



MONASH
University

**FIT9136: Algorithms and programming
foundations in Python**

Assignment 2
Car Application System User Manual

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Main Menu

- Prints Main Menu and prompts user to select an option.
- If invalid input is detected, it shows: "Invalid input. Please input again!"

Option 'a': Look for the nearest car retailer.

- Prompt user to input postcode.
- Postcode must be in digits, e.g. 19000, 43300, 99999
- If invalid input is detected, it shows: "Invalid input. Please input an integer."
- User have to input an integer to continue.
- If valid input is detected, program display the nearest car retailer details as follows:
 - o This is your nearest car retailer:
 - o Retailer ID:46625381, Name:Bryant Shop, Address:20 Kajang, 43000, Business Hour:(0.0, 24.0)

Option 'b': Get car purchase advice

- Display list of car retailers as following:
 - o 1. Retailer ID:76880541, Name:Bryant Shop, Address:20 Kajang, 43000, Business Hour:(0.0, 24.0)
 - o 2. Retailer ID:84520503, Name:Lebron Shop, Address:30 Kuala Lumpur, 51000, Business Hour:(0.0, 24.0)
 - o 3. Retailer ID:15337694, Name:Nicole Shop, Address:40 Serdang, 43300, Business Hour:(9.0, 17.0)
- Prompt user to select car retailer by index, e.g. "1" or "2"
- If user inputted invalid input (index not included in the list, characters, symbols), it shows " Invalid input. Please input again."
- If valid input is detected, it prints selected retailer details and brings user to the **sub menu**

Option 'c': Place a car order

- Prompt user to input retailer ID and car ID, e.g. "12345678 MB123456:", or "B" back to Main Menu.
- Input "B": Send user back to main menu.
- Input existing retailer ID and car ID, e.g. 12345678 MB123456: Create an order and print order details as follows:
 - o Order have been successfully created, here is your order details.
 - o Order ID :nlwMuM!\$&&&~&&&MB1234561695309596
 - o Order Car :Car ID:MB123456, Car Name:BMW, Car Capacity:6, Car HP:180, Car Weight:2000, Car Type:FWD
 - o Order Retailer :Bryant Shop
 - o Order Timestamp:1695309596
 - o Thank you for your order!

****Advise:** To determine the existing retailer ID and car ID, user can use Option 'b' get car purchase advice show the available cars. The advice given also provides retailer ID and car ID.

- If user inputs a not existed retailer ID, it prints "Retailer ID does not exist, please input again."
- If user inputs a not existed retailer ID, it prints "Retailer ID does not exist, please input again."
- If user inputs a not existed car ID or a car ID owned by other retailers, it prints "Car ID does not exist, please input again."
- If user inputs random characters or numbers with random formats, it prints "Input is not in the correct format, please input again."
- It prints "Would you like to make another order?" and prompt user to input retailer ID and car ID to order again or input "B" to go back to main menu.

Option 'd': Exit

- It prints "Exit?(Y/N)", to make a confirmation whether user would like to exit.
- Option "Y": Exit the program and prints "You selected Exit. Goodbye!"
- Option "N": Back to main menu

Sub Menu

Option '1': Recommend a car.

- Random recommend a car in the specific retailer stock and prints the car details as follows:
 - o Car ID:WE604327, Car Name:BYD, Car Capacity:6, Car HP:300, Car Weight:1800, Car Type:AWD
- After that, it prints sub menu and prompts user to select option again.

Option '2': Get all cars in stock.

- Get all cars in the specific retailer stock and prints the retailer id and car details as follows:
 - o Retailer ID : 98555187
 - o Retailer Name : Bryant Shop
 - o List of cars in stock
 - o 1. Car ID:MB123456, Car Name:BMW, Car Capacity:6, Car HP:180, Car Weight:2000, Car Type:FWD
 - o 2. Car ID:LM654321, Car Name:Mercedes, Car Capacity:4, Car HP:200, Car Weight:1800, Car Type:AWD
 - o 3. Car ID:LK654820, Car Name:Audi, Car Capacity:4, Car HP:200, Car Weight:1800, Car Type:RWD

- 4. Car ID:WE604327, Car Name:BYD, Car Capacity:6, Car HP:300, Car Weight:1800, Car Type:AWD
- After that, it prints sub menu and prompts user to select option again.

Option '3': Get cars in stock by car types

- It prints: "This is the list of car types: FWD, RWD, AWD" and prompts user to input preferred car type(s) with space in between, e.g. "FWD RWD" or "FWD" or "FWD RWD AWD"
- If user inputted invalid input (other elements other than the one required), it shows "Invalid input. Please input again."
- After user input, get cars stock by type in the specific retailer stock and prints the retailer id and car details as follows:
 - Retailer ID : 98555187
 - Retailer Name : Bryant Shop
 - List of cars with FWD type in stock
 - 1. Car ID:MB123456, Car Name:BMW, Car Capacity:6, Car HP:180, Car Weight:2000, Car Type:FWD
- After that, it prints sub menu and prompts user to select option again.

Option '4': Get probationary licence permitted cars in stock.

- Get probationary licence permitted cars stock in the specific retailer stock and prints the retailer id and car details as follows:
 - Retailer ID : 98555187
 - Retailer Name : Bryant Shop
 - List of cars with FWD type in stock
 - 1. Car ID:MB123456, Car Name:BMW, Car Capacity:6, Car HP:180, Car Weight:2000, Car Type:FWD
- After that, it prints sub menu and prompts user to select option again.

Option '5': Back to Main Menu

- Send user back to main menu