



**PIMPRI CHINCHWAD EDUCATION TRUST'S  
PIMPRI CHINCHWAD COLLEGE OF  
ENGINEERING**

**DEPARTMENT OF COMPUTER ENGINEERING**

**Mini Project Report**

**TITLE: “GRE ANALYZER”**

**SUBJECT: Skill Development Lab**

**YEAR: TE Computer (2015 Course)**

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**Under the guidance of –**

**Mr.Prof.Rajesh Lomte.**



**PIMPRI CHINCHWAD COLLEGE OF ENGINEERING  
DEPARTMENT OF COMPUTER ENGINEERING**

**CERTIFICATE**

This is to certify that, the project entitled

**“GRE ANALYZER”**

is successfully carried out as a mini project successfully submitted by  
following students of “PCET's Pimpri Chinchwad College of Engineering,  
Nigdi, Pune-44”.

**Under the guidance of Mr.Prof.Rajesh Lomte.**

In the partial fulfillment of the requirements for the T.E. (Computer Engineering)

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**Project Guide:  
Mr.Prof.Rajesh Lomte.**

## **ABSTRACT**

In this project we are predicting the universities for students (as per entered three universities) who going to apply for the Masters in same country or in other country.

These criteria are depend on the score of the GRE ,world rank of the university and the preference given by the student.so, whenever the input is given by user according to the previous datasets it predict the universities .

so ,this will help lot of students who want to take admission in different universities.

As well as the selection criteria for the universities are depend on the three parameters preferences, world rank of university and the number of students applied for the universities ,these numbers of applied student previous years depends on the previous year datasets which are already present.

So, selection of an universities for student is being easy and very efficient who going to apply for masters.

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# **Chapter 1**

## **1.1 INTRODUCTION**

### **1.2 Problem Statement:**

- An GRE Analyzer who going to predict the university for Masters by taking score and preferences from the user
- Draw bar graph of No. of Student applied for universities
- Predict the university from the given preferences.

### **1.3 Objectives of Project:**

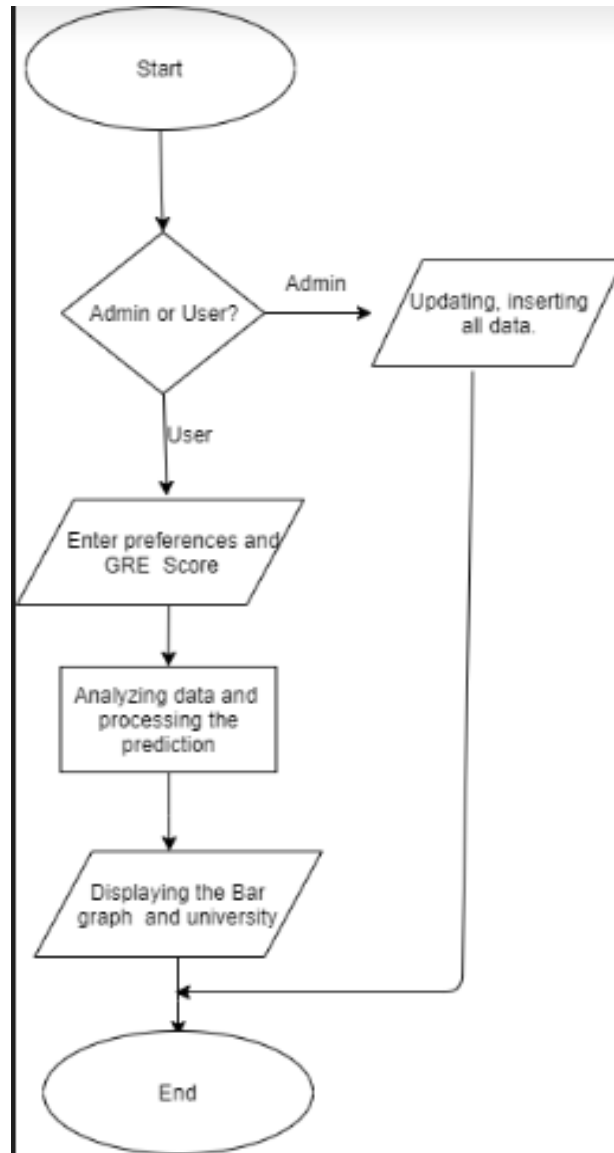
- The main objective of this project is to predict the university for the M.S. from given preferences.
- Therefore, users should be able to check according to the score in which university they may be selected.
- Developing a platform for students to check in which university they got select.

### **1.4 Scope:**

- Can be used at private coaching center who takes coaching for GRE as well as in colleges where students are interested in GRE.
- We can also improve the prediction algorithm and improve the college prediction.

## **Chapter 2**

### **2.1 PROJECT DESIGN**



**Fig:Flowchart of System**

## **2.2 Technical Details:**

### **Platform used:**

Pycharm Professionals, oracle Database, SQL developer.

**Backend Language:** Python,3.6,SQL

### **Frontend Language:**

PyQT5.

### **Python libraries used:**

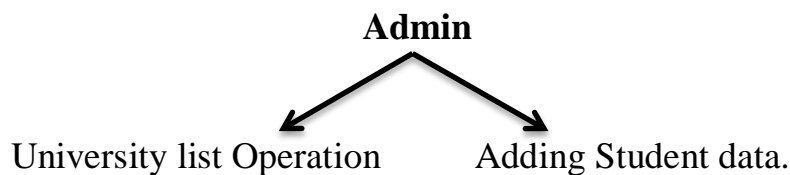
- cx\_Oracle
- Statistics
- Pandas
- Numpy
- Matplotlib
- PyQt5

## **2.3 Detailed design of modules / functionality with explanation:**

### **Module 1: User Module(Analysis)**

- In this module input will be
  - 1.Preferences
  - 2.GRE Score
- After taking GRE Score and Preferences from the user it will check the preferences and Score it will predict the university
- If the three preferences are same or Score is less than 0 or more than 340 or the two preferences are same then it will provide the error message so, here we provided the validation to the UI through UI coding as well as from database by applying the NOT NULL constraint.
- We performing the operations on the database not on CSV file so accordingly all data such as previous dataset as well as current year data is available in database.

### **Module 2: Admin Panel(Database Operations)**



#### **1. University list Operation:**

- In this we are performing the operations on the database from universities as are performing the CRUD operations.
- These operations are:
  - Insert
  - Update
  - Delete

##### **1. Insert:**

Here, we are inserting the new university in list of the universities we already have

##### **2. Update:**

Here, we are updating the university in list of the universities with respect to world rank.



### 3. Delete:

Here, we are inserting the deleting university in list of the universities we already have .

## 2. **Student list Operation:**

In this section we are adding the data of the student we got already admitted to the university. This data will be helpful to improve the dataset that will be helpful for next year data analysis.

Operation: Insert

It consist of Insertion of Name, University Name, GRE Score,TOFEL Score.

Analysis : Prediction of the University:

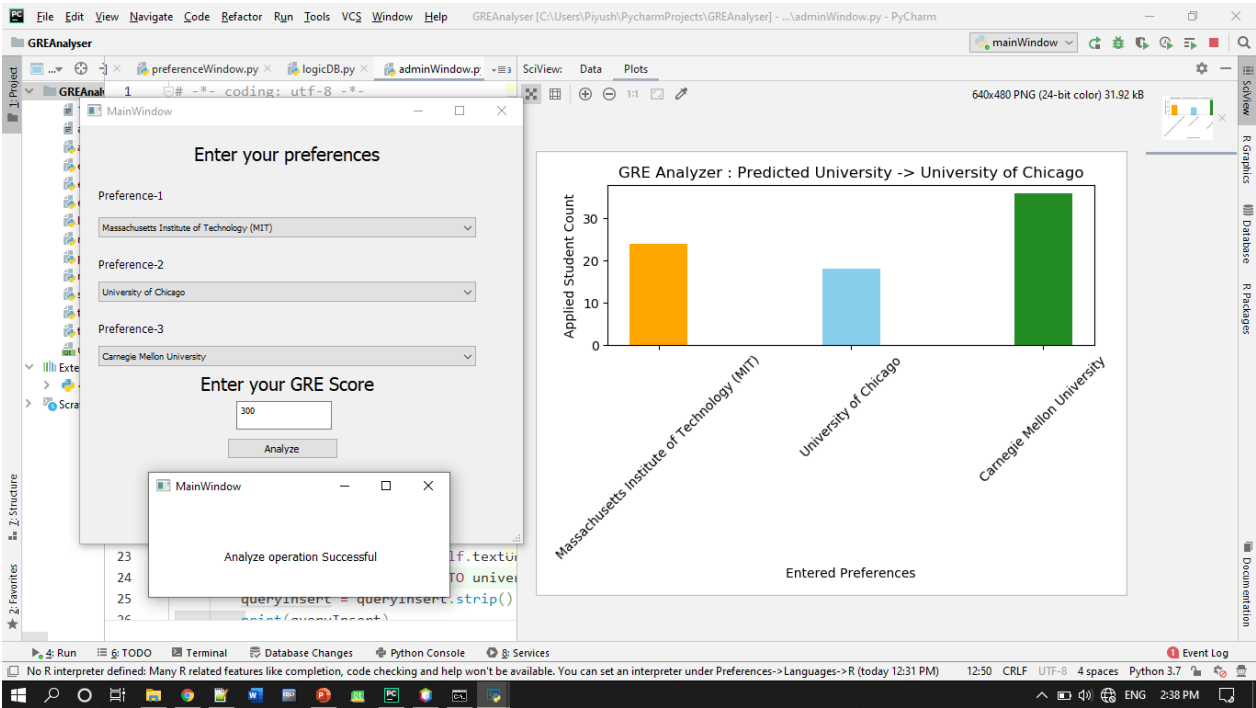


Fig :Prediction of System

## **Chapter 3:**

## **RESULTS & DISCUSSION**

### **3.1 Source code: –**

#### **MAINWINDOW.Py**

```
from PyQt5 import QtCore, QtGui, QtWidgets
import adminWindow
import preferenceWindow

class Ui_mainWindow(object):
    def openPrefWindow(self):
        self.window = QtWidgets.QMainWindow()
        self.ui = preferenceWindow.Ui_prefMainWindow()
        self.ui.setupUi(self.window)
        self.window.show()

    def openAdminWindow(self):
        self.window = QtWidgets.QMainWindow()
        self.ui = adminWindow.Ui_adminMainWindow()
        self.ui.setupUi(self.window)
        self.window.show()

    def setupUi(self, mainWindow):
        mainWindow.setObjectName("mainWindow")
        mainWindow.setWindowModality(QtCore.Qt.WindowModal)
        mainWindow.resize(529, 256)
        mainWindow.setAutoFillBackground(False)
        self.centralwidget = QtWidgets.QWidget(mainWindow)
        self.centralwidget.setObjectName("centralwidget")
        self.buttonPrediction = QtWidgets.QPushButton(self.centralwidget)
        self.buttonPrediction.setGeometry(QtCore.QRect(90, 110, 151, 51))

        self.buttonPrediction.setObjectName("buttonPrediction")
        self.buttonPrediction.clicked.connect(self.openPrefWindow)

        self.buttonAdmin = QtWidgets.QPushButton(self.centralwidget)

        self.buttonAdmin.setGeometry(QtCore.QRect(300, 110, 151, 51))
        self.buttonAdmin.setObjectName("buttonAdmin")
        self.buttonAdmin.clicked.connect(self.openAdminWindow)
        self.labGREAnalyzer = QtWidgets.QLabel(self.centralwidget)
        self.labGREAnalyzer.setGeometry(QtCore.QRect(90, 50, 341, 31))
        font = QtGui.QFont()
        font.setPointSize(15)
```

```

font.setBold(True)
font.setUnderline(False)
font.setWeight(75)
self.labGREAnalyzer.setFont(font)
self.labGREAnalyzer.setAlignment(QtCore.Qt.AlignCenter)
self.labGREAnalyzer.setObjectName("labGREAnalyzer")
mainWindow.setCentralWidget(self.centralwidget)
self.statusbar = QtWidgets.QStatusBar(mainWindow)
self.statusbar.setObjectName("statusbar")
mainWindow.setStatusBar(self.statusbar)

self.retranslateUi(mainWindow)
QtCore.QMetaObject.connectSlotsByName(mainWindow)

def retranslateUi(self, mainWindow):
    _translate = QtCore.QCoreApplication.translate
    mainWindow.setWindowTitle(_translate("mainWindow", "MainWindow"))
    self.buttonPrediction.setText(_translate("mainWindow", "Prediction"))
    self.buttonAdmin.setText(_translate("mainWindow", "Admin"))
    self.labGREAnalyzer.setText(_translate("mainWindow", "GRE Analyzer"))

if __name__ == "__main__":
    import sys
    import cx_Oracle
    connection = cx_Oracle.connect("piyush/piyushchaudhari@localhost")
    cursor = connection.cursor()

    app = QtWidgets.QApplication(sys.argv)
    mainWindow = QtWidgets.QMainWindow()
    ui = Ui_mainWindow()
    ui.setupUi(mainWindow)
    mainWindow.show()
    sys.exit(app.exec_())

```

## ADMINWINDOW.Py

```
from PyQt5 import QtCore, QtGui, QtWidgets
import cx_Oracle
connection = cx_Oracle.connect("piyush/piyushchaudhari@localhost")
# cursor = connection.cursor()

class Ui_adminMainWindow(object):

    def doUniInsert(self):
        cursor = connection.cursor()

        insertUniName = str(self.textUniInsertName.toPlainText().strip())
        insertUniWRank = int(self.textUniInsertWRank.toPlainText().strip())
        insertUniCountry = str(self.textUniInsertCountry.toPlainText().strip())
        queryInsert = f'INSERT INTO university_list VALUES (\'{insertUniName}\',
{insertUniWRank}, \'{insertUniCountry}\')'
        queryInsert = queryInsert.strip()
        print(queryInsert)
        print(insertUniName)
        cursor.execute(queryInsert)
        connection.commit()
        # print("piyu")

    def doUniUpdate(self):
        cursor = connection.cursor()
        updateUniName = str(self.comboUniUpdateSelect.currentText().strip())
        updatedWorldRank = int(self.plainTextUniUpdateWRank.toPlainText().strip())

        qryToUpdateWR = f'UPDATE UNIVERSITY_LIST SET WORLD_RANK =
{updatedWorldRank} WHERE UNIVERSITY_NAME = \'{updateUniName}\''
        print(qryToUpdateWR)
        qryToUpdateWR = qryToUpdateWR.strip()
        cursor.execute(qryToUpdateWR)
        connection.commit()

    def doUniDelete(self):
        cursor = connection.cursor()
        deleteUniName = str(self.comboUniDeleteSelect.currentText().strip())
        qryToDeleteUni = f'DELETE FROM UNIVERSITY_LIST WHERE
UNIVERSITY_NAME = \'{deleteUniName}\''
        print(qryToDeleteUni)
        qryToDeleteUni = qryToDeleteUni.strip()
```

```
cursor.execute(qryToDeleteUni)
connection.commit()
```

```
def doStuInsert(self):
```

```
    cursor = connection.cursor()
    insertedStudentname = str(self.textStudInsertName.toPlainText().strip())
    insertedStudUniversityname = str(self.textStudInsertUniName.toPlainText().strip())
    insertedStudGREScore = int(self.textStudInsertGREScore.toPlainText().strip())
    insertedStudTOEFLScore = int(self.textStudInsertTOEFLScore.toPlainText().strip())
```

```
    qryToInsertInAdmittedStud = f'INSERT INTO ADMITTED_STUDENTS VALUES
    ({\{insertedStudentname}\',\{insertedStudUniversityname}\', {\insertedStudGREScore},
    {\insertedStudTOEFLScore})'
    print(qryToInsertInAdmittedStud)
    qryToInsertInAdmittedStud = qryToInsertInAdmittedStud.strip()
    cursor.execute(qryToInsertInAdmittedStud)
    connection.commit()
```

```
def setupUi(self, adminMainWindow):
```

```
    adminMainWindow.setObjectName("adminMainWindow")
    adminMainWindow.resize(744, 640)
    self.centralwidget = QtWidgets.QWidget(adminMainWindow)
    self.centralwidget.setObjectName("centralwidget")
    self.labelAdminPanel = QtWidgets.QLabel(self.centralwidget)
    self.labelAdminPanel.setGeometry(QtCore.QRect(280, 10, 141, 31))
    font = QtGui.QFont()
    font.setPointSize(15)
    self.labelAdminPanel.setFont(font)
    self.labelAdminPanel.setAlignment(QtCore.Qt.AlignCenter)
    self.labelAdminPanel.setObjectName("labelAdminPanel")
    self.labelMUniversities = QtWidgets.QLabel(self.centralwidget)
    self.labelMUniversities.setGeometry(QtCore.QRect(20, 46, 131, 20))
    font = QtGui.QFont()
    font.setPointSize(12)
    font.setBold(True)
    font.setWeight(75)
    self.labelMUniversities.setFont(font)
    self.labelMUniversities.setObjectName("labelMUniversities")
    self.labelUniInsert = QtWidgets.QLabel(self.centralwidget)
    self.labelUniInsert.setGeometry(QtCore.QRect(20, 90, 51, 20))
    font = QtGui.QFont()
    font.setPointSize(11)
```

```

self.labelUniInsert.setFont(font)
self.labelUniInsert.setObjectName("labelUniInsert")
self.labelUniUpdate = QtWidgets.QLabel(self.centralwidget)
self.labelUniUpdate.setGeometry(QtCore.QRect(20, 210, 61, 20))
font = QtGui.QFont()
font.setPointSize(11)
self.labelUniUpdate.setFont(font)
self.labelUniUpdate.setObjectName("labelUniUpdate")
self.comboUniUpdateSelect = QtWidgets.QComboBox(self.centralwidget)
self.comboUniUpdateSelect.setGeometry(QtCore.QRect(60, 260, 291, 31))
self.comboUniUpdateSelect.setObjectName("comboUniUpdateSelect")

```

```

universityList = ["Massachusetts Institute of Technology (MIT)",
                  "Stanford University",
                  "Harvard University",
                  "California Institute of Technology (Caltech)",
                  "University of Chicago",
                  "Princeton University",
                  "Cornell University",
                  "University of Pennsylvania",
                  "Yale University",
                  "Columbia University",
                  "University of Michigan",
                  "Johns Hopkins University",
                  "Duke University",
                  "University of California, Berkeley (UCB)",
                  "Northwestern University",
                  "University of California, Los Angeles (UCLA)",
                  "New York University (NYU)",
                  "University of California, San Diego (UCSD)",
                  "Carnegie Mellon University",
                  "University of Wisconsin-Madison",
                  "Brown University",
                  "University of Texas at Austin",
                  "University of Washington",
                  "Georgia Institute of Technology",
                  "University of Illinois at Urbana-Champaign",
                  "Rice University",
                  "University of North Carolina, Chapel Hill",
                  "Pennsylvania State University",
                  "Boston University",
                  "Australian National University",
                  "University of Melbourne",
                  "University of Sydney",
                  "University of New South Wales (UNSW Sydney)",
                  "University of Queensland",

```

```

"Monash University",
"University of Western Australia",
"Tsinghua University",
"Peking University",
"Fudan University",
"Zhejiang University",
"Shanghai Jiao Tong University",
"University of Science and Technology of China",
"University of Oxford",
"University of Cambridge",
"UCL (University College London)",
"Imperial College London",
"University of Edinburgh",
"University of Manchester",
"King's College London",
"London School of Economics and Political Science (LSE)",
"University of Bristol",
"University of Warwick",
"University of Glasgow",
"Durham University",
"University of Sheffield",
"University of Birmingham",
"University of Leeds",
"University of Nottingham",
"University of Southampton",
"University of St Andrews"]

```

```

self.comboUniUpdateSelect.addItem(universityList)

```

```

self.labelUniUpdateSelect = QtWidgets.QLabel(self.centralwidget)
self.labelUniUpdateSelect.setGeometry(QtCore.QRect(150, 230, 101, 20))
self.labelUniUpdateSelect.setObjectName("labelUniUpdateSelect")
self.labelUniUpdateWRank = QtWidgets.QLabel(self.centralwidget)
self.labelUniUpdateWRank.setGeometry(QtCore.QRect(460, 230, 31, 20))
self.labelUniUpdateWRank.setObjectName("labelUniUpdateWRank")
self.plainTextUniUpdateWRank = QtWidgets.QPlainTextEdit(self.centralwidget)
self.plainTextUniUpdateWRank.setGeometry(QtCore.QRect(430, 260, 91, 31))
self.plainTextUniUpdateWRank.setObjectName("plainTextUniUpdateWRank")
self.textUniInsertName = QtWidgets.QTextEdit(self.centralwidget)
self.textUniInsertName.setGeometry(QtCore.QRect(60, 150, 251, 31))
self.textUniInsertName.setObjectName("textUniInsertName")
self.textUniInsertWRank = QtWidgets.QTextEdit(self.centralwidget)
self.textUniInsertWRank.setGeometry(QtCore.QRect(320, 150, 91, 31))
self.textUniInsertWRank.setObjectName("textUniInsertWRank")
self.textUniInsertCountry = QtWidgets.QTextEdit(self.centralwidget)
self.textUniInsertCountry.setGeometry(QtCore.QRect(430, 150, 141, 31))
self.textUniInsertCountry.setObjectName("textUniInsertCountry")

```



```

self.labelUniInsertName = QtWidgets.QLabel(self.centralwidget)
self.labelUniInsertName.setGeometry(QtCore.QRect(140, 120, 101, 20))
self.labelUniInsertName.setObjectName("labelUniInsertName")
self.labelUniInsertWRank = QtWidgets.QLabel(self.centralwidget)
self.labelUniInsertWRank.setGeometry(QtCore.QRect(330, 120, 71, 21))
self.labelUniInsertWRank.setObjectName("labelUniInsertWRank")
self.labelUniInsertCountry = QtWidgets.QLabel(self.centralwidget)
self.labelUniInsertCountry.setGeometry(QtCore.QRect(470, 120, 51, 21))
self.labelUniInsertCountry.setObjectName("labelUniInsertCountry")
self.labelMStudent = QtWidgets.QLabel(self.centralwidget)
self.labelMStudent.setGeometry(QtCore.QRect(20, 430, 241, 20))
font = QtGui.QFont()
font.setPointSize(12)
font.setBold(True)
font.setWeight(75)
self.labelMStudent.setFont(font)
self.labelMStudent.setObjectName("labelMStudent")
self.labelStudInsert = QtWidgets.QLabel(self.centralwidget)
self.labelStudInsert.setGeometry(QtCore.QRect(20, 460, 51, 20))
font = QtGui.QFont()
font.setPointSize(11)
self.labelStudInsert.setFont(font)
self.labelStudInsert.setObjectName("labelStudInsert")
self.labelStudInsertUniName = QtWidgets.QLabel(self.centralwidget)
self.labelStudInsertUniName.setGeometry(QtCore.QRect(340, 490, 101, 20))
self.labelStudInsertUniName.setObjectName("labelStudInsertUniName")
self.labelStudInsertGREScore = QtWidgets.QLabel(self.centralwidget)
self.labelStudInsertGREScore.setGeometry(QtCore.QRect(530, 490, 61, 21))
self.labelStudInsertGREScore.setObjectName("labelStudInsertGREScore")
self.labelStudInsertTOEFLScore = QtWidgets.QLabel(self.centralwidget)
self.labelStudInsertTOEFLScore.setGeometry(QtCore.QRect(640, 490, 31, 21))
self.labelStudInsertTOEFLScore.setObjectName("labelStudInsertTOEFLScore")
self.textStudInsertUniName = QtWidgets.QTextEdit(self.centralwidget)
self.textStudInsertUniName.setGeometry(QtCore.QRect(290, 530, 201, 31))
self.textStudInsertUniName.setObjectName("textStudInsertUniName")
self.textStudInsertGREScore = QtWidgets.QTextEdit(self.centralwidget)
self.textStudInsertGREScore.setGeometry(QtCore.QRect(510, 530, 91, 31))
self.textStudInsertGREScore.setObjectName("textStudInsertGREScore")
self.textStudInsertTOEFLScore = QtWidgets.QTextEdit(self.centralwidget)
self.textStudInsertTOEFLScore.setGeometry(QtCore.QRect(620, 530, 71, 31))
self.textStudInsertTOEFLScore.setObjectName("textStudInsertTOEFLScore")
self.textStudInsertName = QtWidgets.QTextEdit(self.centralwidget)
self.textStudInsertName.setGeometry(QtCore.QRect(70, 530, 201, 31))
self.textStudInsertName.setObjectName("textStudInsertName")
self.labelStudInsertName = QtWidgets.QLabel(self.centralwidget)
self.labelStudInsertName.setGeometry(QtCore.QRect(150, 490, 31, 20))

```

```

self.labelStudInsertName.setObjectName("labelStudInsertName")
self.labelUniDelete = QtWidgets.QLabel(self.centralwidget)
self.labelUniDelete.setGeometry(QtCore.QRect(20, 320, 61, 20))
font = QtGui.QFont()
font.setPointSize(11)
self.labelUniDelete.setFont(font)
self.labelUniDelete.setObjectName("labelUniDelete")
self.comboUniDeleteSelect = QtWidgets.QComboBox(self.centralwidget)
self.comboUniDeleteSelect.setGeometry(QtCore.QRect(60, 370, 291, 31))
self.comboUniDeleteSelect.setObjectName("comboUniDeleteSelect")

```

```

universityList1 = ["Massachusetts Institute of Technology (MIT)",
    "Stanford University",
    "Harvard University",
    "California Institute of Technology (Caltech)",
    "University of Chicago",
    "Princeton University",
    "Cornell University",
    "University of Pennsylvania",
    "Yale University",
    "Columbia University",
    "University of Michigan",
    "Johns Hopkins University",
    "Duke University",
    "University of California, Berkeley (UCB)",
    "Northwestern University",
    "University of California, Los Angeles (UCLA)",
    "New York University (NYU)",
    "University of California, San Diego (UCSD)",
    "Carnegie Mellon University",
    "University of Wisconsin-Madison",
    "Brown University",
    "University of Texas at Austin",
    "University of Washington",
    "Georgia Institute of Technology",
    "University of Illinois at Urbana-Champaign",
    "Rice University",
    "University of North Carolina, Chapel Hill",
    "Pennsylvania State University",
    "Boston University",
    "Australian National University",
    "University of Melbourne",
    "University of Sydney",
    "University of New South Wales (UNSW Sydney)",
    "University of Queensland",
    "Monash University",

```

"University of Western Australia",  
 "Tsinghua University",  
 "Peking University",  
 "Fudan University",  
 "Zhejiang University",  
 "Shanghai Jiao Tong University",  
 "University of Science and Technology of China",  
 "University of Oxford",  
 "University of Cambridge",  
 "UCL (University College London)",  
 "Imperial College London",  
 "University of Edinburgh",  
 "University of Manchester",  
 "King's College London",  
 "London School of Economics and Political Science (LSE)",  
 "University of Bristol",  
 "University of Warwick",  
 "University of Glasgow",  
 "Durham University",  
 "University of Sheffield",  
 "University of Birmingham",  
 "University of Leeds",  
 "University of Nottingham",  
 "University of Southampton",  
 "University of St Andrews"]

```

self.comboUniDeleteSelect.addItem(universityList1)
self.labelUniDeleteSelect = QtWidgets.QLabel(self.centralwidget)
self.labelUniDeleteSelect.setGeometry(QtCore.QRect(150, 340, 101, 20))
self.labelUniDeleteSelect.setObjectName("labelUniDeleteSelect")
self.buttonUniInsert = QtWidgets.QPushButton(self.centralwidget)
self.buttonUniInsert.setGeometry(QtCore.QRect(620, 150, 81, 31))
self.buttonUniInsert.setObjectName("buttonUniInsert")
  
```

```

self.buttonUniInsert.clicked.connect(self.doUniInsert)
  
```

```

self.buttonUniUpdate = QtWidgets.QPushButton(self.centralwidget)
self.buttonUniUpdate.setGeometry(QtCore.QRect(620, 260, 81, 31))
self.buttonUniUpdate.setObjectName("buttonUniUpdate")
self.buttonUniUpdate.clicked.connect(self.doUniUpdate)
self.buttonUniDelete = QtWidgets.QPushButton(self.centralwidget)
self.buttonUniDelete.setGeometry(QtCore.QRect(620, 370, 81, 31))
self.buttonUniDelete.setObjectName("buttonUniDelete")
  
```

```

self.buttonUniDelete.clicked.connect(self.doUniDelete)
  
```

```

self.buttonStudentInsert = QtWidgets.QPushButton(self.centralwidget)
self.buttonStudentInsert.setGeometry(QtCore.QRect(320, 580, 81, 31))
self.buttonStudentInsert.setObjectName("buttonStudentInsert")

```

```

self.buttonStudentInsert.clicked.connect(self.doStuInsert)
adminMainWindow.setCentralWidget(self.centralwidget)
self.statusbar = QtWidgets.QStatusBar(adminMainWindow)
self.statusbar.setObjectName("statusbar")
adminMainWindow.setStatusBar(self.statusbar)

```

```

self.retranslateUi(adminMainWindow)
QtCore.QMetaObject.connectSlotsByName(adminMainWindow)

```

```

def retranslateUi(self, adminMainWindow):
    _translate = QtCore.QCoreApplication.translate
    adminMainWindow.setWindowTitle(_translate("adminMainWindow",
"MainWindow"))
    self.labelAdminPanel.setText(_translate("adminMainWindow", "ADMIN PANEL"))
    self.labelMUniversities.setText(_translate("adminMainWindow",
"UNIVERSITIES"))
    self.labelUniInsert.setText(_translate("adminMainWindow", "INSERT"))
    self.labelUniUpdate.setText(_translate("adminMainWindow", "UPDATE"))
    self.labelUniUpdateSelect.setText(_translate("adminMainWindow", "SELECT
UNIVERSITY"))
    self.labelUniUpdateWRank.setText(_translate("adminMainWindow", "RANK"))
    self.labelUniInsertName.setText(_translate("adminMainWindow", " UNIVERSITY
NAME"))
    self.labelUniInsertWRank.setText(_translate("adminMainWindow", "WORLD
RANK"))
    self.labelUniInsertCountry.setText(_translate("adminMainWindow", "COUNTRY"))
    self.labelMStudent.setText(_translate("adminMainWindow", "STUDENTS GOT
ADMITTED"))
    self.labelStudInsert.setText(_translate("adminMainWindow", "INSERT"))
    self.labelStudInsertUniName.setText(_translate("adminMainWindow", "
UNIVERSITY NAME"))
    self.labelStudInsertGREScore.setText(_translate("adminMainWindow", "GRE
SCORE"))
    self.labelStudInsertTOEFLScore.setText(_translate("adminMainWindow",
"TOFEL"))
    self.labelStudInsertName.setText(_translate("adminMainWindow", "NAME"))
    self.labelUniDelete.setText(_translate("adminMainWindow", "DELETE"))
    self.labelUniDeleteSelect.setText(_translate("adminMainWindow", "SELECT
UNIVERSITY"))
    self.buttonUniInsert.setText(_translate("adminMainWindow", "INSERT"))
    self.buttonUniUpdate.setText(_translate("adminMainWindow", "UPDATE"))
    self.buttonUniDelete.setText(_translate("adminMainWindow", "DELETE"))

```

```
self.buttonStudentInsert.setText(_translate("adminMainWindow", "INSERT"))
```

```
if __name__ == "__main__":  
    import sys  
    app = QtWidgets.QApplication(sys.argv)  
    adminMainWindow = QtWidgets.QMainWindow()  
    ui = Ui_adminMainWindow()  
    ui.setupUi(adminMainWindow)  
    adminMainWindow.show()  
    sys.exit(app.exec_())
```

## **LOGICDB.Py**

```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import statistics
import cx_Oracle
```

```
connection = cx_Oracle.connect("piyush/piyushchaudhari@localhost")
```

```
def queryExecutor(qry1, qry2, qry3):
    totalCountOfUni = 0
    reqAvgGREScore = 0
    p = [] # empty list to have GRE SCORE of Selected applied Universities
    cursor = connection.cursor()
    l = list(cursor.execute(qry1))
```

```
    totalCountOfUni = totalCountOfUni + len(l)
    o = [p.append(i[1]) for i in l]
    l = list(cursor.execute(qry2))
    totalCountOfUni = totalCountOfUni + len(l)
    o = [p.append(i[1]) for i in l]
    l = list(cursor.execute(qry3))
    totalCountOfUni = totalCountOfUni + len(l)
    o = [p.append(i[1]) for i in l]
    reqAvgGREScore = statistics.mean(p)
```

```
    return totalCountOfUni, reqAvgGREScore
```

```
def logicDBFunc(pref1, pref2, pref3):
    cursor = connection.cursor()
```

```
    view = f'CREATE VIEW pref_uni AS SELECT preference1, preference2, preference3,
GRE_SCORE FROM student_gre'
    cursor.execute(view)
```

```
    queryp1 = f'select preference1, GRE_SCORE from pref_uni where preference1 =
\'{{pref1}}\'
    queryp2 = f'select preference2, GRE_SCORE from pref_uni where preference2 =
\'{{pref1}}\'
    queryp3 = f'select preference3, GRE_SCORE from pref_uni where preference3 =
\'{{pref1}}\'
    count1, average1 = queryExecutor(queryp1, queryp2, queryp3)
```

```

# delUniSelected = Ui_prefMainWindow.comboUniDeleteSelect.currentText()
# print(delUniSelected)
# queryDelete = 'delete from UNIVERSITY_LIST where university_name =
\{ }\'.format(delUniSelected)

queryp4 = f'select preference1, GRE_SCORE from pref_uni where preference1 =
\{pref2}\'
queryp5 = f'select preference2, GRE_SCORE from pref_uni where preference2 =
\{pref2}\'
queryp6 = f'select preference3, GRE_SCORE from pref_uni where preference3 =
\{pref2}\'
count2, average2 = queryExecutor(queryp4, queryp5, queryp6)
queryp7 = f'select preference1, GRE_SCORE from pref_uni where preference1 =
\{pref3}\'
queryp8 = f'select preference2, GRE_SCORE from pref_uni where preference2 =
\{pref3}\'
queryp9 = f'select preference3, GRE_SCORE from pref_uni where preference3 =
\{pref3}\'
count3, average3 = queryExecutor(queryp7, queryp8, queryp9)
view1 = f'DROP VIEW pref_uni'
cursor.execute(view1)
# print("piyu")
cursor.close()

y = [count1, count2, count3]
avgList = [average1, average2, average3]

logicOfAdmission = list(zip(y, avgList))
logicOfAdmission.sort(reverse=False)

toRetrievePreference = {average1: pref1, average2: pref2, average3: pref3}

xLabel = [pref1, pref2, pref3]

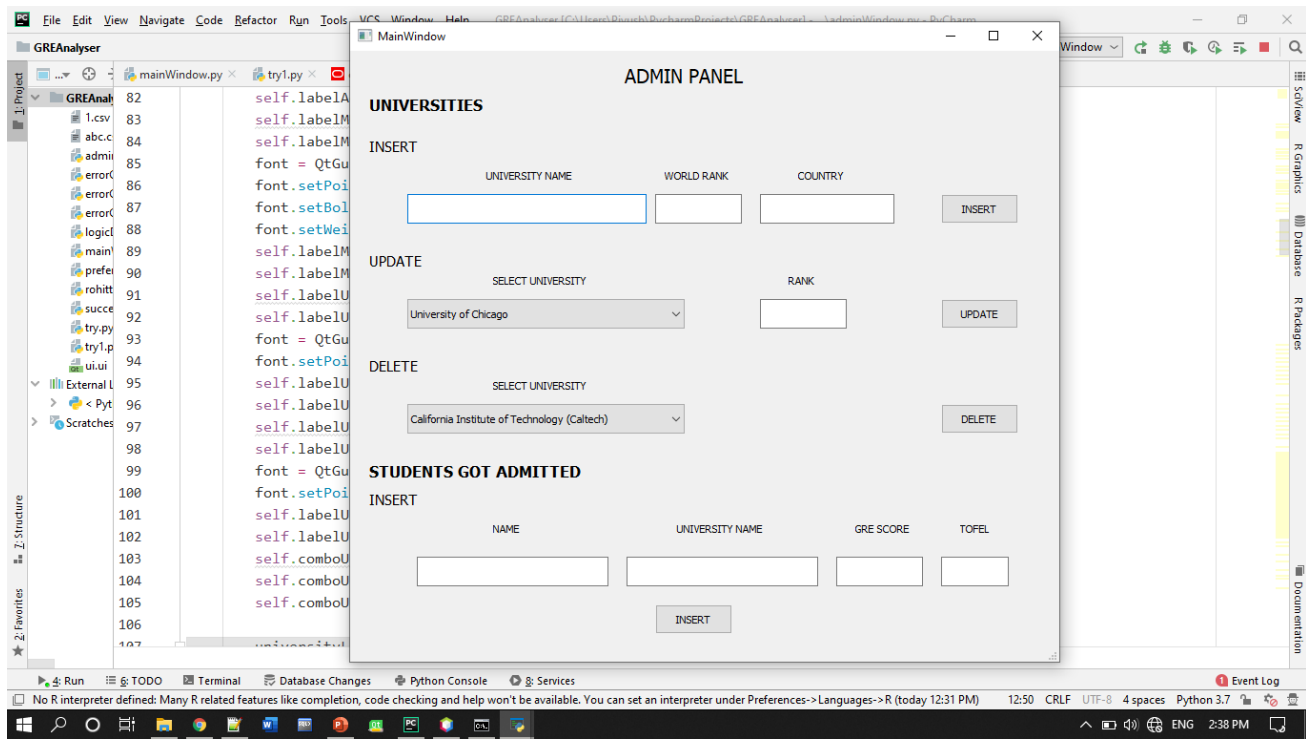
colours = ['#FFA500', '#87CEEB', '#228B22']
plt.xlabel("Entered Preferences")
plt.ylabel("Applied Student Count")
plt.bar(x=np.arange(1, 4), height=y, color=colours, width=0.3)

titleMsgUni = toRetrievePreference[logicOfAdmission[0][1]]
titleMsg = f'GRE Analyzer : Predicted University -> {titleMsgUni}'

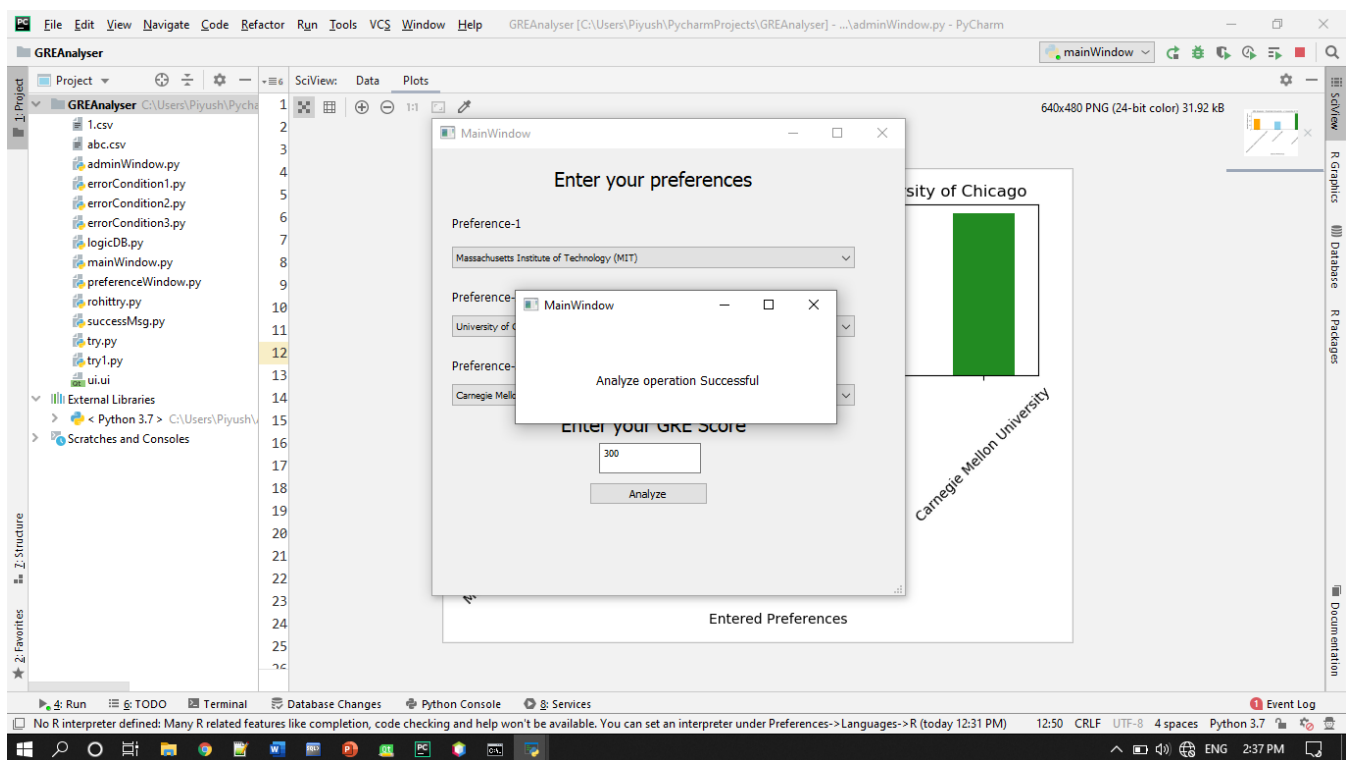
plt.title(titleMsg)
plt.xticks(np.arange(1, 4), xLabel, rotation=45)
plt.show()

```

## OUTPUTS:

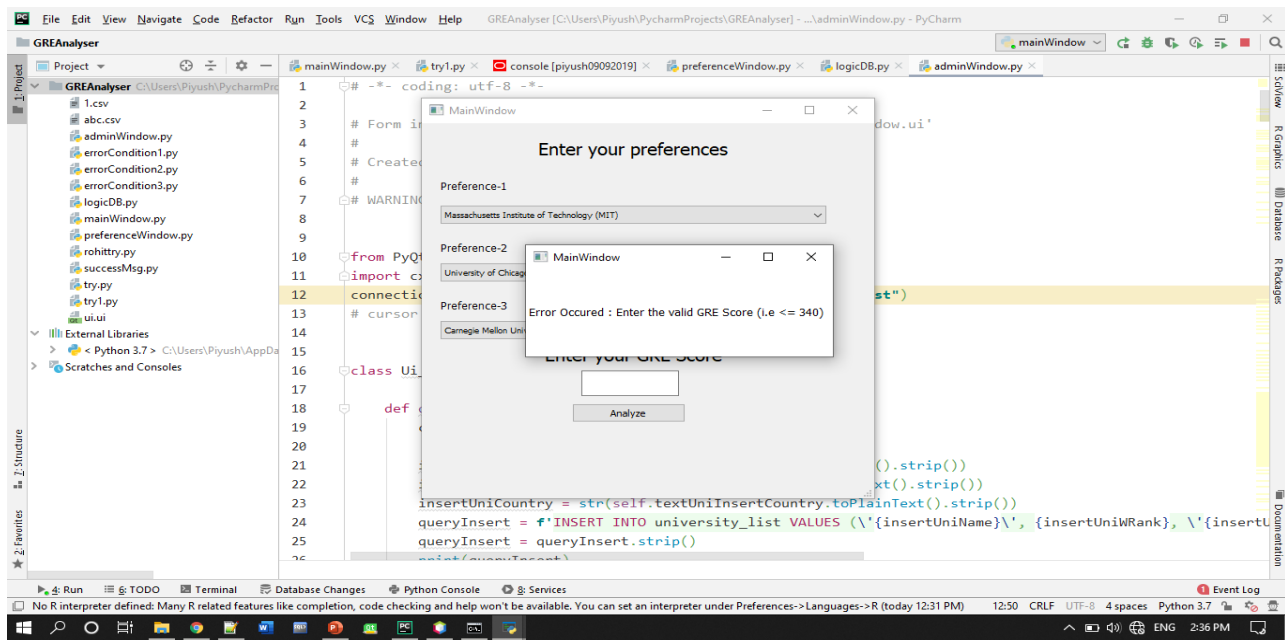


**Fig:AdminPanel**

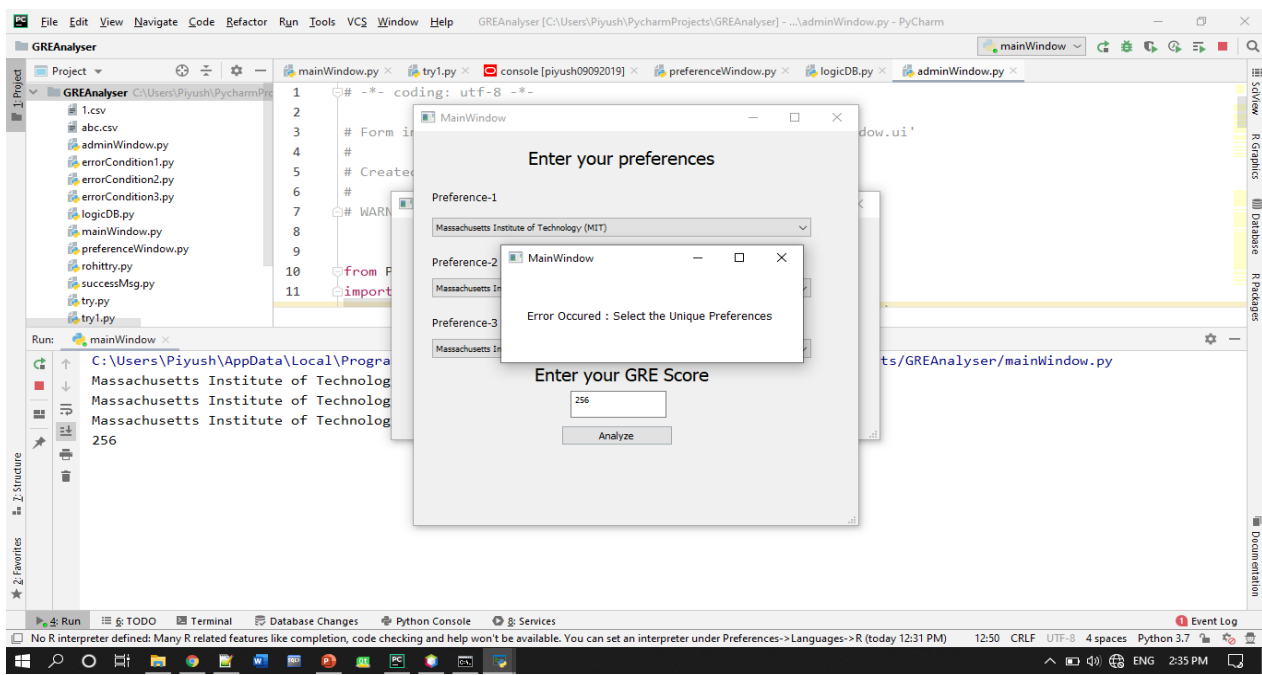


**Fig:Validation**

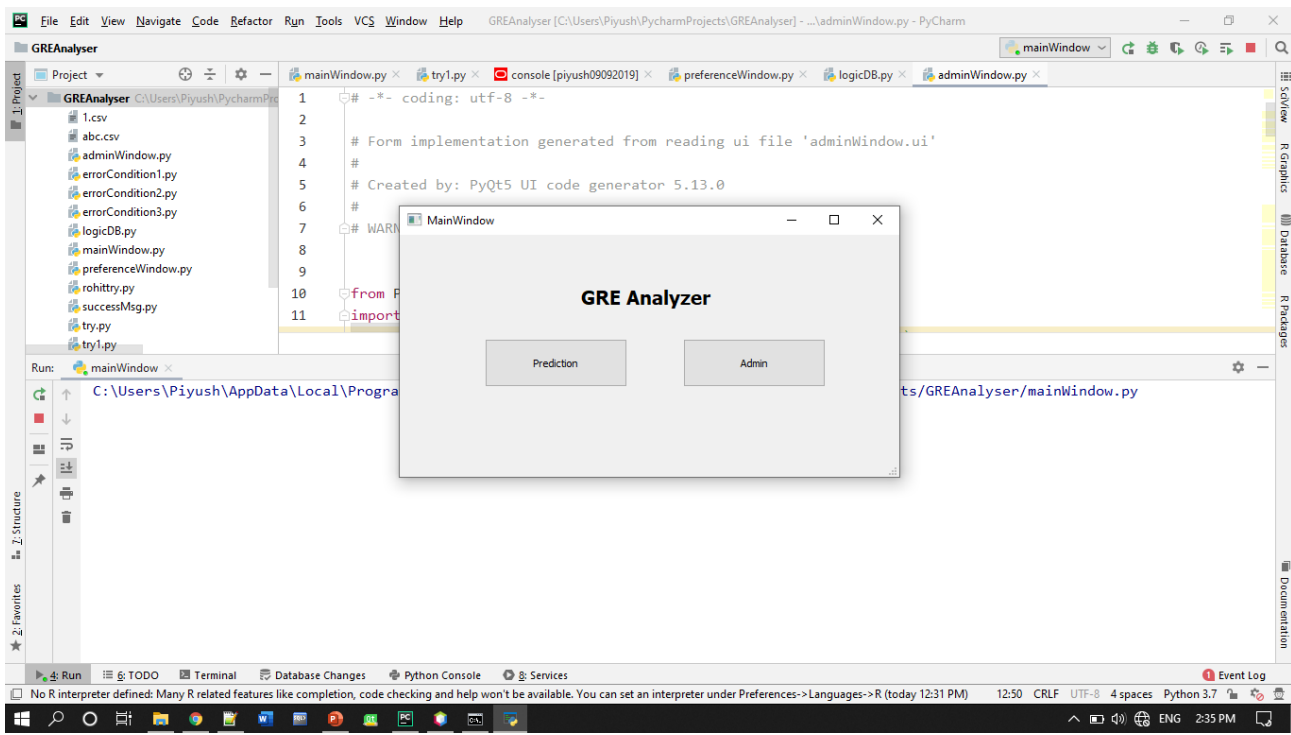




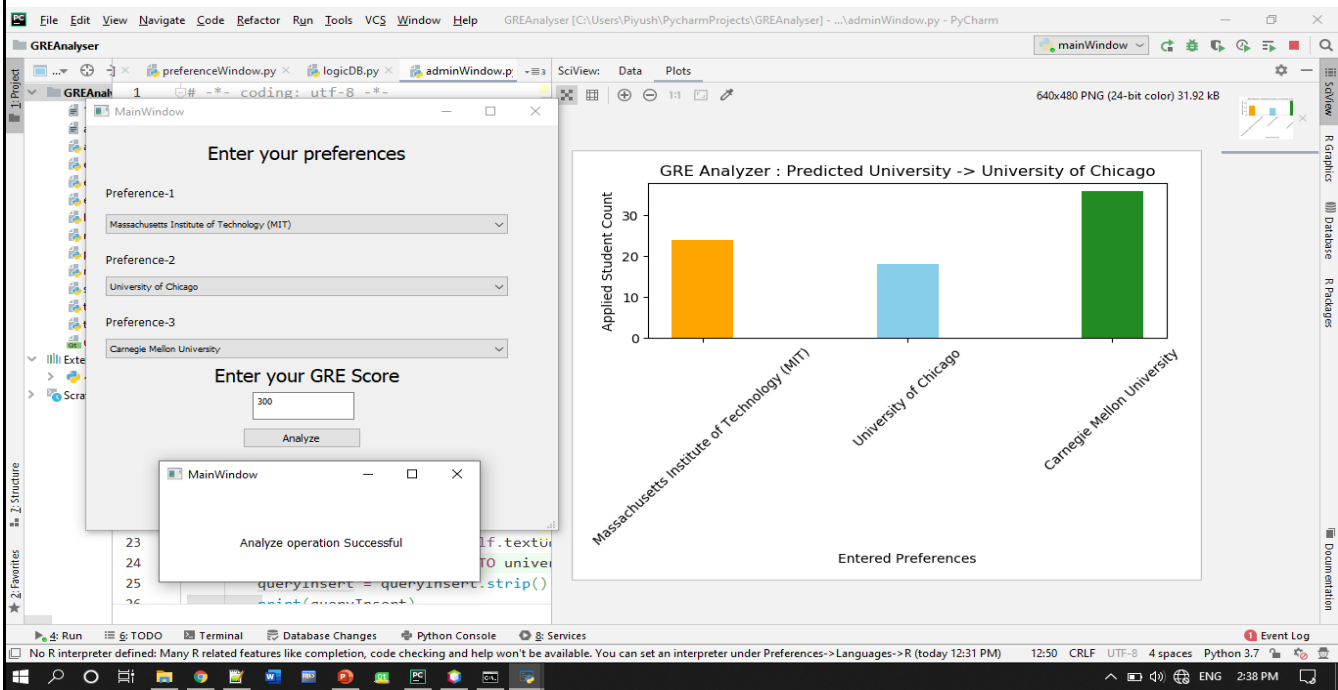
**Fig:Validation2**



**Fig:Validation3**



**Fig:MainWindow**



**Fig:Final Output**

## **Chapter 4**

### **CONCLUSION**

**Through this project skills that we have  
acquired are :**

- Team work & Time management .
- We are now comfortable with Oracle Database and python language .
- We studied matplotlib in bar plot for analysis part .
- We are able to develop new algorithm that analyze the University.