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

Date	03 October 2022
Team ID	PNT2022TMID06847
Project Name	Project - Personal Expense Tracker
Maximum Marks	4 Marks

Technical Architecture:

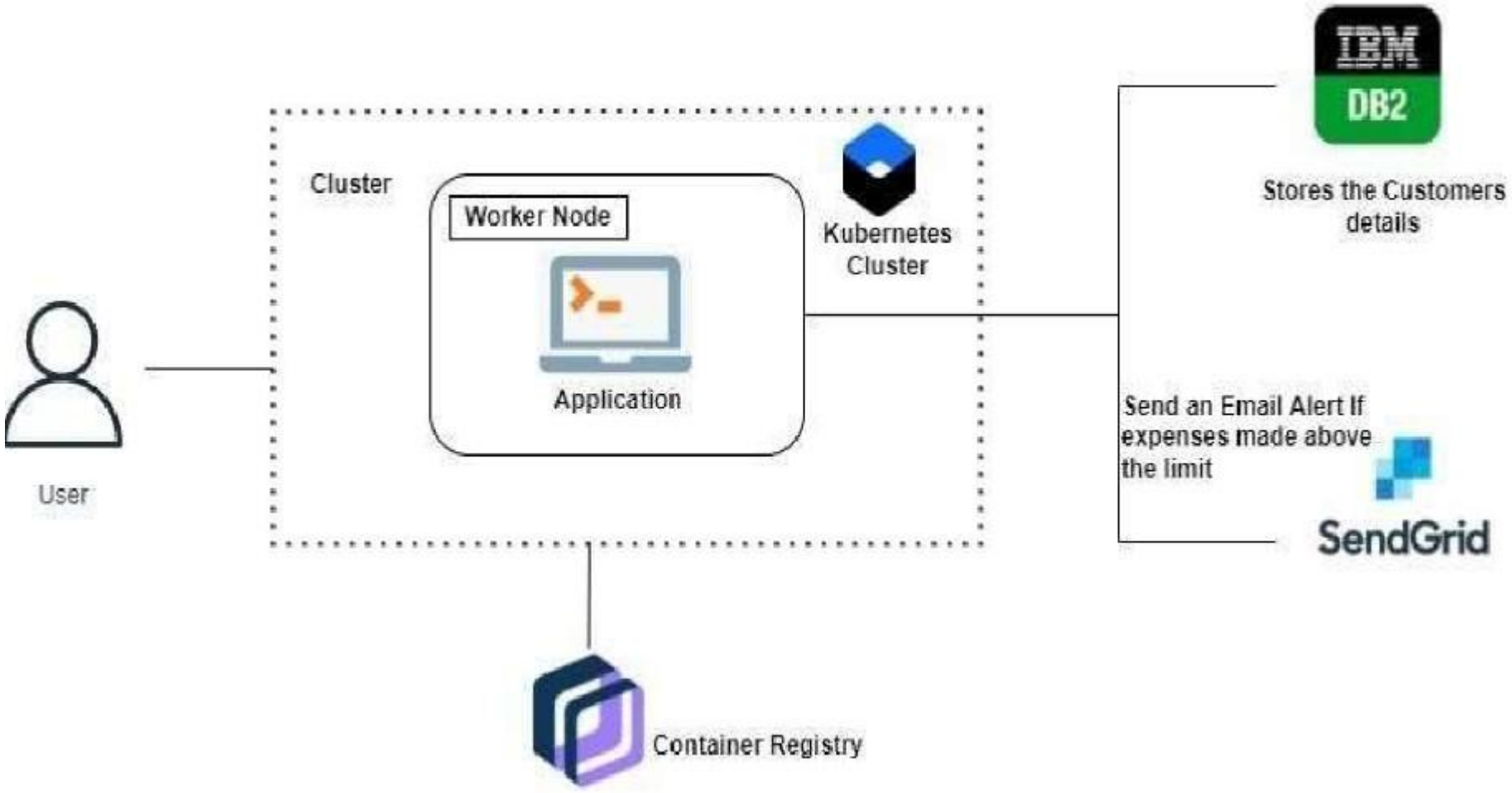
IBM
DB2
Stores the Customers details
Cluster
Worker Node
Kubernetes Cluster
Application
User
Send an Email Alert If expenses made above the limit
SendGrid
Container Registry

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
2.	Application Logic-1	The application contains the sign in/sign up where the user will login into the main dashboard .	Java / 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
5.	Database	The Income and Expense data are stored in the MySQL database.	MySQL, NoSQL, etc.
6.	Cloud Database	With the use of Database Service on Cloud, the User data is 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	Flask Framework in Python is used to implement this Application	Python-Flask

S.No	Characteristics	Description	Technology
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 lifetime access supplication. Its demand will increase 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.	Kubernetes Cluster
5.	Performance	The performance will be high because there will be no network traffic in the application .	Kubernetes Cluster