

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

Date	03 October 2022
Team ID	PNT2022TMID27307
Project Name	Project - Personal Expense Tracker Application
Maximum Marks	4 Marks

Technical Architecture:

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

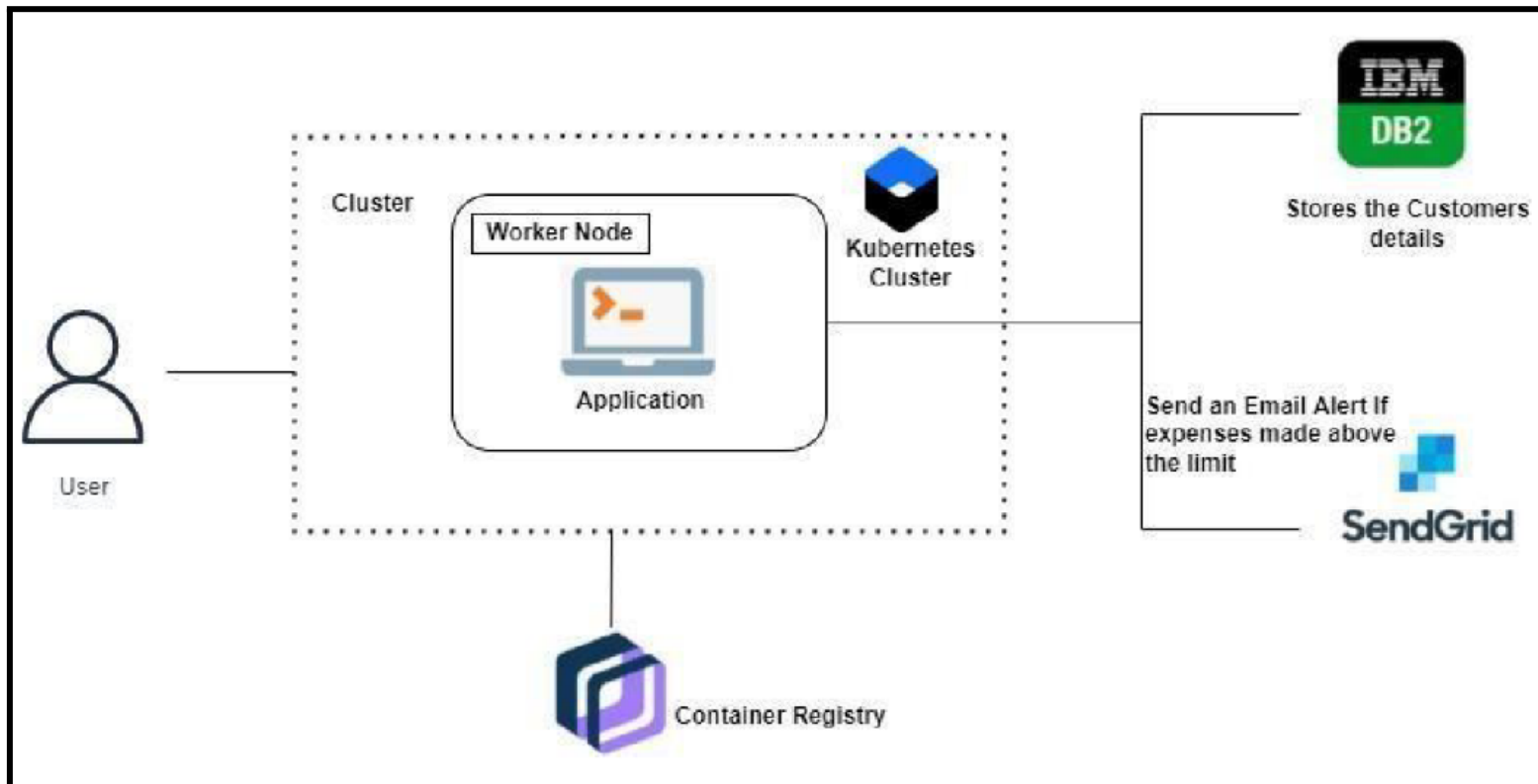


Table-1 : Components & Technologies:

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 login into the main dashboard	Python
3.	Application Logic-2	Dashboard contains the fields like Add income, Add Expenses, Save Money	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 exceeds	IBM Watson Assistant / Send Grid
5.	Database	The Income and Expense data are stored in the MySQL database	MySQL, NoSQL, etc.
6.	Cloud Database	With use of Database Service 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
8.	Infrastructure (Cloud)	Application deployed on Cloud to manage all the data that need to be processed by the application.	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	Python
2.	Security Implementations	This Application Provides high security to the user financial/confidential data, It is done with help of the Container Registry in IBM cloud	Kubernetes Cluster / Cluster registry
3.	Scalable Architecture	Personal expense tracker is a life time access application. It can further used by accountants/auditors when they deal with huge expense	Kubernetes Cluster / Cluster registry
4.	Availability	This application will be fully available and functional to the user with seamless internet connection. Without internet connection user can just view their expense-time graph.	Kubernetes Cluster / Cluster registry
5.	Performance	The performance will be high because there will be very low network traffics in the application because all the data are lightweight	Kubernetes Cluster