. Click on calculate to view the points.



The 'Evaluation Dialog' window shows the team 'RR' selected in the 'Select Team' dropdown and 'Match 2' selected in the 'Select Match' dropdown. The 'Players' box now contains a list of players, and the 'Points' box shows the total score '569'.

Players	Points
Virat Kohli	92
Ajinkya Rahane	37
M.S. Dhoni	92
Rohit Sharma	40
Hardik Pandya	44
Ravindra Jadeja	56
Kedar Jadhav	48
Axar Patel	24
R. Ashwin	93
Bhuvaneshwar Kumar	33
Jasprit Bumrah	10

The 'Calculate Score' button is still present at the bottom.

9. You can exit the game by clicking on the close option available at the top right corner of the main window.

Additional Information

Steps for opening the database:

1. Install SQLiteStudio on your computer.
2. Open SQLiteStudio and open the database using an open option.
3. Select the fantasy.db database.

Steps for opening the UI File:

1. Install PyQt5 on your computer.
2. Open the UI file using the designer.exe . It is by default installed at the location:
C:\ProgramFiles\Python\Lib\site-packages\pyqt5_tools\Qt\bin\designer.ui
3. Select the Fantasy_Cricket.ui from the project to open the UI file.

Steps for opening the Python main File:

1. Install python on your computer.
2. Open the Python IDLE. Open the Fantasy_Cricket.py file using an open option.
3. Now you can view the code and can-do modifications as well.
4. Press Ctrl+S to save the modifications.
5. Run the project.

Reference:

- <https://pypi.org/project/PyQt5/>
- <https://sqlitestudio.pl/>
- <https://www.python.org/downloads/>
- <https://atom.io/>

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