PROJECT DESIGN PHASE – II
TECHNOLOGY STACK (ARCHITECTURE AND STACK)

Date	16 October 2022
TeamID	IBM-Project-12178-1659439786
Project Name	Plasma Donor Application
Maximum Marks	2 Marks

TECHNICAL ARCHITECTURE :

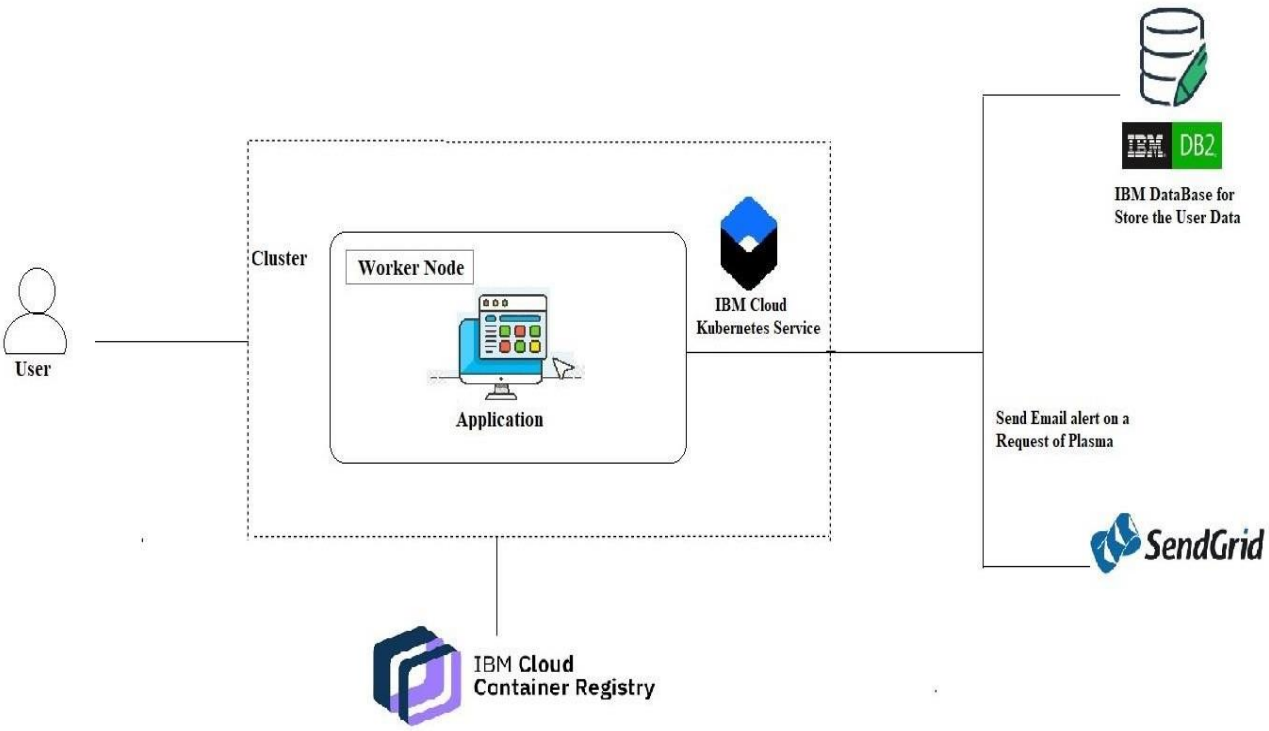

TABLE-1: COMPONENTS AND TECHNOLOGIES :

S. NO	COMPONENT	DESCRIPTION	TECHNOLOGY
1	Website	Donor can proceed the website to register and patients can use them to post a request.	HTML, CSS, JavaScript
2	Docker	Service for storing the private container images	Container Registry
3	Kubernetes	Manage the complete process in the stable state If any software crash it automatically restart the work	Kubernetes
4	DB2	Data types are String, Numeric, Date, time, andtimestamp distinct types. Act_ sortmem_ limit, auto_ del_ rec _ obj, auto_ maintConfiguration .	MySQL
5	Cloud DB2	A fully managed cloud database with AI capabilities that keep our website running 24*7.	IBM DB2
6	SMTP Provider	Sends email alert on a request of plasma by the patients.	SendGrid
7	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Anaconda Cloud Sever Configuration: IBM cloud	Local, Cloud Foundry, Kubernetes, etc.

TABLE-2 : APPLICATION CHARACTERISTICS :

S. NO	CHARACTERISTICS	DESCRIPTION	TECHNOLOGY
1.	Open-Source Frameworks	Cloud Stack, Eucalyptus. Open Nebula, App Scale, Docker.	Docker
2.	Security Implementations	Authentication and password management Accountability to authorize and monitor the use anonymous accounts and to remove	Encryptions, Secured Authorization.
3.	Scalable Architecture	To expand our server capacity, memory, or disc space	IBM DB2
4.	Availability	The administrator needs to look up the stockavailability in the database	Docker
5.	Performance	Speed up the webpage Site optimization based on data analysis.	Kubernetes