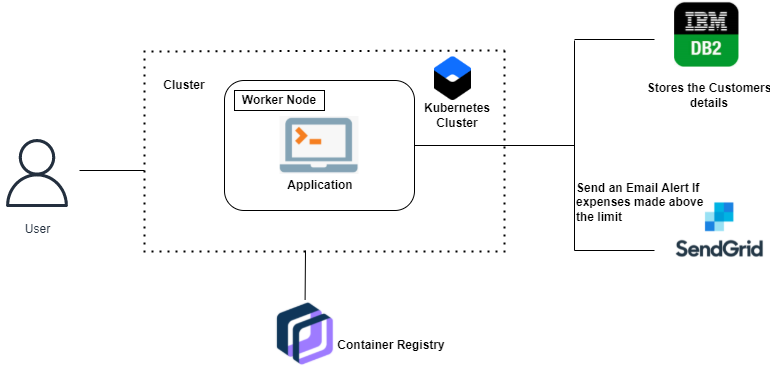
**Project Design Phase-II**

**Technology Stack (Architecture & Stack)**

|  |  |
| --- | --- |
| Date | 4 November 2022 |
| Team ID | PNT2022TMID25349 |
| Project Name | Personal Expense Tracker |
| Maximum Marks | 4 Marks |

**Technical Architecture:**

The Deliverable shall include the architectural diagram as below and the information as per the table1 & 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  Add income, Add Expenses, Save 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 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 Cloud and 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, Kubernetes Cluster |
| 3. | Scalable Architecture | Expense Tracker is a life time access supplication. It’s demand  will increase when the user’s income is high | Container Registry, Kubernetes Cluster |
| 4. | Availability | This application will be available to the user at any part of time | Container Registry, Kubernetes Cluster |
| 5. | Performance | The performance will be high  because there will be no network traffics in the application | Kubernetes Cluster |