Project Design Phase-II

Technology Architecture

Date	22-10-2022
Team ID	PNT2022TMID22332
Project Name	Personal Expense Tracker
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table 1 & table 2

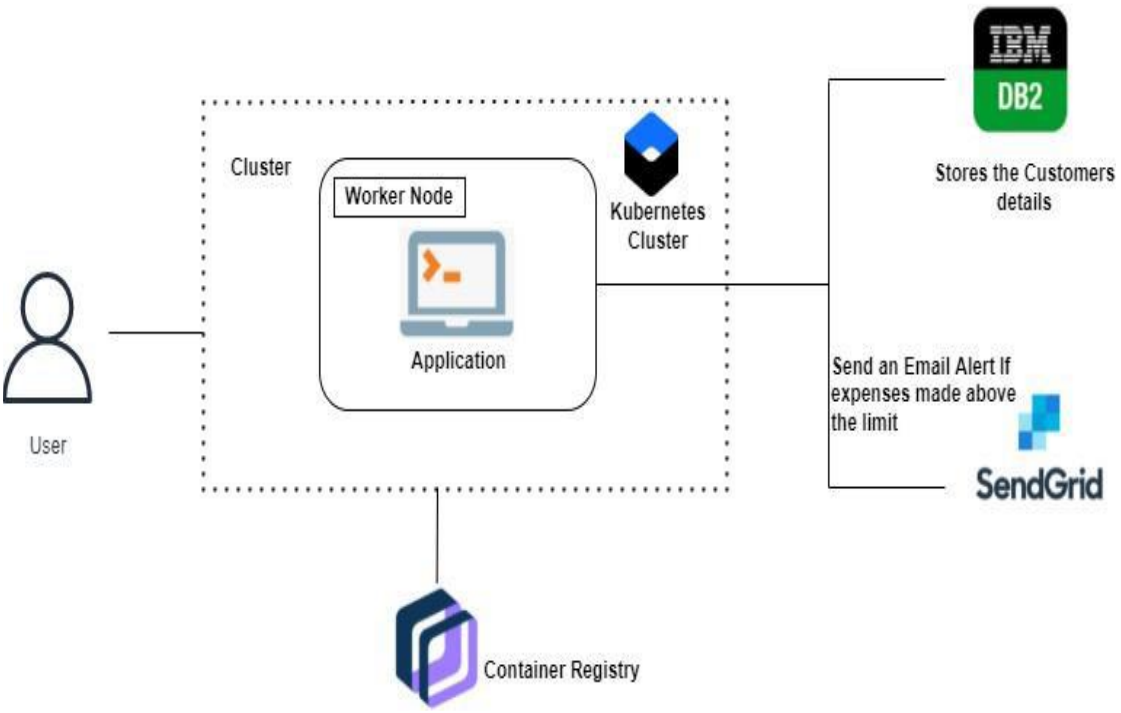

Table-1: Components & Technologies:

S.No.	Component	Description	Technology
1.	User Interface	How the User interacts with application e.g. User interface of the application (Dashboard fields), Mobile App, Chatbot etc.	HTML, CSS, JavaScript, Python Flask Framework etc.
2.	User Login	User can able to login to the application using their login credentials	Python Flask
3.	Database	Data of the application such as income and the expense data are stored in the MySQL database.	MySQL Databases etc.
4.	Cloud Database	With the help of the Cloud Database the user data are securely stored.	IBM DB2
5.	File Storage	Important files related to the application development are being stored in IBM Block Storage.	IBM Block Storage
6.	SendGrid	A cloud-based SMTP provider that allows you to send emails without having to maintain email servers	SendGrid is used to trigger mail to user when the condition is met.
7.	Infrastructure	The Application deployment is on Cloud	Cloud Foundry (or)Kubernetes etc.
8.	User Application Assistant	This Assistant is developed from IBM Watson Assistant and it helps to solve the users query and give the required information	IBM Watson Assistant

Table-2: Application Characteristics:

S.No.	Characteristics	Description	Technology
1.	Open-Source Frameworks	Flask Framework in Python is used to implement this Application	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 Application is a lifetime access app. It's demand should be high in future so it should be scalable	Container Registry, Docker
4.	Availability	This application will be available to all the users	Container Registry, Kubernetes Cluster
5.	Performance	The performance will be high because there will be no network traffics in the application	Kubernetes Cluster