Project Design Phase-II
Data Flow Diagram & User Stories

Date	10 March 2025
Team ID	SWTID1741158850151071
Project Name	News app
Maximum Marks	4 Marks

Data Flow Diagrams:

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

Example:
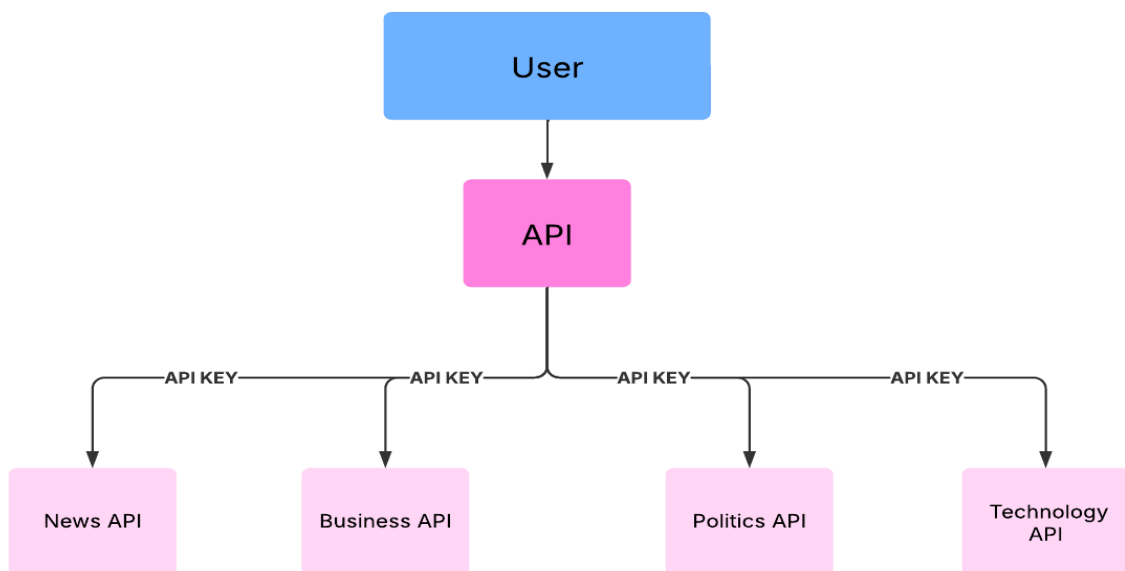
User Stories

User Story Table – Music Streaming App

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
News		USN-1	As a user, I can see the trendy news .	I can see the News of all topics.	High	Sprint-1
Genre		USN-2	As a user, I can watch Political,Business, and Technology News.	I can also go the source and read the full news.	High	Sprint-1
		USN-3	As a user, I can able to view the complete news across the world.	I can also watch the news for multiple pages .	Medium	Sprint-2
Subscription		USN-4	As a user, I can even subscribe.	I can Subscribe to the newsletter for the news .	High	Sprint-2

Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	10 March 2025
Team ID	SWTID1741158850151071
Project Name	News app
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

Functional Requirements – News App

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	News Home	Top News
FR-2	News Genre	General,Health,Technology,Politics,Art & Culture
FR-3	NewsLetter	NewsLetter subscription

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

NFR No.	Non-Functional Requirement	Description
NFR-1	Usability	The app should have an intuitive and user-friendly interface, ensuring smooth navigation and accessibility for users of all demographics.
NFR-2	Security	User authentication and data must be secured using encryption (e.g., HTTPS, OAuth for third-party logins). The app should prevent unauthorized access and follow best security practices.
NFR-3	Reliability	The app should ensure a consistent and uninterrupted music streaming experience, minimizing crashes and downtime.
NFR-4	Performance	Songs should load and stream with minimal buffering. The app should respond to user interactions (search, playback, playlist management) within 2 seconds.

NFR-5	Availability	The system should maintain an uptime of at least 99.9%, ensuring accessibility across different time zones.
NFR-6	Scalability	The app should handle increasing numbers of users and concurrent streams efficiently without performance degradation. The architecture should support future feature expansion.

Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	10 March 2025
Team ID	SWTID1741158850151071
Project Name	News App
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

Example: News App

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Web-based interface for News	HTML, CSS, JavaScript / React Js etc.
2.	Application Logic-1	News fetching from News api	React js
3.	Application Logic-2	News fetching based on genre	React js

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
4.	Open-Source Frameworks	Frontend frameworks	React.js, BootStrap, Tailwind CSS

References:

React.js Documentation