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

Date	15 October 2022
Team ID	PNT2022TMID29977
Project Name	Project - News Tracker Application
Maximum Marks	4 Marks

Technical Architecture:

As our lives are very busy these days, we often feel we need more than 24 hrs. a day to cope up with everything we have in our schedule. Well, that's not possible but reducing the time by changing the conventional method of reading news can help. Just tell us what market news you're interested in and get a quick peek for the day. Only read what you feel is relevant and save your time. This app helps you to query for all information about Indices, Commodities, Currencies, Future Rates, Bonds, etc.… as on official websites.

Diagram:
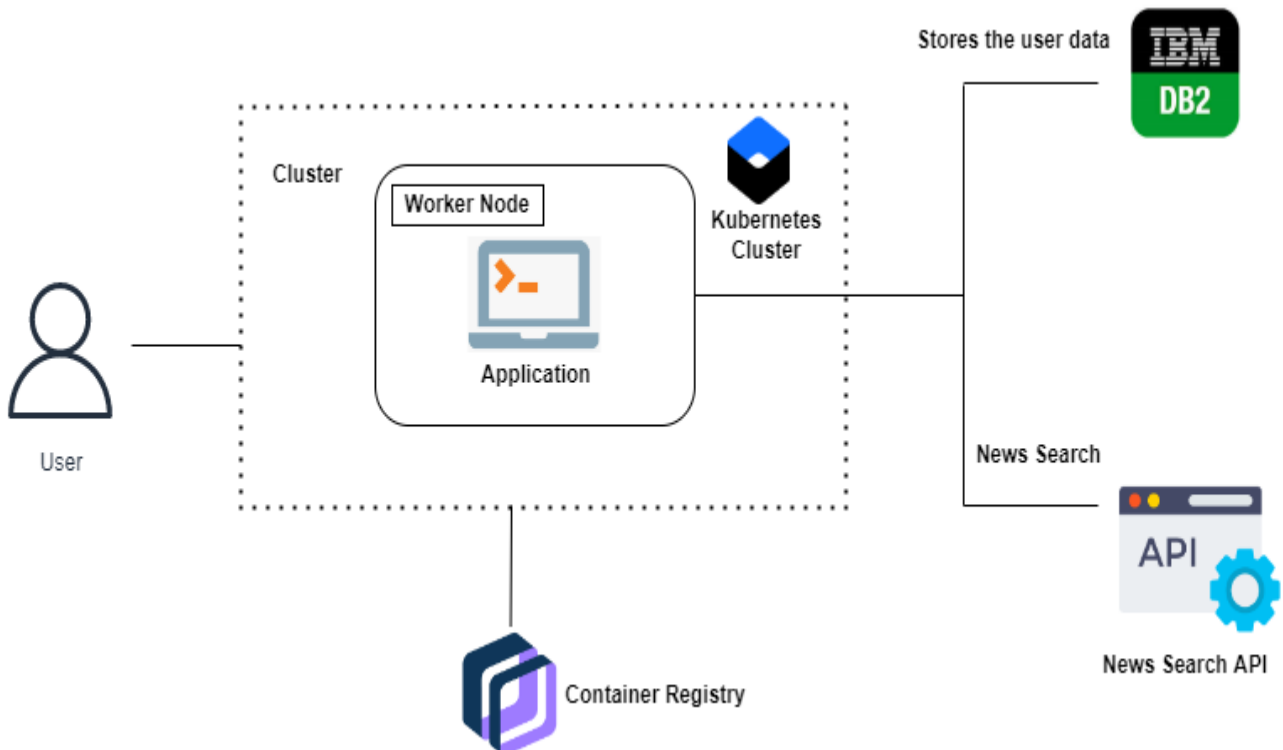
Project Workflow:

• **The user interacts with the application.**

• **Registers by giving the details.**

• **Integrate the application with news APIs and store the data in the database.**

• **The database will have all the details and the user can search the news by using** a search bar.

Table-1 : Componensts & Technologies:

S.No	Component	Description	Technology
•	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript / Angular Js / React Js etc.
•	Application Logic-1	Logic for a process in the application	Java / Python
•	Application Logic-2	Logic for a process in the application	IBM Watson STT service
•	Application Logic-3	Logic for a process in the application	IBM Watson Assistant
•	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
•	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
•	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
•	External API-1	Purpose of External API used in the application	IBM Weather API, etc.
•	External API-2	Purpose of External API used in the application	Aadhar API, etc.
•	Machine Learning Model	Purpose of Machine Learning Model	Object Recognition Model, etc.
•	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
•	Open-Source Frameworks	List the open-source frameworks used	Technology of Opensource framework
•	Security Implementations	List all the security / access	e.g. SHA-256,

		controls implemented, use of firewalls etc.	Encryptions, IAM Controls, OWASP etc.
•	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Technology used
•	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	Technology used
•	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Technology used