





A PROJECT REPORT

Submitted by

SRI HARITHA VARSHINY R (2303811724322107)

SUBATHRA S (2303811724322109)

SUBIKSA G R (2303811724322110)

SUGAPRIYA A (2303811724322112)

In partial fulfillment of requirements for the award of the course

AGB1211-DESIGN THINKING

in

ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

K. RAMAKRISHNAN COLLEGE OF TECHNOLOGY

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

SAMAYAPURAM-621112 DECEMBER,2024

K. RAMAKRISHNAN COLLEGE OF TECHNOLOGY(AUTONOMOUS)

SAMAYAPURAM-621 112

BONAFIDE CERTIFICATE

Certified that this project report on "NEWS FEED APP" is the bonafide work of SRI HARITHA VARSHINY R (2303811724322109), SUBATHRA S (2303811724322109), SUBIKSA G R (2303811724322110), SUGAPRIYA A (2303811724322112) who carried out the project work during the academic year 2024 - 2025 under my supervision.

Signature Signature

Dr. T. AVUDAIAPPAN M.E., Ph.D., Mrs. JOANY FRANKLIN M.E.,

HEAD OF THE DEPARTMENT, SUPERVISOR,

Department of Artificial Intelligence, Department of Artificial Intelligence,

K. Ramakrishnan College of Technology, K.Ramakrishnan College of Technology,

Samayapuram, Trichy - 621 112. Samayapuram, Trichy -621 112.

Submitted for the viva-voce examination held on 06.12.24

DECLARATION

I declare that the project report on "NEWS FEED APP" 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	
SRI HARITHA VARSHINY R	
(2303811724322107)	
SUBATHRA S	
(2303811724322109)	
,	
SUBIKSA G R	
(2303811724322110)	
, ,	
SUGAPRIYA A	
(2303811724322112)	
(2303011/24322112)	

Place: Samayapuram

Date: 06/12/2024

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.**, Principal, who gave 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 AND DATA SCIENCE**, for providing her Encouragement inpursuing this project.

I wish to convey our profound and heartfelt gratitude to our esteemed project guide Mrs. JOANYFRANKLINM.E., Department of ARTIFICIAL INTELLIGENCE AND DATA SCIENCE, 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 centre 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 excel in education, innovation and research in Artificial Intelligence and Data Science to fulfil industrial demands and societal expectations.

Mission 1: To educate future engineers with solid fundamentals, continually improving teaching methods using modern tools.

Mission2: To collaborate with industry and offer top-notch facilities in a conductive learning environment.

Mission 3: To foster skilled engineers and ethical innovation in AI and Data Science for global recognition and impactful research.

Mission4: To tackle the societal challenge of producing capable professionals by instilling employability skills and human values.

PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

PEO 1: Compete on a global scale for a professional career in Artificial Intelligence and Data Science.

PEO 2: Provide industry-specific solutions for the society with effective communication and ethics.

PEO3: Hone their professional skills through research and lifelong learning initiatives.

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 teamwork:** 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.

PROGRAMSPECIFICOUTCOMES(PSOs)

- **PSO 1:** Capable of working on data-related methodologies and providing industry-focussed solutions.
- **PSO2:** Capable of analysing and providing a solution to a given real-world problem by designing an effective program.

ABSTRACT

In today's fast-paced digital era, the abundance of online information often leads to challenges in accessing relevant and personalized content. The News Feed App addresses this issue by providing a user-centric platform that curates news tailored to individual preferences. This report outlines the systematic development of the app, which integrates advanced machine learning algorithms with an intuitive design to enhance the user experience. The app utilizes real-time data processing to ensure that users stay updated on their chosen topics while avoiding information overload. The design thinking approach was adopted to prioritize user needs and refine features through iterative feedback. The app includes modules for user authentication, personalized news curation, notifications, and analytics, making it both efficient and engaging. By delivering a seamless and tailored news experience, the News Feed App aims to redefine how users consume information.

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CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

The News Feed App caters to the growing need for customized news consumption in the digital age. Traditional news delivery methods often overwhelm users with irrelevant or excessive information. This project focuses on leveraging technology to solve this issue by curating a personalized feed that adapts to users' interests and browsing habits. Designed to improve convenience and engagement, the app delivers real-time updates and ensures users remain informed on their preferred topics in an efficient and meaningful way.

1.2 PROBLEMSTATEMENT

With the vast amount of information available online, users often face difficulties in filtering out irrelevant news. Traditional news platforms fail to address individual preferences, leading to frustration and decreased user satisfaction. The challenge lies in creating a solution that simplifies news consumption while maintaining relevance and accuracy.

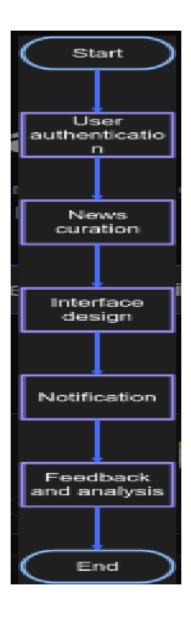
1.3 OBJECTIVE

The primary objective of this project is to develop a news feed app that:

- Provides users with personalized and relevant news content.
- Utilizes advanced algorithms to adapt to user behavior over time.
- Features an intuitive, easy-to-navigate interface to enhance usability.

CHAPTER 2 PROJECT METHODOLOGY

BLOCKDIAGRAM



CHAPTER 3

KEY PHASES OF DESIGN THINKING

3.1 EMPATHIZE

Understanding user needs and challenges through surveys, interviews, and market research. Insights include the demand for personalized content and frustration with irrelevant news.

3.2 DEFINE

The core problems were identified, such as overwhelming content, lack of personalization, and cumbersome interfaces. These issues formed the basis of the app's design goals.

3.3 IDEATE

Brainstorming potential solutions like AI-driven curation, customizable filters, and a minimalist UI for better engagement and ease of use.

3.4 PROTOTYPE

Developing a working prototype with features like category filters, trending topics, and user feedback systems. This prototype served as a foundation for iterative improvements.

3.5 TEST

The prototype was tested with real users to gather feedback on usability, performance, and relevance. This feedback was incorporated into subsequent design iterations.

CHAPTER 4

MODULE DESCRIPTION

4.1 USER AUTHENTICATION MODULE

This module ensures secure access for users through account creation, login systems, and integration with social media platforms. It allows users to save preferences and access them across devices.

4.2 NEWS CURATION MODULE

Powered by machine learning, this module analyzes user data to curate a personalized news feed. It dynamically updates based on interaction patterns and preferences.

4.3 INTERFACE DESIGN MODULE

The app features a sleek and responsive design. Users can easily navigate between sections, filter news categories, and enable dark mode for a comfortable reading experience.

4.4 NOTIFICATION MODULE

The app includes a notification system to alert users about breaking news, updates on subscribed topics, and daily news summaries.

4.5 FEEDBACK AND ANALYSIS MODULE

This module collects user feedback to improve content recommendations and app functionality. It also tracks analytics to optimize user engagement and retention.

CHAPTER 5 CONCLUSION

The News Feed App represents a significant advancement in personalized news delivery. By integrating machine learning algorithms with design thinking principles, the app provides a seamless, engaging, and user-friendly experience. It not only addresses the challenge of information overload but also empowers users to stay informed on their own terms. Future enhancements include voice command features, multilingual support, and integration with wearable devices to make the app even more versatile and inclusive.

REFERENCES:

Figma Resources:

Nuntium News App UI Kit: A premium mobile UI kit with 24 pages designed for news feed applications. It is pixel-perfect and includes a comprehensive UX process. You can find it on <u>Figma Elements</u>

UI/UX Tutorials:

YouTube tutorials like <u>"Design a Newsfeed App UI on Figma"</u> offer a beginner-friendly approach to creating a news app design, covering steps from wireframes to high-fidelity designs

Free Templates:

A modern news app template is available on Uplabs, focusing on clean, minimalistic news display. This is perfect for quick prototyping or inspiration for your app's layout. Details are on Figma Elements

Design Case Studies:

Explore Behance or Dribbble for examples of news app designs. These platforms host case studies and design concepts that showcase different approaches to UI and UX for similar apps.

Development Guides:

If you're coding the app, tools like Firebase for backend integration or platforms like Flutter for cross-platform development can simplify the process. Tutorials on sites like Medium or Dev.to provide step-by-step guidance for implementing news feed functionality.

APPENDIX A-SCREENSHOTS



