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Web Development of Online Cake Shop Website

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Independent University, Bangladesh

Web Development of Online Cake Shop Website

By

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September 19, 2022

Dissertation submitted in partial fulfillment for the degree of Bachelor of Science in Computer Science

Department of Computer Science & Engineering

Independent University, Bangladesh

Attestation

This is to certify that I, Arpita Das Puja(ID:1730938), have completed the report on the online cake shop partial website and submitted it in partial fulfillment of the requirement for the Degree of Computer Science and Engineering from Independent University Bangladesh (IUB).It was completed under the supervisor of Mohammad Motiur Rahman .I attest that all of my work is genuine and based on my experience what I have learn from my internship.All information sources used in this project and report have been also properly acknowledged.

Arpita Das Puja — Signature

19.9.22 — Date

Arpita Das Puja — Name

Acknowledgement

First and foremost, praises and thanks to God, the Almighty, for his showers of blessings throughout my Internship work and allowing me to complete the Internship work successfully within the timeframe. I would like to thank Independent University, Bangladesh (IUB) for offering an Internship program for me. From the core of my heart, I would like to express great appreciation to all those who provided me the possibility to complete this report. A special thanks I give to my course instructor, Mohammad Motiur Rahman, lecturer of Independent University, Bangladesh, whose contribution and suggestions were extremely helpful to complete this report. The timely completion of this project is mainly due to the attentiveness and perseverance of my company. I am tremendously thankful to my parents for their affection, devotions, kindness and sacrifices for educating and organizing me for my future. I am also grateful to Mediasoft Data System LTD. for recruiting me as an intern.

I want to offer my utmost gratitude to Gopal Debnath (MD, Mediasoft Data system LTD) for his Monitoring and guidance to fulfill my Internship.

(Arpita Das Puja) September 17, 2022 Dhaka, Bangladesh

Letter of Transmittal

17th September, Mohammad Motiur Rahman,
Lecturer of Independent University, Bangladesh

Subject: Letter of Submission of Internship Report, summer 2022.

Dear Sir,
I am writing this letter to kindly inform you that I have completed my Internship program and its report. The Internship started from 1st June 2022 and ended on 31st August 2022. I completed my internship at Mediasoft Data System LTD which is a Software and Technology Company. The following report is based on my experience and the work I did in the development sector of this company. I have worked for 3 months in this company and did my best work there with high passion, dedication and enthusiasm.
I hope that you will be kind enough to consider any mistakes in preparing this report and accept it.
Thanking you Sincerely yours,
Arpita Das Puja

Evaluation Committee

Signature

Mohammad Motiur Rahman

Name

Mohammad Motiur Rahman

Supervisor

Signature

Sabrina Alam

Name

Sabrina Alam

Internal Examiner

Signature

Name Fazle Imamul Karim

External Examiner

Signature

Name

Convener

Dr. Mahady Hasan
Head, Department of CSE
School of Engineering & Computer Science
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Abstract

The Internship course fulfills part of the requirements in pursuing the degree of Computer Science Engineering in the Institute of Independent University Bangladesh. This report serves as summaries of the activities and experiences gained with the Mediasoft Data Systems LTD team as an intern. Clients can submit online orders and/or request services from a store that accepts both walk-in customers and online orders through a website for a cake shop. The internet system displays all the available things that they intend to sell online. Customers are assisted in adding things to their shopping baskets by this web-based application. Customers who order cakes online can have them delivered to their homes by providing their full address, name, and contact information. As a junior Web Developer, I joined Mediasoft Data System LTD for the internship program. It was my responsibility to create an online cake business website. I was given a few tasks from the lead developer that must be finished in order to construct the website. I completed the assigned milestones by the deadline. I unexpectedly encountered the requirements gathering phase, but I handled it well.

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Chapter 1

Introduction

1.1 Overview/Background of the Work

The undergraduate program requires that we complete an internship period with a reputable company where I will be trained practically with working environment practices and get familiar with the industry. I worked at a software company Mediasoft Data Systems LTD where I completed 3 months of internship. In this report, I have discussed my internship period at Mediasoft, an overview of the work and everything I have done there. This section gives a viewpoint about the project. Web application has become very essential for any organization which has a number of members connected with it, along with new associates interested in joining it.

I designed an online cake shop website so that people can buy cakes from this site . I was told the kind of design I needed to do from my supervisor. I followed the kind of design he wanted me to do and I would also tell if I felt I could add something here and there and often I would get the approval. Our communication was physically at the office.

An online cake shop website enables clients to submit online orders and/or request services from a business that accepts both walk-in customers and online orders. The system for the online store provides an online presentation of all the products that are available and that they want to sell. Customers can add their cake of choice to their shopping carts with the use of this web-based application. Customers can have their chosen cake delivered to their home by providing their full address, name, and contact information.

Purpose of the Internship

The goal of this internship is to simultaneously expose students to real work experiences and environments. The report's preparation serves to highlight the author's accomplishments throughout the internship. The internship program's goals are as follows:

To build the strength, teamwork spirit and self-confidence in students' lives. Provides the opportunity to learn real-life work skills and etiquette hands-on at a real job. To gain valuable skills, knowledge and experience in a field to allow you to make a career

transition Explore a career interest, develop skills, and gain experience. Internships focus on the skills you will learn and the experiences you will have, not simply on the company name. To help you apply the theory and skills you have learned in the classroom setting, and for your personal development. The student will be able instilled with good moral values such as responsibility, commitment and trustworthy during their training Improving productivity and time management for full-time employees, as interns often complete smaller tasks To build the strength, teamwork spirit and self-confidence in students' lives.

1.2 Objectives

The project's goal is to submit an application to buy things from a cake shop. The main goal of the project is to create a comprehensive and effective web application that can offer an online shopping experience. Other goals include:

Design an online cake shop website. Test the system many times. Building sales and profits. Increasing customer traffic. Building customer loyalty. Make the System user friendly so that customers find it easy to use. Have ratings and reviews of products. Allow filter search options, and there should be a range of products to choose from the search result. Make the System secure and safe to use.

1.3 Scopes

Features available to user and administrator after developing this web application are: The admin can add any new product or update the product's information or delete any existing products. Customers can register and login into the system, view the products and select their desired ones. Once they do that, they will be directed to the shopping cart and then they can make the payment and will receive a confirmation message. Customers can also give their feedback and contact us. The admin can add new categories of items or update or delete the existing ones. The admin can view the order of products. The admin can edit the coupons or add new ones or delete the existing ones. The admin can also deactivate or activate any category of products. The admin can also view the customer information of the ones who have registered into the system. Customers can view the recently added products and select them and add them to the shopping cart. Customers can view the about page.

Chapter 2

Literature Review

2.1 Relationship with Undergraduate Studies

The web development course was a huge help for this project of mine. I learned HTML, CSS, JavaScript, PHP, and jQuery. I learned MYSQL in my Database course. My programming logic was built by the Data Structure and Algorithms courses. The Object Oriented Programming course helped me build the codebase in a structured, organized, and professional way. And all the other course lessons helped me solve various problems that occurred while completing the project. Some of the tools I learned from my courses and used here are described below:

Figure 2.1: HTML

The standard markup language for documents intended to be viewed in a web browser is called HTML, or HyperText Markup Language [1, 2]. Technologies like Cascading Style Sheets and scripting languages like JavaScript can assist. HTML documents are downloaded from a web server or local storage by web browsers, who then turn them into multimedia web pages. HTML originally featured cues for the document's design and semantically explains the structure of a web page. The foundation of HTML pages are HTML components. Images and other objects, like interactive forms, may be embedded within the produced page using HTML techniques. By indicating structural semantics for text elements like headings, paragraphs, lists, links, quotations, and other objects, HTML offers a way to generate structured texts. HTML elements are delineated by tags,

written using angle brackets. text and may include other tags as sub-elements. Browsers do not display the HTML tags, but use them to interpret the content of the page [1]. With HTML it is possible to create one's own Website(s). .

Cascading Style Sheets is a style sheet language used for describing the presentation of a document written in a markup language such as HTML [3]. The World Wide Web's foundational technologies, along with HTML and JavaScript, include CSS. Layout, colors, and fonts are just a few examples of how CSS is intended to permit the separation of display and content. .

Figure 2.2: CSS

By specifying the pertinent CSS in a separate CSS file, which reduces complexity and repetition in the structural content, and by allowing the.css file to be cached to improve page load speed between the pages that share the file and its formatting, this separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple web pages to share formatting, and improve accessibility. The ability to offer the same HTML page in many styles for various rendering techniques, such as on-screen, in print, by voice (using a speech-based browser or screen reader), and on Braille-based tactile devices, is also made possible by the separation of formatting and content. If a user accesses the material on a mobile device, CSS additionally provides rules for different formatting. The names of different style properties are specified using a number of English keywords in CSS, which has a straightforward syntax. A style sheet is a list of guidelines. A declaration block and one or more selectors make up each rule in a rule-set [4].

JavaScript often abbreviated as JS, is a programming language that conforms to the ECMAScript specification [5]. JavaScript is multi-paradigm, high-level, and frequently just-in-time compiled. It has prototype-based object-orientation, dynamic typing, curly-bracket syntax, and first-class functions. JavaScript is one of the foundational technologies of the World Wide Web, along with HTML and CSS [5, 6]. Over 97% of websites use it client-side for web page behavior,[6]

JavaScript

Figure 2.3: JavaScript

often incorporating third-party libraries [6]. A dedicated JavaScript engine is available in every major web browser and is used to run the code on the user's device. JavaScript is a multi-paradigm language that allows imperative, functional, and event-driven programming. It offers application programming interfaces (APIs) for using the Document Object Model, regular expressions, dates, and standard data structures (DOM). There are no input/output (I/O) features like networking, storage, or graphics capabilities in the ECMAScript standard. In reality, JavaScript APIs for I/O are provided by the web browser or another runtime system [5]. JavaScript engines were originally used only in web browsers, but they are now core components of other software systems, most notably servers and a variety of applications.

PHP is a general-purpose scripting language especially suited to web development [7]. Rasmus Lerdorf, a Danish-Canadian programmer, first developed it in 1994. The PHP Group now creates the PHP reference implementation. Personal Home Page was the first meaning of PHP, however it is now used to refer to the recursive initialism. Hypertext Preprocessor: PHP.

Figure 2.4: Php

A PHP interpreter, which can be implemented as a module, daemon, or Common Gateway Interface (CGI) executable, typically processes PHP code on a web server [7]. On a web server, the result of the interpreted and executed PHP code – which may be any type of data, such as generated HTML or binary image data – would form the whole or part of an HTTP response. Various web template systems, web content management systems and web frameworks that can be used to organize or make the production of that answer easier. In addition, PHP may be used for a wide range of programming activities that are not related to the web, including the control of robotic drones and standalone graphical programs. Additionally, the command line can be used to execute PHP code directly. The Zend Engine-based default PHP interpreter is free software distributed

under the PHP License. Since PHP has been widely adapted, it may be used for free on the majority of web servers and practically all platforms and operating systems. [7, 8]. Fast, flexible and pragmatic, PHP powers everything from your blog to the most popular websites in the world [8].
MySQL is an open-source relational database management system(RDBMS) [9]. Its name is a combination of "My", the name of co-founder Michael Widenius's daughter, and "SQL", the abbreviation for Structured Query Language. In a relational database, data is organized into one or more tables where different data types may be associated to one another.

Figure 2.5: MySQL

The relational database's data can be created, modified, and extracted using the SQL programming language, which is also used to manage user access to the database. A RDBMS, such as MySQL, works with an operating system to implement a relational database in a computer's storage system, manages users, permits network access, and makes it easier to evaluate database integrity and create backups. Under the rules of the GNU General Public License, MySQL is free and open-source software. It is also accessible under a number of proprietary licenses. MySQL was owned and sponsored by the Swedish company MySQL AB, which was bought by Sun Microsystems (now Oracle Corporation). In 2010, when Oracle acquired Sun, Widenius forked the open-source MySQL project to create MariaDB [6]. MySQL Database Service is a fully managed database service to deploy cloud- native applications [8, 9].

2.2 Related works

Anam et al. in their research conducted an analysis of re-engineering processes to opti mize the business processes in the cake shop [10]. The major goal of Nguyen, Tien Duy's project was to create a website that includes participation in discussions and answers on suitable social media platforms for a family business, selling and operating a cake shop [11]. Even though prices change often, it can be challenging for customers to forecast costs, which can raise concerns when buying cake components. In order to address these problems, "Design and Development of Masa cake Application to Recommendations and Online Order Of The Cake In Bagu's Shop Using YouTube API" will be created [12]. Basulescu et al. in a study highlighted the key elements in interior designing projects by looking at the personal project of a shop "Zephira" which searches for pastry and

bakery goods [13]. Mahale et al. proposed an online cake ordering system using firebase database [14].

Chapter 3

Project Management & Financing

3.1 Work Breakdown Structure

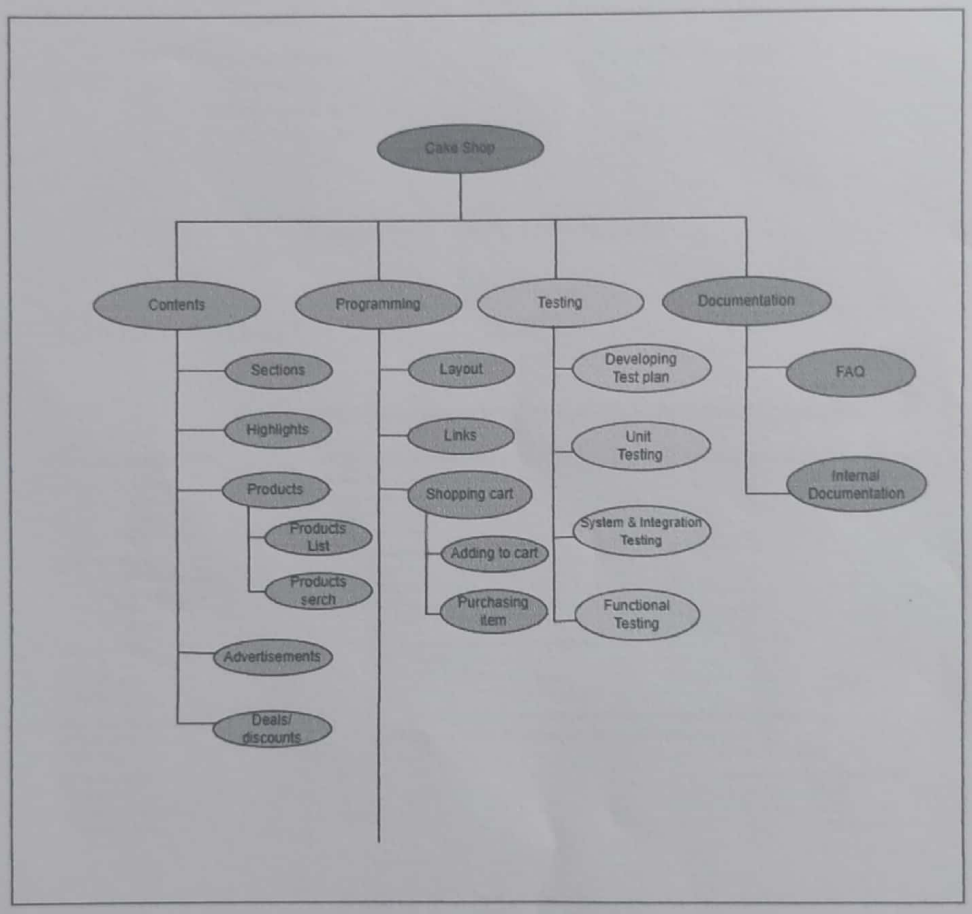

Figure 3.1: WBS Diagram

3.2 Process/Activity wise Time Distribution

Website Design Plan	start	end
Project Definition	**07/04/22**	**07/07/22**
Conduct research	07/04	07/06
Define project scope	07/05	07/07
Team kickoff meeting	07/04	07/04
Content Phase	**07/11/22**	**07/18/22**
Define content hierarchy	07/11	07/12
Create sitemap	07/12	07/13
Write content	07/11	07/14
Review content	07/14	07/18
Design Phase	**07/18/22**	**07/29/22**
Build mindmap	07/18	07/21
Design pages	07/21	07/26
Review design	07/27	07/29
Development Phase	**08/01/22**	**09/09/22**
Code site	08/01	09/02
QA site	09/01	09/09
Review Phase	**09/08/22**	**09/21/22**
Review full site	09/08	09/13
Make final updates	09/13	09/19
Official launch	09/21	09/21

Figure 3.2: Time Distribution

3.3 Gantt Chart

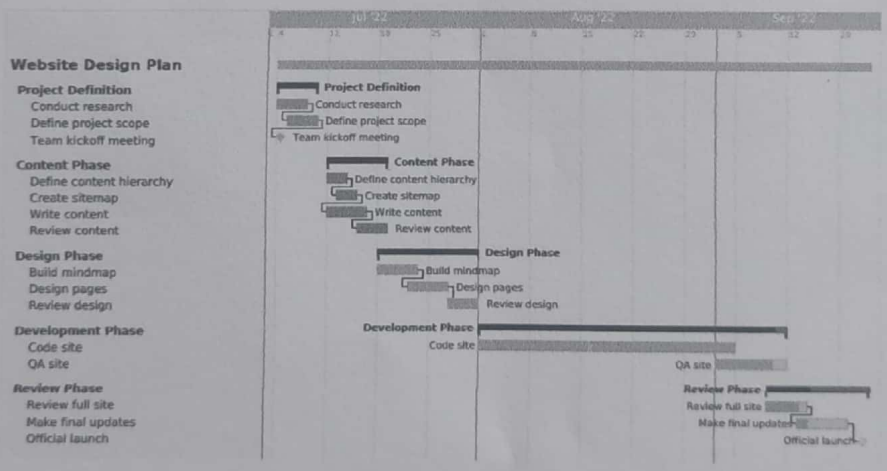

Figure 3.3: Gantt Chart

3.4 Process/Activity wise Resource Allocation

Enough support and resources were provided to me. Computer with good configuration was available in the office.

3.5 Estimated Costing

We are planning to get hosting from SiteGround as it is one of the best hosting providers. Domain name will cost us around $15.95/year. The hosting will cost us $5.95/month, so it will be $71.4 per year. SiteGround provides a free SSL certificate. For SEO our estimated cost will be around $50.

Chapter 4

Methodology

We have used agile methodology for our project. Agile methodology is a project management system that advocates for self-organizing, adaptive planning, flexible development, continuous changes, and early delivery [15]. The main idea is to have teams work with shorter (and multiple) deadlines. This allows for more feedback from end-users, while also providing them a working product sooner, even if it isn't necessarily the final product.

It can be thought like this: a user wants you to build them a house. Instead of giving the user a house in a year from now, you give them a gazebo after a month before continuing to build and improve the final product: a house. Users get a product with value (a roof over their head), while also being able to provide feedback in order to make the future house even better than originally planned. These shorter deadlines and increased feedback loops can bring the following advantages: teams can be more flexible as the users' needs change over time users can get a working product much faster teams can create a better final product for the end-users. It can be thought of like breaking one big project into a lot of smaller projects (called "runs"). After each run is "completed", there is a time to reflect on what was (or wasn't) accomplished, get feedback from the product owner/consumer, and then make some adjustments while planning the next run and product release [15].

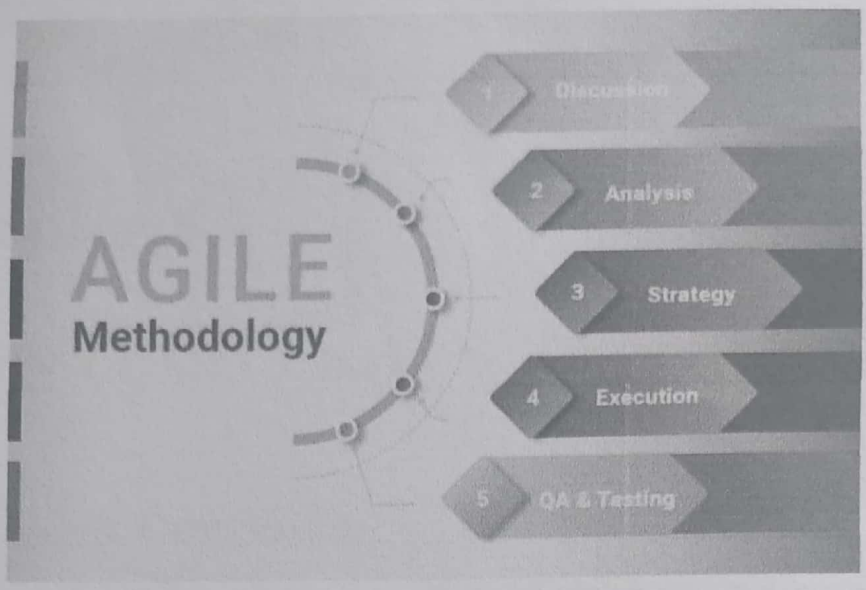

Figure 4.1: Agile Methodology flow

Along with the four core values/themes, there are also twelve main Agile principles: Customer satisfaction by early and continuous delivery of valuable software. Welcome changing requirements, even in late development. Deliver working software frequently (every few weeks rather than months) Close, daily cooperation between business people and developer Projects are built around motivated individuals, who should be trusted Face-to-face conversation is the best form of communication Working software is the primary measure of progress Sustainable development, able to maintain a constant pace Continuous attention to technical excellence and good design Simplicity—the art of maximizing the amount of work not done—is essential Best architectures, requirements, and designs emerge from self-organizing teams Regularly, the team reflects on how to become more effective, and adjusts accordingly

It is clearly visible that flexibility and feedback are two of the biggest core concepts in Agile. Through feedback and adaptability, it is believed that Agile can help companies produce better products, faster [16].

Chapter 5

Body of the Project

5.1 Work Description

I have used HTML, CSS, Bootstrap, PHP and MYSQL. JavaScript, jQuery were also used for the project but I did the particularly selected part. The online cake shop is a website where customers can simply order their demanding cake items. An online cake shop permits the customer to submit online orders and/or services from a shop that serves both customers walking into the store or ordering online. The online store system presents an online display of all the items available that they want to sell. This web based application helps the customers to choose their favorite choice of cake and add that to their shopping carts. Customers provide their complete address, name and contact information and they can get their chosen product delivered to their home.
Online cake purchases will be possible for clients on our website. When people are busy or don't feel like going outdoors, buying things online can be incredibly handy and time-saving because there is no need to stand in line to pay. This is especially true at busy times. Any existing item may be deleted, its information may be updated, or any new object may be added. Customers can examine the items and choose the ones they want by registering and logging into the system. Following that, they will be taken to the shopping basket where they can complete their purchase and get a confirmation message. Customers can also email us and provide feedback. The admin panel has a section where the admin can add new categories of items or update or delete the existing ones. The admin can view the messages customers have sent. The admin can also deactivate or activate any category of products. The admin can also view the customer information of the ones who have registered into the system.
It is a user friendly, responsive website that resizes itself, and depending on the type of device like desktop computer monitor, laptop or small screens devices like smartphone, tablets. Our goal is to:

Design an online cake shop. Test the system many times. Make sure to order prod-

ucts that are out of stock immediately. Building sales and profits Increasing customer traffic Building customer loyalty Improve ratings Make the System user-friendly so that customers find it easy to use. Make shipping of the products faster. Have ratings and reviews of products. Allow filter search options, and there should be a range of products to choose from the search result. Make the System secure and safe to use.

5.2 Requirement Analysis

Functional and Non-Functional Requirements

5.2.1 Functional Requirements

The system should allow the admin/stuff to upload product pictures The system should allow the admin/stuff to add/edit product description The system should allow the customers to write a message in the contact section The system should allow customers to give their reviews The system should allow admin/stuff to add new categories , or update or delete categories. The system should allow admin to add new vendors or update existing vendor information or delete existing vendor The system should allow admin/stuff to view customer details The system should allow admin/stuff to add new coupons or edit existing ones or delete existing ones. The system should allow customer, vendor, or admin to log into the system The system should allow customers to register The system should allow customers to choose the brand of the product. The system should allow customers to view their order history. The system should allow customers to place orders The system should allow to track orders after placed The system should give the option to download the order receipt upon order confirmation. The system should cancel order if required The system should send email confirmation upon successful ordering of products The system should give a number of different payment options and handle the payment by contacting with the bank The admin can also deactivate or activate any category of products

5.2.2 Non Functional Requirements

Only administrators can perform administrative task on pages they are privileged to access. The system shall display confirmation message within 3 seconds as the users completes the payment. The system must be reliable and be secure for everyone. The system must be user friendly. Customers can view only their own previous history of orders. All the webpages must load within 5 seconds.

5.3 System Analysis

The planning part and strategy and analyzing wise the System analysis and Design course really helped me. Before all the implementation it is important to plan well and get a nice picture of what we really want to do. System analysis is the process of collecting and interpreting facts, identifying problems, and decomposition of the system into its components. It is conducted to study or evaluate a system and its components in order to identify the objects. Another definition of system analysis is its evaluation of a particular system to identify the areas of improvements and make any necessary enhancements, if needed. Objective of System Analysis are: first of all, it helps to design systems where subsystems may have conflicting objectives. Also, system analysis helps to achieve inter compatibility and unity of the sub systems It helps in understanding of complex structures. Above all, system analysis gives an advantage of understanding and comparing the subsystems functions with the complete system.

5.3.1 Six Element Analysis

Process	Human (Role)	Non- Computing Hardware	Software	Hardware	Database	Connectivity
Choose Product	Select product from Website	Customers buy product by phone call	TheSweet Piece	PC or any other smart device	MySQL	Internet
Upload New Product	Admin upload new Product, pictures, description, etc	None	TheSweet Piece	PC or any other smart device	MySQL	Internet
Review the product	Customer Review the product after purchase	None	TheSweet Piece	PC or any other smart device	MySQL	Internet
Deliver the Product	If the product available, delivery person picks up	Place signature	TheSweet Piece	PC or any other smart device	MySQL	Internet

Table 5.1: Six Element Analysis

5.3.2 Feasibility Analysis

There are 5 different kinds: technical, operational, economic, schedule and social feasibility. The main goal of feasibility study is not to solve the problem but to achieve the scope. Let's check the different kinds of feasibilities:
Technical feasibility: Our Company has a technical expert and system developer team. They are highly qualified to make any software and reach any requirement goal. The company has a lot of resources to create this kind of software.
Operational Feasibility: Whenever a customer orders a cake from the website, the products table changes in the database. Manually it is very difficult to keep these records but it is easy using the web based application. So, it is operationally feasible.
Economic Feasibility: When people will use our website and buy their desired products

from it then we will make a profit. So, it is economically feasible.

5.3.3 Problem and Solution Analysis

Problems:

There should be options for the admin side to control the product's distribution and management. Admin side should be able to control the information of the product and customers. Customers should be able to view products by category. Customers should be able to view all the products. Customers should be able to view products by an anonymous person.

Solution:

An admin panel will be built to manage the admin side. Database will be used for controlling the purpose of product and customer information. Products can be stored under specific category sections. Authentication system will handle the guest mode and authenticated mode.

5.3.4 Effect and Constraints Analysis

Effects

Reduced costs. Efficiency & Flexibility Better Management, better Quality Furthermore, Proper system analysis makes the clear path for web application development by minimizing the future IT requirements. Gathering a clear set of requirements for any system will give an advantage of the precise planning of the resources for development, this will bring the final product at low cost. Efficiency & Flexibility System analysis will not only reduce the costs, and also helps to gain flexibility & flexibility in the system development. Also, it gives clear development targets for each version by defining the set of requirements The greater flexibility of System Analysis is to cater almost every future requirements of business by mitigating the IT requirement.

Constraints Product Summary

Customers can purchase goods or services online and pay for them electronically. To conduct online shopping, a person needs an electronic device, such as a laptop, computer, tablet, or smartphone, as well as an internet connection. Customers may now shop whenever they want and from the convenience of their house, eliminating the need to travel outside and all the way to the store. Customers can choose from a variety of products without having to travel to other markets; by conducting thorough searches, they can complete all of their shopping here. Making life much simpler and calm as a result.
Stakeholders Employees, developers, customers, product management, Customer Ser-

vices, Marketing department, Finance department, Security, Sales Engineers. Technical Features

High resolution photo and video Must be mobile friendly as more people use smartphones than a PCs or laptops. Customers should be able to give their reviews. Have in store options so that if customers want they can go and get the product immediately if they don't want to wait for the shipping. Should have a frequently asked Questions page. Should provide good security.

5.4 System Design

Rich Picture

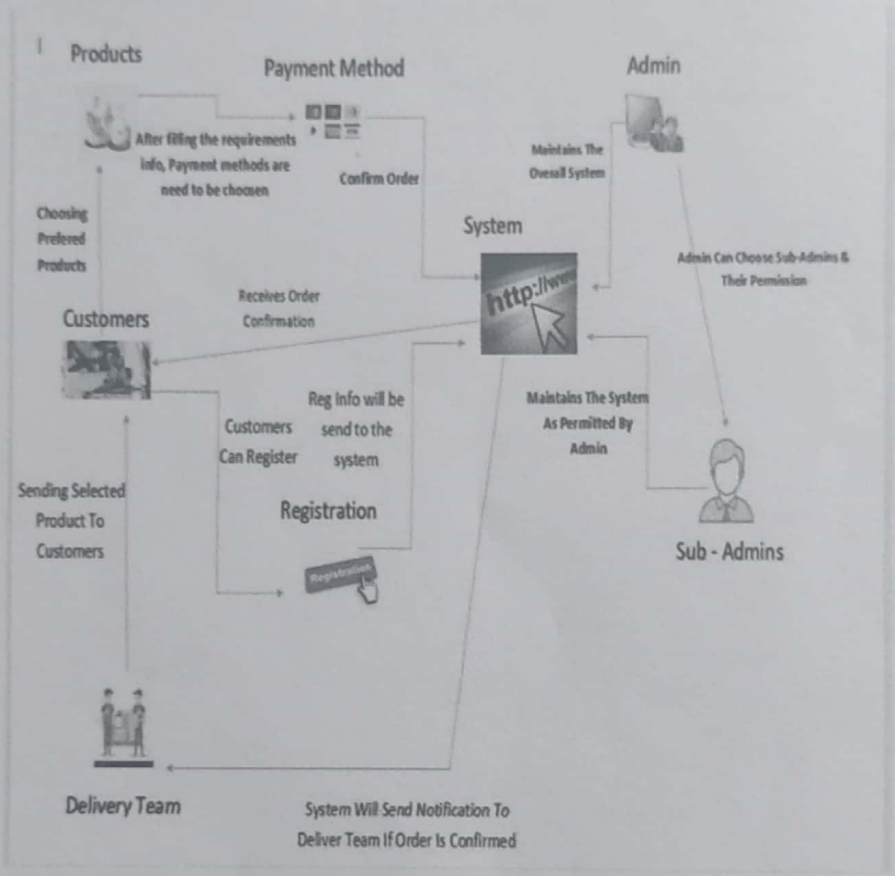

Figure 5.1: Rich Picture

ERD

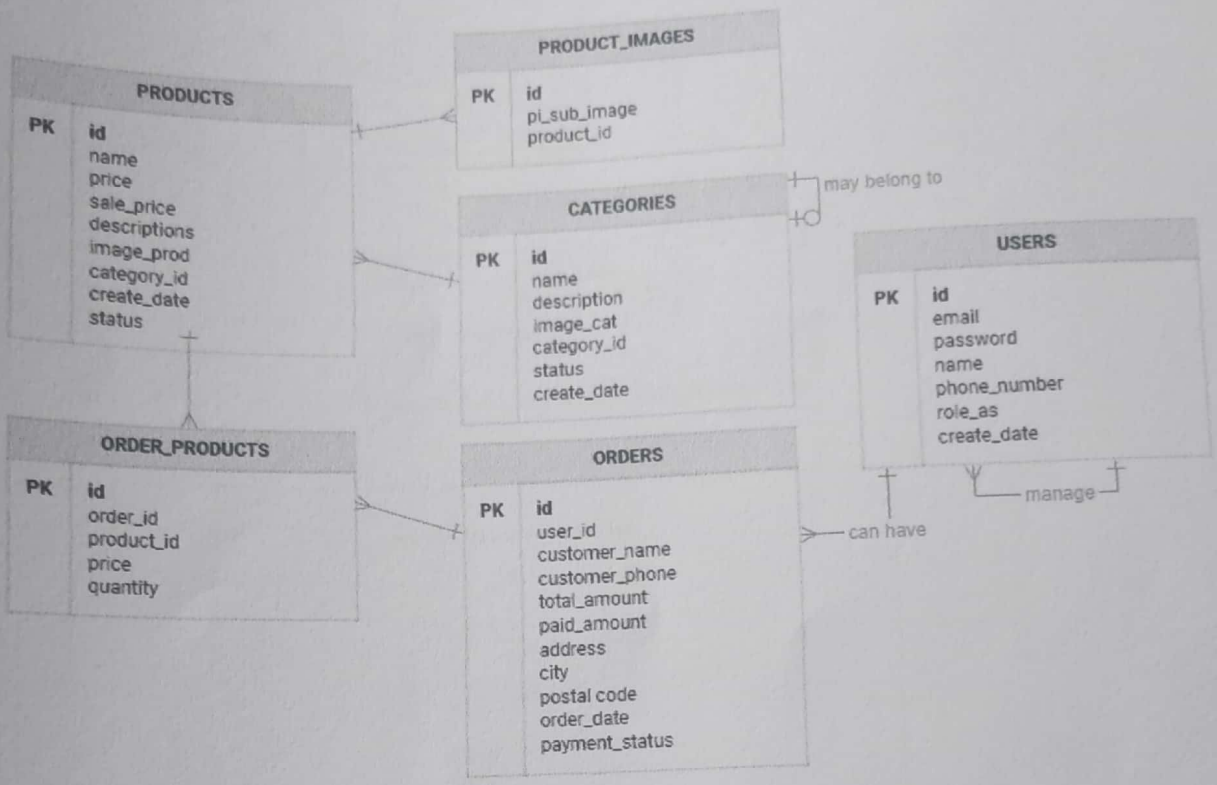

Figure 5.2: ERD Diagram

Data Flow

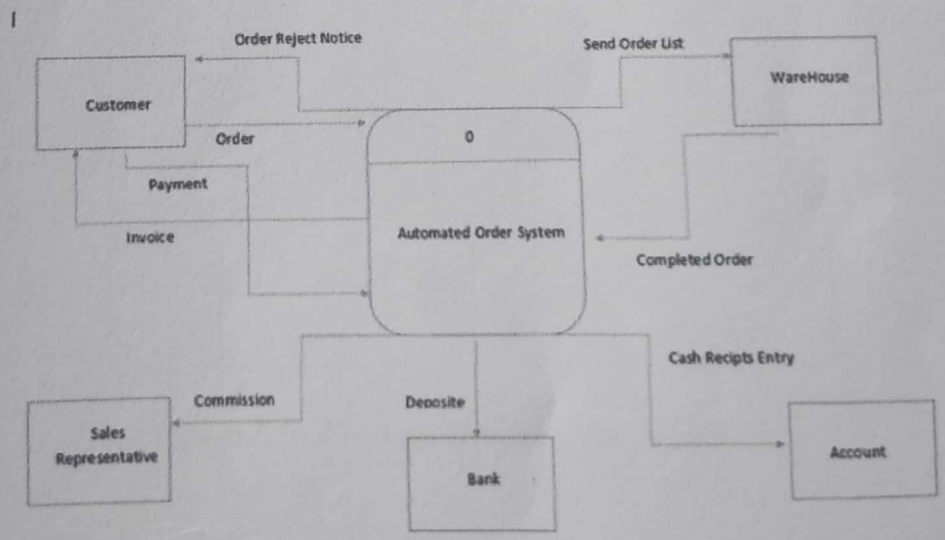

Figure 5.3: Data Flow Diagram

Activity Diagram

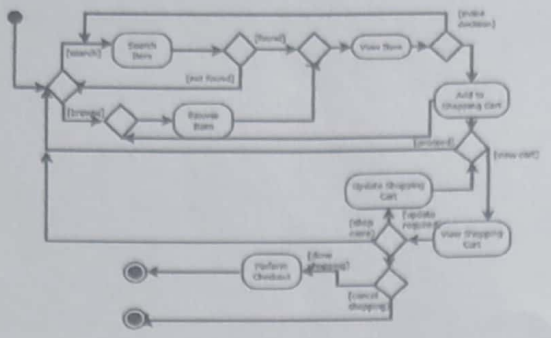

Figure 5.4: Activity Diagram

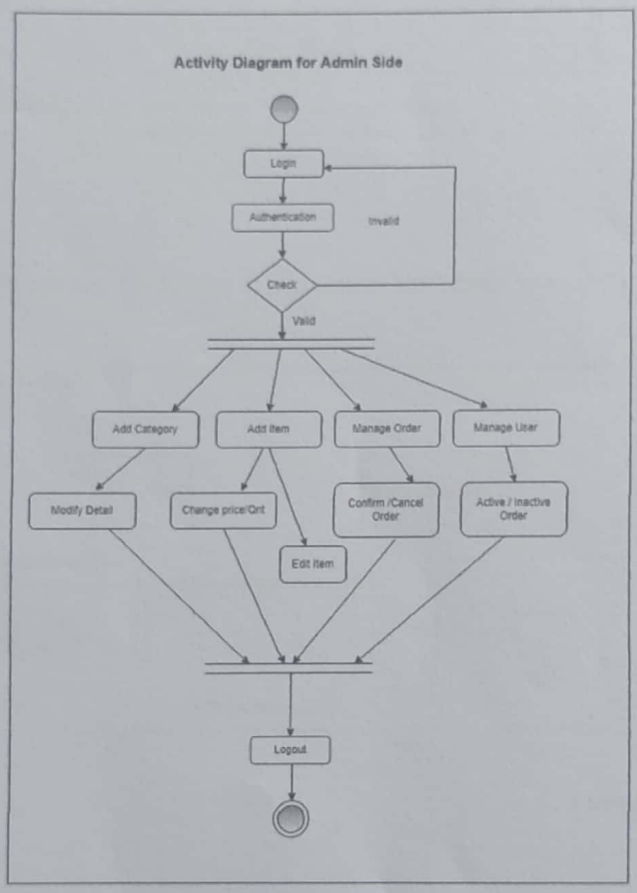

Figure 5.5: Activity Diagram For Admin Side

Sequence Diagram

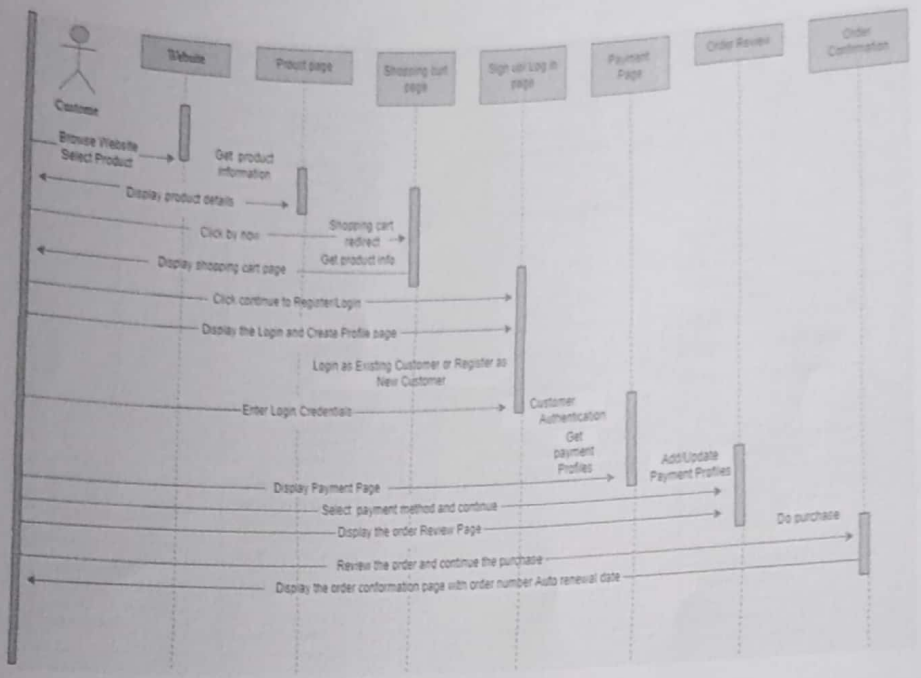

Figure 5.6: Sequence Diagram for customer work process

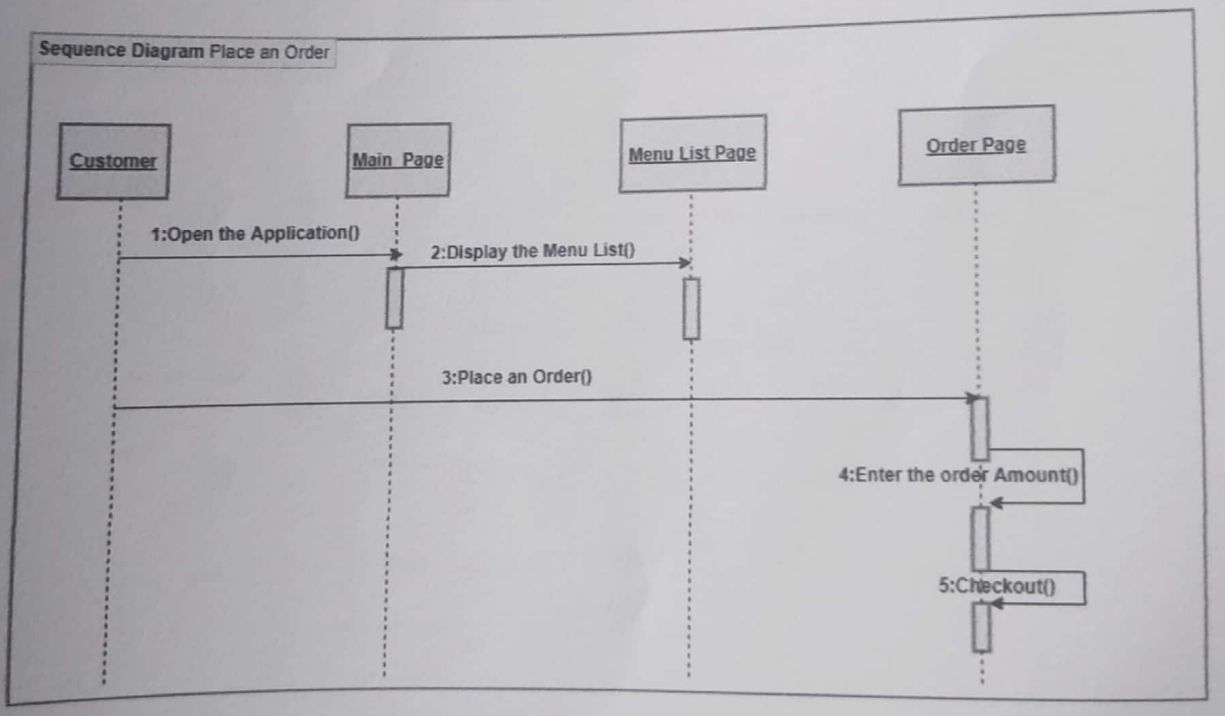

Figure 5.7: Sequence Diagram for customer placing Order

Claass Diagram

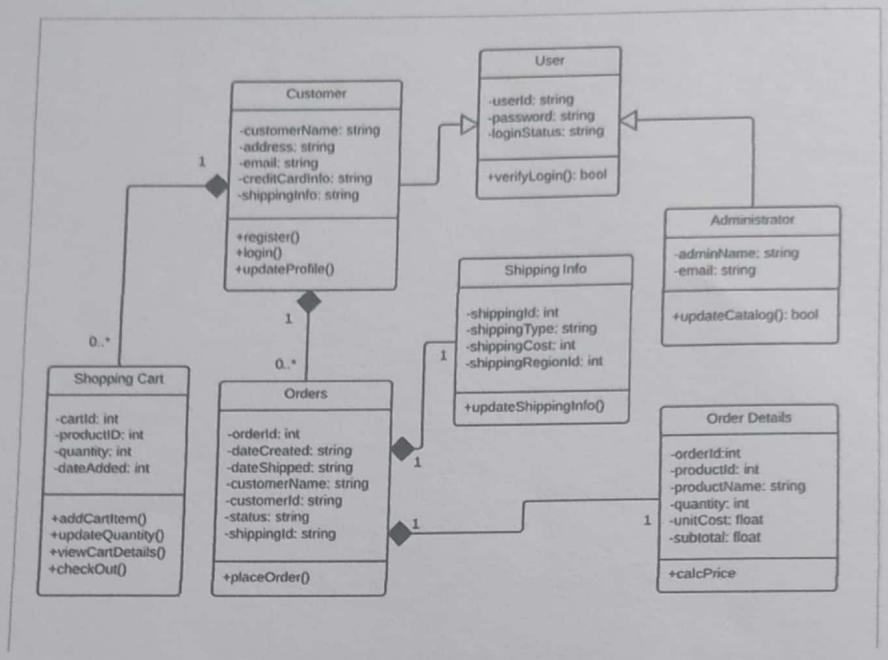

Figure 5.8: class diagram

State Chart Diagram

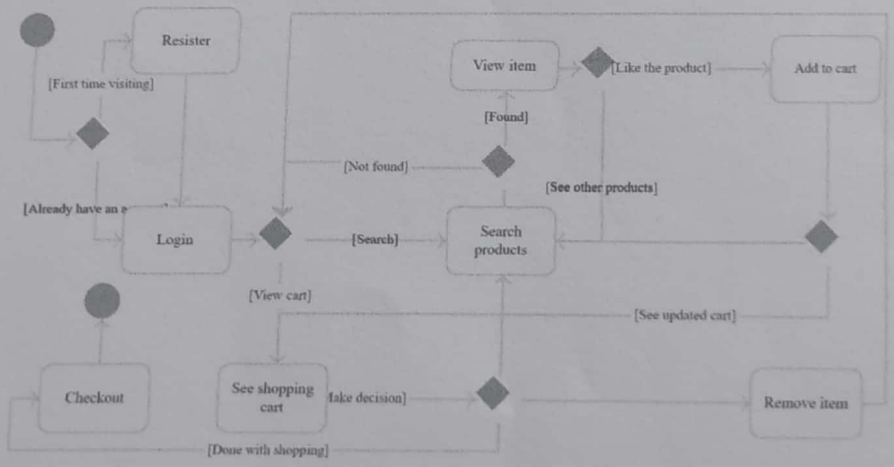

Figure 5.9: State chart Diagram for total process of a order

Use Case Diagram

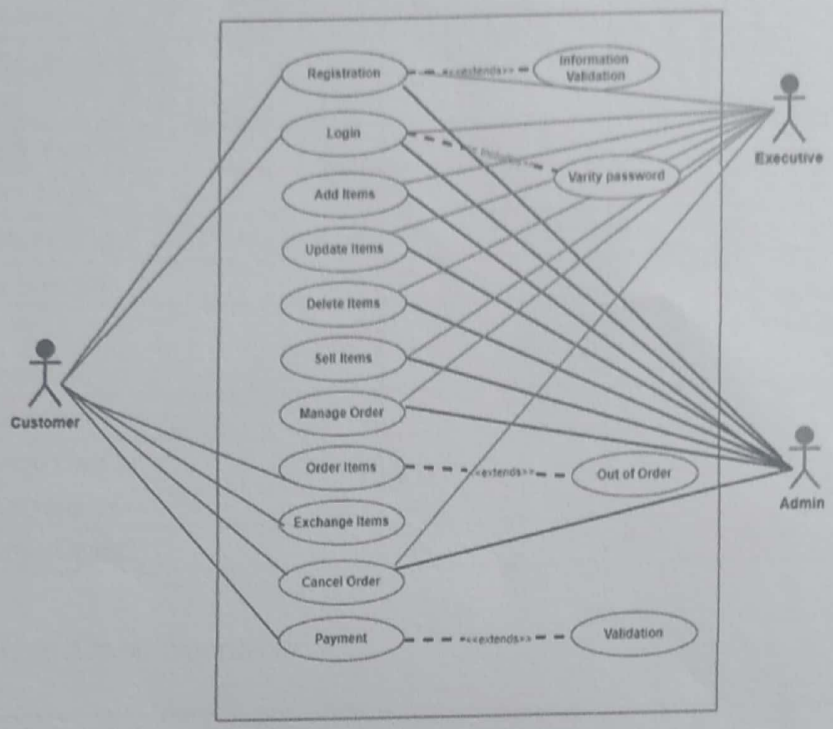

Figure 5.10: Use Case Diagram

CRUD Matrix

Activity	Customer	Item	Order	Order detail
Customer Login	R			
Search Item		R		
Select Item			C	C
Make Payment and Purchase Item	U	U	U	R
Add account	C			
Close Account	D			
Cancel Order		D	D	
Change Customer demographics	RU			
Change Order	RU	RU	RU	CRUD

5.4.1 Use Case Scenario

Usecasename: Order
Area: OnlineShoppingsystem
Actor(s): RequestedUser/Customer
Stakeholder: Customer,Shipping agent,Developer
Description: Customers will order their desired products
Triggeringevent:Customer clicks on the order button after selecting thedesired product
Triggertype: External

Table 5.2: Use case 1

Steps performed (Main path)	**Information for steps**
1) The Customer logs onto the web server	User ID, password, user type
2) Password is being verified	User ID, password, user type
3) The customer selects the product	Products page
4) Payment page appears	Secure credit card webpage
5) All the required credit card information are filled in	Secure credit card webpage
6) Credit card is charged for ordering the product	Secure credit card webpage
7) Order confirmation	Confirmation webpage
8) Download the order receipt	Confirmation webpage
9) Confirmation email is sent	Confirmation webpage

Preconditions: Must have an Online Shopping system account
Postconditions: The customer successfully Placed the order

Table 5.3: Alternative scenario for use case – order

1) Customer views a list of products
2) Filters the products using search option
3) Selects the desired product
4) Information is sent to the system
5) The product is out of stock

5.5 Implementation & Testing

Figure 5.11: Welcome page of website

Figure 5.12: Shop By Category

Figure 5.13: New Arrival

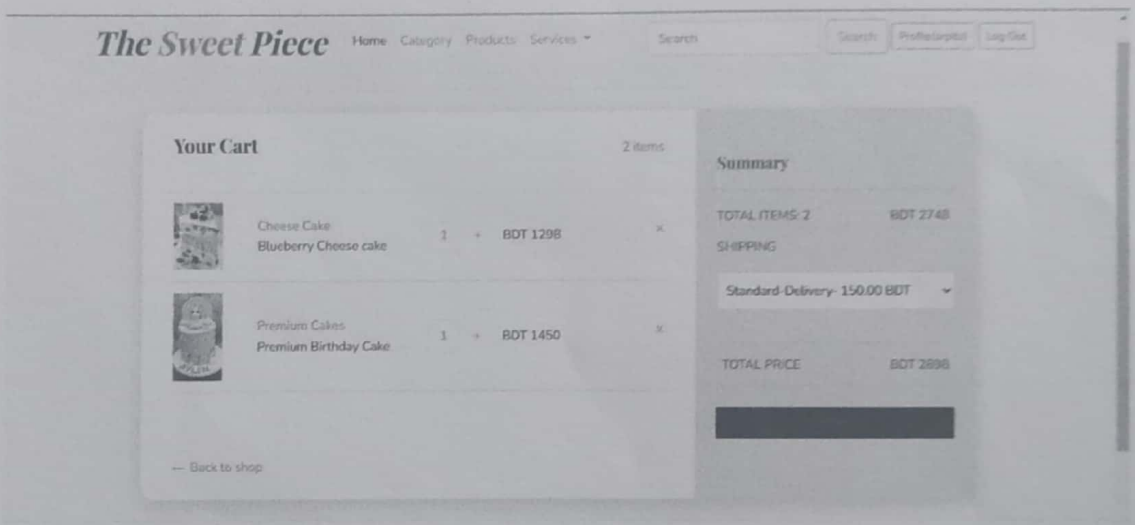

Figure 5.14: Cart Page

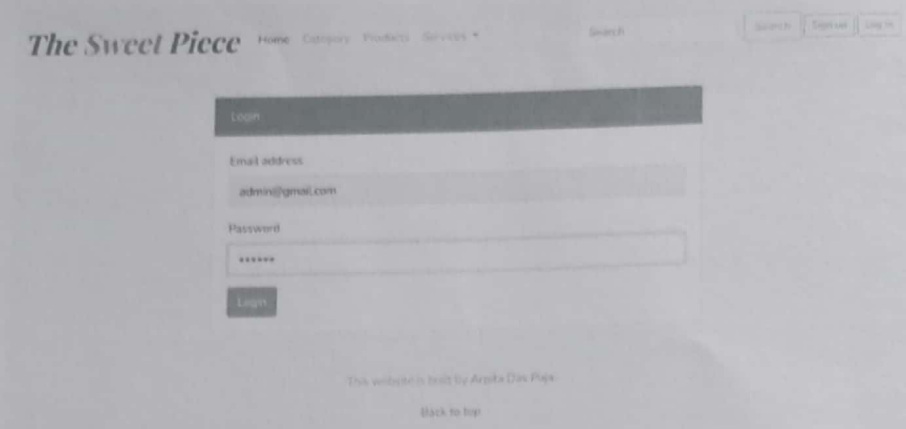

Figure 5.15: login page

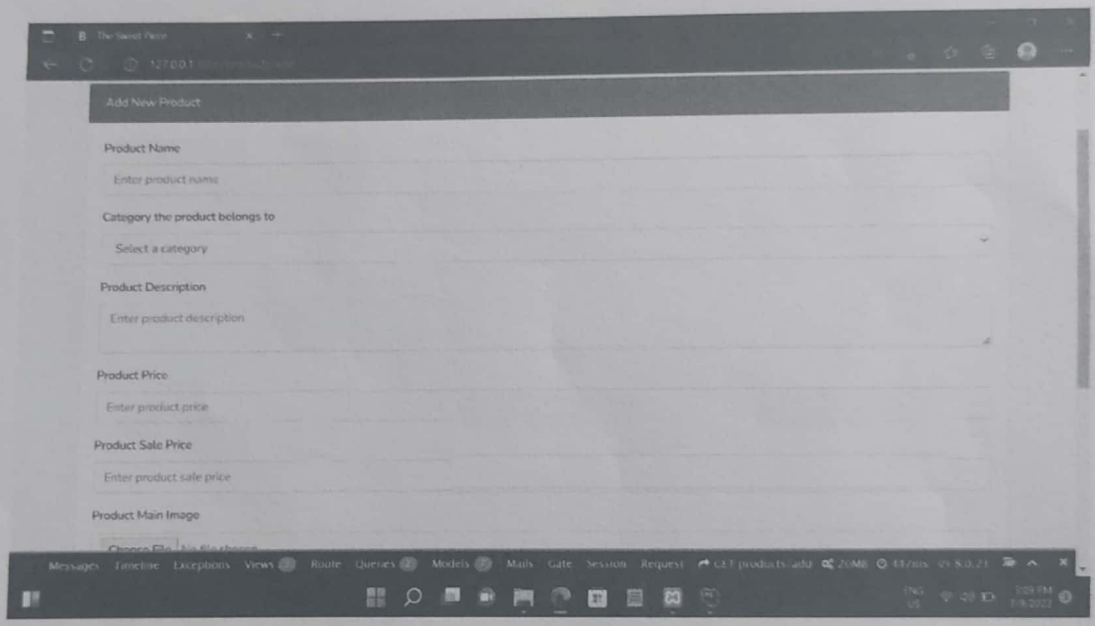

Figure 5.16: Add Product

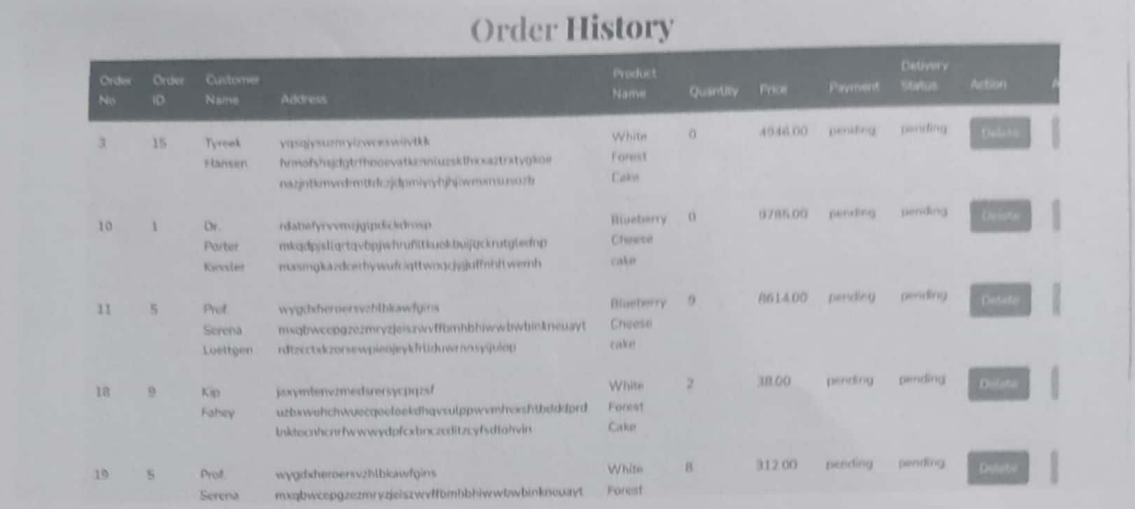

Figure 5.17: Order Management Page

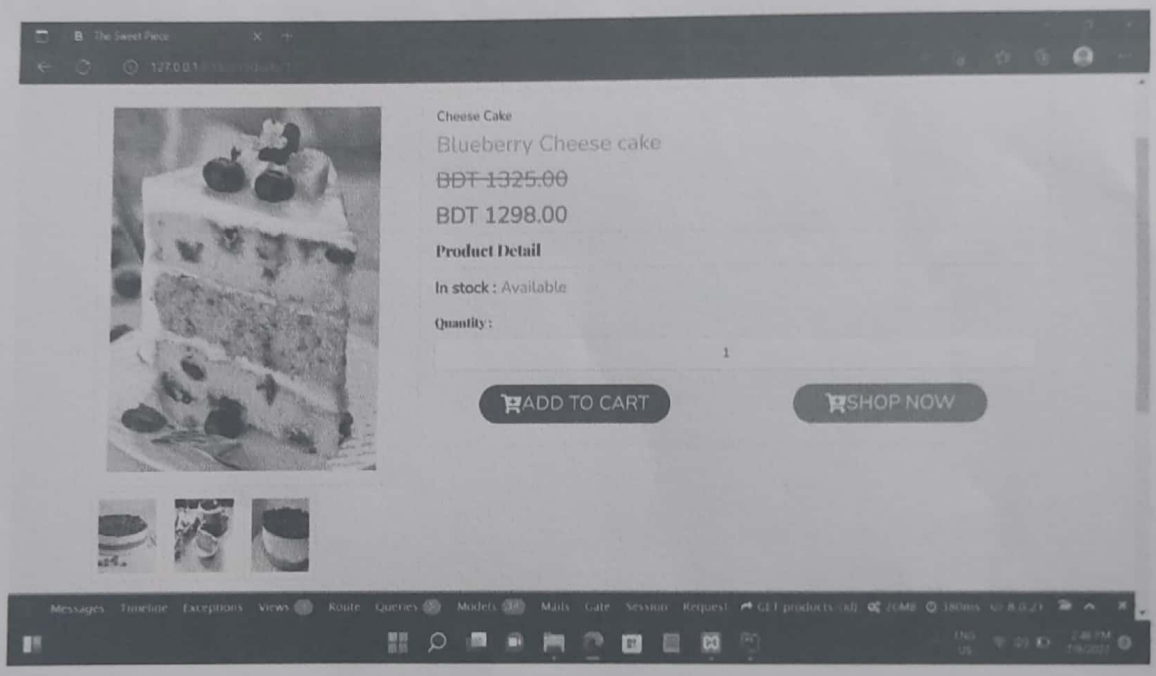

Figure 5.18: product details page

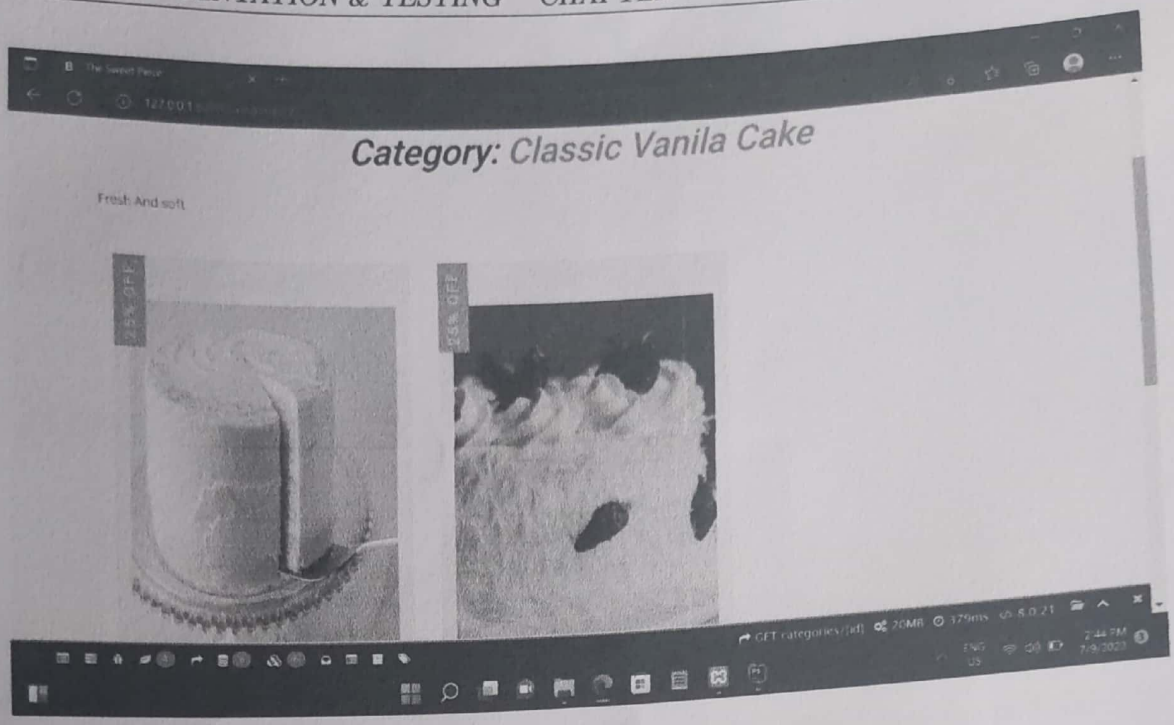

Figure 5.19: Product By category

Chapter 6

Results & Analysis

Our website has a very simple user-friendly interface. So far what we have accomplished:

Customers can register into our system. Admin/Customer/Vendor can login or logout of the system. Customers can view the products available. Customers can view the recent products that have been added. Customers can select a product they like and add it to their shopping cart and then confirm their order. Customers can edit their shopping cart before placing the order. Customers can give their feedback. Customers can write to us using the contact section. Admin can view the customer details Admin can add/edit/delete/view staff members and vendors. Admin can add/delete/view/activate/deactivate the different categories of groceries. The admin can view the messages customers have sent. The admin can edit the coupons or add new ones or delete the existing ones. The admin can also view the customer information of the ones who have registered into the system. Admin/Customer/Vendor can view the about page. The application helps consumer to access services without going to their shop or destination. Provide Notification alerts about their order so no need to call again and again to ask status of order. Provide service after order is complete whether to pick order or deliver directly to home. Helps vendor or cake owner business to enhance its business and provide reliable service to their consumer.

Opportunities

Orders can be placed 24/7. Wide range of products available. Wide range of customers available, resulting in more profit. Building good relationships with customers and giving them a good experience.

Chapter 7

Project as Engineering Problem Analysis

7.1 Sustainability of the Project/Work

A corporation can have beneficial results across the board by incorporating a "green" philosophy into its project management strategy, which can boost productivity, reduce waste, and boost staff morale. In our company, there are five methods for organizing and carrying out sustainable projects.

Start by assessing current project sustainability

It's crucial to understand where you stand right now before making any moves toward increased sustainability. Finding the most significant areas for improvement and tracking your progress as your sustainability project takes shape are both facilitated by doing a sustainability analysis. When determining whether the idea of sustainability applies to a particular project or project management technique, you should first determine whether it does. If so, you should then assess the costs and effort required to make improvements, the potential benefits to the environment and the company's reputation, and any potential cost savings that may follow.

Develop a sustainability strategy

Once your assessment is complete, the next step is to draft a strategy that defines the goals in improving sustainability, how the improvements will be achieved and what the organization hopes to gain in the process. Similar to a project plan, the strategy should name the people, roles or departments who will be responsible for leading the sustainability initiative and the level of authority they will have in determining project priorities.

Adopt a sustainability standard

As interest in project sustainability continues to grow, organizations have begun to set standards to help executive leaders and project managers determine whether they are meeting their sustainability goals. Look for sustainability in partners and vendors

Spread the word

As with any organizational effort, communication is the key to success. As soon as your sustainability strategy is defined, start engaging your project teams in the process. Ask for feedback on your sustainability goals and solicit new ideas that employees might have based on their previous projects. The more ownership your employees feel in the sustainability effort, the harder they'll work to make it a success.

Sustainability can be of 3 main types:

Financial Sustainability

Once our website will be launched, we will have to promote it and do the SEO successfully. Once that will be done, we can expect visitors to come to our site. Once the customers begin placing orders and we can please them with our service and product quality there will be more customers and our company will make profits so it is financially sustainable.

Community Sustainability

Once customers are pleased with our service and products they will tell about our site to their friends and family members so it is sustainable in terms of community.

Organization Sustainability

Once the website will be live there will more updates that will be added soon as well which have been planned. So, it is sustainable in terms of organization.

7.2 Social and Environmental Effects and Analysis

As we continue to expand our products and add more products, we can expect to have a greater social effect about our website and people using our service more often. Our website is not detrimental or harmful to the environment in any ways.

7.3 Addressing Ethics and Ethical Issues

It is important that the ethical guidelines are being followed. Here are some that should be followed:

Maintaining the privacy and keeping user data safe and secure. Only the administration has access to the database. API services should be used properly. There shouldn't be any favoritism. Only relevant user data should be collected.

Chapter 8

Lesson Learned

I learned many valuable lessons during this period regarding varieties of problems. Some problems were technical, some problems concerned business strategy. With the help of my supervisor, teachers, lessons of my courses and internet, I was able to solve those problems.

8.1 Problems Faced During this Period

Sometimes the product could be a little distorted due to shipping issues. Wrong item delivered. Product quality. Have to wait for the product, product is not instantly available. Unclear website policies for customers. There could be hidden cost and customers could be charged extra when they make the online payment. Often payment confirmation is not received by the customer and that causes unnecessary anxiety among the people

8.2 Solution of those Problems

Include all the tax or VAT and make sure there are no hidden fees. Keep experienced people for delivery so that mistakes are rare. Make sure all website policies are clear. Develop the system well and make sure customers receive an email confirmation once they have made payment for a product.

Chapter 9

Future Work & Conclusion

9.1 Future Works

We have further plans to add new updates and features to our website. We hope to start working on those as soon as we launch our website. Here are few ones we have plans:
Track the order. Customers should be able to contact the delivery person. Make a mobile application of our current system. Add more vendors/products. Add more different brands of products. Add a customer profile. Customers should be able to view their history of shopping. Have a customer profile with their details. Have a vendor profile with their details. Offer cheap deals.

9.2 Conclusion

A fantastic approach to assist individuals in these trying times is through the online cake shop. On important occasions, people won't need to travel outside to get the cakes they want. I can sum up by saying that this internship was a fantastic experience. Once more, many thanks to Mediasoft Data System LTD. In addition to improving my technical understanding, I also benefited personally. For students who are interested in working in this profession, there are now several options accessible. Web designers are employed by a large number of public and commercial companies for online projects and website creation. There will be many career opportunities for hopefuls in the next years as a result of the online industry's rapid growth and rising demand for web designers. Also, an experienced person in this field can also work as a freelancer; there are many online companies which provide online projects to the individuals.

9.3 Future Scopes

To work in an IT company. Can work as a Web Designer. New and improved skills and how to apply them. Gain valuable work experience. Prepare me for a future career.

9.4 Limitation of the work

Due to time shortage for an internship program, there is still a lot of work that is to be done as we had planned earlier.

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Your Name

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1730938

Summer, 2022

Consent Form

The student modified the internship final report as per the recommendations made by his/her academic supervisor and/or panel members during final viva, and the department can use this version for archiving.

Mohammad Motiur Rahman (19th Sept, 2022)
(Signature of the Supervisor)

Mohammad Motiur Rahman.
Name of the Supervisor

Department of Computer Science & Engineering
Independent University, Bangladesh