

SKOMS

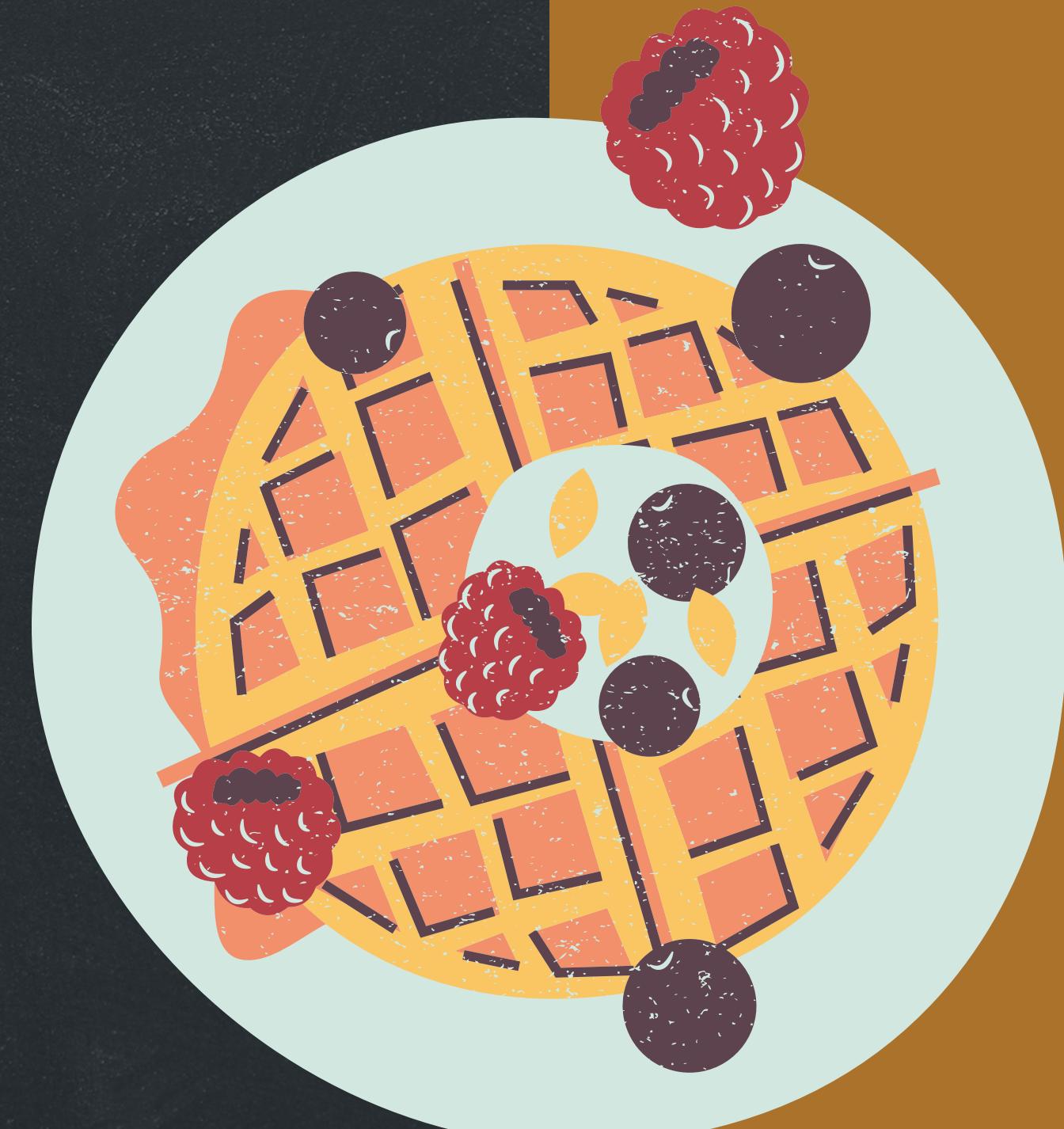
SELF-SERVICE KIOSK AND
ORDER MANAGEMENT SYSTEM

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Project Overview

The implementation of self-ordering kiosks is an effective means of simplifying the ordering process while reducing instances of communication errors and wait times for customers. The use of this technology renders physical queues unnecessary as customers can comfortably await their turn, leading to an overall enhanced experience.

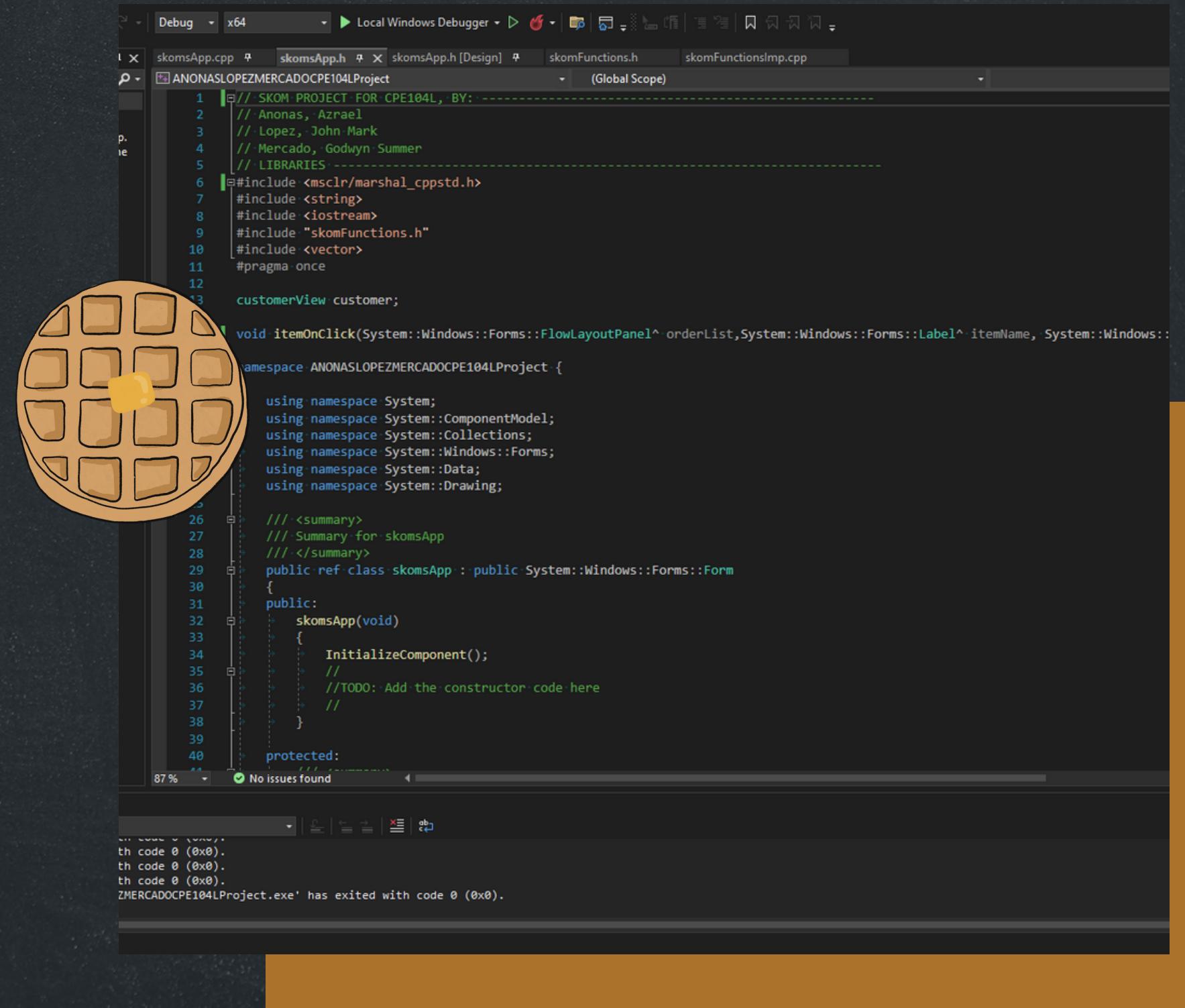
In addition, introducing a listed queueing management system streamlines the process and improves communication between customers and employees. The ultimate aim of this project is to optimize employee efficiency, reduce waiting times, and enhance the overall customer experience. The Belgian Waffle, located within the university, can serve as a suitable sample scope for effective implementation.



Project Overview (Technical)

The Technical Overview of the Project highlights that the system will employ CLR .NET Framework GUI in Visual Studio. The project's primary objective is to simulate the roles of a customer and cashier, which will be presented in the Flowchart. The system will execute the self-ordering process for customers, and the queuing system for cashiers.

To enhance convenience, the group resolved to change the program's approach. Instead of utilizing the queuing system based on the order number provided by the kiosk, the group followed Sir Cruz's recommendation to prioritize orders that are easier to fulfill compared to other orders.



```
// SKOM PROJECT FOR CPE104L, BY:  
// Anonas, Azrael  
// Lopez, John-Mark  
// Mercado, Godwyn Summer  
// LIBRARIES  
#include <msclr/marshal_cppstd.h>  
#include <string>  
#include <iostream>  
#include "skomFunctions.h"  
#include <vector>  
#pragma once  
  
customerView customer;  
  
void itemOnClick(System::Windows::Forms::FlowLayoutPanel^ orderList, System::Windows::Forms::Label^ itemName, System::Windows::  
namespace ANONASLOPEZMERCADOCPE104LProject {  
  
    using namespace System;  
    using namespace System::ComponentModel;  
    using namespace System::Collections;  
    using namespace System::Windows::Forms;  
    using namespace System::Data;  
    using namespace System::Drawing;  
  
    ///-<summary>  
    ///-Summary for skomsApp  
    ///-</summary>  
    public ref class skomsApp : public System::Windows::Form  
    {  
        public:  
            skomsApp(void)  
            {  
                InitializeComponent();  
                //  
                //TODO: Add the constructor code here  
                //  
            }  
        protected:  
    };  
};  
ZMERCADOCPE104LProject.exe' has exited with code 0 (0x0).
```

Project Features

Intuitive UI

The program features an easy-to-navigate UI that can seamlessly guide its users through its various functionalities.

Order Number Generation

This automatically assigns a unique number to a customer upon order finalization

CRUD Implementation

Utilizes operations such as Create, Read, Update, and Delete which are essential when it comes to managing customer orders.

Order History Logging

Records and stores customer transactions providing a comprehensive overview of customer order history

Cashier/Customer View

The program simulates two different important roles that aids the self-ordering kiosk and queue management system to be functional.

CRUD IMPLEMENTATION

Create

- Upon accessing the program, meticulous records are kept of each and every customer interaction and transaction. This ensures that all information is accurately and comprehensively documented for future reference.
- Customers will be prompted to input essential details of their order and transaction, such as the items to be ordered. Once finished the program will then print the total cost, the order number, and the timestamp of the transaction.

Read

- After a transaction has been recorded, the system will promptly collect all relevant details and append the order number to the queue. To keep in mind, the system will generate two files: one with a record of all transaction logs and the other exhibiting the queue transactions that will feature the order number for an organized display of the items in the queue.

Update

- After the customer finishes their transaction, the program will provide them with an order number that corresponds to their place in the queue. This helps the customer to easily recognize their order and receive updates when it is ready.
- After the order is fulfilled and available for pick up, the cashier updates the customer's order status. Subsequently, a receipt is generated, displaying all transaction details provided at the beginning of the program when prompted.

Delete

- Once an order has been picked up or canceled, the system then efficiently removes all associated order numbers and details. This is done to prevent any unnecessary information from cluttering our system and causing potential data overload.

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THANK YOU
FOR ALL THE
ATTENTION

