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

Date	14 October 2022
Team ID	PNT2022TMID14518
Project Name	Project - xxx
Maximum Marks	4 Marks

Technical Architecture:

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

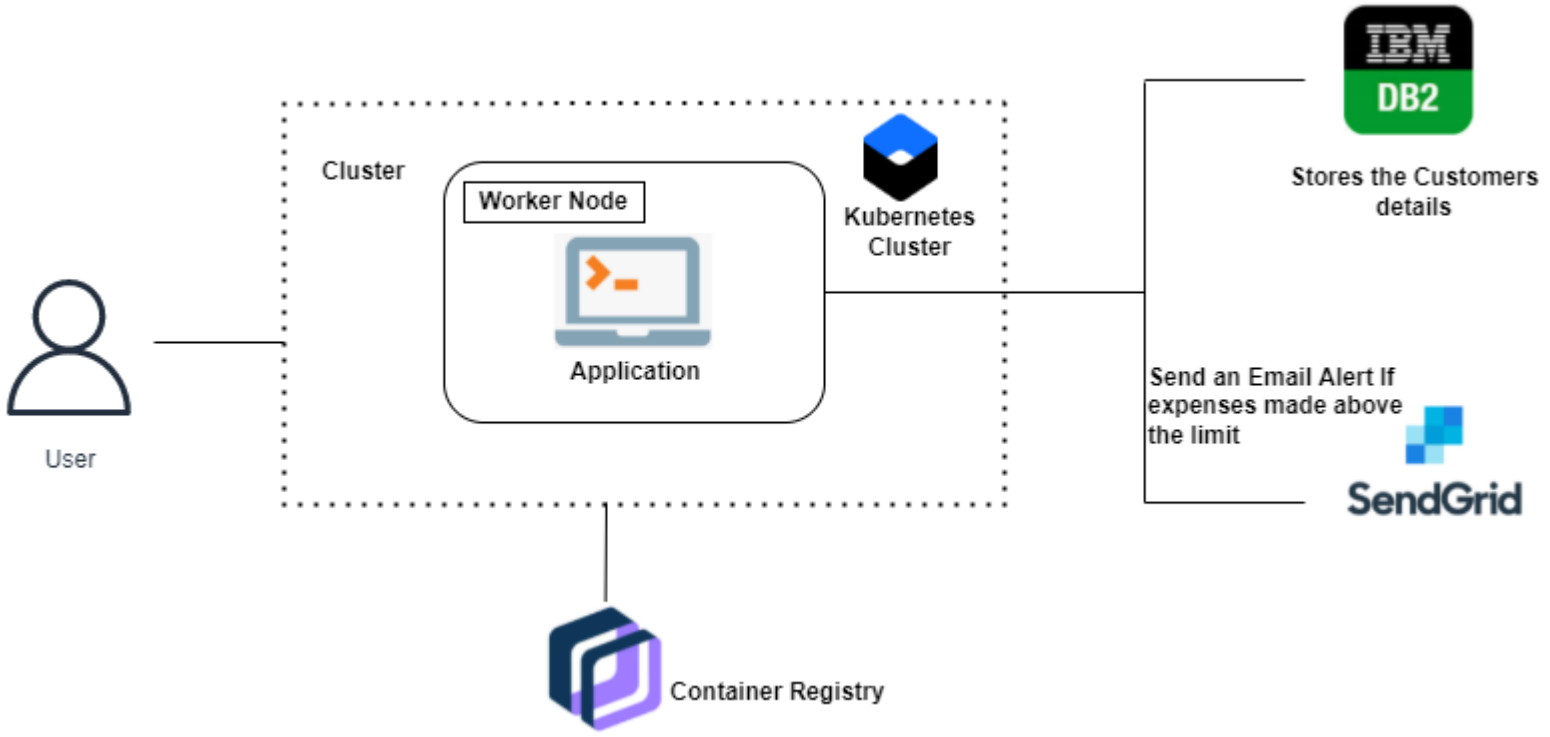

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	The user can interact with the application with the use of Chatbot	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Application Logic-1	Register/Login page where user can create account and login into the expense wallet	Java / Python
3.	Application Logic-2	Wallet & Dashboard with provisions to set budget, limits, add expense, income, savings, etc.	IBM Watson STT service
4.	Application Logic-3	Insights in the form of graphs and charts in a standalone page that are visually informative to the user.	IBM Watson Assistant
5.	Database	Collected data from the Chatbot can be stored in Database	MySQL, NoSQL, etc.
6.	Cloud Database	The IBM db2 is the database that will be stored in cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	External API	No external API will be used	Nil
9.	Machine Learning Model	No ML Model will be used	Nil
10.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Python's Flask Framework is used for development of web applications specifically in the server side (backend)	Python-Flask
2.	Security Implementations	User data will be Encrypted for security	SHA-256, Encryptions
3.	Scalable Architecture	3 – tier, Micro-services with highly reliable vertical and horizontal scaling provisions	Docker, Kubernetes Cluster
4.	Availability	The application will be available 99.99% of the time (e.g. use of load balancers, distributed servers etc.)	IBM Cloud, IBM Cloud Object Storage
5.	Performance	4000 users per hour with max of 100000 requests per second	Kubernetes,Docker,IBM DB2,IBM Container Registry