

Logistics

These certain packages must be installed in order for the program to work as expected.

- Colorama - python3 -m pip install colorama
- seaborn - python3 -m pip install seaborn
- Pandas - python3 -m pip install pandas
- Matplotlib - python3 -m pip install matplotlib

Purpose of Each File

Customer.py - Creates a customer that can purchase a vehicle

Dealership.py - An object that holds and keeps track of vehicles

Main.py - Allows us to run our program more elegantly, contains command prompt inputs,

Vehicle.py - Creates Vehicle Objects

car_shipment2022.txt - Text file for car shipment

receipt.txt - Generated receipt from purchased vehicles.

How to Run Program

****We assume you type valid inputs (ie. ints with integer appropriate values), mimics a real dealership where a genuine customer won't put type helicopter to search for a car or enter letters when a credit score is asked for.**

Simply type this into your VSCode terminal

- Mac: python3 Main.py car_shipment2022.txt
- Windows: python3 Main.py car_shipment2022.txt

First asks basic info like

- Name (Should enter a valid string)
- Credit score (enter integer)
- Age (enter integer)
- Annual Income (Should be an integer)
- If you have been into an accident (y or n)

Prompts user if they would like to view a visual breakdown

- If you type "y" a barplot will automatically pop up (shows average msrp by each car make)

Asks if you need help deciding a vehicle

- If you say "y",
 - asks if you prefer a eco-friendly (electric or hybrid) vehicle (y or n)

- Then asks how much are you willing to spend on a vehicle (enter integer)
- Then all of the vehicles that fit this criteria will pop up
 - If the car entered is not in the filtered list, it is fine. That means the customer viewed the filtered list and wanted another one that's still in the dealership
- If you say “n”, all of the cars in the dealership will pop up.
 - Then asks you to type in your desired vehicle (should be in form: YEAR MAKE MODEL)
- Asks if you would like to buy another vehicle
 - If “n”, the program gives you a purchase summary on the terminal and also generates a receipt in the same directory called “receipt.txt”
 - If “y” you keep repeating the steps above until you are done purchasing cars

Sources

Python. (n.d.). *Colorama*. PyPI. Retrieved December 14, 2021, from <https://pypi.org/project/colorama/>

Contributions:

Vehicle Class

Ilyas Nur - `__init__()` - *Vehicle class*

Customer Class

Noh Mesfin - `monthly_payment()`

Dealership Class

Ilyas Nur - `check_holiday()` - *Dealership class*

Thomas Pallan - `display_chart()`, `sell()`, `print_receipt()`, **also added color to main function

Pair Programmed (Everyone) - `display()`, `calculate_msrp()`

Main.py

Jose Murillo - `questionnaire()`, `main()`

Noh Mesfin - `parse_args()`

Special Thanks

From all of the members of Team Green, we would like to extend our deepest thanks to Professor Aric Bills and his teaching staff for supporting us during the semester. We've learned a lot during the semester and the skills we learned in this course will equip us with the necessary skills to perform object-oriented programming in the future.

- **Special thanks to Thomas Pallan**

- Been a great team player. Facilitated our plans and gave quality insights to our project. Also was the man behind improving customer experience by incorporating feedback messages, colors, and visualizations for our program.

- Ilyas Nur

- Thank you Thomas for the time you put into the project, you were a great help and I truly appreciate the professionalism you showed

- Noh Mesfin

- Thank you Thomas for being responsive and for always helping us out with the debugging.

- Jose Murillo

- **Special thanks to Ilyas Nur**

- Great job Ilyas on all your hard work this semester. When I had a tough bug in my code you were able to help me successfully debug and were always there to help any other group members.

- Thomas Pallan

- You've been great all semester, you came up with a great idea for a final project and helped push this idea into existence.

- Noh Mesfin

- Good job this semester Ilyas, you stayed on top of all the work we had to do and made sure we all did our parts.

- Jose Murillo

- **Special thanks to Noh Mesfin**

- For calculating loan terms, real helpful information which we can learn from when purchasing our own vehicles

Ilyas Nur

- Been a great team player. Excellent job with calculating the loan terms. Thanks for making the trip out from South Campus to meet in my dorm to work on the project.

Ilyas Nur & Thomas Pallan

- Great job this semester Noh, your loan terms method was a big part of our project and you did a really good job with the code.

Jose Murillo

- **Special thanks to Jose Murillo**

- Great job Jose! Thanks for making the trip out to my dorm to meet as a group in person for the project!
- Thomas Pallan
- Thank you for being communicative and always available to discuss project ideas and issues
- Noh Mesfin
- Thanks a lot Jose for the amount of effort and brainstorming you did during the project. Your insights helped us big time when bringing our ideas together and making it as realistic as possible.
- Ilyas Nur