**ONLINE PLATFORM FOR DESSERT PRODUCTS**

**PROJECT REPORT**

**Submitted by**

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***in partial fulfilment of the requirement***

***for the award of the degree of***

**BACHELOR OF SCIENCE** **IN** **INFORMATION SYSTEMS**

**DEPARTMENT OF COMPUTER TECHNOLOGY – UG**

**KONGU ENGINEERING COLLEGE**

**(Autonomous)**

**PERUNDURAI ERODE – 638 060**

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**DEPARTMENT OF COMPUTER TECHNOLOGY - UG**

**KONGU ENGINEERING COLLEGE**

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**PERUNDURAI ERODE- 638 060**

**OCTOBER 2024**

**BONAFIDE CERTIFICATE**

This is to certify that the project entitled “**ONLINE PLATFORM FOR DESSERT PRODUCTS**” is the bonafide record of project work done by **N.ANGAPPAN (Reg.No: 22BIR003)**, **T.K.GOKULA SHANKAR (Reg.No: 22BIR011)** and **K.PAVISH (Reg.No: 22BIR036)** in partial fulfilment for the award of Degree of Bachelor of science in **INFORMATION SYSTEMS** of Anna University, Chennai during the academic 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**

**DEPARTMENT OF COMPUTER TECHNOLOGY - UG**

**KONGU ENGINEERING COLLEGE**

**(Autonomous)**

**PERUNDURAI ERODE- 638 060**

**OCTOBER 2024**

**DECLARATION**

We affirm that the project titled "**ONLINE PLATFORM FOR DESSERT PRODUCTS**” being submitted in partial fulfilment of the requirements for the award of Bachelor of Science in **INFORMATION SYSTEMS** is the original work carried out by us. It has not formed part of any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this occasion on any other candidate.

**ANGAPPAN N (REG.NO:22BIR003)**

**GOKULA SHANKAR T K (REG.NO:22BIR011)**

**PAVISH K (REG.NO:22BIR036)**

**Date:**

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

knowledge.

Name and Signature of the Supervisor

**ABSTRACT**

The Online Platform for Dessert Products is an innovative project designed to help a local bakery expand its reach and improve the ordering process. Customers can place bulk orders for events or individual orders for personal use, all through an easy-to-use interface that allows them to browse bakery items, check availability, and place orders conveniently. The platform also provides detailed product information, special offers, and secure online payments for a hassle-free experience.

The platform features real-time order tracking and customer support, ensuring a smooth and reliable service. Additionally, it integrates inventory management to help the bakery maintain accurate stock levels and streamline operations. Customers can stay informed about their orders, and any inquiries are promptly addressed.

Built using the MEAN stack (Angular, MongoDB, Express, Node), the platform is fast, secure, and scalable, enabling the bakery to reach more customers and expand its business. This technology ensures the platform can handle growing demand while delivering high performance and reliability, making the bakery more competitive in the digital market.

**ACKNOWLEDGEMENT**

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**CHAPTER 1**

**INTRODUCTION**

The Online Platform for Dessert Products is a comprehensive and user-friendly solution designed to help a local bakery reach more customers and expand its business. This platform allows customers to easily place both bulk orders for events and individual orders for personal use, making the bakery's products more accessible and convenient. With an intuitive interface, customers can effortlessly browse through a variety of desserts, check availability, and place their orders online from anywhere, at any time.

In addition to offering a seamless browsing and ordering experience, the platform includes secure payment options, real-time order tracking, and a dedicated customer support system to ensure smooth operations. The bakery also benefits from an integrated inventory management system that helps streamline operations and maintain accurate stock levels. Built with the MEAN stack (Angular, MongoDB, Express, Node), the platform is fast, secure, and scalable, allowing the bakery to cater to an increasing number of customers and grow its online presence in the competitive digital marketplace.

**CHAPTER 2**

**SYSTEMS SPECIFICATION**

**2.1 SOFTWARE REQUIREMENTS**

Operating System : Windows 11

Web Server : Local development server

Database : MongoDB atlas

Text Editor/IDE : Visual Studio Code

Version Control : Git

Package Managers : npm (Node Package Manager)

Browsers : Latest versions of Google Chrome

Additional Tools : Postman

**2.2 HARDWARE REQUIREMENTS**

Processor : 12th Gen Intel(R) Core(TM) i5

RAM : 8 GB

Storage : 256 GB SSD

Network : Stable internet connection

System Type :64-bit operating system, x64-based processor

**2.3 SOFTWARE DESCRIPTION**

**2.3.1 FRONTEND**

The frontend of the Online Platform for Dessert Products is designed with a focus on delivering a seamless and user-friendly experience. Built using Angular, the interface is responsive and allows customers to easily browse through various dessert categories, view product details, and place both bulk and individual orders. The platform offers detailed product pages with images, descriptions, prices, and availability, making it easy for users to make informed decisions. Customers can securely log in, track their orders in real-time, and enjoy a smooth checkout experience. The frontend also features a search function, allowing users to find specific products quickly, and is optimized to provide a consistent experience across all devices, whether desktop or mobile.

**2.3.1 BACKEND**

The backend is powered by the MEAN stack (MongoDB, Express, Angular, Node.js), ensuring a fast, secure, and scalable system. The Node.js server, along with Express as the web framework, handles all client requests, from order placement to payment processing. The backend communicates with the MongoDB database to store product information, customer data, and order details. It also manages real-time features like order tracking and inventory updates. The platform integrates secure payment gateways, such as Stripe or PayPal, to facilitate online transactions. Additionally, user authentication is handled using JWT (JSON Web Tokens) for secure login and access control. With the backend managing inventory, order processing, and secure payment systems, the platform provides a reliable and efficient service that supports the bakery’s growing business.

**SYSTEM DESIGN**

The System Design of the Online Platform for Dessert Products focuses on scalability, security, and performance. The frontend, built with Angular, provides a responsive interface for customers to browse products, place orders, and track their status. The backend, developed with Node.js and Express, processes requests and manages business logic, while MongoDB stores product, customer, and order data. JWT ensures secure user authentication, and the system integrates payment gateways like Stripe or PayPal for smooth transaction processing. This design ensures a reliable, efficient, and secure experience for customers and the bakery.

**PROJECT DESCRIPTION**

The Online Platform for Dessert Products is a digital solution designed to streamline the ordering process for a local bakery. The platform allows customers to browse a variety of desserts, view product details, and place orders for both bulk and individual purchases. With a user-friendly interface, the platform provides features like real-time order tracking, detailed product descriptions, and secure payment processing, ensuring a smooth and efficient experience for customers. Built using the MEAN stack (MongoDB, Express, Angular, Node.js), the platform is scalable and reliable, enabling the bakery to manage inventory, track orders, and securely process payments. The platform supports both online and event-based orders, helping the bakery expand its reach and cater to a larger customer base.

**CONCLUSION**

In conclusion, the Online Platform for Dessert Products offers a comprehensive solution to enhance the bakery’s operations and improve customer experience. By providing a seamless and secure ordering process, real-time order tracking, and easy access to product information, the platform simplifies the way customers interact with the bakery. The use of the MEAN stack ensures scalability and reliability, while integration with secure payment gateways guarantees safe transactions. With the ability to handle both individual and bulk orders, the platform helps the bakery reach a wider audience, fostering growth and expanding its digital presence in a competitive market.