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

| Date | 17 October 2022 |
|---|---|
| Team ID | PNT2022TMID35573 |
| Project Name | Project – Personal Expense Tracker Application |
| Maximum Marks | 4 Marks |

## Architecture
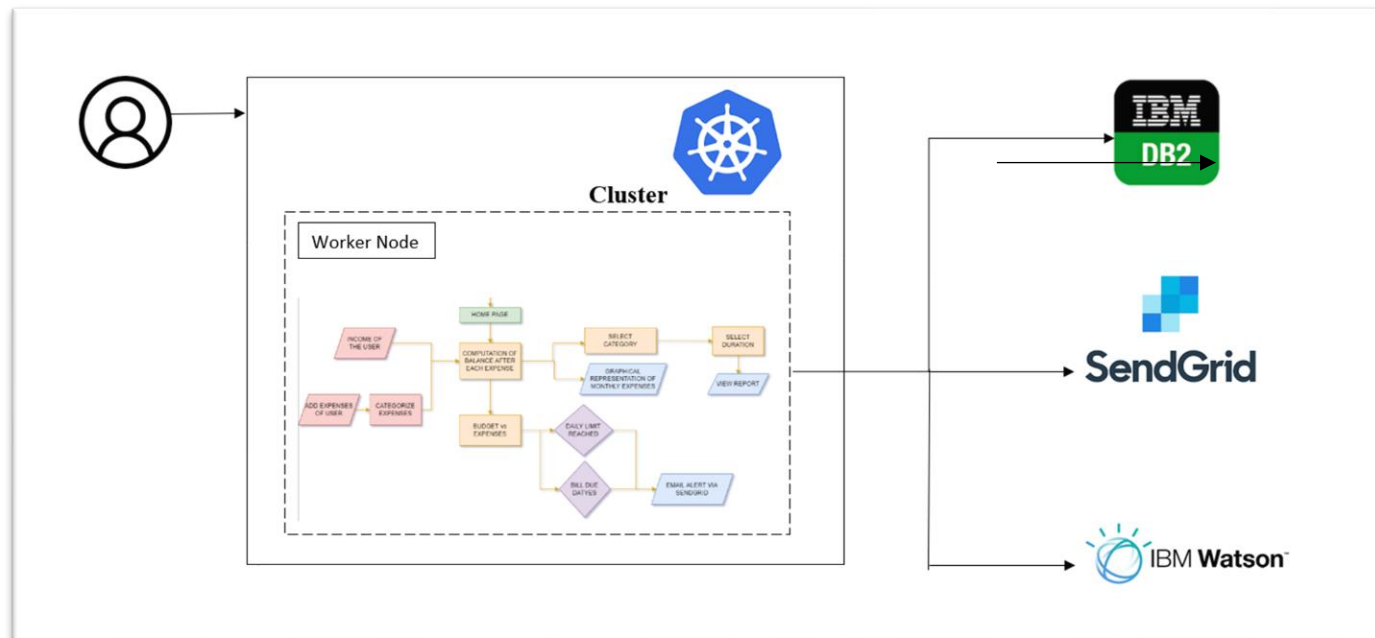
**Table-1 : Components & Technologies:**

| S.No | Component | Description | Technology |
|---|---|---|---|
| 1. | User Interface | User can interact with the application with features such as Chatbot, Web UI, etc. | HTML, CSS, JavaScript, Flask |
| 2. | Application Logic-1 | Calculating and tracking expenses and alert if overspending | Python |
| 3. | Application Logic-2 | Adding chatbot feature | IBM Watson Assistant |
| 4. | Database | Data Type, Configurations etc. | MySQL |
| 5. | Cloud Database | Database Service on Cloud | IBM DB2 |
| 6. | File Storage | File storage requirements | IBM Object Storage |
| 7. | Infrastructure (Server / Cloud) | Application Deployment on Cloud Local Server Configuration: Cloud Server Configuration | Kubernetes |

**Table-2: Application Characteristics:**

| S.No | Characteristics | Description | Technology |
|---|---|---|---|
| 1. | Open-Source Frameworks | It includes permission to use the source code, design documents, or content of the product. | Flask, Spyder |
| 2. | Security Implementations | Helps in building a string information security system | Encryptions, IAM Controls |
| 3. | Scalable Architecture | Micro-services | Docker |
| 4. | Availability | Use of cloud application increases availability, storage and security | Kubernetes |
| 5. | Performance | Number of requests per sec and use of Cache | Kubernetes |