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Major Project
20MCA36

on

"Development of Custom Application for Product Lifecycle Management"

Submitted by

Nithin

1RV21MC067

Under the Guidance

of

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Submitted in partial fulfillment of the requirements for the award of degree of

MASTER OF COMPUTER APPLICATIONS

2022-2023

RV COLLEGE OF ENGINEERING®

(Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi)

DEPARTMENT OF

MASTER OF COMPUTER APPLICATIONS

Bengaluru– 560059

CERTIFICATE

Certified that the project work titled **Development of Custom Application for Product Lifecycle Management** carried out by **Nithin, 1RV21MC067**, a bonafide student of **RV College of Engineering®, Bengaluru** submitted in partial fulfilment for the award of **Master of Computer Applications** of **RV College of Engineering®, Bengaluru affiliated to Visvesvaraya Technological University, Belagavi** during the year **2022-23**. It is certified that all corrections/suggestions indicated for internal assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirement in respect of project work prescribed for the said degree.

Dr. S Anupama Kumar Associate Professor Department of MCA RVCE, Bengaluru –59	**Dr. Andhe Dharani** Professor and Director Department of MCA RVCE, Bengaluru–59	**Dr. K. N. Subramanya** Principal RVCE, Bengaluru–59

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DEPARTMENT OF

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DECLARATION

I, **Nithin**, student of fourth semester MCA in **Department of Master of Computer Applications,** RV College of Engineering®, Bengaluru declare that the project titled **"Development of Custom Application for Product Lifecycle Management"** has been carried out by me. It has been submitted in partial fulfilment of the course requirements for the award of degree in **Master of Computer Applications** of RV College of Engineering®, Bengaluru affiliated to Visvesvaraya Technological University, Belagavi during the academic year **2022-23**. The matter embodied in this report has not been submitted to any other university or institution for the award of any other degree or diploma.

Date of Submission: **Signature of the Student**

Student Name: Nithin
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Department of Master of Computer Applications
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KOCH

KOCH BUSINESS SOLUTIONS INDIA PRIVATE LIMITED

1 March 2023

INTERNSHIP CONFIRMATION LETTER

Dear **Nithin,**
RV College of Engineering, Bengaluru

Congratulations on your selection ...!

We are delighted to offer you an internship opportunity at our organization. Your internship will start from **Thursday, March 9, 2023** and end on **Friday, September 8, 2023**.

As per company's internship policy, you will be paid a stipend of **INR 40,000 (Rupees Forty Thousand Only)** per month paid on **pro-rata basis** of actual attendance record of the month. You would be eligible to use our subsidized canteen facility during your internship by paying the applicable charges. You would not be entitled for any other benefit as part of your internship assignment.

Please be informed that this letter does not constitute a contract of employment or guarantee you any employment with Koch Business Solutions India Pvt Ltd. Based on your performance during the internship period, the company may offer you a permanent employment at the end of the internship period.

During your internship with our organization, you shall follow all the rules and regulations of the organization. **Your standard working hours will be 12:00 – 9:00 pm on all working days.** Failure to adhere to the rules and regulations may result in termination of your internship assignment.

Please review, sign, and return the letter to confirm acceptance, no later than close of business on **March 9, 2023**.

Sincerely,
For Koch Business Solutions India Private Limited

Manish Sinha
HR Leader

I accept the above terms & conditions

Nithin / 09-03-23

Signature Date

ACKNOWLEDGEMENT

The satisfaction and euphoria that accompany the success of any work would be incomplete unless I mention the name of the people, who made it possible, whose constant guidance and encouragement served a beacon light and served our effort with success.

First and foremost, I would like to extend my sincere gratitude to my supervisor **Mr. Hitesh Patel**, Delivery Leader- Guardian, Koch Business Solutions India, Bengaluru, also my project guide **Mr. Amit Kumar Sharma**, PLM Developer, Koch Business Solutions India, Bengaluru for his constant encouragement, support, and guidance during the project work.

I express my wholehearted gratitude to **Dr. Subramanya K N**, Principal, RV College of Engineering® for providing me an opportunity.

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Nithin

Department of MCA

RV College of Engineering®

Bengaluru-59

ABSTRACT

A specialised software solution specifically created to meet the demands, processes, and commercial goals of a manufacturing organisation is known as custom application for PLM (Product Lifecycle Management). By fostering cooperation, increasing data accessibility, and improving process efficiency, it plays a significant part in simplifying and optimising product development processes. A customised PLM application gives businesses the tools they need to manage product data efficiently, make informed decisions, and gain a competitive edge on the market, fostering innovation and success throughout the entire product lifecycle. These features include CAD integration, quality assurance management, and customised reporting.

The modules which are present are Document Management: Manage product-related documents such as specifications, drawings, and user manuals. CAD Integration: Allows for seamless connection with CAD software, making it easier to import, convert, and visualise CAD data for collaborative product design and synchronisation, improving product quality and speeding up development. Through inspections, audits, and non-conformance control, quality assurance ensures product quality and compliance, making it possible to quickly identify and address problems. This increases customer satisfaction and promotes continual development. Report & Analytics: Provides users with in-depth reports and visualisations, editable templates, and data aggregation tools for strategic planning, process optimisation, and informed decision-making. This aids in the effective creation of products and the success of businesses.

The outcome of the custom application will be specific to the goals and objectives of the organization and the application. However, some potential outcomes of the application could include Improved Productivity, automation, and streamlining of product-related processes, resulting in increased productivity and efficiency for the organization. Improved Data Management: The application can provide better management of product data, including CAD data, and documentation, resulting in improved accuracy and up-to-date information. Overall, the application provides numerous benefits to an organization, depending on its specific requirements and objectives. The outcome of the application can lead to improved efficiency, quality, and compliance, resulting in increased profitability and competitiveness in the market.

Publication Details

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Title of Paper: Virtual Assistant Using Deep Learning Techniques

Corresponding Author: Dr. S Anupama Kumar

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1 message

Microsoft CMT <email@msr-cmt.org> 19 July 2023 at 14:30
Reply-To: Microsoft CMT - Do Not Reply <noreply@msr-cmt.org>
To: kumarnithin724@gmail.com

Hello,

The following submission has been created.

Track Name: CSITSS2023

Paper ID: 20

Paper Title: VIRTUAL ASSISTANT USING DEEP LEARNING TECHNIQUES

Abstract:
An application programme known as a virtual assistant, also known as an AI assistant or digital assistant, is one that can recognize natural language voice commands and carry out the user's requests. The goal of this work is to use deep learning to build a thorough virtual assistant for the Core Windows platform. The purpose is to solve the lack of an appropriate virtual assistant for Windows users, especially in scenarios with slow internet or server problems. The suggested virtual assistant seeks to provide offline capability, improve natural language interpretation, and optimize performance on Windows devices by utilizing recurrent neural networks, transformer topologies, and pre-trained language models. This study helps the Windows ecosystem's virtual assistants reach more audiences and enhance user experience. solution for the lack of an appropriate virtual assistant for Windows users. By utilizing recurrent neural networks, transformer topologies, and pre-trained language models, the proposed virtual assistant offers offline capability, enhanced natural language interpretation, and optimized performance on Windows devices. These advancements aim to reach a broader audience and improve the user experience within the Windows ecosystem

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Thanks,
CMT team.

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