

# Fantasy Cricket Game using Python

Python is a popular, high-level, general purpose, dynamic programming language that has been on the market for almost 30 years. We know that Python is also used for making various applications which are helpful in various disciplines like Data Science, Machine Learning, Web Development, Game Development, etc. The main objective of this synopsis is to explain how Python can be used to create an entertaining game like Fantasy Cricket Game and its advantages in creating any user-friendly game/applications.

The Game project consists of three parts:-

- a. The UI files for designing the applications.
- b. The database named 'players', for maintaining the data created or modified while playing the Game.
- c. And two Python files.

In this Python project, 'proj.py' is the main file which contains Python code to create and save a new team in the 'players' database, open and update an existing team from the database. To save a newly created team, the team must have

11 players. There are 4 categories of players in the Game: batsman(BAT), bowlers(BWL), all-rounders(ALL) and wicket-keepers(WK). While selecting the players from a particular category some criteria needs to be followed, i.e., the team should have maximum 5 batsman, 5 bowlers, 3 all-rounders and 1 wicket-keeper. If the above criterias are not followed then the team won't be saved. To save a new team, a name needs to be assigned for the team and then the 'Save Team' button needs to be selected. An existing team can also be updated by clicking the 'Open Team' button and then selecting the desired team. On clicking the 'Evaluate Score' button, the 'evaluate.py' file will be executed. The 'evaluate.py' file is used to calculate, evaluate and display the score of each and every team selected. Also, the score is calculated based on the criteria mentioned in the problem statement. The UI files, which have been used to design the Game, are stored in 'UI\_files' folder. Both the 'evaluate.ui' and 'proj.ui' UI files are created using PyQt5 and these files are then converted to 'evaluate.py' and 'proj.py' Python files, respectively using the 'pyuic5' code in Command Prompt(cmd). The database 'players.db' is created using SQLite and contains three tables: 'matches' which stores the data of players used in the match, 'stats' which contains overall stats of the

players, and finally the 'team' table which contains list of teams created or updated. The latest version of Python is required to create the two mentioned Python files, PyQt5 to design the UI files for the Game and SQLite to create the database.

The advantage of creating the game using Python is that, the game is quite user-friendly for users and code used to create the Game is also easy to be understood. In this way, we can also create other user-friendly softwares or applications for various fields using Python. This all possible because Python is an Object-Oriented Programming Language which is versatile, easy to use, open source with a vibrant community, and has various libraries used to do various functions/ operations. At last I would like to thank Internshala for giving me the opportunity to create this Game project using Python.