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

Date	16 October 2022
Team ID	PNT2022TMID35286
Project Name	Personal Expense Tracker Application
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per thetable1 & table 2

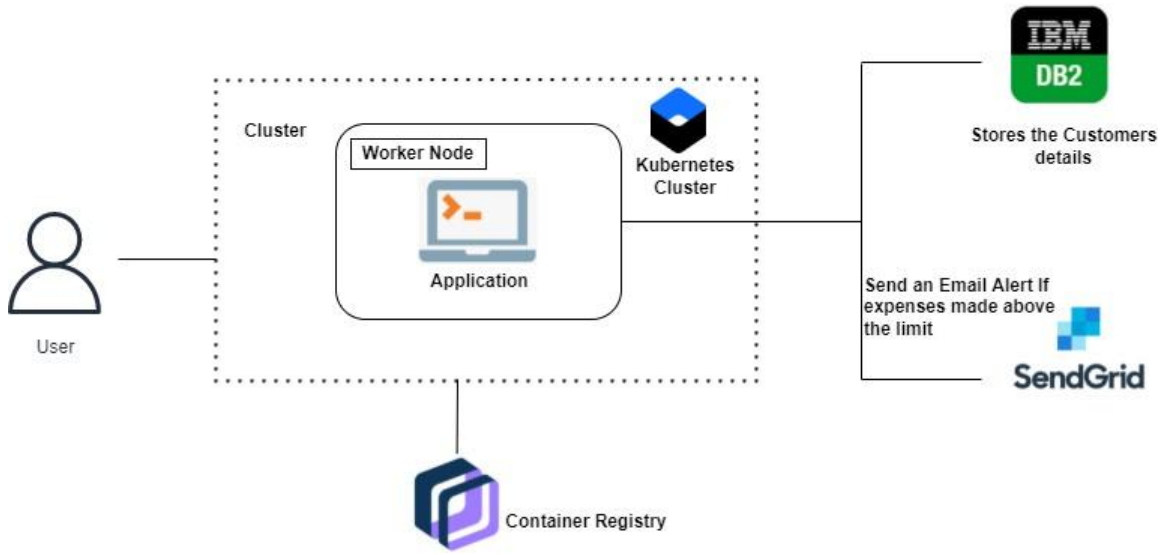

Table 1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	The user can interact with theapplication with the use of a Chatbot.	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Application Logic-1	The application contains the sign-in/sign-up where the user will log in to the main dashboard.	Java / Python
3.	Application Logic-2	The dashboard contains the fields like Add income, Add Expenses, and Save Money.	IBM Watson STT service
4.	Application Logic-3	The user will get the expense report in graph form and also get alerts if the expense limit exceeds.	IBM Watson Assistant
5.	Database	The Income and Expense data arestored in the MySQL database.	MySQL, NoSQL, etc.

6.	Cloud Database	With the use of Database Serviceon the Cloud, the User data are stored in a well-secured Manner.	IBM DB2, IBM Cloudant etc.
7.	File Storage	IBM Block Storage is used to store the Financial data of theuser.	IBM Block Storage or Other Storage Service orLocal Filesystem
8.	External API-1	It exposes a business's internal resources to outside users orapplications.	IBM Weather API, etc.

Table 2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Flask Framework in Python is usedto implement this Application.	Python-Flask
2.	Security Implementations	This Application Provides high security to the user's Financial data.It can be done by using the Container Registry in the IBM cloud.	Container Registry, Kubernetes Cluster
3.	Scalable Architecture	Expense Tracker is a lifetime access supplication. Its demand willincrease when the user's income is high.	Container Registry, Kubernetes Cluster
4.	Availability	This application will be available to the user at any part of time.	container Registry, Kubernetes Cluster
5.	Performance	The performance will be high because there will be no networktraffics in the application.	Kubernetes Cluster