

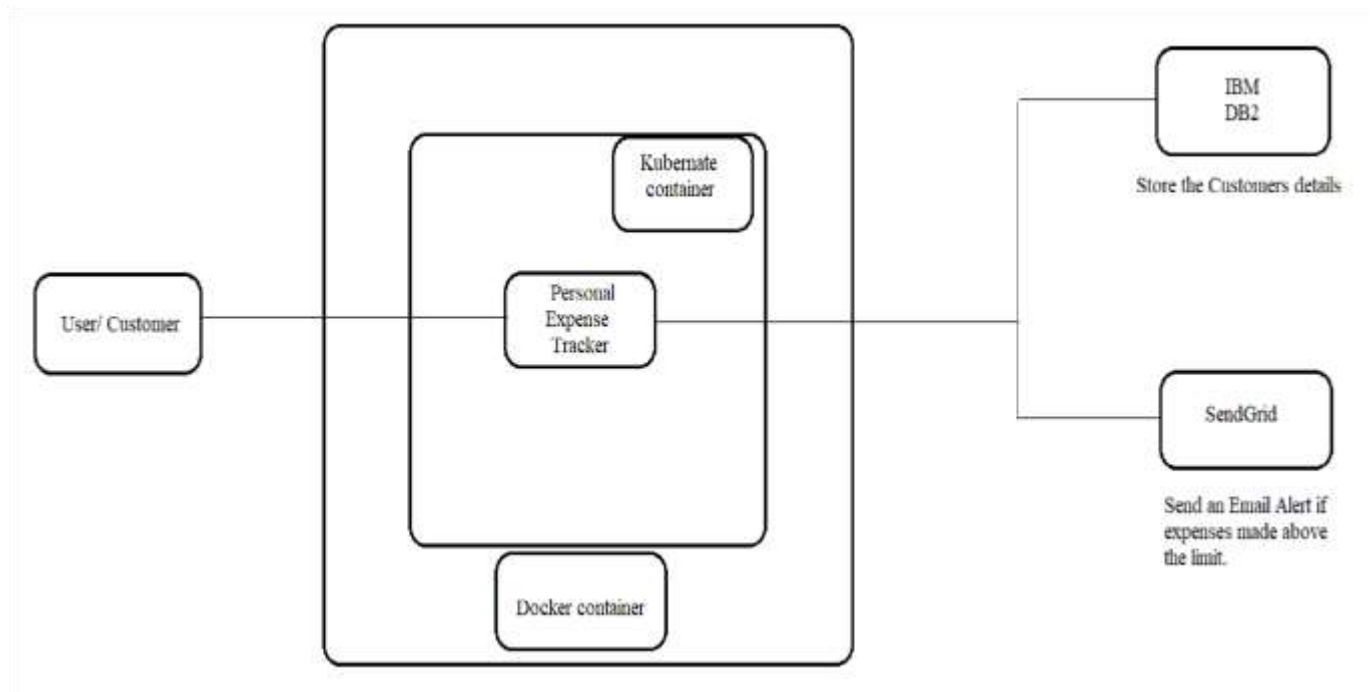
## Project Design Phase –II

### Technology Architecture

|                      |                                       |
|----------------------|---------------------------------------|
| <b>Team ID</b>       | PNJ2022JMID45745                      |
| <b>Project Name</b>  | Personal Expenses Tracker Application |
| <b>Maximum Marks</b> | 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:**

| <b>S. No</b> | <b>Components</b> | <b>Description</b>   | <b>Technology</b>                     |
|--------------|-------------------|--|---------------------------------------|
| 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:**

| <b>S. No</b> | <b>Characteristics</b>  | <b>Description</b>  | <b>Technology</b>                       |
|--------------|-------------------------|---|---|
| 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                      |