

ECT200

Introduction to Computing Fall 21-22 Semester Group Project

Marks 15

Part A: Pizza Ordering System

You are required to create a Virtual Pizza Shop, based on clients’ requirements. Please consider the specifications given below for the project: -

# Client requirements

Our customers (pizza shop) need to be able to do the following while the application is running.

1. The User should be able to see the Welcome screen with following options: -
   1. MENU for the Pizza
   2. Order the Pizza
   3. Exit the Program
2. One the User selects the MENU option; he/she should see all the types of pizzas available with their prices. The user should be able to go back to the previous MENU/Welcome Screen shown in Step 1.
3. The User should be able to submit a new order, where he/she can select: -
   1. How many pizzas he/she wants to order and the kind of each pizza (i.e., pepperoni, margherita, vegetarian, Neapolitan)?
   2. Size of Each Pizza (Large (50 AED), Medium (40 AED), Small (30AED))
   3. User can request up to 3 toppings (i.e., olives, tomatoes, mushrooms, jalapenos etc.) for each pizza without any extra cost. Each additional pizza topping will cost 3 AED.
4. Once the User completes the order, the invoice should be displayed on the screen with all the details about the order (i.e., how many pizzas have been ordered, what type of pizzas have been ordered, any extra toppings and the breakdown of the bill)
5. After displaying the invoice on the screen, the user should have an option to return to main menu/Welcome Screen.

# Tasks to be completed (Part A)

* You are required to identify the requirements for this program in terms of the input, output, and processing

1. Requirements

User inputs.

1. Type of pizza. (i.e., pepperoni, margherita, vegetarian, Neapolitan).
2. Size of pizza. (Large (50 AED), Medium (40 AED), Small (30AED))
3. Topping. (i.e., olives, tomatoes, mushrooms, jalapenos etc.)
4. Processing
5. Selection of pizza type
6. Selection of pizza size and tabulation of prices
7. Selection of topping and tabulation.
8. Output

Pizza Invoice

* Write an algorithm/pseudocode for the program
* Create a flowchart for the program

* Write a python program

* Create a User Manual for the program

Part B: Website Development

This project will give you ample opportunity to showcase your creative skills. The website project contains a set of webpages written in HTML and CSS. The website highlights the most important features of Abu Dhabi city and the UAE. The website contains images of areas, photographs of the most prominent leaders, and key milestones. The website project can be summarized as below:

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* Create a main page that has the flag of UAE, important information about the UAE, and a menu with labels as {leaders, areas, universities, contact us}.
* The leader page contains photos of leaders and some information for each one.
* The areas page contains the name of seven areas in UAE and some information for each one as well as some of the photos of key milestones for each one.
* The universities page contains the name of the universities in UAE with some information for each one. You can add some photos and the URL link of each university.
* Create a dummy contact us page with a form to contact the company admin
* The website has 5 webpages, one is the main page and four others. You can use hyperlinks to link all webpages to each other. We can move from the main page to one of the other pages and we can back to the main from any page by using the back button.
* The website can be run once click on it and move between pages easily.
* The main page should be attractive and has a good design.

You can use this link to learn how to design and create a new website using HTML and CSS commands. These links will provide you the basic commands that will help you to create your website.

<https://www.tutorialrepublic.com/html-tutorial/html-links.php> <https://www.w3schools.com/css/css_intro.asp>

# Deliverables/Requirements for Part B: -

1. You are required to give the demo of the working website. It can be on your local system (i.e., you do not need to host it)
2. The website should be built using HTML and CSS. You can’t use tools like WIX to create the website.
3. Write a report covering all the steps you have followed to build your website. Describe HTML/CSS tags used to complete the webpage with screenshots.

**Report Structure (Part A and B)**

The report should contain the following sections: -

# Title Page

1. **Introduction**
   1. Introduction to the tasks you need to complete in Part A and B.
   2. Individual Contribution by each team member. A paragraph by each team member summarizing their contributions.

# Main Body of the report

* 1. Description of Algorithms/Pseudocode, Flowchart to solve Part A and steps in Part B.
  2. Screenshots of the sample code and output for Part A and B.

# Conclusion

1. **References**

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| --- | --- | --- |
| **Part A** |  | **Mark** |
| **Implementation** | * Program runs without error. * All requirements are implemented * Program produces the required output | 2.5 |
| **Documentation** | * Complete Documentation with the help of algorithm/ Pseudocode and Flowchart * User manual describes all the useful features   of a system and how to use each feature effectively leading to a good user experience. | 2.5 |
| **Presentation** | * Demonstrates that the code works properly. * All members can answer the questions   (You may be asked to rewrite/explain a certain section of the project) | 2.5 |
| **Total Marks for Part A** |  | **7.5 Marks** |
| **PART B** |  | **Mark** |

|  |  |  |
| --- | --- | --- |
| **Implementation** | * All web pages are implemented * Organization: How information is organized and presented on your website * Formatting: Correct use of headings, sub- headings, paragraphs, bullets or lists to break up text. * Effective navigation * Attractive Design (A website doesn’t have to be flashy to look good) | **2.5** |
| **Documentation** | Report describing all the steps followed along with description of all HTML/CSS tags | **2.5** |
| **Presentation/Demo** | * Demonstration that the website works properly * All members can answer the questions. (You   may be asked to rewrite/explain a certain part of the project) | **2.5** |
| **Total Marks for Part B** |  | **7.5 Marks** |

# Note: 1. In addition to the marking criteria, marks may be deducted for failure to comply with the assignment requirements, including (but not limited to):

* Incomplete implementation(s), and
* Incomplete submissions (e.g., missing files), and
* Poor spelling and grammar.

# 2. Each group needs to demonstrate their project to the rest of the class in Week 13.

**Submission Guidelines:**

1. Submission of the project is no later than 20th of November 2021
2. The project is worth 15%
3. Work needs to be done by a group of students of no more than three students.
4. You are required to submit soft copy of your code and a report/documentation in a compressed file via Blackboard.
5. You are required to give a presentation where you can give a demonstration of your work in Part A and B.
6. Each group should submit one copy.