

PROFESSIONAL TRAINING REPORT

at

**Sathyabama Institute of Science and
Technology (Deemed to be University)**

Submitted in partial fulfillment of the requirements for
the award of Bachelor of Technology Degree in
Information Technology

By

Nitheshwer.V.S
REG.NO. 39120076



DEPARTMENT OF

SCHOOL OF COMPUTING

**SATHYABAMA INSTITUTE OF SCIENCE AND
TECHNOLOGY**

**JEPPIAAR NAGAR, RAJIV GANDHI SALAI,
CHENNAI – 600119, TAMILNADU**

NOVEMBER 2021

	SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY (DEEMED TO BE UNIVERSITY) Accredited with Grade “A” by NAAC (Established under Section 3 of UGC Act, 1956) JEPPIAAR NAGAR, RAJIV GANDHI SALAI CHENNAI– 600119 www.sathyabama.ac.in	
---	--	---

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

BONAFIDE CERTIFICATE

This is to certify that this Project Report is the Bonafide work of **Nitheshwer** (Reg. No: **39120076**) who carried out the project entitled “**FOOD ORDER WEBSITE**” under my supervision from June 2021 to November 2021.

Internal Guide

Dr. V. Maria Anu, M.E., Ph.D.

Head of the Department

Dr . R. Subhashini, M.E., Ph.D.,

Submitted for Viva voce Examination held on

Internal Examiner External Examiner

External Examiner

DECLARATION

I'm, **NITHESHWER** hereby declare that the project report entitled **FOOD ORDER WEBSITE** done by me under the guidance of **Dr. V. Maria Anu, M.E.,Ph.D** is submitted in partial fulfillment of the requirements for the award of Bachelor of Engineering Degree in Computer Science and Engineering.

DATE: 12/11/2021

PLACE: CHENNAI

A handwritten signature in blue ink that reads "Nitheshwer V.S." with a small flourish at the end.

SIGNATURE OF THE CANDIDATE:

ACKNOWLEDGEMENT

I am pleased to acknowledge my sincere thanks to **Board of Management** of **SATHYABAMA** for their kind encouragement in doing this project and for completing it successfully. I am grateful to them.

I convey my thanks to **Dr. T. Sasikala M.E., Ph. D, Dean**, School of Computing, **Dr.R.Subhashini, M.E., Ph.D. Heads of the Department of INFORMATION TECHNOLOGY** for providing me necessary support and details at the right time during the progressive reviews.

I would like to express my sincere and deep sense of gratitude to my Project Guide **Dr.V.Maria Anu M.E.,Ph.D**, for her valuable guidance, suggestions and constant encouragement paved way for the successful completion of my project work.

I wish to express my thanks to all Teaching and Non-teaching staff members of the **DEPARTMENT OF INFORMATION TECHNOLOGY** who were helpful in many ways for the completion of the project.

TRAINING CERTIFICATE

This certificate is computer generated and can be verified by scanning the QR code given below. This will display the certificate from the NPTEL repository, <https://nptel.ac.in/noc/>

Roll No: NPTEL21CS62S14190021
To
NITHESHWER V S
NO:10 ALLEN STREET,VANARAPET, PUDUCHERRY
NO: 120,CANTEEN STREET,PUDUCHERRY
PUDUCHERRY
PUDUCHERRY - 605001
PH. NO :6380354604



Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

No. of credits recommended by NPTEL:2

An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.



Elite
NPTEL Online Certification
(Funded by the Ministry of HRD, Govt. of India)



This certificate is awarded to
NITHESHWER V S
for successfully completing the course

Cloud Computing

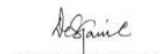
with a consolidated score of **60** %

Online Assignments	23.79/25	Proctored Exam	35.94/75
--------------------	----------	----------------	----------

Total number of candidates certified in this course: **3189**


Prof. G P Raja Sekhar
Dean, Continuing Education
IIT Kharagpur

Aug-Oct 2021
(8 week course)


Prof. Debjani Chakraborty
Coordinator, NPTEL
IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL21CS62S14190021

To validate and check scores: <https://nptel.ac.in/noc/>

TABLE OF CONTENTS

CHAPTER No.	TITLE	PAGE NO
	ABSTRACT	8
1	INTRODUCTION	8
	1.1 Project Aim & Objective	8
	1.2 Project overview	9
2	AIM AND SCOPE OF THE PROJECT	9
	2.1 Scope	9
	2.2 Feasibility	9
3	SYSTEM REQUIREMENTS AND DESIGN	10
	3.1 Software and Hardware Requirements	10
	3.2 Software Used	10
4	MATERIALS AND METHODS	10
	4.1 System model	10
	4.2 Functional requirements	11
	4.3 Web ordering system	12
	4.4 Cloud and Deployment Models	13
	4.5 Developer Tools	14
5	CONCLUSION	15
	5.1. Achievements	16
	5.2. Future recommendation	16
	5.3. Personal reflection	17
	5.4. Acquiring research skills	17

6	CONCLUSION	17
7	REFERENCES	
8	APPENDIX	17
	A. SCREENSHOTS	18

LIST OF FIGURES

<u>FIGURE NUMBER</u>	<u>FIGURE NAME</u>	<u>PAGE NO</u>
Fig.4.1	<u>Workflow of the website</u>	10
Fig.7.1	Output screenshot	18
Fig.7.2	Output screenshot	19
Fig.7.3	Output screenshot	<u>20</u>
Fig.7.4	Output screenshot	21
Fig.7.5	Output screenshot	22
Fig.7.6	Output screenshot	23

Fig.7.7	Output screenshot	24
---------	-------------------	----

FOOD ORDER WEBSITE

ABSTRACT

The aim of the project was to build a responsive online application for restaurant which helps customers to order foods online. Along with this, the application needs to be responsive as the application can be accessed through devices with different size of screens. One of big problem while ordering online is trust. Social media websites play a vital role to attract customers and make trust on their mind. Hence, Facebook API is integrated to the application. So, customers trust the quality and attract to order online when they see the reviews and likes of their friends and relatives who used the service earlier. To address this functionalities, deep research has been made on the earlier works for automating the food ordering processes. Bootstrap 4 framework used for developing the responsive frontend. After developing the system, different testing methods have been used to find bugs in the system and ensure the quality.

1.INTRODUCTION

This chapter starts with a high-level overview of the project. It then describes the specific aims and objectives of the project. Finally, it analyses the feasibility of the project and provides with a feasibility report of the system

1.1 PROJECT AIM & OBJECTIVE

The project aims to build a web-based system for restaurant, which automates food ordering system. It will also help the management to manage the online orders and view the status. The management can add menus and take orders with the system. The system also has a simple mobile-friendly user interface which can be used through different types of devices and screens. Facebook API will be integrated with the application so customers can login with their Facebook account and like or share menus which can work a new customer as word of mouth.

1.2 PROJECT OVERVIEW

The project sets to develop an online ordering system for restaurant. Many industries now quickly adopting technologies. Restaurant industry also embraces different types of technologies which make daily processes easier and faster. But the adoption of technology in restaurant industry is slower compared to other industries. Restaurants can use technology in different ways. One of them is to build an online presence by a web application which may also help in online ordering. Because the use of internet-based ordering system is in rise in today's world. Since 2014, about 30% of customers aged between 18 and 54 have ordered food from a restaurant's website via their phone or tablet in USA. On the other hand, QSR Web found that digital restaurant ordering is growing 300% faster than dine-in traffic. So, the market for online food delivery now remains as large as ever. Nevertheless, a huge section of this market is still being overwhelmingly offline.

2.AIM AND SCOPE OF THE PROJECT

2.1 SCOPE

- * Website for restaurant
- *Online restaurant management system
- *Online food ordering system
- *Online customer management

2.2 FEASIBILITY

At the present moment, the system is entirely functional, save the few minor bugs which are bound to present themselves during more extensive testing. A user is currently able to register and log in to the website and place an order. That order is then displayed, correctly and completely, in the order retrieval desktop application. Much of what is left to do focuses not on improving functionality, but rather on improving user

experience by creating richer graphical interfaces for the user to interact with and modifying the application's icons and color schemes to make them more pleasing to look at and use

3.SYSTEM REQUIREMENTS AND DESIGN

3.1 Software and Hardware Requirements

Aside from a computer and an internet connection, most of the tools you need to build a website are software programs, some of which may already be on your computer. You need a **text or HTML editor, a graphics editor, web browsers, and an FTP client to upload files to your web server, AWS cloud for deployment.**

Operating System: Windows / MacOS / Linux RAM: 1GB (minimum)

Processor: 1GHz processor (minimum) ROM: 20GB (minimum)

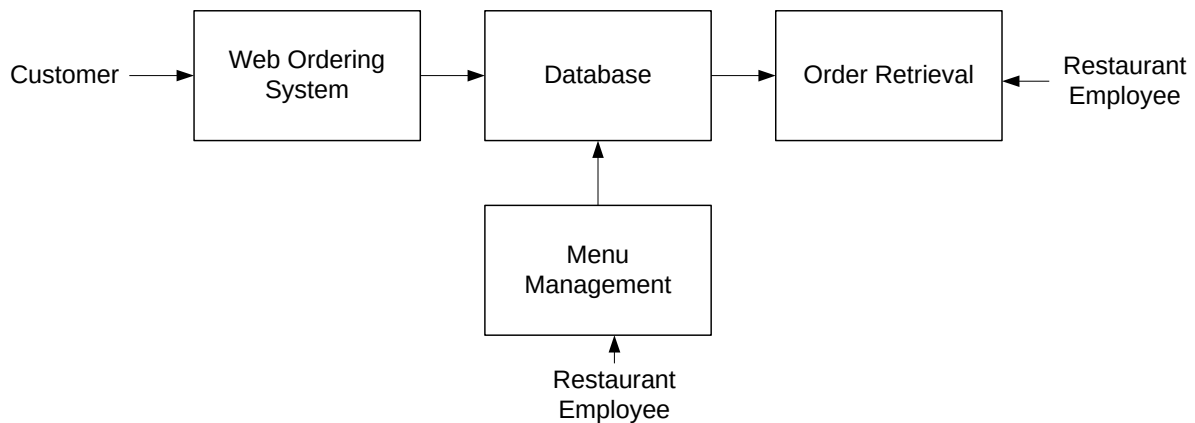
3.2 Software used

- **Vscode(for editor)**
- **AWS (for deployment)**
- **Programming language(HTML,CSS,(Bootstraps),Javascript)**

4.MATERIALS AND DESIGN

4.1 SYSTEM MODEL

The structure of the system can be divided into three main logical components. The first component must provide some form of menu management, allowing the restaurant to control what can be ordered by customers. The second component is the web ordering system and provides the functionality for customers to place their order and supply all necessary details. The third and final logical component is the order retrieval system. Used by the restaurant to keep track of all orders which have been placed, this component takes care of retrieving and displaying order information, as well as updating orders which have already been processed.



4.1 workflow of the website

4.2 FUNCTIONAL REQUIREMENTS

As can be seen in the system model diagrammed above, each of the three system components essentially provides a layer of isolation between the end user and the database. The motivation behind this isolation is twofold. Firstly, allowing the end user to interact with the system through a rich interface provide a much more enjoyable user experience, particularly for the non-technical users which will account for the majority of the system's users. In addition, this isolation layer also protects the integrity of the database by preventing users from taking any action outside those which the system is designed to handle. Because of this design pattern, it is essential to enumerate exactly which functions a user will be presented and these functions are outlined below, grouped by component.

4.3 WEB ORDERING SYSTEM

Users of the web ordering system, namely restaurant customers, must be provided the following functionality:

- Create an account.
- Manage their account.
- Log in to the system.
- Navigate the restaurant's menu.
- Select an item from the menu.
- Customize options for a selected item.

- Add an item to their current order.
- Review their current order.
- Remove an item/remove all items from their current order.
- Provide delivery and payment details.
- Place an order.
- Receive confirmation in the form of an order number.

As the goal of the system is to make the process of placing an order as simple as possible for the customer, the functionality provided through the web ordering system is restricted to that which is most pertinent to accomplish the desired task. All of the functions outlined above, with the exceptions of account creation and management, will be used every time a customer places an order. By not including extraneous functions, I am moving towards my goal of simplifying the ordering process.

Users of the web ordering system will interact with the application through a series of simple forms. Each category of food has its own form associated with it which presents a drop-down menu for choosing which specific item from the category should be added to the order, and a series of check boxes and radio buttons for selecting which options are to be included. Adding an item to the order is accomplished by a single button click. Users select which category of food they would like to order, and therefore which form should be displayed, by navigating a menu bar, an approach which should be familiar to most users.

Entering delivery and payment details is done in a similar manner. The user is presented with a form and must complete the required fields, which include both drop down and text boxes, before checking out and receiving a confirmation number. One thing

worth noting here is that whenever possible drop-down boxes and buttons were used over freeform input in order to both simplify the ordering process and reduce the possibility of an SQL injection attempt.

4.4 CLOUD AND DEPLOYMENT MODEL

- ★ **Big Query:** Big Query is a fully-managed data analysis service that enables businesses to analyse Big Data. It features highly scalable data storage that accommodates up to hundreds of terabytes, the ability to perform ad hoc queries on multi-terabyte datasets, and the ability to share data insights via the web.

- ★ **Cloud Composer:** Cloud Composer is a managed workflow orchestration service that can be used to author, schedule, and monitor pipelines that span across clouds and on-premises data centres.

- ★ **Cloud Data Fusion:** Cloud Data Fusion is a fully-managed, cloud native, enterprise data integration service for quickly building and managing data pipelines.

- ★ **Data CatLog:** Data CatLog is a fully-managed and scalable metadata management service that empowers organizations to quickly discover, manage, and understand their data in Google Cloud.

- ★ Dataflow: Dataflow is a fully-managed service for strongly consistent, parallel data-processing pipelines.
- ★ Data lab: Data lab is an interactive tool for exploration, transformation, analysis and visualization of your data on Google Cloud Platform.
- ★ Data proc: Data proc is a fast, easy to use, managed Spark and Hadoop service for distributed data processing
- ★ Data proc Meta store: Data proc Meta store provides a fully-managed meta store service that simplifies technical metadata management and is based on a fully-featured Apache Hive meta store.

4.5 DEVELOPER TOOLS

- ★ Cloud Deployment Manager: The Google Cloud Developer Deployment Manager allows you to do just that, by ensuring you can specify the resources that you need for your application using yam.

- ★ Google Cloud Source Repositories: Most Google Cloud Developers are already familiar with Git solutions. The Google Cloud Source Repository simply offers a single space where your team can come together to collaborate on and store code.

- ★ Google Cloud Platform Tools for IntelliJ: Access the Google Cloud Developer tools for IntelliJ to easily and quickly deploy back-end Java for your cloud apps through the Google App Engine.

- ★ Google Cloud Platform Tools for PowerShell: Available with an SDK for Windows, the Google Cloud PowerShell tools allow developers to quickly and easily automate, script, and manage Windows workloads running in the GCP.

- ★ Cloud Tools for Visual Studio: Cloud Tools for Visual Studio package. Through the Visual Studio system of Google Cloud Developer Tools, you can access an environment for building.

- ★ Developer Tools on AWS: Amazon LightSail is the easiest way to launch and manage a Web **server** using **AWS**. LightSail includes everything you need to jumpstart your **website**

5. CONCLUSION

5.1. ACHIEVEMENTS

The project has gone through a series of activities to develop a complex solution for the online food ordering system. After analysis of the project's goal and research direction, a set of objectives were established, as specified in Chapter 1.2. All the activities done during the project were attempts to realise these objectives

The project was time-consuming. It has been tried to implement as many features as possible within the very limited timeframe. It has successfully satisfied the Functional Requirements. Some Non-functional Requirements of the system is not implemented. These requirements have top priority and reflect the most needed features. Some requirements are not implemented due to time constraints. However, their absence would not result in major operational issues as they are the lower priority features. These features could be implemented in the future

5.2. FUTURE RECOMMENDATION

In addition to the unfinished requirements, there are other possibilities of further improving the project. The respondent of user acceptance testing also suggest some improvement ideas. The improvements may include:

- Overcoming the limitations mentioned
- Secured payment system with various payment methods.
- Presenting graphical floor plan for table management and reservation.
- Adding support for food order delivery tracking.

- Advanced inventory control with material storage and expiry information.
- Managing customer loyalty membership and discount voucher.
- Converting the system to progressive web application.

5.3. PERSONAL RELECTION

I have gained some experiences and developed skills through the project. I also became aware of some aspects which needs improvements.

5.4. ACQUIRING RESEARCH SKILLS

The literature review chapter required reviewing lots of journal articles and research papers. By reading and reviewing journal articles, I have gained some knowledge about how to write a journal paper in a structured way and how research is conducted. It also improved my presentation skills. I also become aware of my lacking on researching which should be improved to be a better researcher.

6.REFERENCES

- 1.**Prof. Soumya Kanti Ghosh IIT** Kharagpur
- 2.**Kaye, Russell**, Cloud Computing
- 3.**Martin & Hoover**, Guide to Cloud Computing

7.APPENDIX:

HOST LINK : <https://foodorder1.s3.ap-south-1.amazonaws.com/food+website/index.html>

A. SCREENSHOT

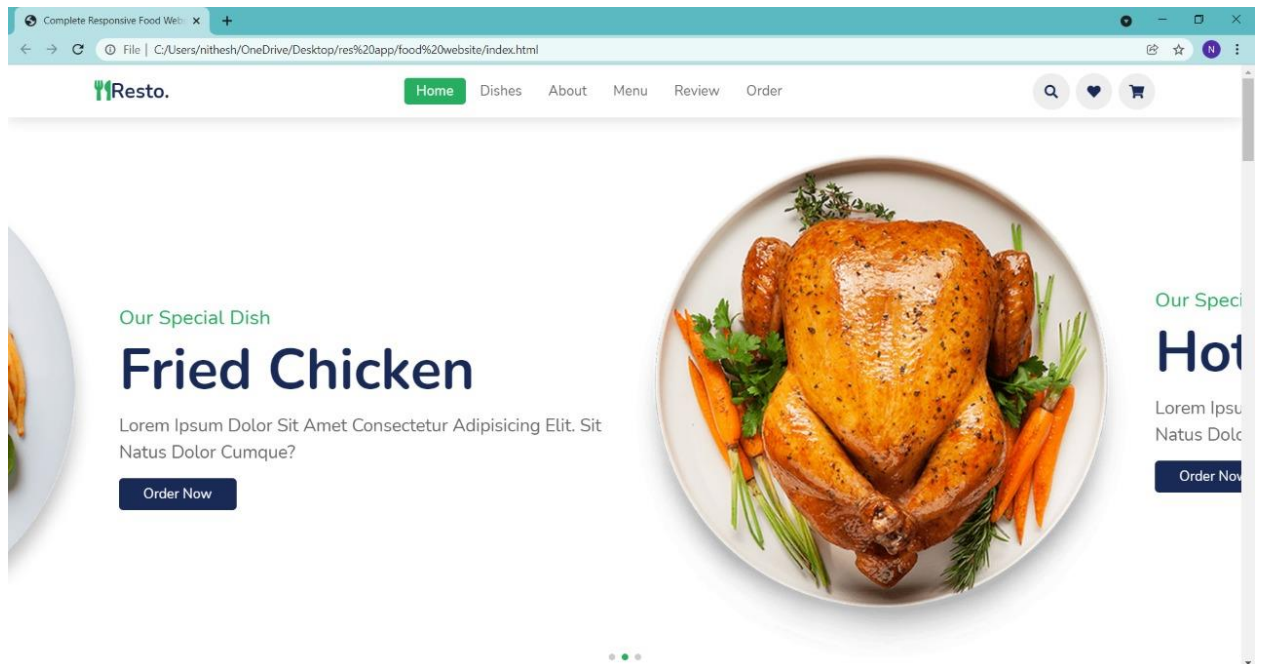


Fig 7.1

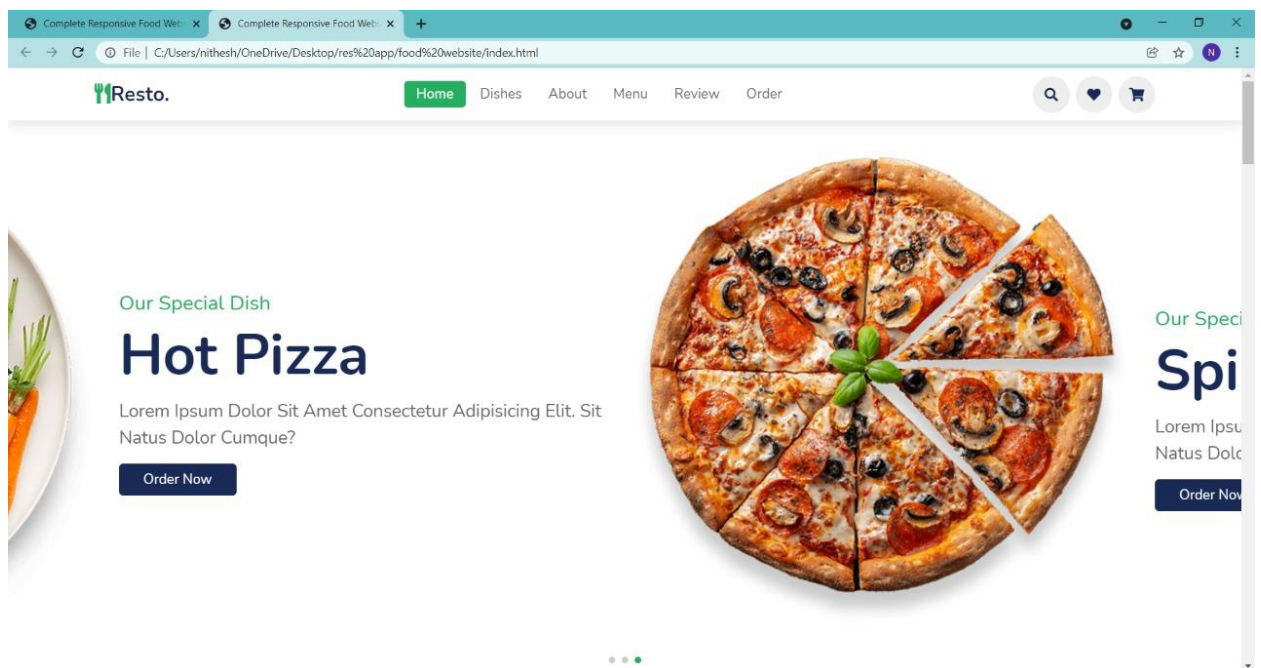


Fig 7.2

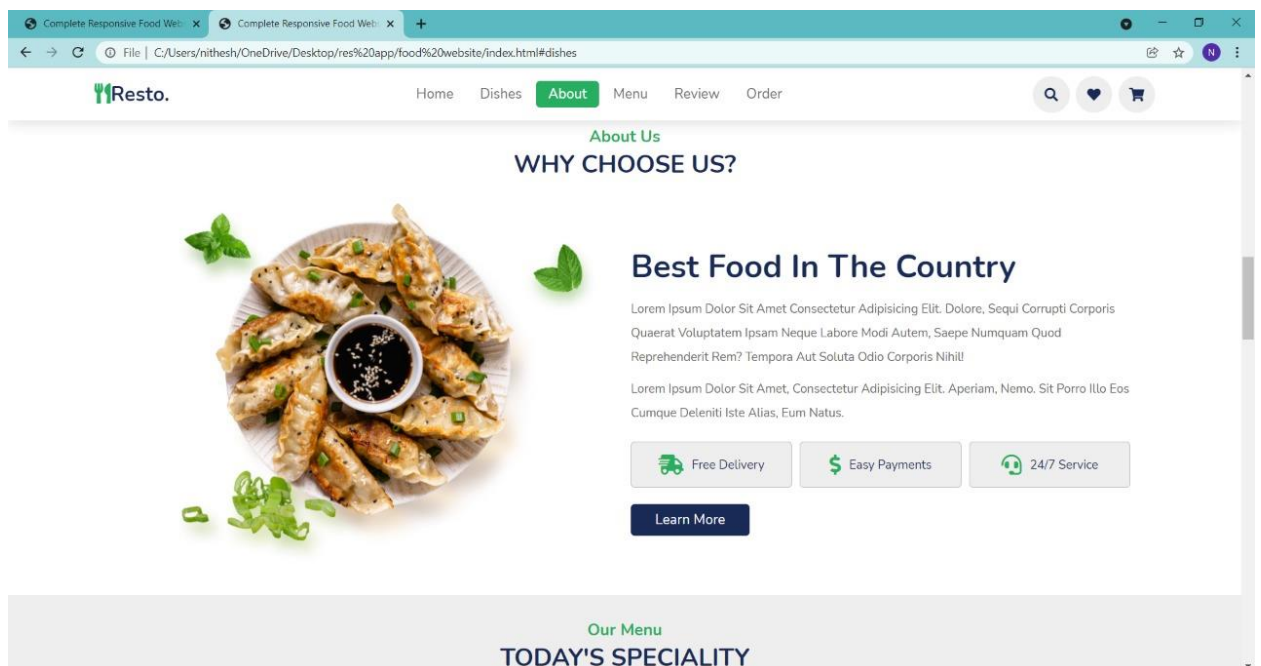


Fig 7.3

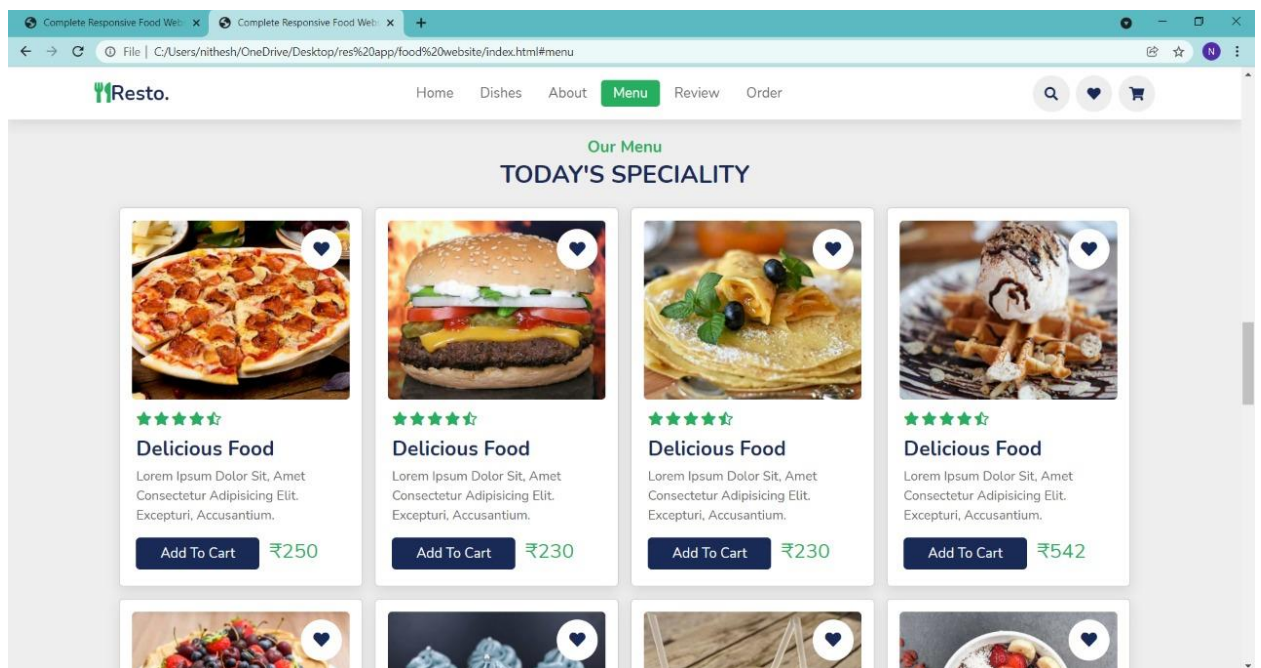


Fig 7.4

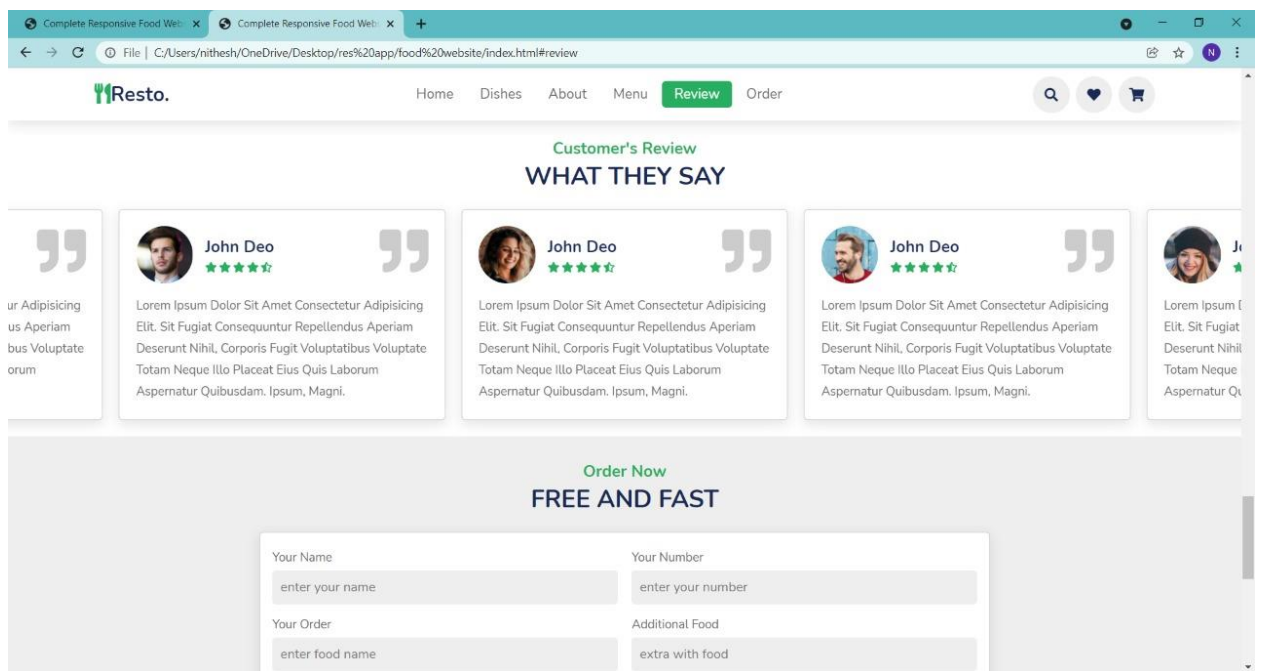


Fig 7.5

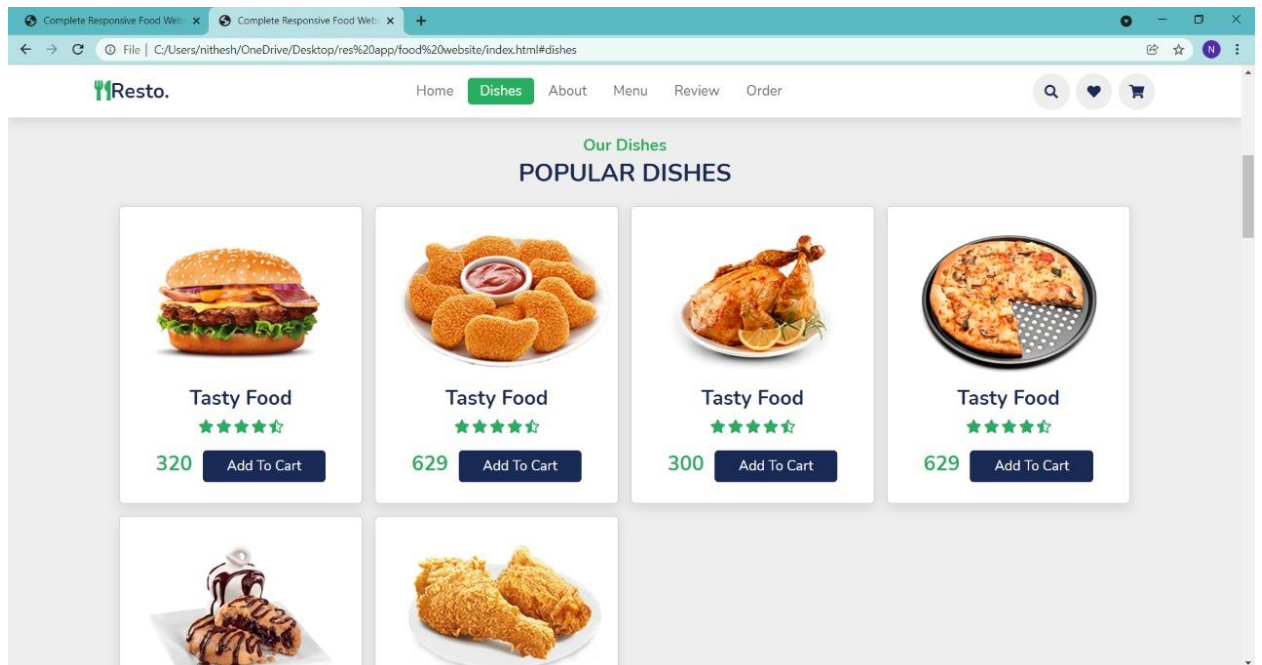


Fig 7.6

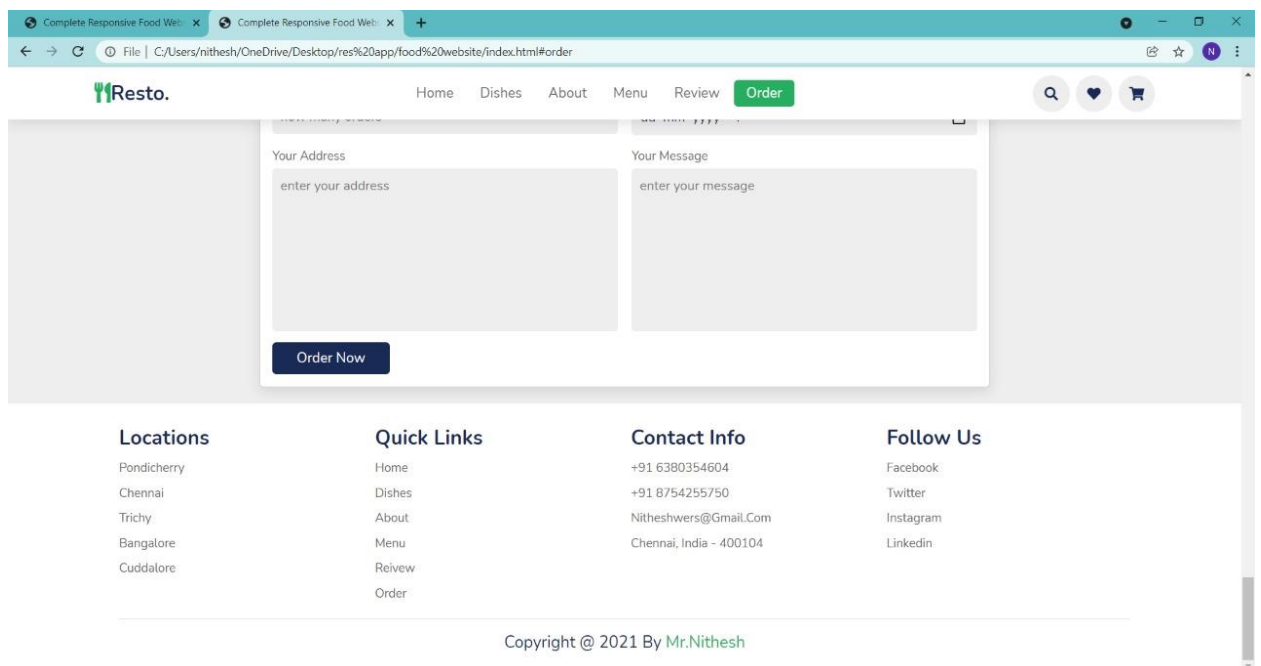


Fig 7.7