

### **Summary of the Stock Management System Project**

- Uses a SQLite relational database to store suppliers, sales, food information, login details etc.
- Implements CRUD operations to add new food products, food categories, suppliers etc. Also has search features to easily find a record.
- Dashboard shows total sales (£) and contains display buttons that show the number of items stocked out or need reordering. These buttons are clickable which then shows a treeview with the respective products along with their supplier information. There is also an email panel below the treeview so you can email suppliers for more of those food products.
- Accepts a CSV file containing sales data which is then imported into the system to update the food inventory levels. This updates any graphs or reports made as well as the number of products below the reorder point or are stocked out.
- Makes use of data visualisation (bar charts) to produce sales reports for individual products (in terms of Quantity Sold and Value made (£)) as well as performance reports showing the worst and best 5 performing products (in terms of Quantity Sold) for a specific time period. (The time period is hard coded in the SQL queries).
- Makes use of the ARIMA model to forecast sales of a particular food product for a specific time period.

#### **Additional Features:**

- Fully GUI Based – Makes use of Python Tkinter along with OOP
- Has 2 Factor Authentication to access the system and allows passwords to be reset.