



# Final Assignment

Code Discovery Programme

Version 1.0



## Scenario

You will be building an application for a retro technology collector. This collector likes to collect old technology, like computers, cameras, phones etc. You will be building a small database program so the collector can record all the items in the collection.

The collector must be able to:

1. Add items to the collection.
2. Show the items in the collection (by type).
3. Delete items from the collection.

When the program runs, it should display a menu with the options above, as well as an exit option. The user will then choose an option, and the program will either ask for input, or display output, depending on the user's choice. For example:

```
Python Collector
```

```
-----
```

- ```
1. Add Item to Collection.
2. Show Items in Collection.
3. Delete Items from Collection.
4. Exit
```

```
Choice> 1
```

```
Adding an Item
```

```
-----
```

```
Title> IBM 5150 Computer
```

```
Types: 1. Computer, 2. Camera, 3. Phone, 4. Video Player
```

```
Type> 1
```

```
Date Added> 25/07/2019
```

```
Date of Manufacture> 12/08/1981
```

```
Description> The original IBM PC.
```

```
Item Added!
```

```
Python Collector
```

```
-----
```

- ```
1. Add Item to Collection.
2. Show Items in Collection.
3. Delete Items from Collection.
4. Exit
```

```
Choice> 2
```

```
Types: 1. Computer, 2. Camera, 3. Phone, 4. Video Player
```

```
Type> 1
```

```
Showing: Computer
```

Item	Date Added	Date of Manufacture
IBM 5150 Computer	25/07/2019	12/08/1981
Apple II	12/01/2018	14/07/1977



Python Collector

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1. Add Item to Collection.
2. Show Items in Collection.
3. Delete Items from Collection.
4. Exit

Choice> **3**

What would you like to delete?

Number	Item
1	Apple II
2	IBM 5150 Computer
3	Nokia 3310
4	Atari 2600

Delete> **3**

Nokia 3310 Deleted

For each item in the collection, you must store the item name, type, date added to the collection, and the date the item was made. The type of the item can be computer, video player, phone or camera.

## Marks

You will be given marks as follows. You need to score at least 50/100 to pass the assignment.

Item	Marks
A working main menu	<b>15</b>
Ability to add an item to the collection, with all required fields.	<b>15</b>
Ability to show all the items in the collection, after choosing a type.	<b>15</b>
Ability to delete an item from the collection.	<b>15</b>



### Extra Marks

You can get more marks by adding additional features.

Item	Marks
Implement a Tkinter or PyQt GUI	10
Make the program save and load data to a file	10
Add an option to allow the user to add more item types	10
Allow the user to edit an existing item	10

### Submission

Assignment code is to be submitted via TheStudentCampus, or via e-mail to [keith@icemalta.com](mailto:keith@icemalta.com). If you have trouble e-mailing your project, you can use WeTransfer (<http://wetransfer.com>).

### Submission

The deadline for this assignment is **6<sup>th</sup> November 2019**.