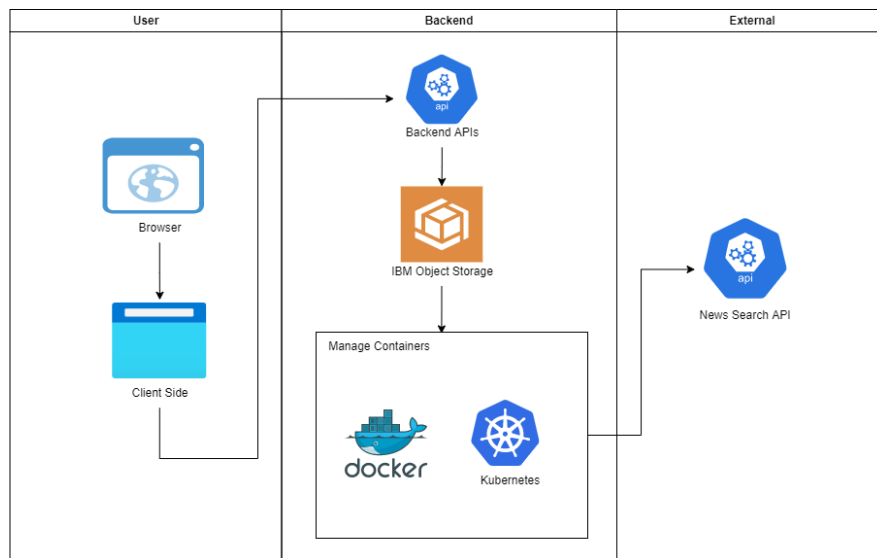


Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	03 October 2022
Team ID	PNT2022TMID21106
Project Name	News Tracker Application
Maximum Marks	4 Marks

Technical Architecture:



- HTML, CSS and JavaScript will be used as the base of the frontend
- The user will be having access to a personalized feed with stories from domains of interest as well as a general feed
- The content is updated in real time in the feed and can be seen after refreshing it
- The users also receive push notifications to alert them about new content when they are not using the app
- The users can also bookmark or save content that they intend to come back to later

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	The user should be able to access the application through a web browser in a range of devices like desktops, mobile phones, tablets etc	HTML, CSS, React Js.
2.	Application Logic	Logic for the backend processes in the application	Flask (Python)
3.	Database	Data Type, Configurations etc.	MySQL
4.	Cloud Database	Database Service on Cloud	IBM DB2
5.	File Storage	File storage requirements	IBM Block Storage
6.	External API	To fetch news articles that are updated in real time	News Search API
7.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Docker, Kubernetes.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Flask	Python
2.	Security Implementations	IAM controls provided by the IBM cloud	Encryptions, IAM Controls
3.	Scalable Architecture	3 tier architecture	IBM container registry, IBM DB2 cloud
4.	Availability	Distributed cloud, and automatic load balancing with containerization	Docker, Kubernetes
5.	Performance	High performance as a result of load balancing and containerization	Container registry, Kubernetes

