IT-Workshop-1

Project Report

Criminal Record Database

Problem Statement:

In this Project we create a database of Criminal record according to their Names, Crime, Offense date, Disposed Date and Confinement type. Now Write a Python Code to Access this data by Different Methods-

- By Display Full List
- Access the Data by Criminal Name

Create Different Plots using Matplotlib Library in Python file.

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Here we Create a Python File and Import the libraries named as NumPy, Panda, Matplotlib which we will used in this project.

First, we create a class name Criminal and initialize the variable jail as "COUNTY JAIL" and now use _init_ method function to assign values to the data members. Now we create another function name GetCriminalList using self argument and define a dictionary name data in this function where we write the database of criminal record such as Names, Charge, Offense Date, Disposed Date and Confinement type.

In the end of This function we use Panda Library and use the Panda DataFrame to create a data frame using index as the case number and pass the dictionary variable data in it and at last use print function to print this data base.

Now use some other functions to print the data Name wise. Here we use different functions for different case numbers. In this function we store the data of that criminal as name, charge...etc.

And after that we use data frame using pandas with index as the case number and pass the criminal details which we store in dictionary variable. Similarly create functions for other cases also.

Now we use if and else for choose the users choice and take input of user choice. Now if we run this then it first ask for select choice of display the data full list or display the data of a particular criminal.

Welcome to Criminal Record Database

- 1. Display Full list
- 2. Display namewise

Now if we enter 1 then it shows full list --

```
Welcome to Criminal Record Database
1. Display Full list
2. Display namewise
                                            Charge Offense Date
                                                                   Disposed Confinement type
                                                     20/09/2012 20/09/2019
case no.1
                   John
                                                                                  COUNTY JAIL
case no.2
                  Ithan
                                        Kidnapping
                                                     10/01/2015 10/01/2019
                                                                                  COUNTY JAIL
                   Pekk
                                       Tax Evasion
                                                     11/09/2010 11/09/2022
case no.3
                                                                                  COUNTY JAIL
                                         Blackmail
                                                     01/01/2020 01/01/2023
case no.4
               Sherlock
                                                                                  COUNTY JAIL
                                       Child Abuse
                                                     30/03/2011 30/03/2025
case no.5
                 Tyrion
                                                                                  COUNTY JAIL
                                        Cybercrime
                                                     12/12/2015 12/12/2022
case no.6
                   Mike
                                                                                  COUNTY JAIL
                                                     10/10/2010 10/10/2026
case no.7
                   Will
                                             Fraud
                                                                                  COUNTY JAIL
                                       Hit and Run
                                                     09/04/2017 09/04/2024
                  Steve
                                                                                  COUNTY JAIL
case no.8
                 Dustin
                                         Terrorism
                                                     10/03/2005 10/03/2029
                                                                                  COUNTY JAIL
case no.9
case no.10
               Jonathan
                                           Robbery
                                                     20/09/2019 20/09/2030
                                                                                  COUNTY JAIL
case no.11
             Silverdeev
                                         Smuggling
                                                     20/10/2013 20/10/2035
                                                                                  COUNTY JAIL
                                Paintings Smuggler
case no.12
             Majnu Bhai
                                                     15/09/2013 15/03/2024
                                                                                  TIHAR JAIL
                          Animal Abuse, Hit and Run
                                                     10/12/2010 20/03/2022
case no.13 Selmon Bhoi
                                                                                  TIHAR JAIL
case no.14 Sanjay Dutt Carrying concealed weapon
                                                     15/02/2010 12/12/2022
                                                                                   TIHAR JAIL
Press q to quit and c to continue
```

Now if we enter 2 then it ask for enter the criminal name and then we enter and it provide the full record of that criminal --

```
Welcome to Criminal Record Database

1. Display Full list

2. Display namewise

2
Enter the name :Jonathan

Name Charge Offense Date Dispose Confinement type

case no.10 Jonathan Robbery 20/09/2019 20/09/2030 COUNTY JAIL

Press q to quit and c to continue
```

Now we create another python file for create some plots related to that criminal record database, where we use Matplotlib Library in python to create different plots.

In this file we use the same criminal record database and create some array using NumPy library in python and use this data of array to create plots. When we run this file it will ask user to select serial number to which plot you want to see --

```
Choose the data which you want to see from here --

1.For how many years crimnal in jail

2.Criminals for more than 10 years in Jail

3.Criminal for less than 10 years in Jail

4.In which year criminal was caught

Enter the Number of data which you want to see :-
```

Now which plot you want to show enter that number and if you enter other than this it will ask to enter a valid number.







