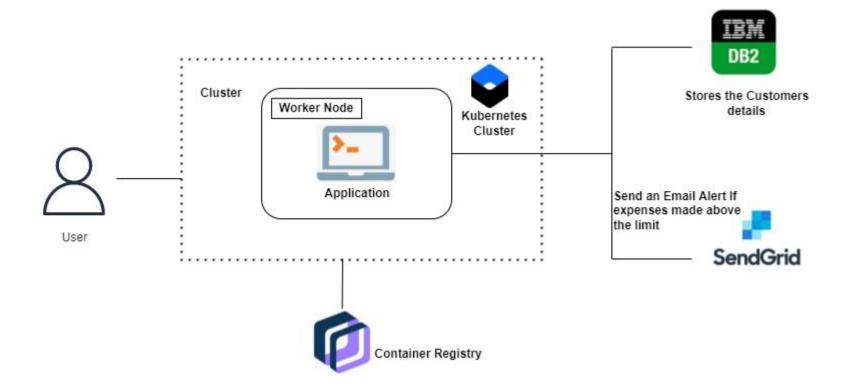
## Project Design Phase-II Technology Stack (Architecture & Stack)

| Date          | 14 October 2022                      |
|---------------|--------------------------------------|
| Team ID       | PNT2022TMID23221                     |
| Project Name  | Personal Expense Tracker Application |
| Maximum Marks | 4 Marks                              |

## **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 application with use of Chatbot  | HTML, CSS, JavaScript / Angular Js / React Js etc.             |
| 2.    | Application Logic-1 | The application contains the sign in/sign up where the user will login into the main dashboard          | Java / Python  |
| 3.    | Application Logic-2 | Dashboard contains the fields like<br>Add income, Add Expenses, Save<br>Money                           | IBM Watson STT service   |
| 4.    | Application Logic-3 | The user will get the expense report in the graph form and also get alerts if the expense limit exceeds | IBM Watson<br>Assistant,SendGrid                               |
| 5.    | Database            | The Income and Expense data are stored in the MySQL database  | MySQL, NoSQL, etc.   |
| 6.    | Cloud Database      | With use of Database Service on Cloud, the User data are stored in a well secured Manner                | IBM DB2, IBM Cloudant etc.                                     |
| 7.    | File Storage        | IBM Block Storage used to store the Financial data of the user  | IBM Block Storage or Other Storage Service or Local Filesystem |

**Table-2: Application Characteristics:** 

| S.No. | Characteristics          | Description   | Technology                                |
|-------|--------------------------|---|---|
| 1.    | Open-Source Frameworks   | Flask Framework in Python is used to implement this Application   | Python-Flask                              |
| 2.    | Security Implementations | This Application Provides high security to the user Financial data. It can be done by using the Container Registry in IBM cloud | Container Registry,<br>Kubernetes Cluster |
| 3.    | Scalable Architecture    | Expense Tracker is a life time access supplication. It's demand will increase when the user's income are high                   | Container Registry,<br>Kubernetes Cluster |
| 4.    | Availability             | This application will be available to the user at any part of time  | Container Registry,<br>Kubernetes Cluster |
| 5.    | Performance              | The performance will be high because there will be no network traffics in the application                                       | Kubernetes Cluster                        |