 

9530

St.MOTHER THERESA ENGINEERING COLLEGE

COMPUTER SCIENCE ENGINEERING

**NM-ID:** B61DCBAF5F9AEADA4E54997D90371029

**REG NO:** 953023104047

**DATE:** 15-09-2025

Completed The Project Named as

Phase 1

News Feed Application

SUBMITTED BY,

**Kirthic Prakash S**

6382471983

**Phase 1**

1. **Introduction**

The **News Feed Application** is a modern platform designed to provide real-time, reliable, and personalized news updates. With the growing dependency on digital media, users often struggle with information overload and unreliable sources. This application addresses those issues by delivering content from trusted APIs, organizing it into categories such as Politics, Sports, Business, Technology, and Entertainment, and presenting it in a user-friendly interface. Its primary aim is to ensure that people stay informed quickly, efficiently, and interactively.

1. **Problem Statement**

Traditional newspapers and television broadcasts are limited by schedules and geography, while online platforms often overwhelm users with excessive or irrelevant information. Fake news and lack of personalization further complicate the problem. Users today need a **centralized, trustworthy, and customizable platform** that provides news instantly.

The News Feed Application solves this problem by:

* + - Delivering real-time updates from credible sources.
    - Filtering content by categories and user preferences.
    - Providing offline access through bookmarks.
    - Notifying users about breaking news instantly.

**3. Objectives**

The main objectives of the project are:

* To create a **reliable and accurate** news delivery system.
* To provide **personalized feeds** according to user-selected categories.
* To design a **responsive and user-friendly interface**.
* To support **bookmarks, notifications, and offline reading**.
* To ensure **scalability and smooth performance** across devices.

**4. Users & Stakeholders**

* + **End Users**: Students, professionals, and general public who consume news.
  + **Content Providers**: APIs and trusted news sources such as NewsAPI, Google News RSS.
  + **Developers/Designers**: Responsible for building and maintaining the system.
  + **Business Stakeholders**: Organizations and startups that aim to increase digital engagement and provide information services.

.

**5. Basic Layout (Wireframe)**

-------------------------------------------------

| [ Breaking News Banner ] |

| ---------------------------------------- |

| [ Headline + Image ] |

| [ Category: Politics ] |

| [ Short Description ] |

| ---------------------------------------- |

| Bottom Nav: Home | Search | Bookmarks | Me |

-------------------------------------------------

* **Top Section**: Breaking/Trending news.
* **Middle Section**: Category-based articles.
* **Bottom Section**: Navigation tabs for Home, Search, Bookmarks, Profile.

**6. Features**

The News Feed Application includes:

* Real-time updates from trusted APIs.
* Category-wise news organization (Politics, Business, Sports, Tech, Entertainment).
* Personalized feed tailored to user interests.
* Search and filter functionality.
* Bookmarking and offline reading.
* Push notifications for breaking news.
* Dark/Light mode for flexible reading.

**7. Benefits**

* Saves time by consolidating multiple sources in one place.
* Reduces misinformation by relying on trusted APIs.
* Provides a personalized and interactive reading experience.
* Accessible across devices with responsive design.
* Lightweight and fast with minimal data usage.

**8. Acceptance Criteria**

* **The system must fetch at least 20 articles per category from the API.**
* **News must refresh dynamically without manual reload.**
* **Search results should display within 2 seconds.**
* **Push notifications must work for breaking news.**
* **The application must be responsive (mobile, tablet, desktop).**
* **Bookmarked articles must remain accessible offline.**
* **The system must handle at least 1000 concurrent users smoothly.**