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

Date	10 October 2022
Team ID	PNT2022TMID13118
Project Name	News Tracker Application
Maximum Marks	4 Marks

Technical Architecture:

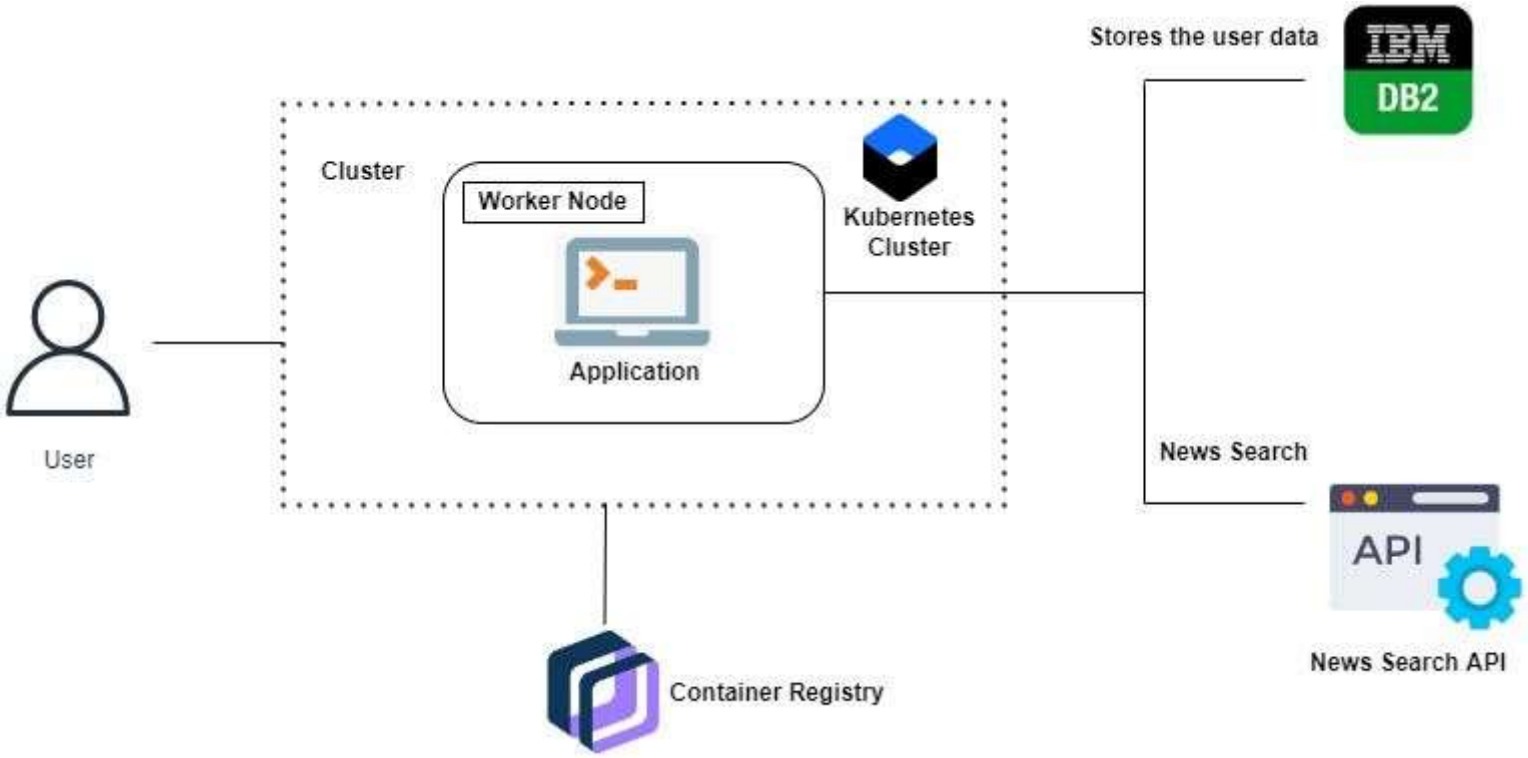

Table-1: Components & Technologies:

S.NO	Component	Description	Technology
1.	User Interface	How user interacts with application and the most efficient environment to obtain maximum success e.g.,Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript
2.	Application Logic-1	The application has its sign in or sign-up page in the web application	Python
3.	Application Logic-2	Logic for a process in the application where user enters personal data to update their Account profile where IBM Watson STT service used.	IBM Watson STT service
4.	Application Logic-3	Logged In Application User can view news content based on geo-location, time, date and places where chatbot is used.	IBM Watson Assistant
5.	Database	Data Type, Configurations etc. and other data for functional reasons	MySQL
6.	Cloud Database	Database Service used in IBM DB2.Using this user can access all the data stored in cloud through network from any accessible device	IBM DB2, IBM Cloudant etc.
7.	File Storage	File storage requirements and personal data in IBM Storage Block	IBM Block Storage or Other Storage Service or Local Filesystem
8.	External API-1	Purpose of External API used in the application	Aadhar API, etc.
9.	External API-2	Application used IBM Weather to get exact weather report as it is one of the mandatory news contents.	IBM Weather API, etc.
11.	Infrastructure (Server / Cloud)	Application Deployment on Cloud for fast-performing and efficient usage of the application	Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.NO	Characteristics	Description	Technology
1.	Open-Source Frameworks	Light-weight open-source frameworks using Python.	Flask
2.	Security Implementations	Application contains user personal information, login credentials, transaction details are protected using access controls and kept confidential using data protection in IBM cloud	e.g., Encryptions, IAMControls in IBM Clouds, etc.
3.	Scalable Architecture	Python flask for high-end performance and IBM Cloud for great availability and scalability.	Flask, .Net
4.	Availability	Works properly on the IBM Cloud and justified requirements.	IBM cloud, Docker, Kubernetes cluster
5.	Performance	Every request, response and building blocks efficiently for better performance	Instana, Python, Java