<div align="center">

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

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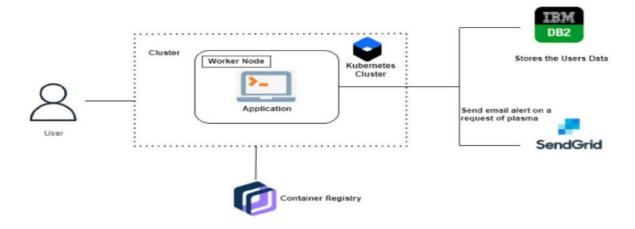| Date	17 October 2022
Team ID	PNT2022TMID36720
Project Name	Project – Plasma Donor Application
Maximum Marks	4 Marks

Technical Architecture:

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, JavaScript / Angular Js / React Js etc.
2.	Donor Registration	How donor Registers himself/herself	HTML, CSS, JavaScript
3.	Recipient Registration	How recipient registers himself/herself	HTML, CSS, JavaScript
4.	Finding a match	Find if any donor and receiver have same blood group.	Python
5.	Database	Data Type, Configurations etc.	MySQL
6.	Cloud Database	Database Service on Cloud	IBM DB2
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	Email API	Automatic Sending Email	Send Grid etc.
9.	Infrastructure (Server/ Cloud)	Application Deployment omn Docker	Docker, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Docker, Kubernetes	Namespaces for containers
2.	Security Implementations	SendGrid Security	TLS-Encryption, Operational Security Standards.
3.	Scalable Architecture	To scale one or more replicated services.	Docker
4.	Availability	IBM Cloud is available almost all the time.	IBM Cloud
5.	Performance	SendGrid can send 100 mails per day.	Send Grid