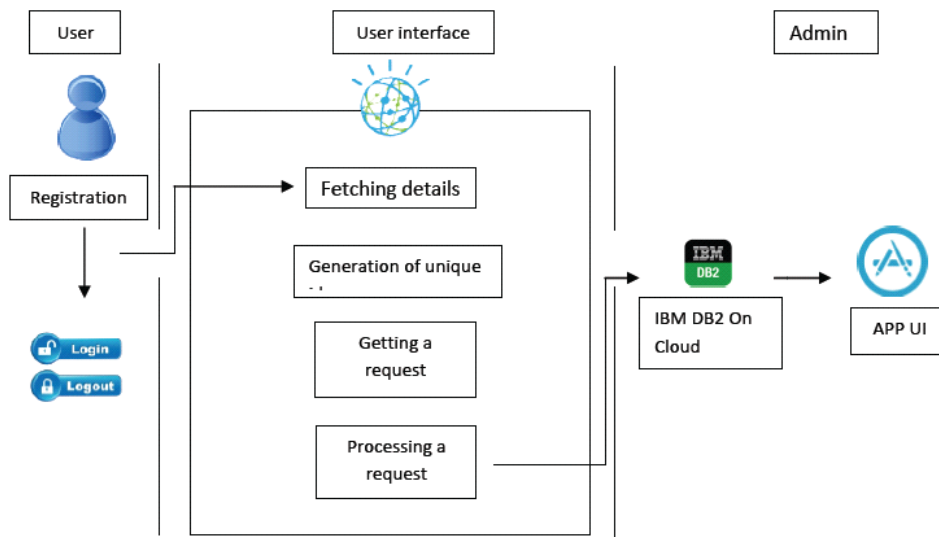# Project Design Phase-II
Technology Stack (Architecture & Stack)

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
•	Registration	How user interacts with application by entering email, password and confirming password.	HTML, CSS, JavaScript
•	Email confirmation	A user will receive confirmation	Email confirmation

		email once they registered for the application.	
•	Login	A user can log into the application by entering email & password.	HTML, CSS, JavaScript
•	Details	A donor can fill personal details like blood type.	HTML, CSS, JavaScript
•	Details	A receiver can request for the particular blood type.	HTML, CSS, JavaScript
•	Unique ID Generation	An administrator can generate a unique id for each other.	IBM DB2, Object storage
•	Cloud Database	An administrator can store the donor details into the database.	IBM DB2, Object storage
•	Cloud Database	An administrator can store the receiver details into the database.	IBM DB2, Object storage
•	Details	A receiver can request the website for a particular donor.	HTML, CSS, JavaScript
•	Cloud database	An administrator can match the particular donor with receiver with unique id.	IBM DB2, Object storage
•	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
•	Open-Source Frameworks	All the open source software has been used.	HTML,CSS, JavaScript, Python
•	Scalable Architecture	Can be extended by deploying other software like java	Python/Java
•	Availability	Freely available sources are used	HTML,CSS,Javascript,Python,IBM Cloud
•	Performance	The performance is high since we use cloud database.	IBM Cloud

References:

https://c4model.com/

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