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

Date	28 September 2022
Team ID	PNT2022TMID02101
Project Name	Project - Personal expense tracker
Maximum Marks	4 Marks

Technical Architecture:

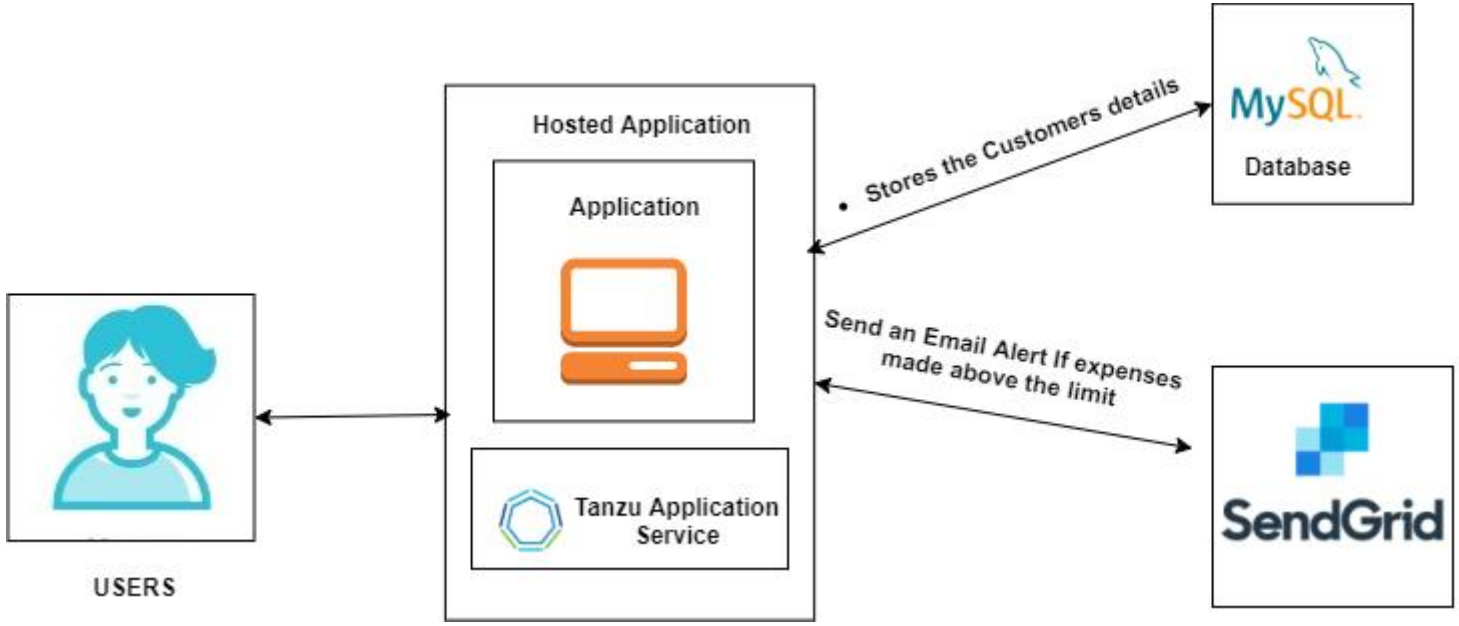

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	User interacts with application e.g.Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Application Logic-1	The application contains the sign in where the user will login into the main dashboard	Python
3.	Application Logic-2	Dashboard contains the fields like add income,add expenses	IBM Watson STT service
4.	Application Logic-3	The user will get the expense report in the graph form and also get alerts if the expense limit reached	IBM Watson Assistant,SendGrid
5.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
6.	Cloud Database	With use of database on cloud,the user data are stored in a well secured manner	IBM DB2, IBM Cloudant etc.
7.	File Storage	IBm block storage used to store the financial data of the user.	IBM Block Storage or Other Storage Service or Local Filesystem

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Flash 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 register in IBM cloud.	Container Registry,Kubernetes Cluster
3.	Scalable Architecture	Expense tracker is a life time access supplication.Its demand will increase when the user’s income are high	Container Registry,Kubernetes Cluster

S.No	Characteristics	Description	Technology
4.	Availability	This application will be available to the user at any time	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

References:

https://c4model.com/

https://developer.ibm.com/patterns/online-order-processing-system-during-pandemic/

https://www.ibm.com/cloud/architecture

https://aws.amazon.com/architecture

https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d20c9fda90d