**Peach Tree**



**Session**: 2022 – 2026

**Submitted by:**

Usman Kibria 2022-CS-90

Fasi Tahir 2022-CS-

**Supervised by:**

Sir Nazeef-ul-Haq

Department of Computer Science

**University of Engineering and Technology, Lahore Pakistan**

**Problem statement:**

Peach tree is an accounting software used by most shops and marts to keep track of their products, sales, and purchases. However, this software has a few missing features such as sorted Data file, recommendations of stored products based on what the person is searching for notifications for products falling below set limit.

**Requirements:**

This software would involve:

* Sorting algorithms to sort the added data.
* User friendly interface.
* Notifications for products falling below threshold.
* Graphs for the sale and purchase of each product.
* Password Hashing to prevent outside interference into the data file.
* Continuously updating of the data file as products are sold or added.
* Binary trees or Linked lists algorithms for systematic computation

**Description:**

**Sorting:**

All the data entered will be sorted into the data file and there will be options to sort the data in order of price, monthly sales, alphabetical or by number of units available.

**User friendly interface:**

The sorted data will be visible to the user to check and edit. It will be made in a comfortable and user-friendly output design to avoid confusion and better support the user.

**Notifications:**

Any products falling below the threshold will immediately be notified to the user also if any custom changes are made to the data there will be a notification.

**Graphs:**

All the sales and purchases will be shown to the user in the form of a graph consisting of monthly and yearly sales.

**Hashing:**

To prevent anyone from editing the Data File, it will be password protected.

**Continuous:**

As changes are made, they will be replicated in the data file and the backup .csv file to prevent any losses in case of mishap.

**Systematic computation:**

To keep the data in systematic manner to edit it we will use binary trees or Linked lists will be used.