

Assignment 2

Deadline: 11:59PM on 1 March, 2024

Problem

You are tasked with creating a Python program to manage a small inventory for a store. Your program should allow users to perform various actions such as adding items to the inventory, removing items from the inventory, and displaying the current inventory.

1. Requirements

- ◆ Implement a Python program that provides a menu-based interface for users to interact with the inventory system.
- ◆ Use a dictionary to store information about items in the inventory, where the keys are item names and the values are integers representing the quantity of each item.
- ◆ Include the following functionalities:
 - Add an item to the inventory.
 - Remove an item from the inventory.
 - Display the current inventory.
 - Implement appropriate error handling for invalid inputs and edge cases.

2. Instructions

- ◆ Use a dictionary to store information about each item in the inventory.
- ◆ Utilize functions to modularize your code for each functionality.
- ◆ Implement error handling to handle invalid inputs and edge cases gracefully.
- ◆ Provide a clear and user-friendly interface with appropriate prompts and messages.

```
PS D:\TA\Work 5\work> py code.py

Welcome to the Inventory Management System!

1. Add an item
2. Remove an item
3. Display current inventory
4. Exit

Enter your choice: 1
Enter item name: Apple
Enter quantity: 10
Apple (10) added to the inventory.
```

3. Save the File Offline

- ◆ Click the “Download Code” button/icon to save the file offline.
- ◆ Rename the downloaded main.py file as a2.py

4. Report

- ◆ Write a report about how you did implemented the solution and how it is efficient.
- ◆ Include screenshots of your code and output in the report.
- ◆ Add your names and A numbers in the report.

5. Submission

- ◆ Include your student number as comment at the top of your code i.e #012345.
- ◆ Make sure to include your partners name and student number as well.
- ◆ Submit your code as a2.py and report as a2.pdf zipped into an a2.zip file.
- ◆ Each group makes one submission. That means only one person in a group makes a submission. Failure to do so will result in penalty.
- ◆ Absolutely no late submissions
- ◆ Failure to submit on Moodle will result in 0

6. Grading

- ◆ (1 point) Correctly submitting both files and including your name and correct student number.
- ◆ (5 point) Correct solution to the problem.
- ◆ (5 point) Submitting a report with implementation details etc.