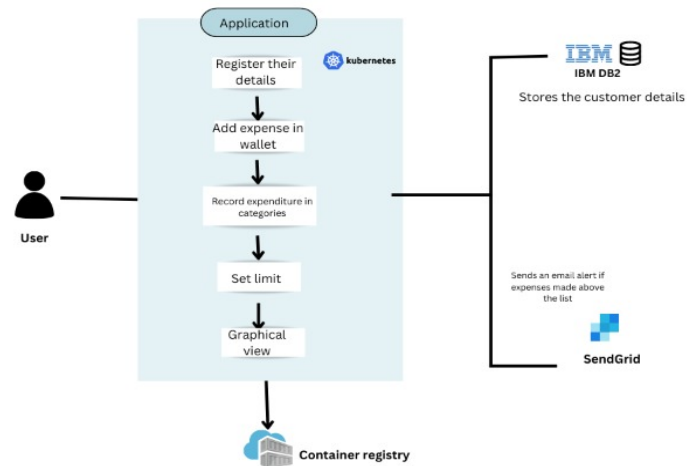


## Project Design Phase-II Technology Stack (Architecture & Stack)

|               |  |
|---------------|--|
| Date          | 16 October 2022                                |
| Team ID       | PNT2022TMID48968                               |
| Project Name  | Project - 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 | How user interacts with application e.g. Web UI, Mobile App, etc.      | HTML, CSS, Python flask   |
| 2.   | Registration   | User register in the application to start the process                  | HTML, CSS, Python flask, IBM cloud, IBM DB2, IBM Container registry |
| 3.   | Login          | User login to their account  | HTML, CSS, Python flask, IBM cloud, IBM DB2, IBM Container registry |
| 4.   | Wallet page    | User can add their expenses in the wallet                              | HTML, CSS, Python flask, IBM cloud, IBM Container registry          |
| 5.   | Cloud Database | Database Service on Cloud  | IBM DB2, IBM Cloudant etc.  |
| 6.   | Email alert    | User can be notified when their expenses cross the limit in the wallet | Kubernetes, IBM container registry, Sendgrid                        |
| 7.   | Graphical view | User can able to see their monthly expenses in a graph format          | IBM cloud object storage, IBM container registry, HTML, CSS         |

**Table-2: Application Characteristics:**

| S.No | Characteristics          | Description   | Technology                           |
|------|--------------------------|---|--------------------------------------|
| 1.   | Open-Source Frameworks   | Docker and kubernetes are the open source frameworks  | Docker, Kubernetes                   |
| 2.   | Security Implementations | IBM DB2 is used for the security control  | IBM DB2                              |
| 3.   | Scalable Architecture    | This architecture connects the three dimensions like processing, storage and connectivity between the user and the system | Python flask, IBM container registry |
| 4.   | Availability             | It is always available  | Python flask and IBM cloud           |
| 5.   | Performance              | The application can perform well user can experience the fast while using the application                                 | Python flask and IBM cloud           |