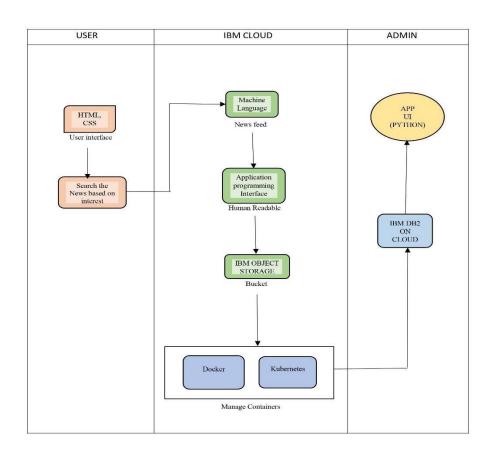
Project Design Phase-II Technology Stack (Architecture & Stack)

| Team ID | PNT2022TMID04862 |
|---------------|------------------------------------|
| Project Name | Project - NEWS TRACKER APPLICATION |
| Maximum Marks | 4 Marks |

Technical Architecture:

NEWS TRACKER APPLICATION



- The HTML and CSS are used for the user interface for the user to use the application.
- The user search for the news based on interest rather than scrolling down the all the news.
- The news feed is list of newly published content on website. End users can receive push updates for new content on a site by subscribing to site's news feed.
- Feeds are designed to be machine-readable so they can they can transfer information from one computer to another without human intervention. Browser plug-ins, client-side applications called readers or application program interfaces (APIs) translate the code into human-readable text.
- IBM DB2 on cloud is used to access the information of the news based on the user interest.

Table-1: Components & Technologies:

| S.No | Component | Description | Technology |
|------|---------------------------------|---|--|
| 1. | User Interface | User interacts with the application using web | HTML, CSS, JavaScript ,React Js etc. |
| | | development, which is used to get the information | |
| | | needed for the user. | |
| 2. | Application Logic-1 | This logic depends on the extraction news from the | Python |
| | | database | |
| 3. | Application Logic-2 | The application contains the news and sub-divisions | IBM |
| | | of the news | |
| 4. | Database | Data Type, Configurations etc. | MySQL, NoSQL, etc. |
| 5. | Cloud Database | Database Service on Cloud | IBM DB2, IBM Cloudant etc. |
| 6. | File Storage | File storage requirements | IBM Block Storage or Other Storage |
| | | | Service or Local Filesystem |
| 7. | Infrastructure (Server / Cloud) | Application Deployment on Local System / Cloud | Local, Cloud Foundry, Kubernetes, etc. |
| | | Local Server Configuration: Docker | |
| | | Cloud Server Configuration: Kubernetes | |

Table-2: Application Characteristics:

| S.No | Characteristics | Description | Technology |
|------|--------------------------|---|--|
| 1. | Open-Source Frameworks | A software for which the original source code is made freely available and may be redistributed and modified according to the requirement of the user. | Python |
| 2. | Security Implementations | Cloud Security Posture Management(CSPM), Detect cloud security and compliance configuration risk, anomalous activity, vulnerabilities, and misconfigurations. | Built-in encryption, container, |
| 3. | Scalable Architecture | Python is one of the pioneers of programming languages that developers can use to do all the scaling work. To improve scalability, you can enable or disable services run by the dispatcher on individual servers to balance the load for a given computer by request type. | Technology used in the architecture is that with the Python and the IBM cloud. |
| 4. | Availability | Availability is the ability of a system to withstand or ssrecover from exceptional situations, such as a computer failure. IBM Cloud is on-demand access, via the internet, to computing resources applications, servers (physical servers and virtual servers), data storage, development tools, networking capabilities, and more hosted at a remote data center managed by a cloud services provider (or CSP). | Technology used are the IBM cloud and the database. |

| 5. | Performance | DB2 is a database product from IBM. It is a | Technology used are the python, cloud |
|----|-------------|--|---------------------------------------|
| | | Relational Database Management System | and ibm db2. |
| | | (RDBMS). DB2 is designed to store, analyze and | |
| | | retrieve the data efficiently. DB2 product is | |
| | | extended with the support of Object-Oriented | |
| | | features and non-relational structures with XML. | |