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BSCS – C204

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7OOP

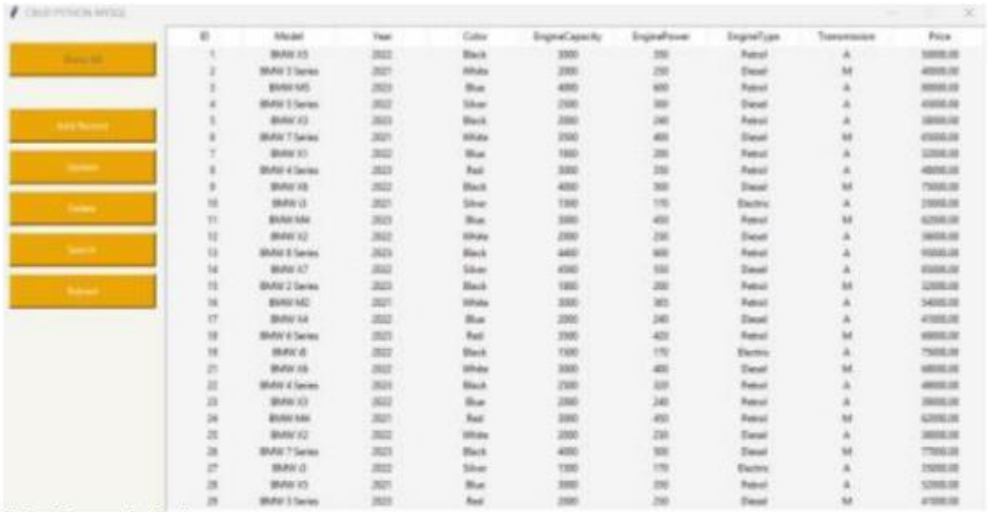
700P FINAL LAB TASK 6

I. PROBLEM

Step 1. Make sure you install the necessary prerequisites:

a. **MySQL-Connector** in Pycharm
b. Activate xampp (Apache and Mysql)
c. Create a database named: cars DB
d. Import the sql file (carsDB.sql) to load the tables and records
E. Create a user named(cs204) with password (asdf123) and assign full access to the database - Use this credentials when connecting to the database

Step 2. See the GUI Design of the Demo interface



Step 3. Try the code below:

Get the copy of the following files and load in pycharm:

Link here:

https://drive.google.com/drive/folders/1e6Eh55qLAwepf0A_I8GKh70elW6jAxJj?usp=sharing

1. connectDb.py
2. main.py
3. window.py

Step 4. Run the program main.py (and test all the functions (CRUD)) it should be free from errors. Make a screenshot of your output as proof that you were able to configure the program properly

Step 5. Add the ff: Functions in the GUI . Choose 1 only

1. Insert a Label and Text widget that will display the ff: infos:

a. *the total Number of Records*,
b. *Car Model* with the Highest Price,
c. *Total Number of Manual Cars*
d. *Total number of and Automatic Cars*

II. SOURCE CODE

```
class Window:
    cnn = ConnectDB(host="localhost", user="cs204", password="asdf123", database="cars db")
```

main.py | window.py | carsDB.sql | connectDB.py

```
56
57          # NEW BUTTON (SHOW STATS)
58          self.buttonStats = tk.Button(frame1, text="Show Stats", command=self.show_stats,
59                                       width=24, height=2, background="#eba607", foreground="white")
60          self.buttonStats.place(x=10, y=350)
```

```
268     # ------------------------------------------------------------
269     # SHOW STATISTICS
270     # ------------------------------------------------------------
271     def show_stats(self):
272         from connectDB import get_statistics
273         total = get_statistics()
274
275         self.statsBox.delete( index1: "1.0", tk.END)
276
277         output = f"""
278 Total Number of Records: {total}
279 """
280         self.statsBox.insert(tk.END, output)
281
282         messagebox.showinfo( title: "Success",  message: "Statistics Loaded Successfully!")
283
```

```python
def get_statistics():
    """
    Retrieves:
      1. total number of records
    from table `car`
    """

    try:
        # DIRECT connection
        conn = mysql.connector.connect(
            host="localhost",
            user="cs204",
            password="asdf123",
            database="cars db",
            ssl_disabled=True
        )
        cursor = conn.cursor()

        # Total number of records
        cursor.execute("SELECT COUNT(*) FROM car")
        total_records = cursor.fetchone()[0]

        conn.close()

        return total_records

    except mysql.connector.Error as error:
        print("Error:", error)
        return 0, "None", 0, 0
```

III. SAMPLE OUTPUT