# Project Design Phase-II

## Technology Architecture

| Date | 14-10-2022 |
|---|---|
| Team ID | PNT2022TMID05063 |
| Project Name | Personal Expense Tracker Application |
| Maximum Marks | 4 Marks |

## Technical Architecture:

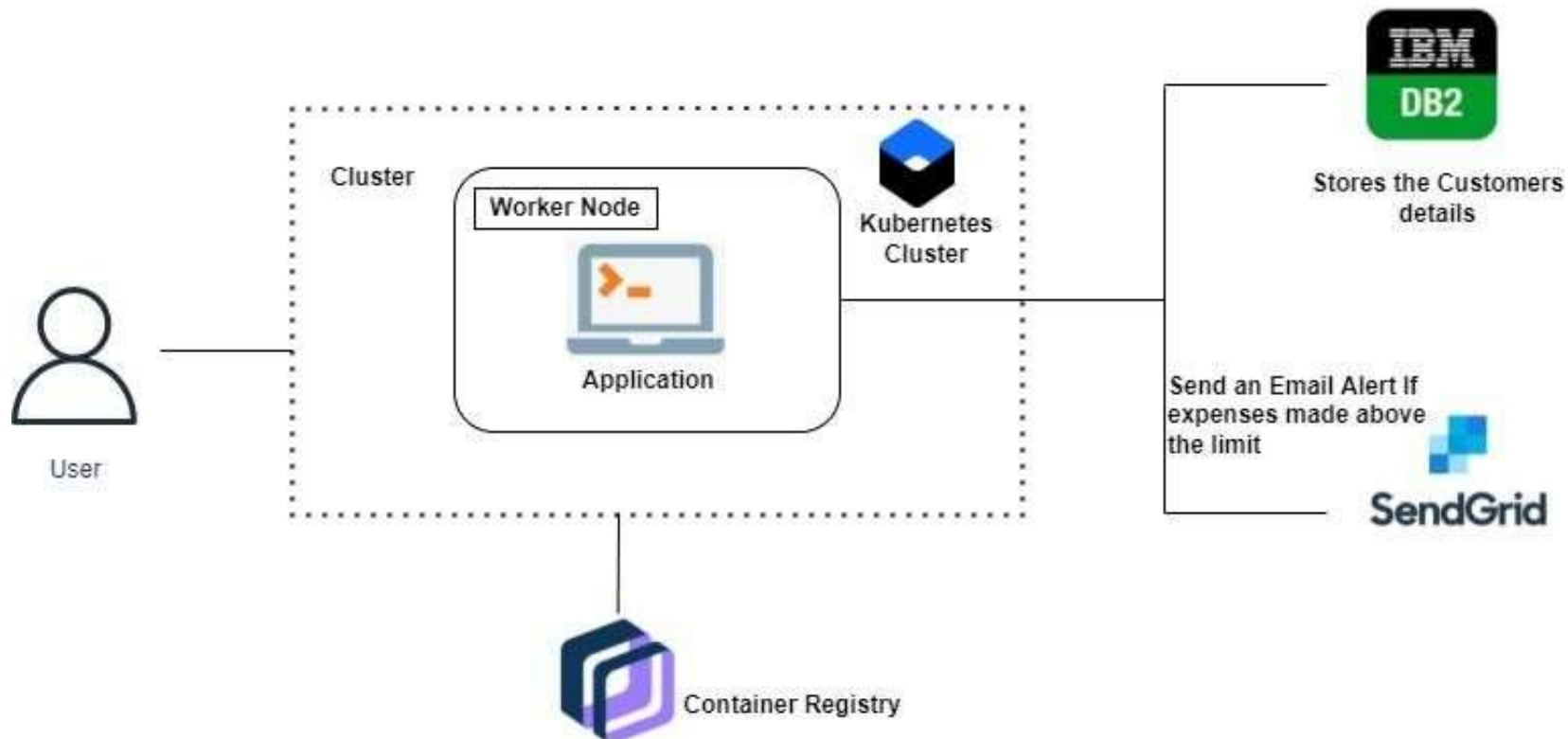The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

**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 logininto the main dashboard | Java / Python |
| 3. | Application Logic-2 | Dashboard contains the fields like Add income, Add Expenses, SaveMoney | 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 limitexceeds | 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 ina well secured Manner | IBM DB2, IBM Cloudantetc. |
| 7. | File Storage | IBM Block Storage used to storethe Financial data of the user | IBM Block Storage or OtherStorage 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'sincome are high | Container Registry, Kubernetes Cluster |
| 4. | Availability | This application will be available tothe user at any part of time | Container Registry, Kubernetes Cluster |
| 5. | Performance | The performance will be high because there will be no networktraffics in the application | Kubernetes Cluster |