

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

Date	03 October 2022
Team ID	PNT2022TMID45905
Project Name	Project - Personal Expense Tracker Application
Maximum Marks	4 Marks

Technical Architecture:

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

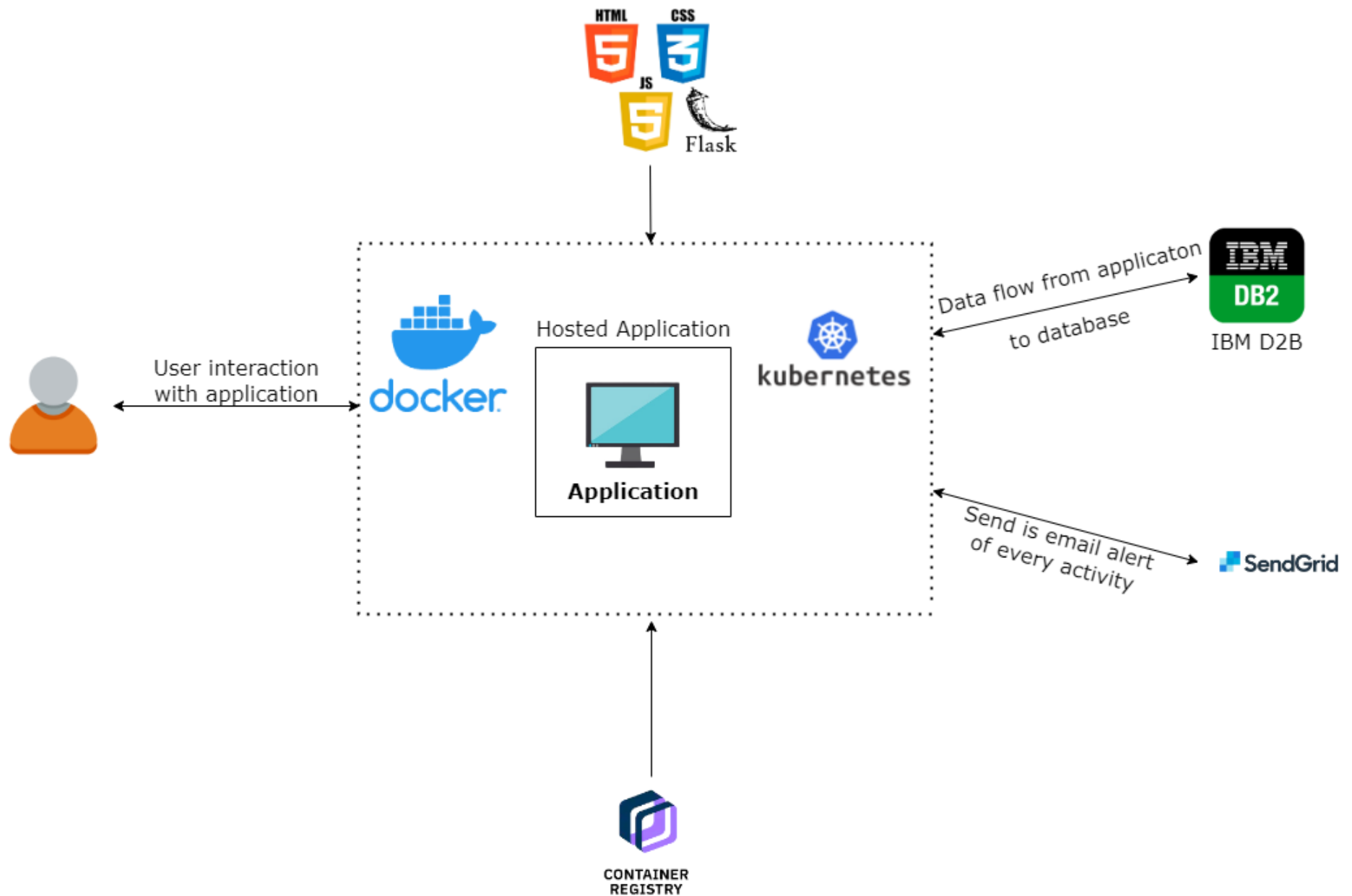


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	The user can interact with the application	HTML, CSS, JavaScript
2.	User Login	The user can login/register to the application	Python
3.	Application	The user dashboard contain like add income ,add expenses, manage expenses	IBM Watson STT service
4.	ChatBot	The user can navigates through the chatbot	IBM Watson Assistant
5.	Database	The user can add expense are store in the MySQL database	MySQL
6.	Cloud Database	Database Service on Cloud	IBM DB2
7.	File Storage	IBM Block Storage used to store the financial data of user	IBM Block Storage
8.	SendGrid	Send the every activity through the email	SendGrid
9.	External API-2	Purpose of External API used in the application	Aadhar API, etc.
10.	Machine Learning Model	Purpose of Machine Learning Model	Object Recognition Model, etc.
11.	Infrastructure (Server / Cloud)	Application Deployment on Cloud	Kubernetes, Docker

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Python Flask is a microweb framework. The microweb framework implement the application	Python-Flask
2.	Security Implementations	Encrypting user data and password with strong encryption algorithm and using inbuilt ibm security	IAM Controls
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