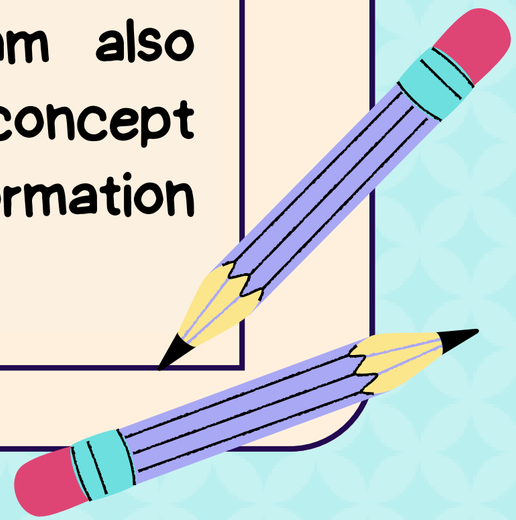
CSC248

KANGAR FOOD

INTRODUCTION

This project is about developing a java program that function like a digital helper for a food inventory system. The main function of this program is to maintain accurate records of information stored like foods item, quantity, expired date, and prices of the food. This program also implement LinkedList and Queue concept in order to store many information regarding the order from customer.



PROBLEM STATEMENT

Our project aims to address the challenges faced by the "Kangar Food" restaurant in managing customer orders and tracking inventory. We're developing a system that links customer and inventory management, automating order processing and maintaining accurate records of food items, their quantities, prices, expiry dates, and weights. Additionally, a staff management system will enable efficient data management for smooth restaurant operations.

APPLICATION

* STORE *

customer information including their username, password, birthdate, membership

* UPDATE *

Staff set the price and quantity of the food

* CALCULATE *

Determine the total price of an order, factoring in birthday discounts and membership discounts

* SEARCH *

check if the account already existed during registration

* DISPLAY *

display total price after order has been made

LINKEDLIST

ATTRIBUTE

head, data, next

METHODS

LinkedListCustom, getHead, setHead, insertAtFront, insertAtBack, insertAtPosition, insertAtMiddle, removeNode, isEmpty, display, getData, getNext, setData, setNext, toString

QUEUE

01 ATTRIBUTE

head, size

02 METHODS

QueueCustom, getHead, setHead, getNext, getSize, getLast, dequeue, enqueue, isEmpty, display

FOOD CLASS

ATTRIBUTES :

foodName, quantity, price,
expiryDate, netWeight

METHOD:

calculateTotalWeight,
afterSST,
calculateTotalPrice,
isMember,
isBirthday,
discountedPrice,
toString

ACCOUNT CLASS

ATTRIBUTES :

username, password,
birthdate, isMember

METHOD:

Account, getUsername, setUsername,
getPassword, setPassword, getBirthdate,
setBirthdate, isMember, setMember, verify,
register,checkStrength,
toString

STAFF CLASS

ATTRIBUTES :

username, password

METHODS :

Staff, getUsername, getPassword, setUsername, setPassword, setFoodPrice, setFoodQuantity, toString

FILEHANDLING CLASS

ATTRIBUTES :

reader, writer

METHODS :

FileHandling, write,
read , open

FLOW OF THE PROGRAM

Turn on the restaurant program

User is asked for their login credentials

For customer, they will be asked to order food and after that the program will record it

The program then checks the food items ordered and reduces them from the stock

If that day it is the customer's birthday then they will get special discount

If they joined the membership program, they also get special discount

For staff, they are able to manually change the food price and quantity to make sure everything is up to date with real life stock

When everything is done for the day, you turn off the program

thank you!