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

Date	17 October 2022
Team ID	PNT2022TMID46680
Project Name	Personal Expense Tracker Application
Maximum Marks	4 Marks

Technical Architecture:
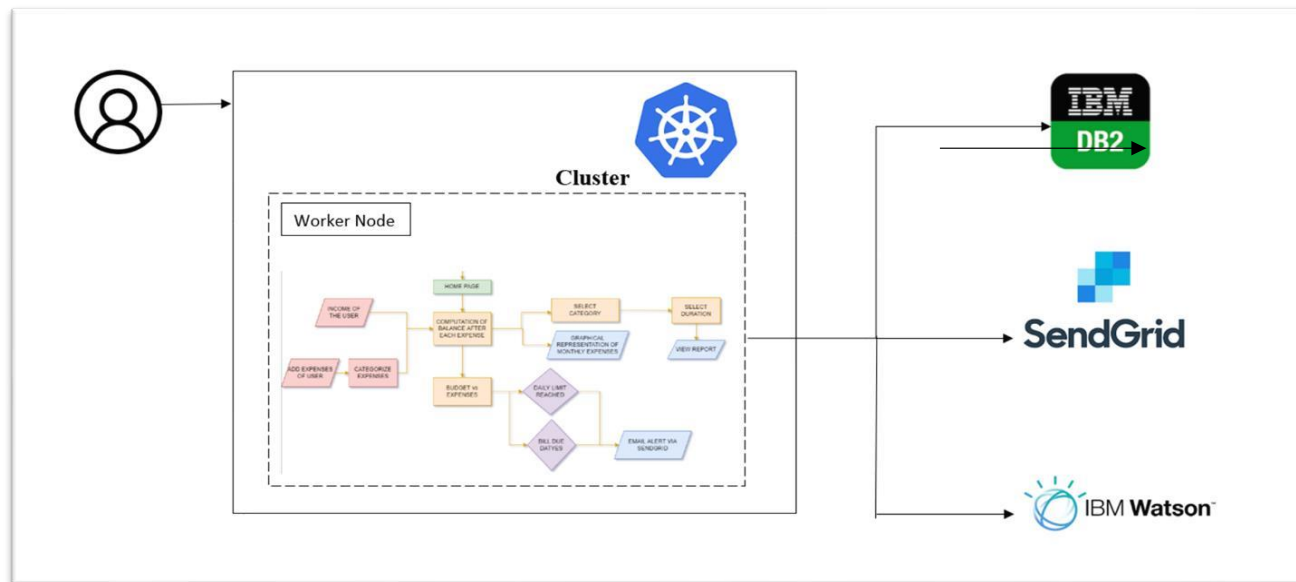
Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	User can interact with the application with features such as Chatbot, Web UI, etc.	HTML, CSS, JavaScript, Flask/React JS
2.	Application Logic-1	Calculating and tracking expenses and alert if overspending	Python/Java
3.	Application Logic-2	Adding chatbot feature	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	Data Type, Configurations etc.	MySQL, NoSQL, etc
6.	Cloud Database	Database Service on Cloud	IBM DB2
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
8.	Infrastructure (Server / Cloud)	Application Deployment on Cloud Local Server Configuration: Cloud Server Configuration	Kubernetes

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	It includes permission to use the source code, design documents, or content of the product.	Python-Flask, Spyder
2.	Security Implementations	Helps in building a string information security system	Encryptions, IAM Controls
3.	Scalable Architecture	Micro-services	Docker
4.	Availability	Use of cloud application increases availability, storage and security	Kubernetes, Cluster
5.	Performance	Number of requests per sec and use of Cache	Kubernetes, Cluster