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

Date	16 October 2022
Team ID	PNT2022TMID43983
Project Name	Plasma Donor 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
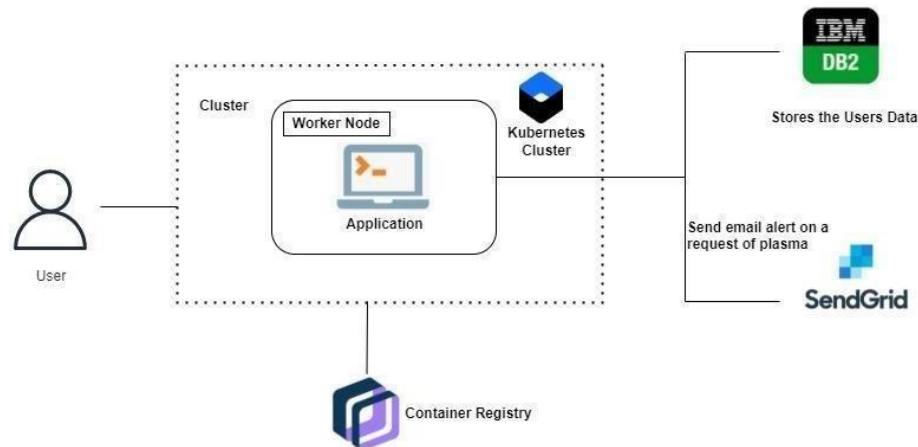
Guidelines:

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	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, bootstrap, JavaScript
2.	Application Logic-1	Logic for a process in the application	Python, Flask
3.	Application Logic-2	Logic for a process in the application	IBM Watson service
4.	Application Logic-3	Logic for a process in the application	IBM Watson Assistant
5.	Database	Data Type, Configurations etc.	IBM DB2
6.	Cloud Database	Database Service on Cloud	IBM Cloud
7.	File Storage	File storage requirements	Docker, Kubernetes
8.	External API-1	Purpose of External API used in the application	Connect to Backend
9.	External API-2	Purpose of External API used in the application	Connect to Third party application
10.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration:	Local, IBM Cloud , Kubernetes, etc.

Table-2: Application Characteristics:

S. No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Flask
2.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Lambda
3.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	Dynamo DB

S. No	Characteristics	Description	Technology
4.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Send GRID