

Project Title

A PROJECT REPORT

Submitted by

Name (Reg no)

(Alphabetical order)

in partial fulfillment of requirements for the award of the course

AGB1211 – DESIGN THINKING

in

ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

K. RAMAKRISHNAN COLLEGE OF TECHNOLOGY

(An Autonomous Institution, affiliated to Anna University Chennai and Approved by
AICTE, New Delhi)

SAMAYAPURAM – 621 112

DECEMBER, 2024

K. RAMAKRISHNAN COLLEGE OF TECHNOLOGY (AUTONOMOUS)

SAMAYAPURAM – 621 112

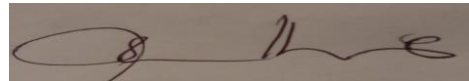
BONAFIDE CERTIFICATE

Certified that this project report on “ **TITLE OF THE PROJECT**” is the bonafide work of **STUDENT NAME (STUDENT ROLLNO)** who carried out the project work during the academic year 2024 - 2025 under my supervision.



Signature

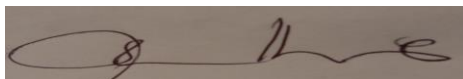
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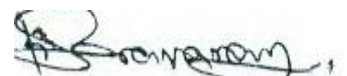
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Ms.S.MURUGAVALLI., M.E.,(Ph.D).,
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Submitted for the viva-voce examination held on 5.12.24



INTERNAL EXAMINER



EXTERNAL EXAMINER

DECLARATION

I declare that the project report on “**PROJECT TITLE**” is the result of original work done by us and best of our knowledge, similar work has not been submitted to “**ANNA UNIVERSITY CHENNAI**” for the requirement of Degree of **BACHELOR OF TECHNOLOGY**. This project report is submitted on the partial fulfillment of the requirement of the award of the **AGB1211 – DESIGN THINKING**.

Signature

Name1

Name 2

Place: Samayapuram

Date: 5/12/2024

ACKNOWLEDGEMENT

It is with great pride that I express our gratitude and indebtedness to our institution, **“K. Ramakrishnan College of Technology (Autonomous)”**, for providing us with the opportunity to do this project.

I extend our sincere acknowledgment and appreciation to the esteemed and honorable Chairman, **Dr. K. RAMAKRISHNAN, B.E.**, for having provided the facilities during the course of our study in college.

I would like to express our sincere thanks to our beloved Executive Director, **Dr. S. KUPPUSAMY, MBA, Ph.D.**, for forwarding our project and offering an adequate duration to complete it.

I would like to thank **Dr. N. VASUDEVAN, M.TECH., Ph.D.**, and Principal, whogave the opportunity to frame the project to full satisfaction.

I thank **Dr.T.AVUDAIAPPAN, M.E.,Ph.D.**, Head of the Department of **ARTIFICIAL INTELLIGENCE**, for providing his encouragement in pursuing this project.

I wish to convey our profound and heartfelt gratitude to our esteemed project guide **Ms.S.MURUGAVALLI,M.E.,(Ph.D)**,Department of **ARTIFICIAL INTELLIGENCE** for her incalculable suggestions, creativity, assistance and patience,which motivated us to carry out this project.

I render our sincere thanks to the Course Coordinator and other staff members for providing valuable information during the course.

I wish to express our special thanks to the officials and Lab Technicians of our departments who rendered their help during the period of the work progress.

VISION OF THE INSTITUTION

To serve the society by offering top-notch technical education on par with global standards.

MISSION OF THE INSTITUTION

- Be a center of excellence for technical education in emerging technologies by exceeding the needs of industry and society.
- Be an institute with world class research facilities.
- Be an institute nurturing talent and enhancing competency of students to transform them as all- round personalities respecting moral and ethical values.

VISION AND MISSION OF THE DEPARTMENT

To become a renowned hub for AIML technologies to producing highly talented globally recognizable technocrats to meet industrial needs and societal expectation.

Mission 1: To impart advanced education in AI and Machine Learning, built upon a foundation in Computer Science and Engineering.

Mission 2: To foster experiential learning equips students with engineering skills to tackle real-world problems.

Mission 3: To promote collaborative innovation in AI, machine learning, and related research and development with industries.

Mission 4: To provide an enjoyable environment for pursuing excellence while upholding strong personal and professional values and ethics.

PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

PEO 1: Excel in technical abilities to build intelligent systems in the fields of AI & ML in order to find new opportunities.

PEO 2: Embrace new technology to solve real-world problems, whether alone or as a team, while prioritizing ethics and societal benefits.

PEO 3: Accept lifelong learning to expand future opportunities in research and product development.

PROGRAM OUTCOMES

Engineering students will be able to:

1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
6. **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

9. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11. **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
12. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO 1: Expertise in tailoring ML algorithms and models to excel in designated applications and fields.

PSO 2: Ability to conduct research, contributing to machine learning advancements and innovations that tackle emerging societal challenges.

ABSTRACT

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CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

1.2 PROBLEM STATEMENT

1.3 OBJECTIVE

CHAPTER 2

PROJECT METHODOLOGY

2.1 BLOCK DIAGRAM

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KEY PHASES OF DESIGN THINKING

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CONCLUSION

REFERENCES:

(It may be any books, websites, youtube links etc..)

(Alphabetical order)

APPENDIX A – SCREENSHOTS