

Project Design Phase –II

Technology Architecture

| | |
|----------------------|---------------------------------------|
| Team ID | PNT2022TMID45745 |
| Project Name | Personal Expenses 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.

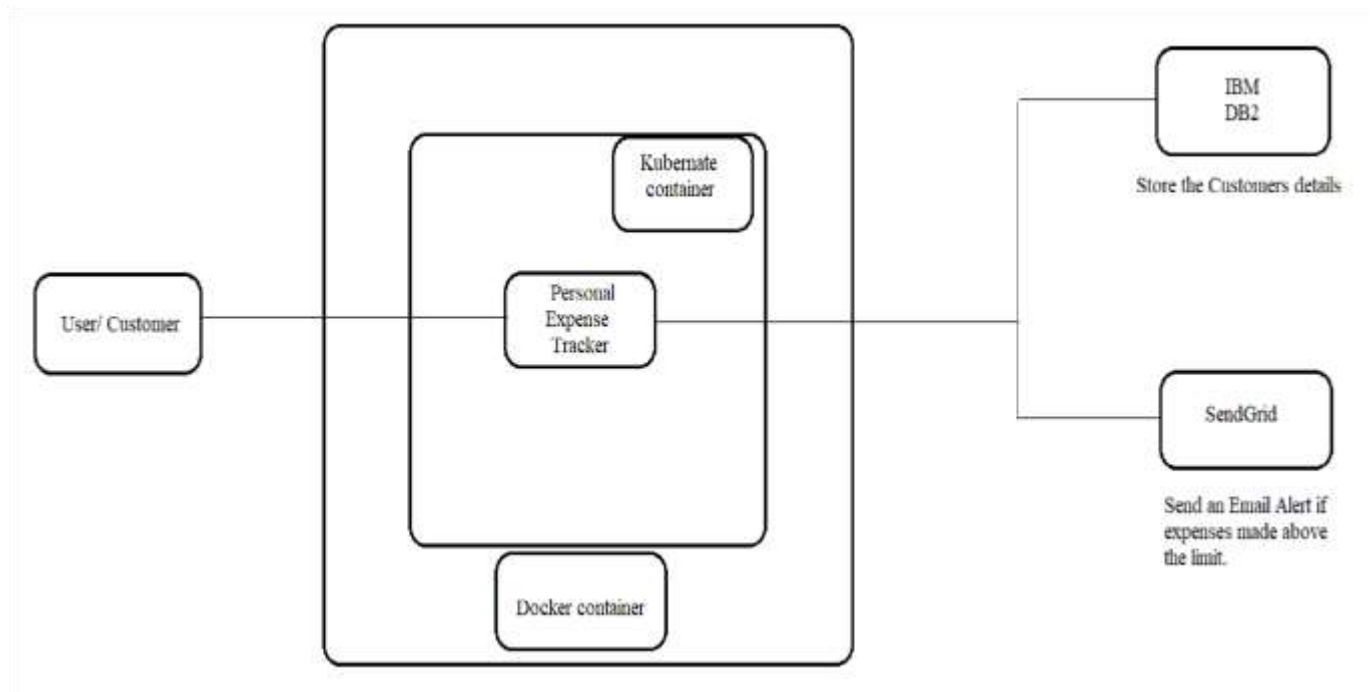


Table 1:**Components and Technologies:**

| S. No | Components | Description | Technology |
|--------------|-------------------|--|---------------------------------------|
| 1. | User interface | The user can Interact with the application with use of Chatbot | HTML, CSS, JavaScript |
| 2. | App logic-1 | The app contains the sign in/sign up where the user will login into the main dashboard | Java/Python |
| 3. | App logic-2 | Dashboard contains the fields like Add income and expenses, Save Money | IBM Watson STT service |
| 4. | App logic-3 | The user will get the expense report 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 |
| 6. | Cloud storage | The user data are stored. | IBM DB2 |
| 7. | File storage | IBM Block Storage used to store the Financial data of the user | Local file system, IBM Block storage. |

Table 2:

Application characteristics:

| S. No | Characteristics | Description | Technology |
|--------------|-------------------------|---|---|
| 1. | Open-source framework | Flask Framework in Python is used to implement this app. | Python flask |
| 2. | Security implementation | This App provides high security to the user financial data. It can be done by using the Container Registry in IBM cloud | Kubernetes cluster, Container registry. |
| 3. | Availability | This app will be available to the user at any part of time | Kubernetes cluster, Container registry |
| 4. | Scalable architecture | Expense Tracker is a life time access supplication. Its demand will increase when the user's income is high | Kubernetes cluster, Container registry |
| 5. | Performance | The performance will be high | Kubernetes cluster |