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

Date	03 October 2022
Team ID	PNT2022TMID43028
Project Name	Plasma Donor Application
Maximum Marks	4 Marks

Technical architecture :

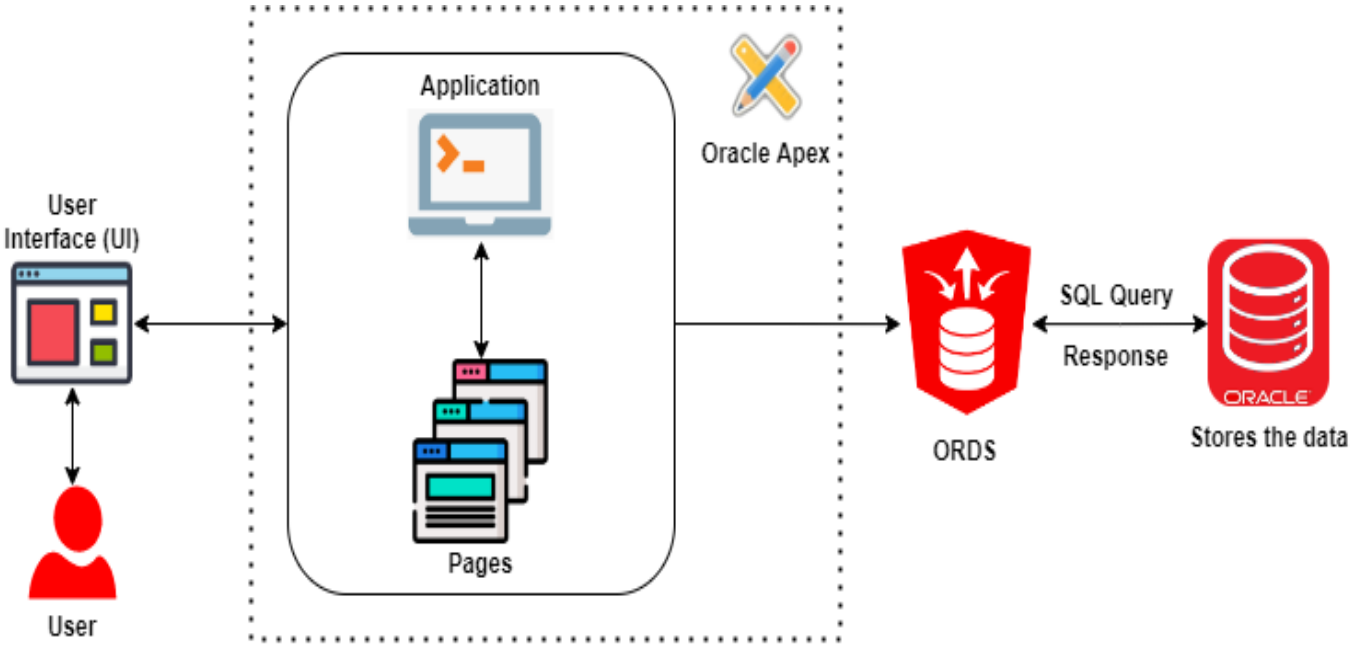

Table-1 : Components & Technologies:

S.o	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	Using Links
2.	Application Logic-1	Logic for a process in the application	Python
3.	Application Logic-2	Logic for a process in the application	IBM Watson STT service
4.	Application Logic-3	Logic for a process in the application	IBM Watson Assistant
5.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloud account etc.
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	External API-1	Purpose of External API used in the application	IBM Weather API, etc.
9.	External API-2	Purpose of External API used in the application	Aadhar card linking API, etc.
10	Machine Learning Model	Purpose of Machine Learning Model	Object Recognition Model, etc.
11	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.no	Characteristics	Description	Technology
1.	Open-Source Frameworks	Open-source plasma donor frame works that make easy to test your organizations explore to the donors.	Used as a free open source web framework that allows developers to build web apps using C# and HTML. .
2.	Security Implementations	Security /access controls implemented ,use of firewalls etc.	Anti spam softwareetc.
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Response time, throughout, CPU and network usage etc.

S.no	Characteristics	Description	Technology
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	This detection website is available at any interfaces like desktop, smart phones and smart watch etc.
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Blacklist/whitelists, Natural language processing, visual similarity, rules and machine learning techniques.