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

Date	17 October 2022
Team ID	PNT2022TMID45939
Project Name	Personal Expense Tracker Application
Maximum Marks	4 Marks

Technical Architecture:

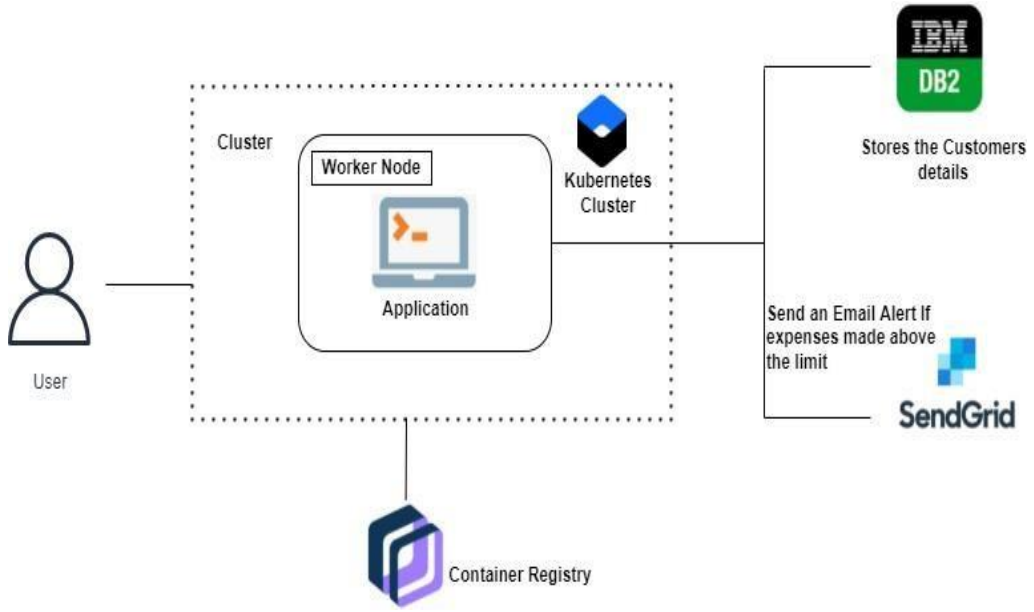

Table-1 : Components & Technologies:

S. No	Component	Description	Technology
1.	User Interface	The user can Interact with the application with use of IBM Watson Chat bot.	HTML, CSS, JavaScript / Angular-js / React-js etc.
2.	Application Logic-1	The application contains the sign in/sign up where the user will login into the main dashboard.	Python
3.	Application Logic-2	Dashboard contains the fields like Add income, Add Expenses, Save Money, Add budget, Profile etc…	IBM Watson STT service
4.	Application Logic-3	The user will get the expense report in the Statistics form and get alerts if the expense limit exceeds.	IBM Watson Assistant
5.	Database	The Income and Expense data are stored in the IBM Cloud database.	MySQL, NoSQL,etc.
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM-Cloudant etc.
7.	File Storage	IBM Cloud Storage used to store the financial data of the user	IBM Block Storage or Other Storage Service or Local Filesystem
8.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S. No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Flask Framework in Python is used to implement this application to connect the UI and the Backend.	Python Flask
2.	Security Implementations	This Application Provides high security to the user financial data. It can be done by using the Container Registry in IBM cloud	Container Registry, Kubernetes Cluster.
3.	Scalable Architecture	Expense Tracker is a lifetime access webblication. Its demand will increase when the user's increases.	Container Registry, Kubernetes Cluster.
4.	Availability	This application will be available to the user at any part of time using the Internet.	Container Registry, Kubernetes Cluster
5.	Performance	The performance will be high because there will be no network traffics in the application.	Container Registry, Kubernetes Cluster.