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

| Date | 15October2022 |
|---|------------------|
| Team ID | PNT2022TMID11679 |
| 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 table 2

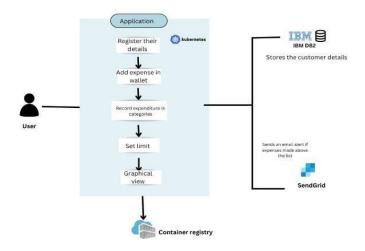


Table-1 : Components & Technologies:

| 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 agraph 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 sourceframeworks | 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 betweenthe 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 |