# TECHNOLOGY STACK (ARCHITECTURE & STACK)

| Date | 09 November 2022 |
|---|---|
| Team ID | PNT2022TMID04044 |
| Project Name | News Tracker Application |
| Maximum Marks | 4 Marks |

## Technical Architecture:



TECHNICAL ARCHITECTURE DIAGRAM
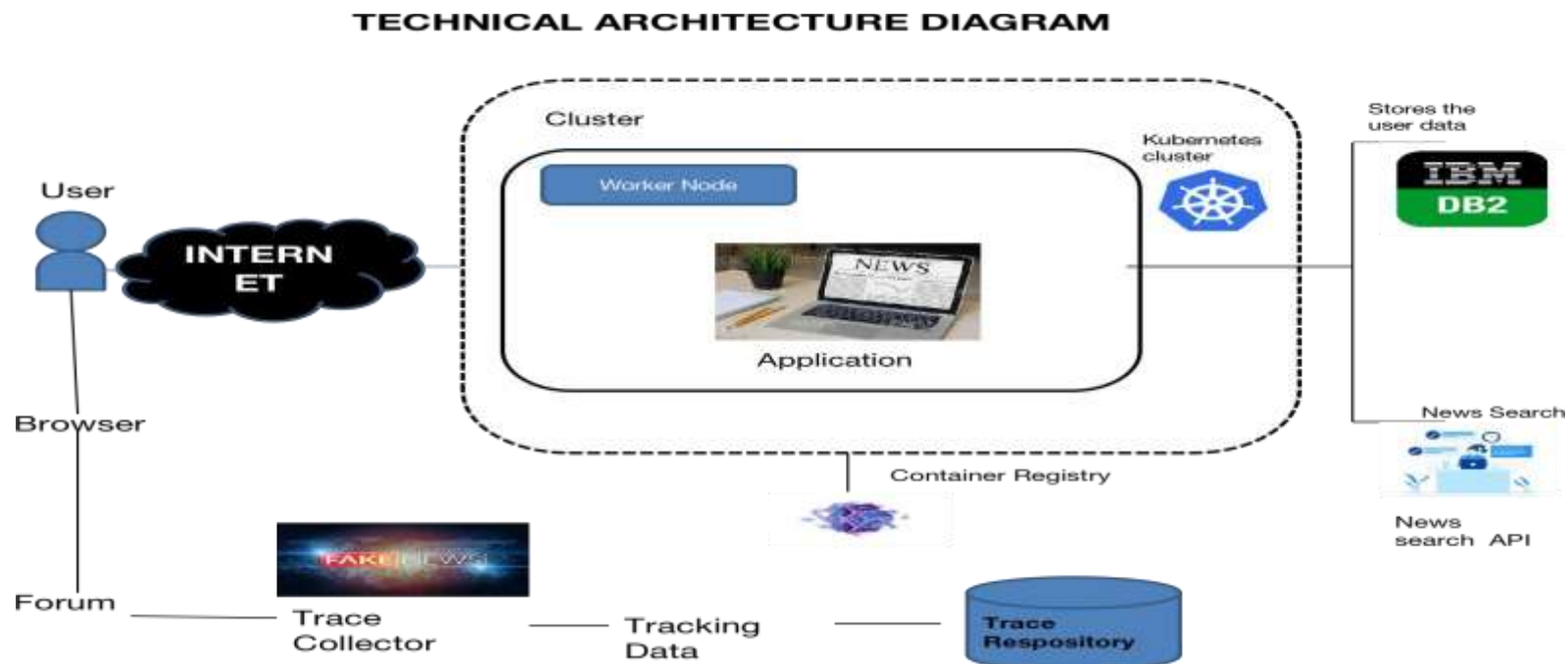
## TABLE 1: COMPONENTS AND TECHNOLOGIES

| 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 StorageService 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 / CloudLocal Server Configuration 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 (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 |