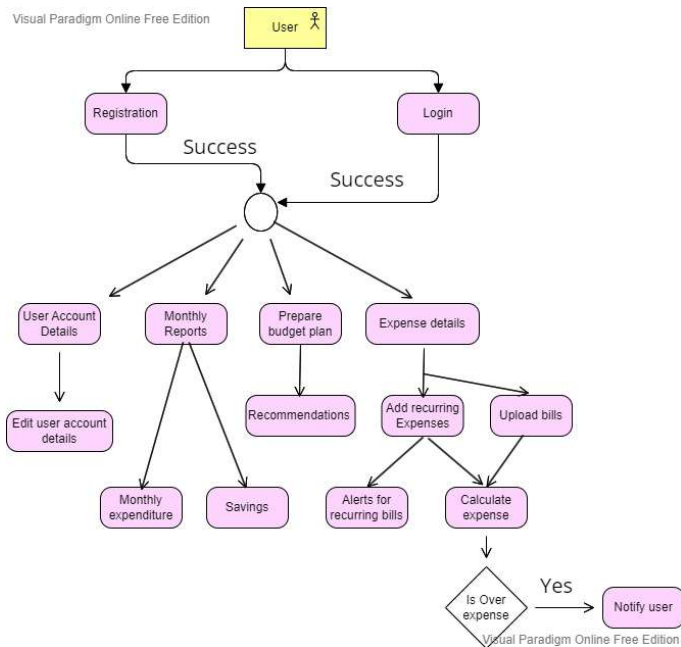


Project Design Phase-II Technology Stack (Architecture & Stack)

Date	03 October 2022
Team ID	PNT2022TMID14542
Project Name	Project – Personal Expense Tracker
Maximum Marks	4 Marks

Technical Architecture:

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



Guidelines:

1. Include all the processes (As an application logic / Technology Block)
2. Provide infrastructural demarcation (Local / Cloud)
3. Indicate external interfaces (third party API's etc.)
4. Indicate Data Storage components / services
5. Indicate interface to machine learning models (if applicable)

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Web UI, Visualisations and charts.	HTML, CSS, JavaScript ,Jquery.js libraries(chart js)
2.	Application Logics	User management,Adding,processing and managing transactions	Python
3.	Database	Data Type, Configurations etc.	MySQL
4.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant
5.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
6.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Development of application using open source framework	Flask (Python) framework
2.	Security Implementations	Authorisation and authentication of users	Role/Identity based access,password hashing,basic authentication
3.	Scalable Architecture	Scalability of architecture which takes care of dynamic number of users at different times.	IBM Cloud Kubernetes Service
4.	Availability	Availability of application which is taken care by Kubernetes.	IBM Cloud Kubernetes Service
5.	Performance	Design consideration for the performance of the application.	Use of Flask-Caching

