

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

Date	03 October 2022
Team ID	PNT2022TMID07421
Project Name	Personal Expense Tracker Application
Maximum Marks	4 Marks

Technical Architecture:

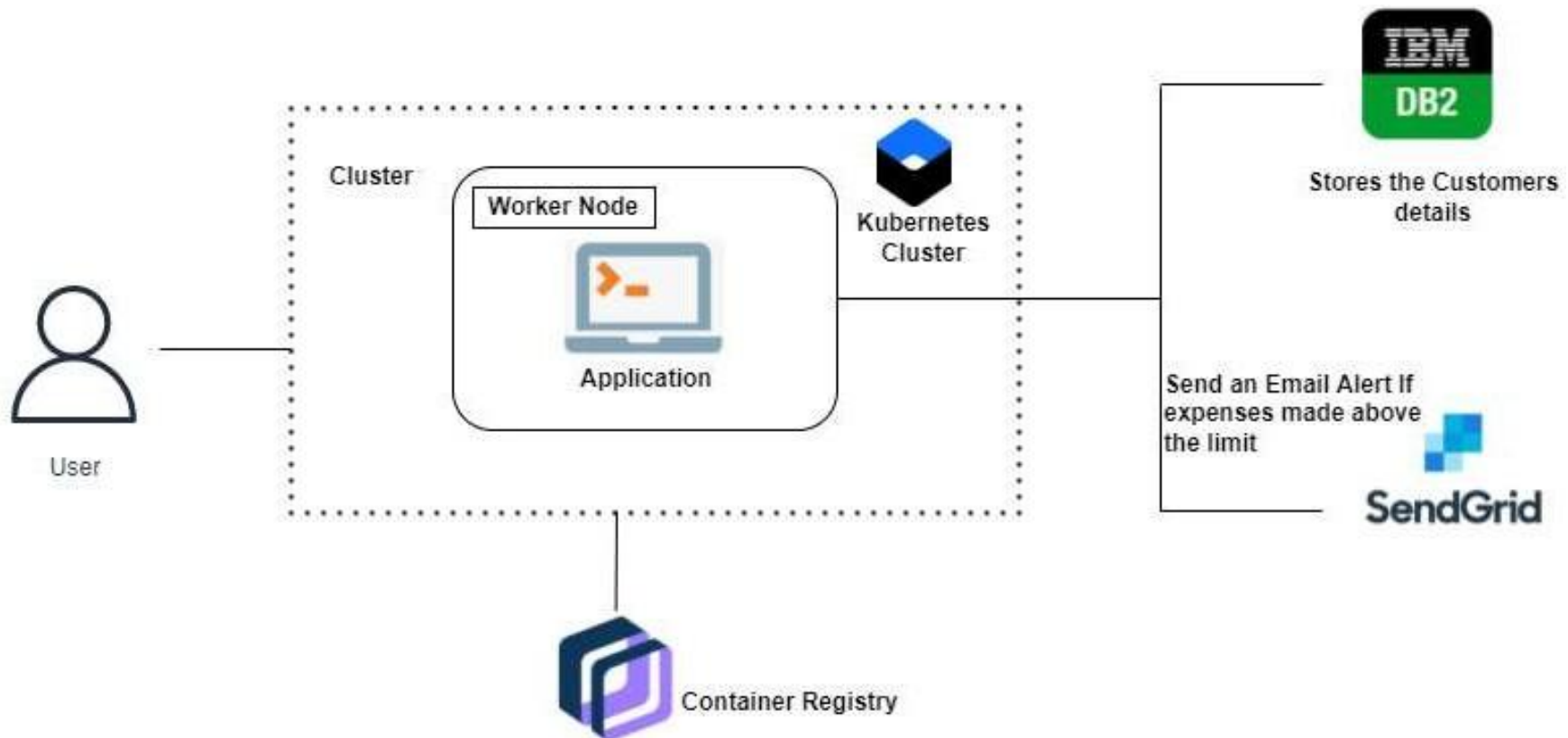


Table-1: Components & Technologies:

S. No	Component	Description	Technology
1.	User Interface	The user interacts with application with Mobile App.	HTML, CSS, JavaScript / React JS etc.
2.	Application Logic-1	The application contains the sign in/sign up where the user will login into the main dashboard.	HTML, CSS, JavaScript, Python
3.	Application Logic-2	Dashboard contains the fields like Add income, Add Expenses, Visualize Income and Expense over a period of time and Budget Limit.	Django, React JS
4.	Application Logic-3	The user will get the expense report in graph form and also get alerts if the expenditure and budget limit exceeds.	IBM Watson Assistant, SendGrid
5.	Database	The Income and Expense data are stored in the MySQL database.	IBM DB2
6.	Cloud Database	With use of Database Service on Cloud, the User data is stored in a well secure Manner.	IBM DB2, IBM Cloudant 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	Django Framework in python is used to implement this application.	Python-Django
2.	Security Implementations	This Application provides high security to the user Financial data by using built-in Django authentication system	Python-Django

S. No	Characteristics	Description	Technology
3.	Scalable Architecture	Expense Tracker is a lifetime access application. Its needs to be scalable when users and user data increases.	Container Registry, Kubernetes Cluster
4.	Availability	This application can be accessible by for any number of users and it is available at any time.	Container Registry, Kubernetes Cluster
5.	Performance	The performance of the application is high because there will be no network traffic.	Kubernetes Cluster