**VISVESVARAYA TECHNOLOGICAL UNIVERSITY**

**Jnana Sangama, Belgaum-590018**



**MINI PROJECT**

**REPORT ON**

“TITLE OF THE PROJECT”

**Submitted in Partial fulfillment of the Requirements for the VI Semester of the Degree of**

**Bachelor of Engineering in Computer Science & Engineering**

**By**

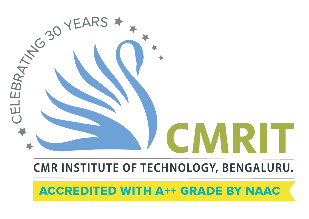
**NAME OF STUDENT (USN)**

**NAME OF STUDENT (USN)**

**Under the Guidance of,**

**XXXX**

**XXXX, Dept. of CSE**



**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

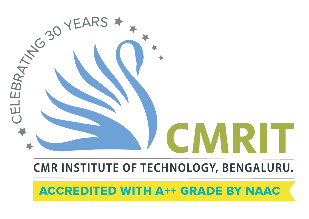
**CMR INSTITUTE OF TECHNOLOGY**

#132, AECS LAYOUT, IT PARK ROAD, KUNDALAHALLI, BANGALORE-560037

**CMR INSTITUTE OF TECHNOLOGY**

#132, AECS LAYOUT, IT PARK ROAD, KUNDALAHALLI, BANGALORE-560037

# DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING



**CERTIFICATE**

Certified that the project work entitled **“\_\_\_\_\_\_\_\_\_\_\_\_\_\_”** carried out by Mr/Ms.\_\_\_\_\_\_\_\_\_\_, USN \_\_\_\_\_\_\_\_\_\_\_\_, Mr./Ms.\_\_\_\_\_\_\_\_\_, USN \_\_\_\_\_\_\_\_\_, are the bonafide students of CMR Institute of Technology, Bengaluru, in partial fulfillment for the award of the degree of **Bachelor of Engineering** in Computer Science and Engineering of the Visvesvaraya Technological University,  Belgaum during the year 2024-2025. 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 requirements in respect of Project work prescribed for the said Degree.

.

|  |  |  |
| --- | --- | --- |
| **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  Signature of Guide  **XXXX**  **XXXX Professor**  **Dept. of CSE, CMRIT** | **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  Signature of Coordinator  **Dr. Hemangi Goswami**  **Assistant Professor**  **Dept. of CSE, CMRIT** | **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  Signature of HOD  **Dr. Kesavamoorthy R.**  **Professor & HoD**  **Dept. of CSE, CMRIT** |

**DECLARATION**

We, the students of 6th semester of Computer Science and Engineering, CMR Institute of Technology, Bangalore declare that the work entitled "**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**" has been successfully completed under the guidance of XXXX, XXXXX, Computer Science and Engineering Department, CMR Institute of technology, Bangalore. This dissertation work is submitted in partial fulfillment of the requirements for the award of Degree of Bachelor of Engineering in Computer Science and Engineering during the academic year 2024 - 2025. Further the matter embodied in the project report has not been submitted previously by anybody for the award of any degree or diploma to any university.

Place:

Date:

**Team members:**

|  |  |
| --- | --- |
| **NAME (1CR\_\_\_\_\_\_)** | **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
| **NAME (1CR\_\_\_\_\_\_)** | **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
|  |  |
|  |  |

**PROJECT OFFER LETTER**

**(1st Letter Before The Commencement of The Project)**

**Scanned Copy of The Original Letter**

**Place it Here and Print in Color**

**PROJECT COMPLETION LETTER**

**(2nd Letter After The Completion of The Project)**

**Scanned Copy of The Original Letter**

**Place it Here and Print in Color**

**ABSTRACT**

An abstract (synopsis) not exceeding 150 words, indicating salient features of the work, should be in a paragraph.

**ACKNOWLEDGEMENT**

**Write an acknowledgement not exceeding a page. Follow this hierarchy**

**College**

**Company**

**Principal, Vice Principal**

**HOD**

**Guide**

**Others**

**SAMPLE**

I take this opportunity to express my sincere gratitude and respect to **CMR Institute of Technology, Bengaluru** for providing me a platform to pursue my studies and carry out my final year project

I would like to express my gratitude to **[Company Name]** for providing me with the opportunity to undertake this project work as a part of my entrepreneurial mini project.

I have a great pleasure in expressing my deep sense of gratitude to **Dr. Sanjay Jain,** Principal, CMRIT, Bangalore, for his constant encouragement.

I would like to thank **Dr. Kesavamoorthy R.,** HOD, Department of Computer Science and Engineering, CMRIT, Bangalore, who has been a constant support and encouragement throughout the course of this project.

I consider it a privilege and honor to express my sincere gratitude to my guide

**(guide name), designation,** Department of Computer Science and Engineering, for the valuable guidance throughout the tenure of this review.

I also extend my thanks to all the faculty of Computer Science and Engineering who directly or indirectly encouraged me.

Finally, I would like to thank my parents and friends for all their moral support they have given me during the completion of this work.

**TABLE OF CONTENTS**

|  |  |
| --- | --- |
|  | **Page No.** |
| **Certificate** | **ii** |
| **Declaration** | **iii** |
| **Project Offer Letter** | **iv** |
| **Project Completion Letter** | **v** |
| **Abstract** | **vi** |
| **Acknowledgement** | **vii** |
| **Table of contents** | **viii** |
| **List of Figures** | **x** |
| **List of Abbreviations** | **xi** |
| 1. **INTRODUCTION**    1. **About the Company**    2. **About the Project**    3. **Software Engineering Methodology** | **1**  **1**  **3**  **4** |
| 1. **REQUIREMENTS SPECIFICATION**    1. **Functional Requirements**        1. **Feature 1**       2. **Feature 2**       3. **Feature N**    2. **Non-Functional Requirements**        1. **Performance Requirements**       2. **Security Requirements**       3. **Software Quality Attributes**    3. **Other Requirements** | **6**  **6**  **7**  **8**  **9**  **10**  **11**  **12**  **13**  **14** |
| 1. **REQUIREMENTS MODELLING**    1. **Scenario Based Modelling**        1. **Use Case Diagram**       2. **Activity Diagram**       3. **Swimlane Diagram**    2. **Data Modelling**        1. **Entity Relationship Diagram**    3. **Class Based Modelling**        1. **Class Diagram**       2. **CRC Cards** | **15** |
| 1. **IMPLEMENTATION**     1. **System Architecture**        1. **Architecture Diagram**       2. **Flow Chart**    2. **Tech Stack**    3. **Sample Code**    4. **Output Screenshots** |  |
| 1. **TESTING**    1. **Unit Testing**    2. **Integration Testing**    3. **System Testing** |  |
| 1. **CONCLUSION AND FUTURE ENHANCEMENTS**    1. **Conclusion**    2. **Future Enhancements** |  |
| **REFERENCES** |  |
| ***APPENDIX (Optional)*** |  |

**LIST OF FIGURES**

|  |  |  |
| --- | --- | --- |
| **Figure No.** | **Figure Caption** | **Page No.** |
| **Fig 1.1** | **Figure caption** | **3** |
| **Fig 2.2** | **Figure caption** | **5** |
| **Fig 2.3** | **Figure caption** | **6** |

**(DO NOT number as 2.2.2 even if the figure is under a subsection, if there are 10 figures in chapter 2, order them 2.1 to 2.10)**

**LIST OF ABBREVIATIONS**

**ABC - Axxx Bxxxx Cxxx**