Project Design Phase-II
Technology Architecture

Date	19 October2022
Team ID	PNT2022TMID31286
Project Name	Personal Expense Tracker Application
Maximum Marks	4 Marks

Technical Architecture:

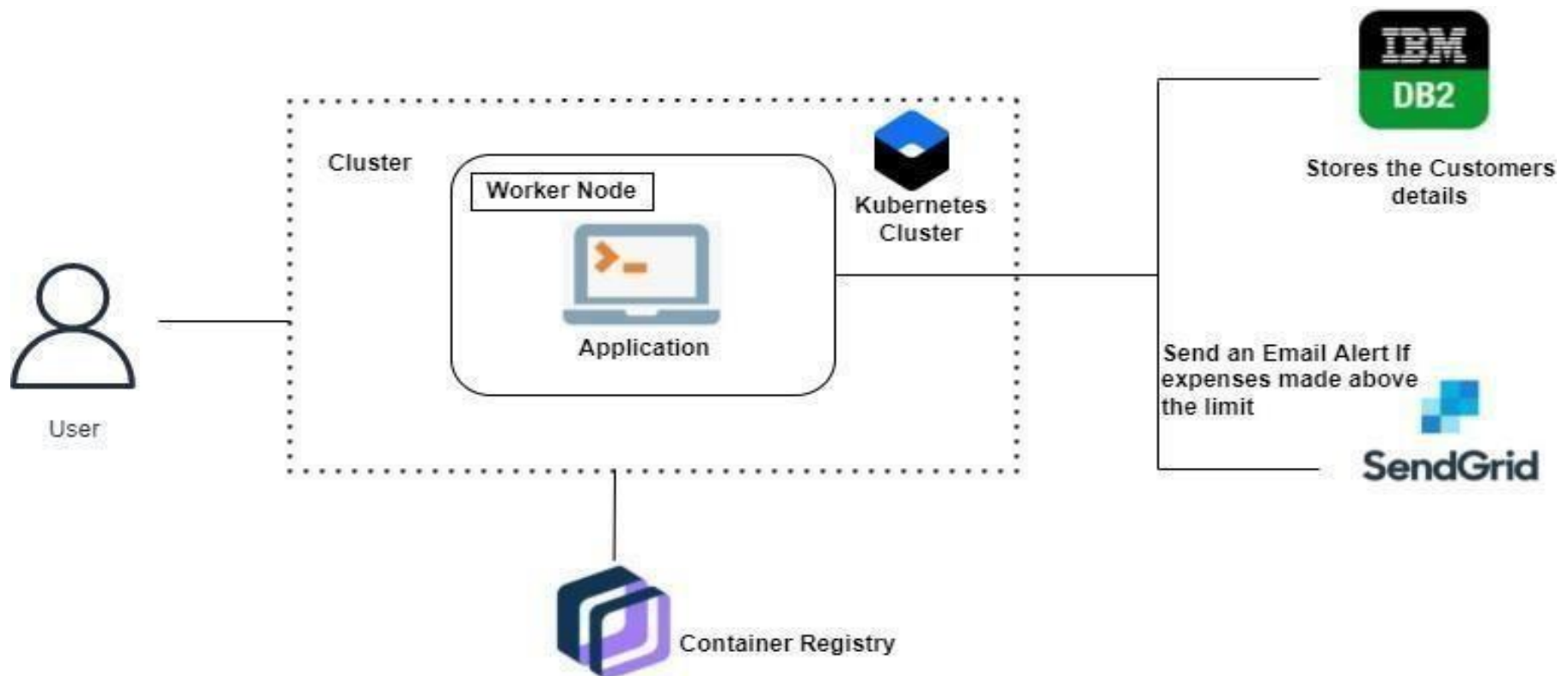The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

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	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, SendGrid
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 Cloud and 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
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 demand will increase when the user's income are high	Container Registry, Kubernetes Cluster
4.	Availability	This application will be available to the 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

REFERENCE:

[1]   D. GRAZIANO, Gartner: Apple leads smartphone sales to new heights. BGR Media, http://bgr.com/2012/02/15/gartner-appleleads-smartphone-sales-to-new-heights/, accessed October 2012, February 2012.

[2]   M. BROWNLOW, Smartphone statistics and market share. Email-Marketing-Reports, http://www.email-marketingreports.com/wireless-mobile/smartphone-statistics.htm, accessed October 2012, October 2012.

[3]   THE WASHINGTON POST, iPhone 5 sales above 5 million, Apple says, surpassing iPhone 4S. The Washington Post, http://www.washingtonpost.com/business/technology/iphone-5-sales-above-5- million-apple-says-surpassing-iphone4s/2012/09/24/8b23322e-0648-11e2-afffd6c7f20a83bf_story.html, accessed September 2012, September 2012.