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

Technical Architecture:

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

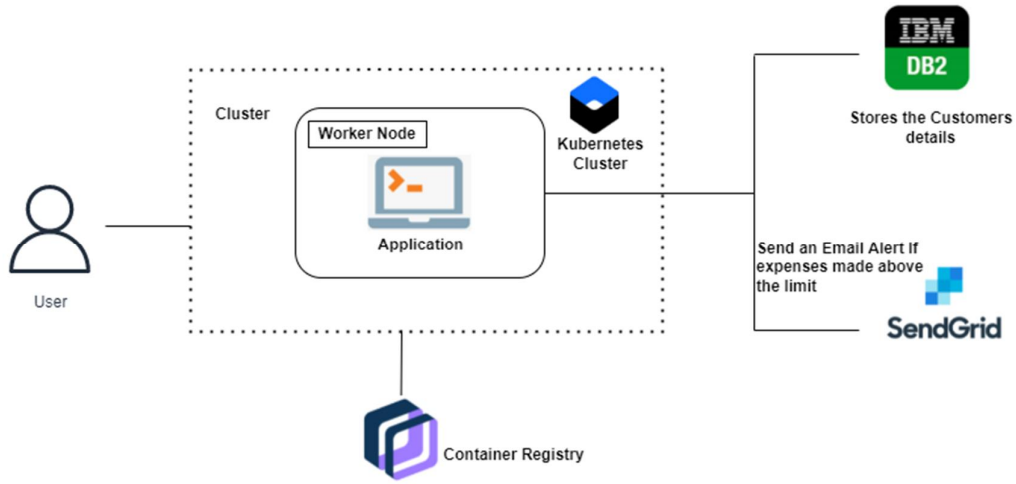

Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How the user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript, Python Flask, etc.
2.	User Login	User can able to login throw their email account.	Python Flask
3.	Graph Visualisation	Rendering plots and graphs based on the user spending data	Seaborn, Matplotlib
4.	Database	Data Type, Configurations etc.	MySQL
5.	Cloud Database	Database Service on Cloud	IBM DB2
6.	File Storage	File storage requirements	IBM Block Storage
7.	SendGrid	A cloud-based SMTP provider that allows you to send email without having to maintain email servers	SendGrid is used to trigger mail to user emails when a particular condition is met.
8.	Google OAuth	OAuth 2.0 allows users to share specific data with an application while keeping their usernames, passwords, and other information private.	Enables login through Gmail account, thus making the application accessible
9.	Infrastructure (Server / Cloud)	Application Deployment on Cloud	Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Python-based Flask is a microweb framework. A microframework is what it is because it does not call for specific tools or libraries	Python Flask Framework
2.	Security Implementations	Python-based Flask is a microweb framework. A microframework is what it is because it does not call for specific tools or libraries	Use some of the crypto algorithms like rail fence transposition technique
3.	Scalable Architecture	Containerized application is deployed too rapidly increase scale on demand	Docker
4.	Availability	This application will be available to user at any point of time	Container Registry, Kubernetes cluster
5.	Performance	The performance will be high because the traffic will be less in the application	Kubernetes cluster