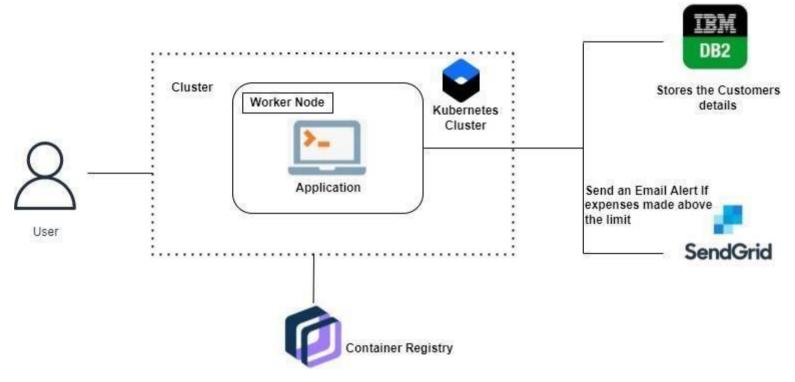
## **Project Design Phase-II**

## Technology Architecture

| Date         | 14 October 2022          |
|--------------|--------------------------|
| Team ID      | PNT2022TMID30054         |
| Project Name | Personal Expense Tracker |

## **Technical Architecture:**

The Deliverable shall include the architectural diagram as below and the information as per the table 1 & table 2



**Table-1: Components & Technologies:** 

| S.No. | Component           | Description                          | Technology                 |
|-------|---------------------|--------------------------------------|----------------------------|
| 1.    | User Interface      | The user can Interact with the       | HTML, CSS, JavaScript /    |
|       |                     | application with use of Chatbot      | Angular Js / React Js etc. |
| 2.    | Application Logic-1 | The application contains the sign    | Java / Python              |
|       |                     | in/sign up where the user will login |                            |
|       |                     | into the main dashboard              |                            |
| 3.    | Application Logic-2 | Dashboard contains the fields like   | IBM Watson STT service     |
|       |                     | Add income, Add Expenses, Save       |                            |
|       |                     | Money                                |                            |
| 4.    | Application Logic-3 | The user will get the expense        | IBM Watson                 |
|       |                     | report in the graph form and also    | Assistant,SendGrid         |
|       |                     | get alerts if the expense limit      |                            |
|       |                     | exceeds                              |                            |
| 5.    | Database            | The Income and Expense data are      | MySQL, NoSQL, etc.         |
|       |                     | stored in the MySQL database         |                            |
| 6.    | Cloud Database      | With use of Database Service on      | IBM DB2, IBM Cloudant      |
|       |                     | Cloud, the User data are stored in   | etc.                       |
|       |                     | a well secured Manner                |                            |

| 7. | File Storage | IBM Block Storage used to store | IBM Block Storage or Other |
|----|--------------|---------------------------------|----------------------------|
|    |              | the Financial data of the user  | Storage Service or Local   |
|    |              |                                 | Filesystem                 |

## **Table-2: Application Characteristics:**

| S.No. | Characteristics          | Description                           | Technology          |
|-------|--------------------------|---------------------------------------|---------------------|
| 1.    | Open-Source Frameworks   | Flask Framework in Python is          | Python-Flask        |
|       |                          | used to implement this Application    |                     |
| 2.    | Security Implementations | This Application Provides high        | Container Registry, |
|       |                          | security to the user Financial data.  | Kubernetes Cluster  |
|       |                          | It can be done by using the           |                     |
|       |                          | Container Registry in IBM cloud       |                     |
| 3.    | Scalable Architecture    | Expense Tracker is a life time        | Container Registry, |
|       |                          | access supplication. It's demand      | Kubernetes Cluster  |
|       |                          | will increase when the user's         |                     |
|       |                          | income are high                       |                     |
| 4.    | Availability             | This application will be available to | Container Registry, |
|       |                          | the user at any part of time          | Kubernetes Cluster  |

|  |  | 5. | Performance | The performance will be high because there will be no network traffics in the application | Kubernetes Cluster |
|--|--|----|-------------|---|--------------------|
|--|--|----|-------------|---|--------------------|