

# cake bakery system

## Project Team

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CS 1312: Computer Programming 2  
Instructor: Dr. Hana Alghamdi

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# 1- Project Title

Cake bakery system.

## 2- Project Description

A cake bakery system is a software application that is designed to streamline the operations of a bakery that specializes in producing and selling cakes, the target user is someone who is looking for a delicious and visually appealing cake for a variety of occasions, such as weddings, graduations, or other celebrations. The aim of the cake bakery is to provide a high-quality dessert that satisfies the customer's taste.

## 3- Project UML

*\*We have included a PDF File of the UML.*

## 4- Project Functionalities or Tasks

- 1- showMenu; method that show the menu to the user.
- 2- chooseIndex; method take the id that user entered and return the index of an array list of cakes info.
- 3- customerInfo; method that take an object of order as a parameter and store the payment method in it and store customer info in a file.
- 4- validateCardNumber; method validate the card Number.
- 5- validateCvv; method validate the cvv number.
- 6- validateExpirationYear; method validate the expiration Year.
- 7- validateExpirationMonth; method validate the Expiration Month.
- 8- calculateCost; method that calculate the cost with the tax.

## 5- Project workflow

Our program is about cake bakery , First we have a welcome line for the user and then we will show the menu with a message asking the user to enter the order by choosing the cake number(cake id) . Then the user will enter his name to store the order with his name. We will request his phone number and the email. After that the user will choose the way of paying, If the user chooses with credit card he will enter his card info (card number, expiration year , expiration month, cvv). If he entered cash the user will enter the following (day of receiving) and we will inform the user with our location . Then we will print the user info with his order and the last thing we will print payment info (payment method, total cost included with the tax).

## 6- Extra Work

reading from files, writing to the file, and handling the exception.

## **7- The distribution of the work**

*\*We worked on the project together.*

## **8- Lessons Learned**

The programming project of a cake bakery has taught us important lessons. These include planning well, organizing the code, checking user input, handling errors, Files I/O, testing the code, and documenting it. And work well with others.

## **9- Project difficulties**

- 1-Working together effectively as a team was challenging.
- 2-It was difficult to ensure that users were entering the correct information which caused errors in the program.
- 3-We encountered a lot of errors in the code.
- 4-Difficulty in reconciling all the materials, as we had other projects to work on.
- 5-We had to stay after class to work on the project together.

## **10-Project Declaration**

We confirm that the work of this project was solely undertaken by ourselves and that no help was provided from other sources as those allowed. As well as we confirm that we completely aware of the violation consequences of the academic integrity.

Read and check the previous declaration.

List all your IDs:

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