

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

Date	03 October 2022
Team ID	PNT2022TMID08568
Project Name	Personal Expense Tracker Application
Maximum Marks	4 Marks

Technical Architecture:

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

Example: Order processing during pandemics for offline mode

Reference: <https://developer.ibm.com/patterns/ai-powered-backend-system-for-order-processing-during-pandemics/>

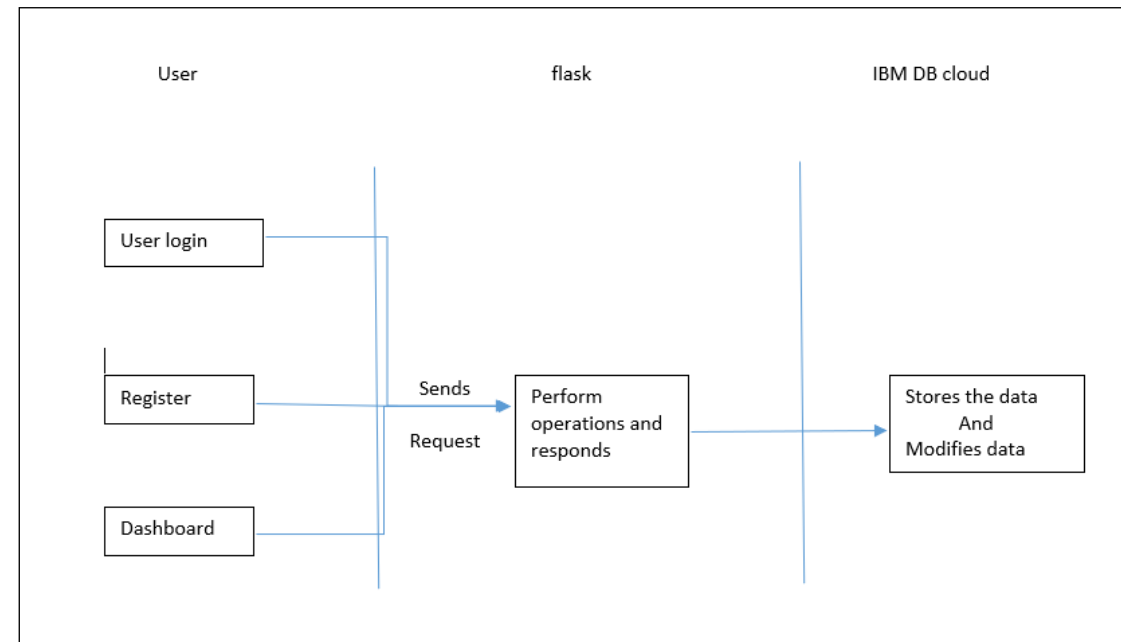
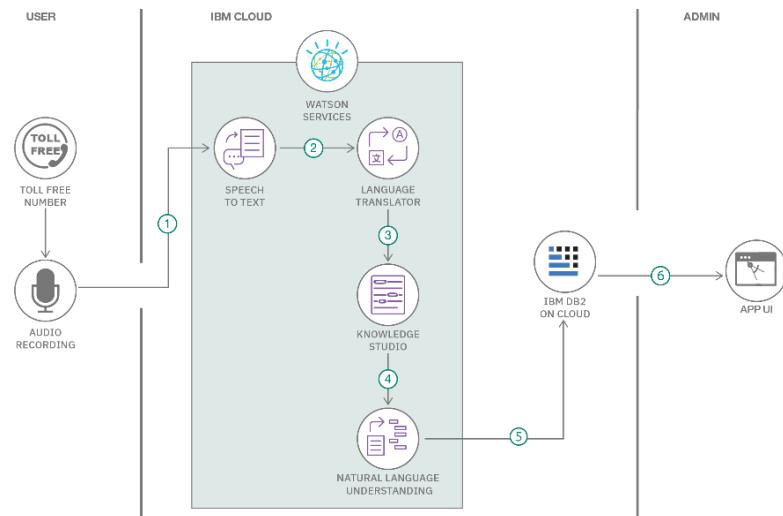


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	The user interacts using web interface	HTML, CSS, JavaScript .
2.	User login/sign up	If new user creates the accounts , if already a user the just logs in using credentials.	Python
3.	Use dashboard	User enter the expenses ,add debts, add category,wallet and insights are displayed.	Python / IBM DB 2
4.	Alert message(email)	Logic for a process in the application	IBM Watson Assistant
5.	Database	varchar, authenticated etc.	MySQL
6.	Cloud Database	Database Service on Cloud	IBM DB2
7.	Infrastructure (Server / Cloud)	Application containerized using docker and orchestrated using Kubernetes	IBM cloud ,Docker , Kubernetes.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Flask is a web framework, it's a Python module that lets you develop web applications easily. It's has a small and easy-to-extend core: it's a microframework that doesn't include an ORM (Object Relational Manager) or such features.	flask
2.	Scalable Architecture	Data scales for the users	IBM DB 2

S.No	Characteristics	Description	Technology
3.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	Technology used
4.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Technology used