

Introduction

This is the user documentation for the car_inventory program that will initialize, read in, and manipulate a database of cars and car accessories and does functions of:

- show car inventory
- add car
- remove car
- show accessory inventory
- search matching accessory given car model number
- find car
- export(output) inventory
- exit

Quick Tour of Car_Inventory

There's nothing more frustrating than spending tons of hours to go through the documentation and wiki when you just planned to start the program. There's no better way to learn other than doing it, so let's do an example together!

1.0 Open db_creator.py and Initialize the pre-loaded databases

1.1 Open card.py.py and Initialize the program

Run the program and you will see a series of instructions below:

```
Welcome to the mini Car database engine
Instructions:
<find car> find the car given model number
<add car> add a new type of car
<remove car> remove car given model number
<show cars> show all cars
<show acc> show all accessories
<export> export the db to json file
<find match> find match by giving accessory seq id
please input your command:
```

1.2: Show Inventory

Wondering what do we have in our car database?

Type "show cars": `please input your command: show cars`

See result:

model_num	year	color	maker	model	body_type	quantity
c1	2011	blue	China	c1-A	sedan	4
c2	2008	yellow	US	c2-A	sedan	1
c3	2001	blue	England	c3-F	SUV	5
c4	2019	blue	Netherland	c4-K	SUV	2
c5	1911	blue	England	c5-past	SUV	5

1.3 Add a new car

Type "add car":

`please input your command: add car`

Enter your car's model number (e.g c6):

`Please input car model number: c6`

Enter year your car was manufactured:(e.g, 2002):

`Please input car year: 2002`

Enter the color of your car (e.g. red):

`Please input car color: red`

Enter the manufacturer of your car (e.g. US):

`Please input car maker: US`

Enter your car model (e.g C6-B):

`Please input car model: c6-B`

Enter the body type of your car (e.g):

`Please input car body type: couple`

Enter the quantity:

```
Please input car quantity: 1
```

Done. Let's see if our car was added to the inventory:

Type "show car" again:

model_num	year	color	maker	model	body_type	quantity
c1	2011	blue	China	c1-A	sedan	4
c2	2008	yellow	US	c2-A	sedan	1
c3	2001	blue	England	c3-F	SUV	5
c4	2019	blue	Netherland	c4-K	SUV	2
c5	1911	blue	England	c5-past	SUV	5
c6	2002	red	US	c6-B	couple	1

1.4 Remove a car

How about remove a car from database? Let's assume someone just purchased our newly added car, so now we have to access to database and delete the car from it.

To remove a car, simply type "remove car" :

```
please input your command: remove car
```

Input the model number(index) as requested:

```
please input model number: c6
```

Type "show cars", see current database:

model_num	year	color	maker	model	body_type	quantity
c1	2011	blue	China	c1-A	sedan	4
c2	2008	yellow	US	c2-A	sedan	1
c3	2001	blue	England	c3-F	SUV	5
c4	2019	blue	Netherland	c4-K	SUV	2
c5	1911	blue	England	c5-past	SUV	5

Car removed successfully.

1.5 Find A Car

Using "find car command to find a car.

```
please input your command: find car
```

Enter model number:

```
please input model number: c2
```

Car found.

model_num	year	color	maker	model	body_type	quantity
c2	2008	yellow	US	c2-A	sedan	1

1.6 Find A Match

To find cars that matches with accessories, first let's look at the accessories database:

Type "show acc":

```
please input your command: show acc
```

See results:

```
please input your command: show acc
```

seq_id	name	model_number	year	color	maker	model	body_type	quantity
1	seat	c1	2019	black	Japan	c1-A	sedan	2
2	wheel	c4	2019	black	UK	c4-K	SUV	10
3	window	c3	2009	white	Taiwan	c1-F	Jeep	12
4	wheel	c1	2009	white	Taiwan	c1-F	SUV	1

To find an accessory that matches with given model number, use "find match" command.

Type "find match", and input the seq_id:

```
please input your command: find match  
please input accessory seq id: 2
```

See results:

model_num	year	color	maker	model	body_type	quantity
c4	2019	blue	Netherland	c4-K	SUV	2

Match successfully found.

1.7 Output Inventory

To output the inventory, simply type “export” command. Database will be exported to the JSON file.

1.7 Quit Program

Type “quit” command, and you will see the program be terminated.

```
please input your command: quit  
See you next time
```