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

| Date          | 15 October 2022                    |
|---------------|------------------------------------|
| Team ID       | PNT2022TMID13666                   |
| Project Name  | Project – News Tracker Application |
| Maximum Marks | 4 Marks                            |

## **Technical Architecture:**

## **TECHNICAL ARCHITECTURE DIAGRAM**

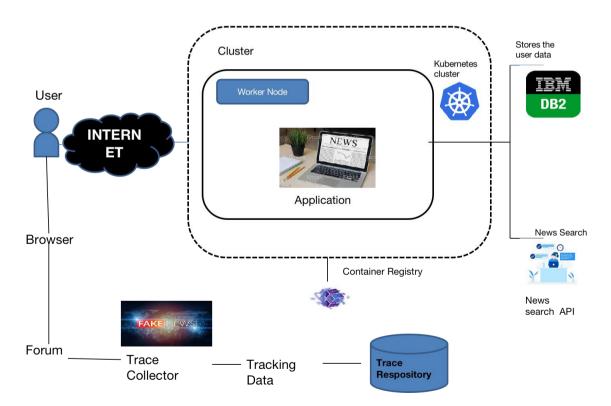


Table-1 : Components & Technologies:

| S.No | Component                       | Description   | Technology  |
|------|---------------------------------|---|---|
| 1.   | User Interface                  | How user interacts with application (Web UI, Mobile App, Chatbot)   | HTML, CSS, JavaScript / Angular Js / React Js                     |
| 2.   | Application Logic-1             | Logic for a process in the application  | Java / Python   |
| 3.   | Application Logic-2             | Logic for a process in the application  | IBM Watson STT service  |
| 4.   | Application Logic-3             | Logic for a process in the application  | IBM Watson Assistant  |
| 5.   | Database                        | Data Type, Configurations   | MySQL, NoSQL  |
| 6.   | Cloud Database                  | Database Service on Cloud   | IBM DB2, IBM Cloudant   |
| 7.   | File Storage                    | File storage requirements   | IBM Block Storage or Other Storage<br>Service or Local Filesystem |
| 8.   | External API-1                  | Purpose of External API used in the application   | IBM Weather API   |
| 9.   | External API-2                  | Purpose of External API used in the application   | Aadhar API  |
| 10.  | Machine Learning Model          | Purpose of Machine Learning Model   | Object Recognition Model  |
| 11.  | Infrastructure (Server / Cloud) | Application Deployment on Local System / Cloud<br>Local Server Configuration:<br>Cloud Server Configuration : | Local, Cloud Foundry, Kubernetes                                  |

**Table-2: Application Characteristics:** 

| S.No | Characteristics          | Description  | Technology                                |
|------|--------------------------|--|---|
| 1.   | Open-Source Frameworks   | List the open-source frameworks used   | Technology of Opensource framework        |
| 2.   | Security Implementations | List all the security / access controls implemented, use of firewalls etc.   | SHA-256, Encryptions, IAM Controls, OWASP |
| 3.   | Scalable Architecture    | Justify the scalability of architecture (3 – tier, Micro-services)   | Technology used db2                       |
| 4.   | Availability             | Justify the availability of application (e.g. use of load balancers, distributed servers)                            | Technology used IBM cloud                 |
| 5.   | Performance              | Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) | Technology used Flask Python              |