

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

Date	03October 2022
Team ID	PNT2022TMID34869
Project Name	Project – 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

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

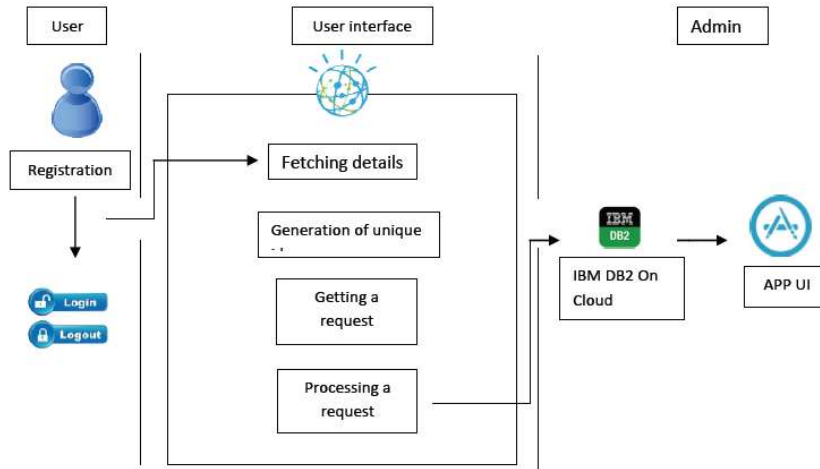


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	Registration	How user interacts with application by entering email, password and confirming password.	HTML, CSS, JavaScript
2.	Email confirmation	A user will receive confirmation email once they registered for the application.	Email confirmation
3.	Login	A user can log into the application by entering email & password.	HTML, CSS, JavaScript
4.	Details	A donor can fill personal details like blood type.	HTML, CSS, JavaScript
5.	Details	A receiver can request for the particular blood type.	HTML, CSS, JavaScript
6.	Unique ID Generation	An administrator can generate a unique id for each other.	IBM DB2, Object storage
7.	Cloud Database	An administrator can store the donor details into the database.	IBM DB2, Object storage
8.	Cloud Database	An administrator can store the receiver details into the database.	IBM DB2, Object storage
9.	Details	A receiver can request the website for a particular donor.	HTML, CSS, JavaScript
10.	Cloud database	An administrator can match the particular donor with receiver with unique id.	IBM DB2, Object storage
11.	Email	As a donor can confirm the email received & As a receiver can receive the plasma of particular type.	Confirming email verification.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	All the open source software has been used.	HTML,CSS, JavaScript, Python
2.	Scalable Architecture	Can be extended by deploying other software like java.	Python/Java
3.	Availability	Freely available sources are used.	HTML, CSS ,JavaScript, Python, IBM Cloud
4.	Performance	The performance is high since we use cloud database.	IBM Cloud

References:

<https://about.gitlab.com/handbook/business-technology/tech-stack-guide/>

<https://developer.ibm.com/patterns/online-order-processing-system-during-pandemic/>

<https://www.ibm.com/cloud/architecture>

<https://aws.amazon.com/architecture>

<https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d20c9fda90d>