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

Date	10 October 2022
Team ID	PNT2022TMID26477
Project Name	Personal Expense Tracker Application
Maximum Marks	4 Marks

Technical Architecture:

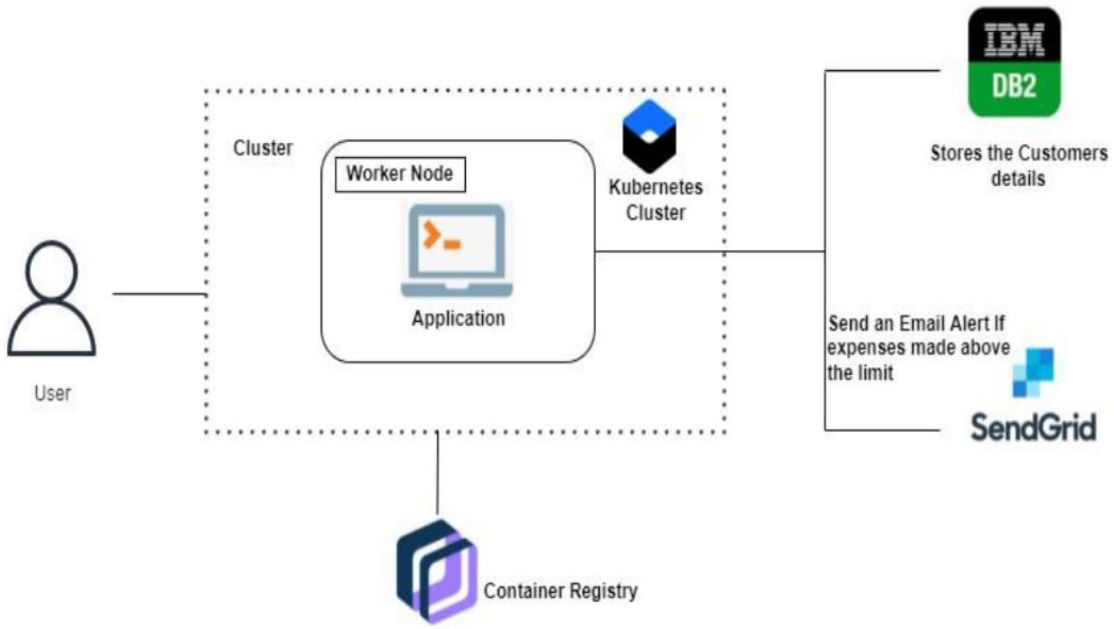

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Interaction of user with the application like Chatbot	HTML, CSS, JavaScript in Python flask
2.	Application Logic-1	The login process can be done through mail or phone number	Java and Python Flask
3.	Application Logic-2	Adding of Income, Setting Daily limit and activating notifications for alerts	IBM Watson STT service
4.	Application Logic-3	Chart for monthly expense reports	IBM Watson Assistant, SendGrid

5.	Database	Expenses will be saved in a form of Datatypes and Configurations	NoSQL
6.	Cloud Database	Database Service on Cloud	IBM DB2.
7.	File Storage	Stores Financial data of users securely	IBM Block Storage

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Flask Frameworks in python is used where it does not call for specific libraries	Python-Flask Framework
2.	Security Implementations	The Container Registry in IBM Cloud is used to provide high security to the user's expense database	Container Registry
3.	Scalable Architecture	Since, there will be an increase in scale on demand, containerized application is implemented in this	Docker
4.	Availability	The services will be distributed anywhere anytime at anyplace to the user	Kubernetes Cluster
5.	Performance	Less in traffic and more reliable	Kubernetes Cluster