

ONLINE PLATFORM FOR DESSERT PRODUCTS

A PROJECT REPORT

Submitted by

ANGAPPAN N

(REG.NO:22BIR003)

GOKULA SHANKAR T K

(REG.NO:22BIR011)

PAVISH K

(REG.NO:22BIR036)

In partial fulfilment of the requirements

for award of the degree

of

BACHELOR OF SCIENCE

IN

INFORMATION SYSTEMS

DEPARTMENT OF COMPUTER TECHNOLOGY – UG

KONGU ENGINEERING COLLEGE

(Autonomous)

PERUNDURAI, ERODE – 638 060



March 2025

DEPARTMENT OF COMPUTER TECHNOLOGY – UG

KONGU ENGINEERING COLLEGE

(Autonomous)

PERUNDURAI ERODE – 638060

MARCH 2025

BONAFIDE CERTIFICATE

This is to certify that the project report titled **ONLINE PLATFORM FOR DESSERT PRODUCTS** is the bonafide record of project work done by **ANGAPPAN N (22BIR003), GOKULA SHANKAR T K (22BIR011), PAVISH K (22BIR036)** in partial fulfilment for the award of Degree of Bachelor of Science in **Information Systems** of Anna University Chennai during the year 2024-2025.

SUPERVISOR

HEAD OF THE DEPARTMENT

(Signature with seal)

Date:

Submitted for the end semester viva-voce examination held on _____

INTERNAL EXAMINER

EXTERNAL EXAMINER

DECLARATION

We affirm that the project titled **ONLINE PLATFORM FOR DESSERT PRODUCTS** being submitted in partial fulfilment for the award of **Bachelor of Science in Information Systems** is the original work carried out by us. It has not formed the part of any other project submitted for award of any degree, either in this or any other University.

ANGAPPAN N

(REG.NO:22BIR003)

GOKULA SHANKAR T K

(REG.NO:22BIR011)

PAVISH K

(REG.NO:22BIR036)

Date:

I certify that the declaration made above by the candidates is true to the best of my knowledge.

Name and Signature of the Supervisor

ABSTRACT

The Online Platform for Dessert Products is a digital solution designed to assist a bakery in expanding its reach and enhancing customer convenience. By providing an intuitive and user-friendly interface, the platform allows customers to seamlessly browse an extensive range of bakery products, check availability, and place either bulk or individual orders. Special offers and discounts are highlighted to attract more customers and improve the sales. The integration of secure online payment options ensures safe transactions, while real-time order tracking allows users to monitor their purchases effortlessly. This streamlined ordering process significantly improves customer satisfaction and boosts operational efficiency for the bakery.

The project was developed using MEAN stack (MongoDB, Express, Angular, and Node.js), the platform is designed for high performance, scalability, and security. Its inventory management system helps the bakery to maintain accurate stock levels, preventing shortages or overstocking. A dedicated customer support system is incorporated, allowing users to raise inquiries or seek assistance regarding their orders, creating a more personalized customer experience. By leveraging modern web technologies, the platform ensures seamless responsiveness across various devices, providing an optimized browsing and purchasing experience on desktops, tablets, and mobile phones.

By adopting this digital transformation, the bakery can strengthen its presence in the online marketplace, catering to a wider audience and increasing sales opportunities. The platform not only simplifies operations but also enhances customer engagement through a well-structured interface and interactive features. With an efficient ordering and management system, the bakery can expand its business, improve customer retention, and stay competitive in the rapidly evolving e-commerce sector. This innovative solution empowers the bakery to adapt to changing consumer preferences and establish a strong position in the digital economy.

ACKNOWLEDGEMENT

We express our sincere thanks to our beloved Correspondent **Thiru.A.K.ILANGO B.Com., MBA., LLB.**, and other philanthropic trust members of the Kongu Vellalar Institute of Technology Trust for having provided with necessary resources to complete this project.

We are always grateful to our beloved visionary Principal **Dr.V.BALUSAMY B.E., (Hons) MTech., Ph.D.**, and thank him for his motivation and moral support.

We express our deep sense of gratitude and profound thanks to **Dr.S.KALAISELVI MCA., ME., Ph.D.**, Head of the Department, Computer Technology-UG for her invaluable commitment and guidance for this project.

We are in immense pleasure to express our hearty thanks to our beloved Project coordinator **Ms.D.NANTHIYA BE., ME.**, and our guide **Dr.A.MUTHUSAMY MCA., Ph.D.**, for providing valuable guidance and constant support throughout the course of our project. We also thank the teaching, non-teaching staff members, fellow students and our parents who stood with us to complete our project successfully.

TABLE OF CONTENTS

CHAPTER No.	TITLE	PAGE No.
	ABSTRACT	iv
	LIST OF FIGURES	viii
	LIST OF TABLES	ix
	LIST OF ABBREVIATIONS	x
1	INTRODUCTION	1
	1.1 OVERVIEW OF THE PROJECT	1
	1.2 PROBLEM DEFINITION	2
	1.3 OBJECTIVES	2
2	SYSTEM ANALYSIS	4
	2.1 EXISTING SYSTEM	4
	2.2 PROPOSED SYSTEM	5
	2.3 FEASIBILITY STUDY	5
	2.3.1 Technical Feasibility	6
	2.3.2 Operational Feasibility	6
	2.3.3 Economic Feasibility	7
3	SYSTEM SPECIFICATION	8
	3.1 HARDWARE SPECIFICATION	8
	3.2 SOFTWARE SPECIFICATION	8
	3.2.1 Frontend	8
	3.2.2 Backend	10
4	SYSTEM DESCRIPTION	12
	4.1 MODULE DESCRIPTION	12
	4.1.1 User Management Module	12
	4.1.2 Cart Module	13
	4.1.3 Product Module	13
	4.1.4 Review Module	13
	4.1.5 Payment Module	13
	4.1.6 Order Module	14

	4.1.7 Admin Module	14
	4.2 USE CASE DIAGRAM	14
	4.3 SYSTEM FLOW DIAGRAM	15
	4.4 DATA FLOW DIAGRAM	16
	4.5 DATABASE DESIGN	17
	4.6 INPUT DESIGN	21
	4.7 OUTPUT DESIGN	23
5	SYSTEM TESTING	24
	5.1 UNIT TESTING	24
	5.2 INTEGRATION TESTING	25
	5.3 VALIDATION TESTING	25
6	SYSTEM IMPLEMENTATION	27
7	CONCLUSION & FUTURE ENHANCEMENTS	29
	7.1 CONCLUSION	29
	7.2 FUTURE ENHANCEMENTS	29
	APPENDIX 1- SAMPLE CODING	30
	APPENDIX 2- SCREEN SHOTS	40
	REFERENCES	47

LIST OF FIGURES

FIGURE No.	TITLE	PAGE No.
4.1	Use case diagram	14
4.2	System flow diagram	15
4.3	Data flow diagram level 0	16
4.4	Data flow diagram level 1	16
4.5	Checkout Page	22
4.6	Payment Page	23
A 2.1	User Management Page	40
A 2.2	Product Page	40
A 2.3	Cart Page	41
A 2.4	Home Page	41
A 2.5	Review Page	42
A 2.6	Order Page	42
A 2.7	Admin Panel	43
A 2.8	Manage Product Page	43
A 2.9	Manage User Page	44
A 2.10	Manage Orders Page	44
A 2.11	Manage State Page	45
A 2.12	Manage Coupon Page	45
A 2.13	Payment Page	46

LIST OF TABLES

TABLE No.	TITLE	PAGE No.
4.6.1	User Details	17
4.6.2	Product Details	17
4.6.3	User Addresses	18
4.6.4	Reviews Details	18
4.6.5	Cart Details	19
4.6.6	Delivery Details	20
4.6.7	Coupon Code Details	20
4.6.8	Order Details	20

LIST OF ABBREVIATIONS

ABBREVIATIONS

HTML

CSS

JSON

JS

UPI

HTTP

API

TS

JWT

EXPANSION

Hypertext Markup Language

Cascading Style Sheet

JavaScript Object Notation

JavaScript

Unified Payments Interface

Hypertext Transfer Protocol

Application Programming Interface

Type Script

Json Web Token