Name - Gaurav Kumar

Department - Computer Science and Engineering

Year - 4th

Section - B

Class Roll - 1751132

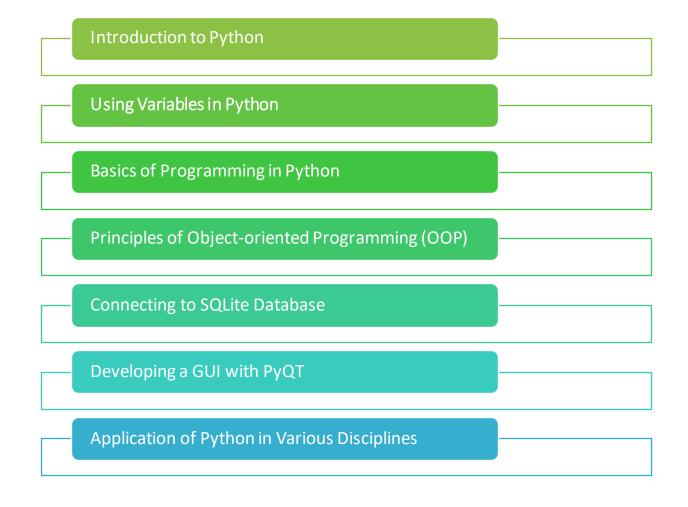
Autonomous Roll No - 12617001053

Training Highlights

- Platform Internshala
- **Training** Programming with Python
- Final Score 100%
- **Duration** 6 weeks
- **Date of completion** 31-05-2020



Training Syllabus -



```
____________ = modifier_ob
  mirror object to mirror
mirror_mod.mirror_object
 peration == "MIRROR_X":
irror_mod.use_x = True
irror_mod.use_y = False
### irror_mod.use_z = False
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  melection at the end -add
   ob.select= 1
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   ntext.scene.objects.action
   "Selected" + str(modified
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  bpy.context.selected_obj
   lata.objects[one.name].se
  int("please select exaction
  OPERATOR CLASSES ----
      mirror to the selected
    ject.mirror_mirror_x*
  ext.active_object is not
```

Introduction to Python

- 1. Training Overview:
- Installation of Python
- Using the Python Interpreter IDLE
- 2. Salient Features of Python
- Basic Syntax of Python

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Data Types in Python

- Data Types and Variables
- Numeric Data Types
- Sequence Data Type
- Boolean Data Type
- String Data Type
- Set Data Type
- Dictionary Data Type

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Basics of Programming in Python

- Understanding Programs and Programming
- Using Conditionals
- Using Loops
- Using Functions
- Using Functions from Built-in Modules
- Constructing Modules and Packages

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Principles of OOP

- Overview of OOP
- Declaring Class and Creating Objects
- Understanding Inheritance
- Using Magic Methods

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Connecting to SQLite Database

- Introduction to SQL
- Creating a SQLite database
- Accessing SQLite Database through Python

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Developing a GUI with PyQt

- GUI and Event Driven Programming
- Qt Designer
- Layout Managers
- Using Common Widgets
- Designing a Menu System

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Application of Python

- Web Development
- Game Development
- Scientific and Numeric Applications
- Artificial Intelligence and Machine Learning
- Software Development
- Enterprise-level/Business Applications

Final Project : Problem statement and rules

Final Project

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

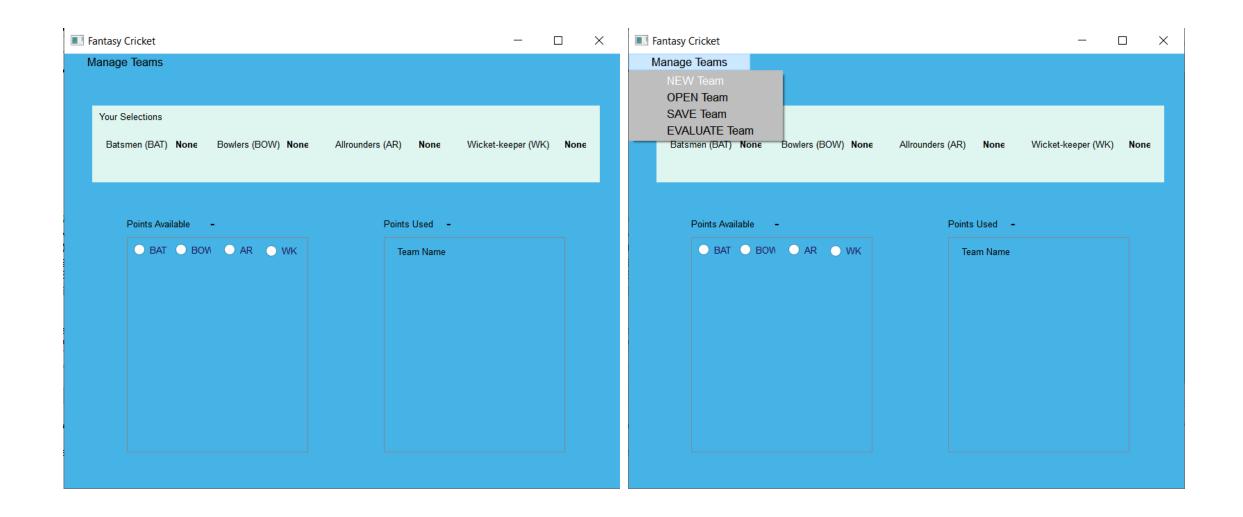
- 1 point for 2 runs scored
- Additional 5 points for half century
- Additional 10 points for century
- 2 points for strike rate (runs/balls faced) of 80-100
- Additional 4 points for strike rate>100
- 1 point for hitting a boundary (four) and 2 points for over boundary (six)

Bowling

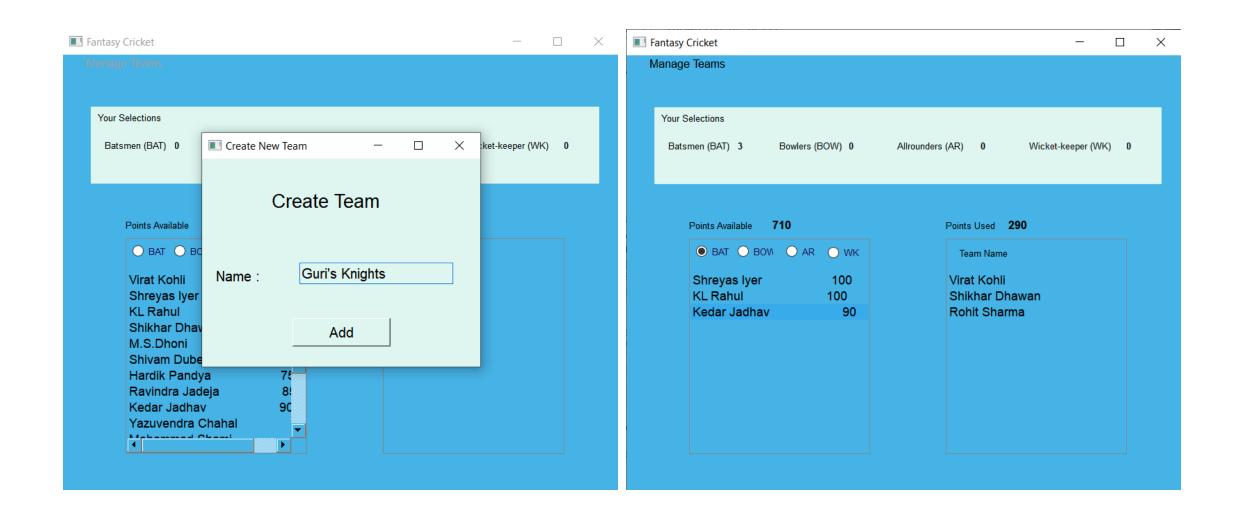
- 10 points for each wicket
- Additional 5 points for three wickets per innings
- · Additional 10 points for 5 wickets or more in innings
- 4 points for economy rate (runs given per over) between 3.5 and 4.5
- 7 points for economy rate between 2 and 3.5
- 10 points for economy rate less than 2

Fielding

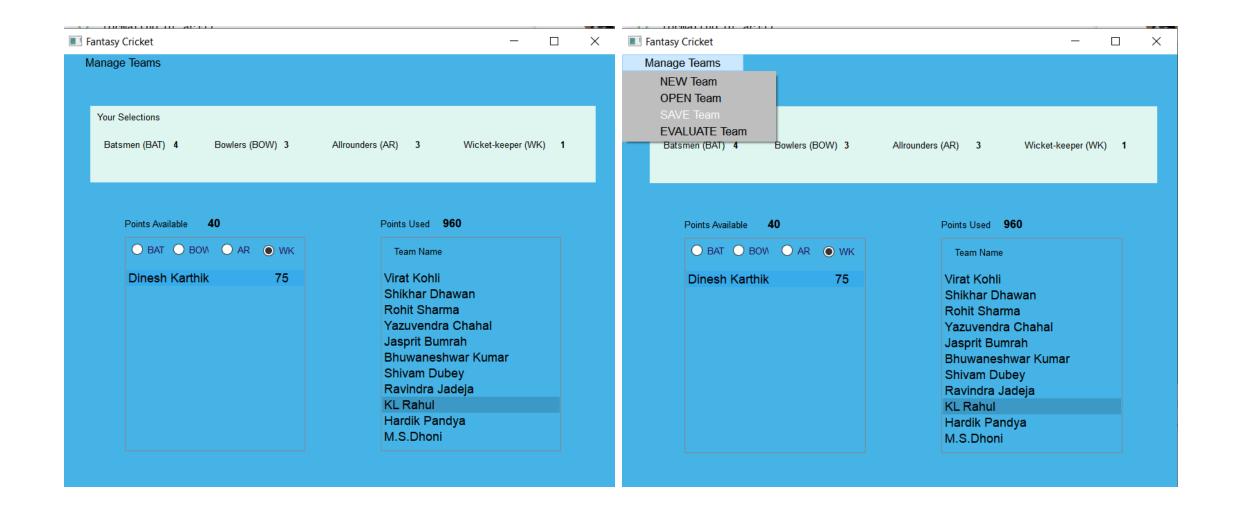
10 points each for catch/stumping/run out



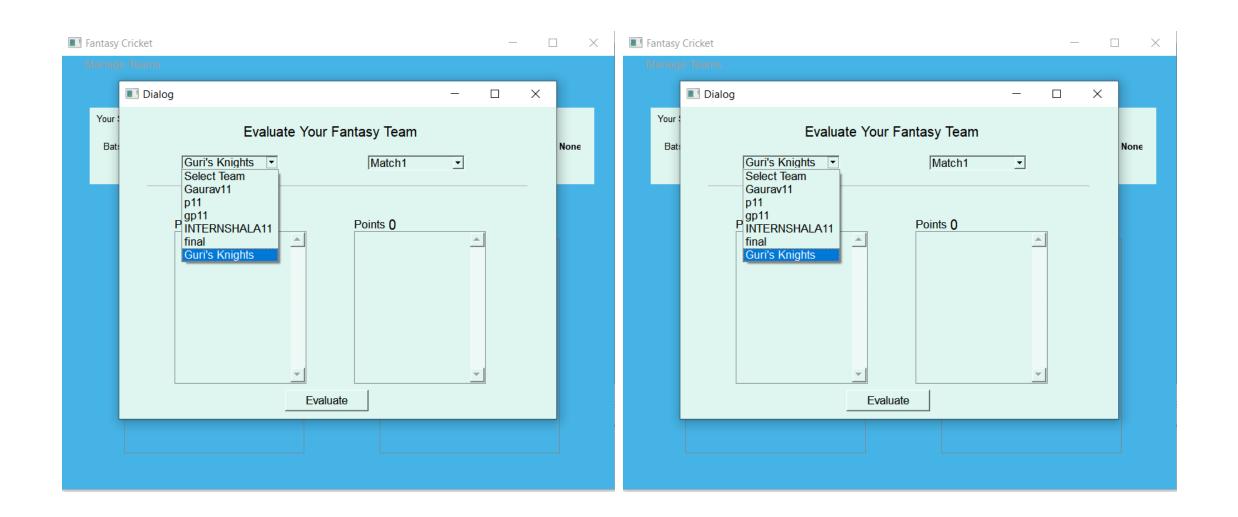
Final Project: Ui Design(Part 1)



Final Project: Ui Design(Part 2)

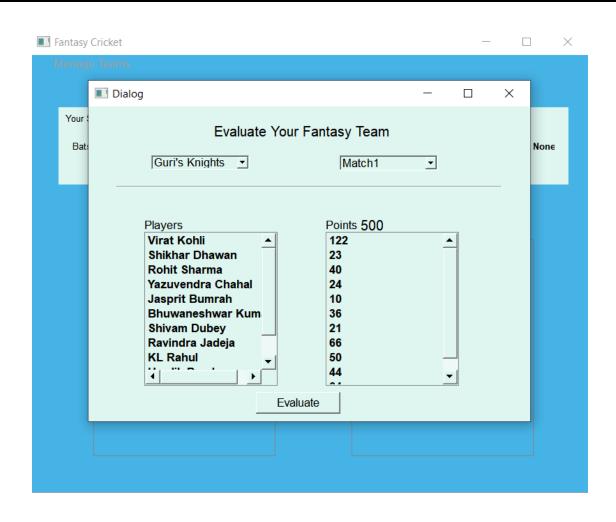


Final Project: Ui Design(Part 3)

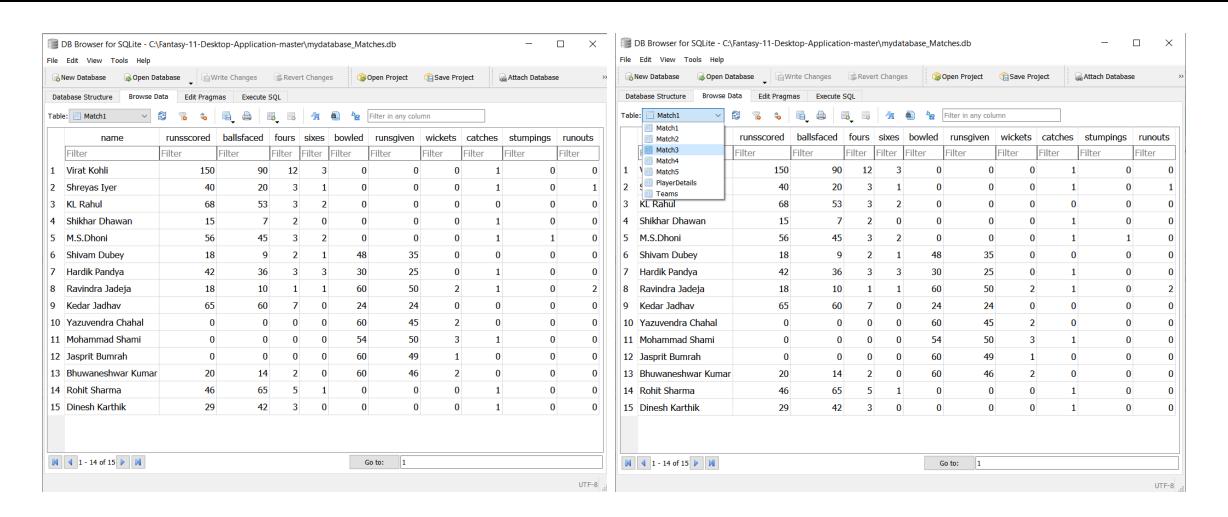


Final Project: Ui Design(Part 4)

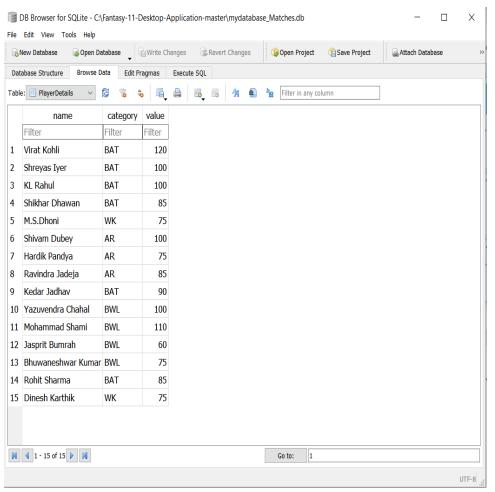
Final Project : Ui Design(Part 5)



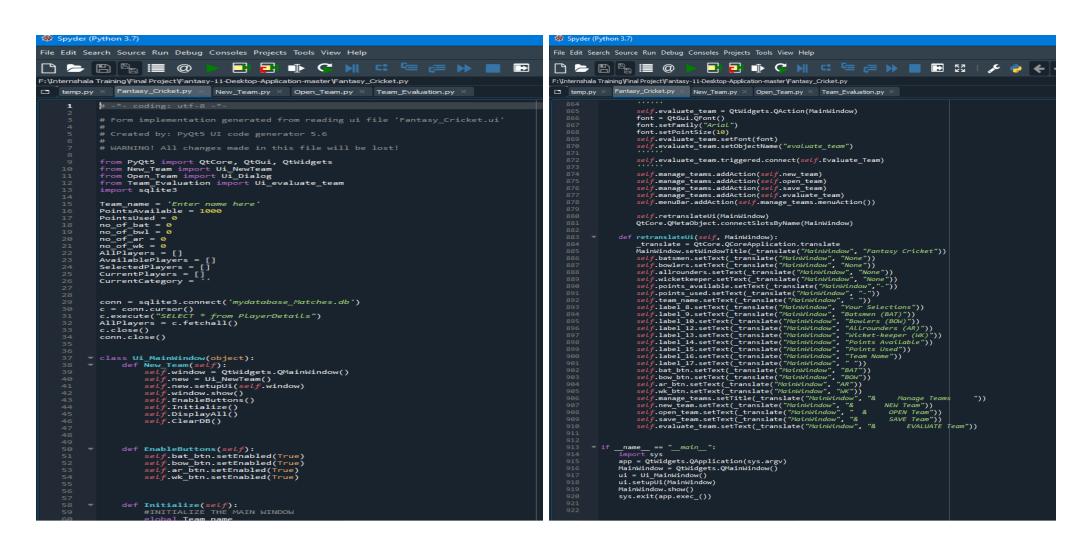
Final Project: Database Design (Part 1)



Final Project: Database Design (Part 2)





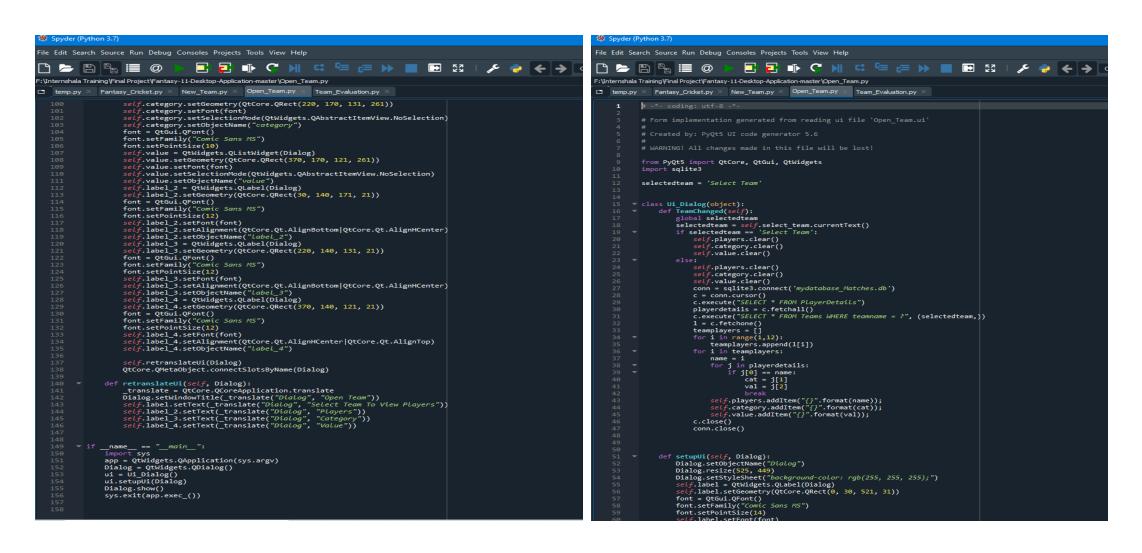


Final Project : Code Snippet(Part 1)

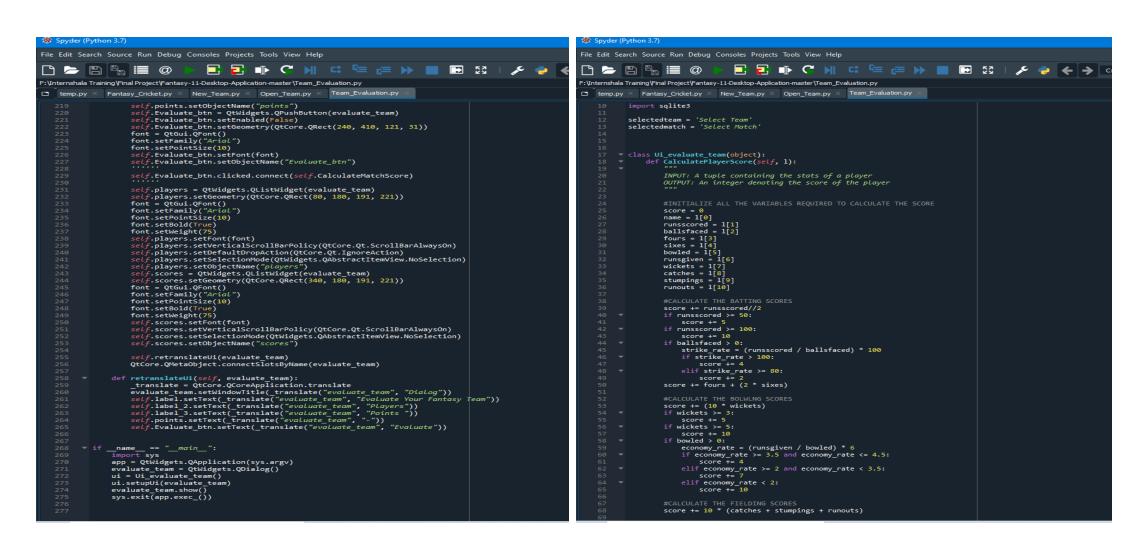
```
NewTeam.resize(400, 300)
                                                                                                                                            NewTeam.setStyleSheet("background-color: rgb(223,246,240);")
e Edit Search Source Run Debug Consoles Projects Tools View Help
                                                                                                                                            self.label = QtWidgets.QLabel(NewTeam)
                             C:\Users\Gaurav
                                                                                                                                            self.label.setGeometry(QtCore.QRect(100, 30, 171, 61))
                                                                                                                                            font = QtGui.QFont()
nternshala Training\Final Project\Fantasy-11-Desktop-Application-master\New_Team.py
                                                                                                                                            font.setFamily("Arial")
                                                                                                                                            font.setPointSize(16)
 temp.py × Fantasy_Cricket.py × New_Team.py × Open_Team.py × Team_Evaluation.py ×
                                                                                                                                            self.label.setFont(font)
      # -*- coding: utf-8 -*-
                                                                                                                                            self.label.setObjectName("label")
                                                                                                                                            self.label_2 = QtWidgets.QLabel(NewTeam)
                                                                                                                                            self.label_2.setGeometry(QtCore.QRect(20, 140, 111, 41))
                                                                                                                                            font = QtGui.QFont()
       # Created by: PvOt5 UI code generator 5.6
                                                                                                                                            font.setFamily("Arial")
                                                                                                                                            font.setPointSize(12)
       # WARNING! All changes made in this file will be lost!
                                                                                                                                            self.label 2.setFont(font)
       from PvOt5 import OtCore, OtGui, OtWidgets
                                                                                                                                            self.label_2.setAlignment(QtCore.Qt.AlignBottom | QtCore.Qt.AlignLeading | QtCore.Qt.AlignLeft)
                                                                                                                                            self.label_2.setObjectName("label_2")
                                                                                                                                            self.team_name = QtWidgets.QLineEdit(NewTeam)
                                                                                                                                            self.team_name.setGeometry(QtCore.QRect(140, 150, 221, 31))
                                                                                                                                            font = QtGui.QFont()

v class Ui NewTeam(object):
     def CheckName(self):
                                                                                                                                            font.setFamily("Arial")
              teamname = self.team name.text()
                                                                                                                                            font.setPointSize(12)
              teamname = teamname.strip()
                                                                                                                                            self.team name.setFont(font)
              conn = sqlite3.connect('mydatabase_Matches.db')
                                                                                                                                            self.team_name.setObjectName("team_name")
              c = conn.cursor()
c.execute("DELETE FROM Teams WHERE player1 = ''")
                                                                                                                                            self.pushButton = QtWidgets.QPushButton(NewTeam)
                                                                                                                                            self.pushButton.setGeometry(QtCore.QRect(130, 230, 141, 41))
               conn.commit()
                                                                                                                                            font = QtGui.QFont()
              c.close()
               conn.close()
                                                                                                                                            font.setFamily("Arial")
               if len(teamname) == 0:
                                                                                                                                            font.setPointSize(12)
                  msg = QtWidgets.QMessageBox()
                                                                                                                                            font.setBold(False)
                  msg.setIcon(QtWidgets.QMessageBox.Warning)
                                                                                                                                            font.setWeight(50)
                  msg.setText("You cannot leave the field blank!!!")
                                                                                                                                            self.pushButton.setFont(font)
                  msg.setWindowTitle("Invalid Team Name")
                                                                                                                                            self.pushButton.setObjectName("pushButton")
                  msg.exec_()
              elif teamname.isnumeric():
                  msg = QtWidgets.QMessageBox()
                                                                                                                                            self.pushButton.clicked.connect(self.CheckName)
                  msg.setIcon(QtWidgets.QMessageBox.Warning)
msg.setText("Please enter a valid teamname\n(Name must contain atleast one character)!!")
                  msg.setWindowTitle("Invalid Team Name")
                                                                                                                                            self.retranslateUi(NewTeam)
                  msg.exec ()
                                                                                                                                            QtCore.QMetaObject.connectSlotsByName(NewTeam)
                  msg = QtWidgets.QMessageBox()
                  msg.setIcon(QtWidgets.QMessageBox.Warning)
                                                                                                                                        def retranslateUi(self, NewTeam):
                                                                                                                                            translate = QtCore.QCoreApplication.translate
                  msg.setWindowTitle("Invalid Team Name")
                                                                                                                                            NewTeam.setWindowTitle(_translate("NewTeam", "Create New Team"))
                  msg.exec_()
                                                                                                                                            self.label.setText(_translate("NewTeam", "Create Team"))
                                                                                                                                            self.label_2.setText(_translate("NewTeam", "Name :"))
                  conn = sqlite3.connect('mydatabase_Matches.db')
                                                                                                                                            self.team_name.setText(_translate("NewTeam", ""))
self.pushButton.setText(_translate("NewTeam", "Add"))
                  c = conn.cursor()
c.execute("SELECT * FROM Teams")
                  1 = c.fetchall()
                  flag = 0
                                                                                                                                  if __name__ == "__main__":
                      if i[0] == teamname:
    flag = 1
                                                                                                                                        app = QtWidgets.QApplication(sys.argv)
                                                                                                                                        NewTeam = QtWidgets.QDialog()
                      ui = Ui NewTeam()
                      msg = QtWidgets.QMessageBox()
                                                                                                                                        ui.setupUi(NewTeam)
                      msg.setIcon(QtWidgets.QMessageBox.Information)
                                                                                                                                        NewTeam.show()
                      msg.setText("Team Created Successfully!!!\nNow go back to the previous window and select the players.")
msg.setWindowTitle("Team Created")
                                                                                                                                        sys.exit(app.exec_())
                      msg.exec ()
```

Final Project: Code Snippet(Part 2)



Final Project: Code Snippet(Part 3)



Final Project: Code Snippet(Part 4)

Certificate of completion







References

- Providing Github Link For Detailed Codes: <u>Fantasy11 Desktop Application</u>
- Training Resources : <u>Programming with python</u>

Thank You