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Major Project **20MCA36**

on
“Development of Custom
Application for Product Lifecycle
Management”

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Under the Guidance
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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

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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.

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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.

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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.

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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,
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Table of Contents

CONTENTS	PAGE NO.
College Certificate	i
Company Certificate	ii
Declaration by student	iii
Acknowledgement	iv
Abstract	v
Table of Contents	vi
List of Tables	vii
List of Figures	viii
Chapter 1: Introduction	1
1.1 Project Description	2
1.2 Company Profile	3
1.3 Dissertation Organization	5
Chapter 2: Literature Review	6
2.1 Literature Survey	6
2.2 Existing and Proposed System	10
2.3 Tools and Technologies used	12
2.4 Hardware and Software Requirements	14
Chapter 3: Software Requirement Specifications	15
3.1 Introduction	15
3.2 General Description	16
3.3 Functional Requirement	17
3.4 Non-Functional Requirements	19
3.5 Design constraints	20

Chapter 4: System Design	22
4.1 System perspective	19
4.2 Context Diagram	26
Chapter 5: Detailed Design	28
5.1 Architecture Design	28
5.2 Detailed design	33
Chapter 6: Implementation	36
6.1 Implementation	36
Chapter 7: Software Testing	41
7.1 Test cases	41
7.2 Testing and Validations	46
Chapter 8: Conclusion	48
Chapter 9: Future Enhancements	49
Bibliography	50

LIST OF TABLES

Table no.	Table label	Page no.
2.1	Hardware Requirement	13
2.2	Software Requirement	13
3.1	Abbreviations	14
7.1	testing the module Document Management	39
7.2	testing the module CAD Integration	40
7.3	testing the module Quality Assurance	40
7.4	testing the module Report and Analytics	41
7.5	Integration Testing of Custom Application for PLM	42
7.6	System Testing of Custom Application for PLM	43

LIST OF FIGURES

Figure no.	Figure Label	Page no.
4.1	Block Diagram	23
4.2	Context Diagram	26
5.1	Architecture Diagram	28
5.2	DFD Level 0	30
5.3	DFD Level - 1	30
6.1	Document Management	33
6.2	Document Overview	33
6.3	Creating new CAD file	34
6.4	Creating New Design	34
6.5	Quality Assurance	35
6.6	Report Overview	36
6.7	Product Report	36
6.8	Analytics example	37