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

Date	03October 2022
Team ID	PNT2022TMID08585
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

Example: Order processing during pandemics for offline mode

Reference: https://developer.ibm.com/patterns/ai-powered-backend-system-for-order-processing-during-pandemics/
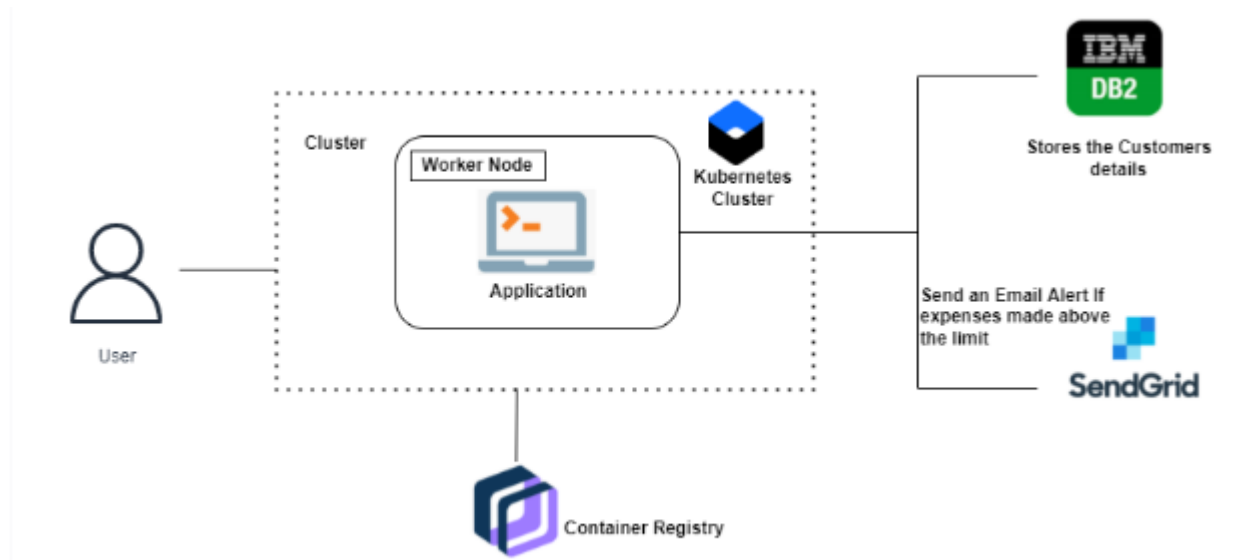
Table 1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript
2.	Registration or Login	Creating a account and Authentication	Python, Mysql
3.	Dashboard	To handle the budget flow	IBM Cloud Kubernetes Services
4.	Cloud Database	User details and budget details will be stored in the database	IBM DB2
5.	External API-1	To sent E-mail alerts to the user	Sendgrid
6.	Cloud Deployment	Application Deployment on Cloud	Docker and Kubernetes

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Flask is a micro web framework written in python	Python Flask
2.	Security Implementations	Passwords can be stored in the encrypted form	Encryption
3.	Scalable Architecture	Containerized application is deployed to rapidly increase scale on demand	Docker
4.	Performance	Availability and Performance enhances user experience Kubernetes is an open-source container orchestration system for software deployment and management	Kubernetes