

# Project 1 - Part 2

## PART 2 – LISTS, DICTIONARIES AND LOOPING

1. Write one page of essay (font 12 and spacing 1.5) explaining your inventory management system.

The inventory management system takes user input and allocates inventory based on “Name”, “Price”, and “Quantity.” The first portion of the code is the `main()` function. This is the backbone of the system. It initialises the products dictionary, initialises the while loop, and calls the menu interface (`display_menu()`). It consists of 4 choices of location (add new product, update product, view products, stop) that will redirect the user to 4 other functions based on user input between 1-4. The `display_menu()` is a code for the landing page interface when the user interacts with the main function and provides context to the system. The following function `add_product()` is a function that adds a new product into the products dictionary. If a product is already in the products dictionary, it will reject the input and ask for a new product. If not, it will prompt the user to enter the subsequent product details, such as price and quantity. Then, it will inform the user if the entry is successful or not. The following function `update_product()` is to update existing products in the products dictionary. If a product is not present in the dictionary, then it will reject the input and ask for a new input. If the product is in the dictionary, it will prompt the user to choose either to update the price or quantity. It will inform the user if the update is successful. The last function is `view_products()`; this code allows the user to view the available products in the dictionary.