

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

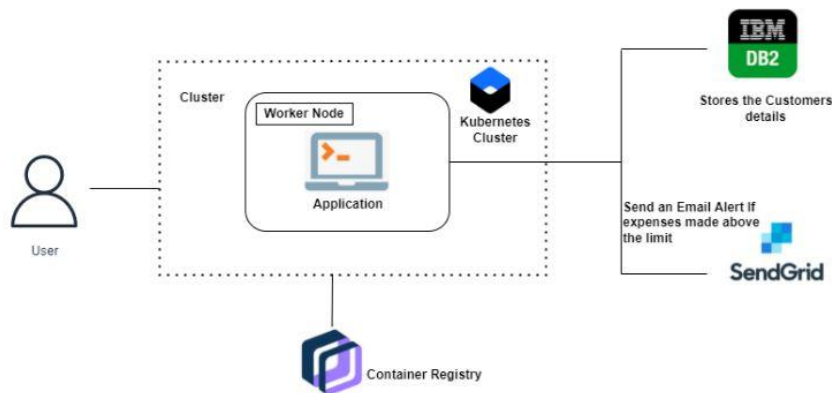
Date	03 October 2022
Team ID	PNT2022TMID5345
Project Name	Project - Personal expense tracker
Maximum Marks	4 Marks

### Technical Architecture:

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

### Example: Order processing during pandemics for offline mode

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



#### Guidelines:

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

**Table-1 : Components & Technologies:**

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS.
2.	Database	For storing and accessing the data.	IBM DB2
3.	Cloud Database	Database Service on Cloud	IBM DB2.
4.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
5.	External API-1	Users email verification	IBM Sendgrid Services.
6.	External API-2	Text document that contains all the commands a user could call on the command line to assemble an image.	Aadhar API, etc.
7.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration:Flask Cloud Server Configuration : IBM	Flask,Kubernetes.

**Table-2: Application Characteristics:**

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	IBM Db2, IBM Kubernetes, Flask,Dockerfile etc.
2.	Security Implementations	Password hiding, and verification using email.	SHA-256, Encryptions, IAM Controls, OWASP etc.
3.	Scalable Architecture	This prototype has a 3 tier architecture and easy to understand	Ibm Cloud
4.	Availability	The prototype is available since it is IBM Cloud	Technology used
5.	Performance	The performance of this prototype is fast and is accessible for 50 users at a time.	Optimization of the code and Ibm cloud storage.

