Project Design Phase-II

Technology Architecture

Date	20 October 2022
Team ID	PNT2022TMID06835
Project Name	Personal Expense Tracker Application
Maximum Marks	4 Marks

Technology Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2.

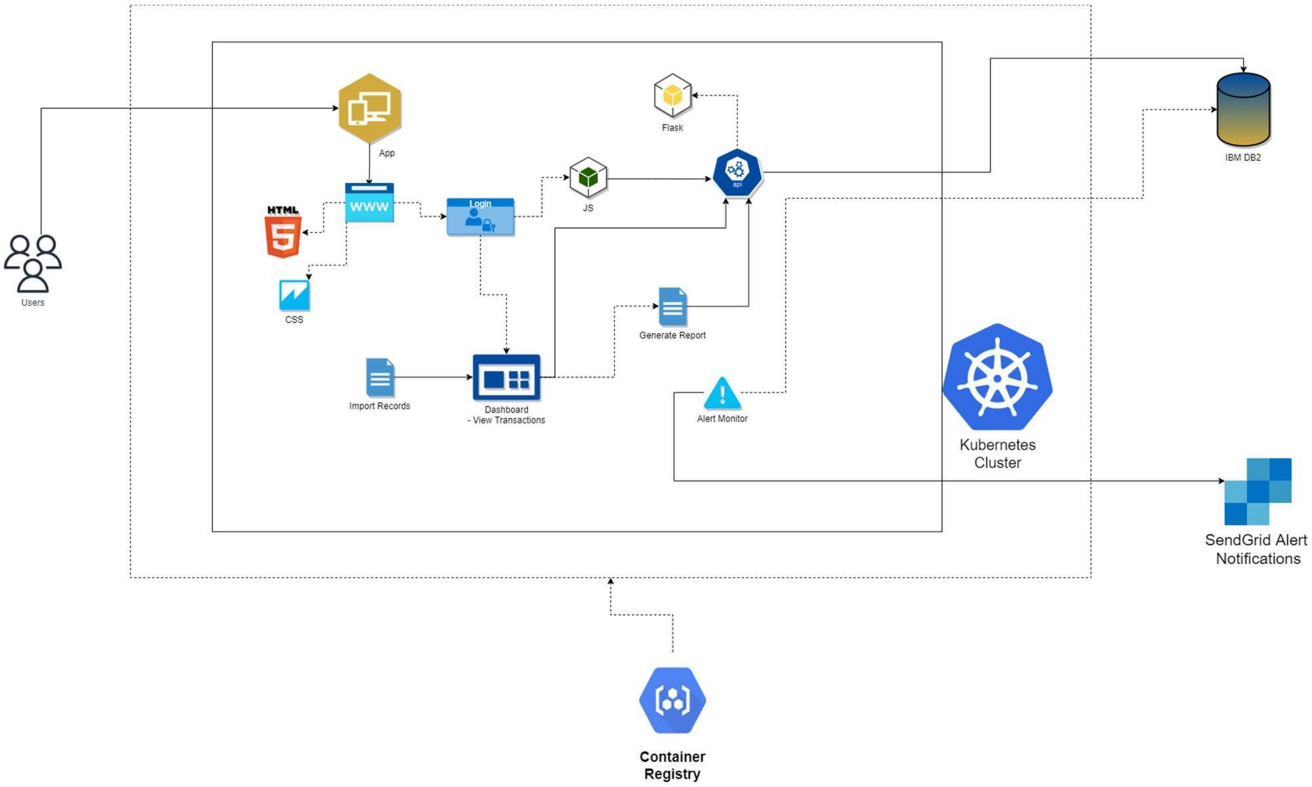

Table-1: Components & Technologies:

S.No.	Component	Description	Technology
1.	User Interface	The user can Interact with the application with use of 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 logininto the main dashboard	Java / Python
3.	Application Logic-2	Dashboard contains the fields like Add income, Add Expenses, SaveMoney	IBM Watson STT service
4.	Application Logic-3	The user will get the expense report in the graph form and alsoget alerts if the expense limit exceeds	IBM Watson Assistan, SendGrid
5.	Database	The Income and Expense data arestored in the MySQL database	MySQL, NoSQL, etc.
6.	Cloud Database	With use of Database Service on Cloud, the User data are stored ina well secured Manner	IBM DB2, IBM Cloud and etc.
7.	File Storage	IBM Block Storage used to storethe Financial data of the user	IBM Block Storage or Other Storage Service or Local File system
8.	File Storage	The user's financial data is stored on IBM Block Storage.	IBM Block Storage or Other Storage Service or Local Filesystem
9.	Container Registry	Container Images Storage	Local Registry: DockerHub Cloud Registry: Container Registry
10.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud	Local Server Configuration: Minikube Cloud Server Configuration: Kubernetes

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 is a life time access supplication. It's demandwill increase when the user's income are high	Container Registry, Kubernetes Cluster
4.	Availability	This application will be available tothe user at any part of time	Container Registry, Kubernetes Cluster
5.	Performance	The performance will be high because there will be no network traffics in the application	Kubernetes Cluster