

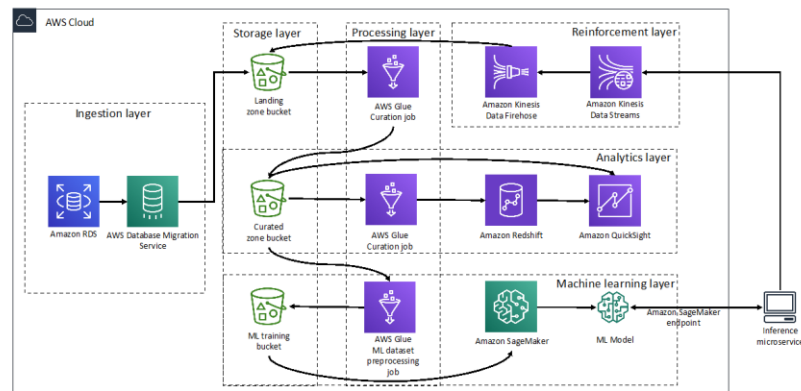
Project Design Phase-II Technology Stack (Architecture & Stack)

Date	16 October 2022
Team ID	PNT2022TMID38683
Project Name	Visualizing And Predicting Heart Diseases with An Interactive Dashboard
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: Heart diseases prediction



Guidelines:

1. Include all the processes (As an application logic / Technology Block)
2. Provide infrastructural demarcation (Local / Cloud)
3. Indicate external interfaces (third party API's etc.)
4. Indicate Data Storage components / services
5. Indicate interface to machine learning models (if applicable)

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Application Logic-1	Web UI	Java / Python
3.	Application Logic-2	Mobile App	IBM Watson STT service
4.	Application Logic-3	Chatbot	IBM Watson Assistant
5.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	Internal storage	IBM Block Storage or Other Storage Service or Local Filesystem
8.	External API-1	Collect the data	IBM Weather API, etc.
9.	External API-2	Preprocessing	Aadhar API, etc.
10.	Machine Learning Model	Traning and Testing	Object Recognition Model, etc.
11.	Infrastructure (Server / Cloud)	Application Deployment on Local Cloud	Cloud Foundry etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Landing zone bucket	Technology of Opensource framework
2.	Security Implementations	Amazon kinesis data stream	e.g. SHA-256, Encryptions, IAM Controls, OWASP etc.
3.	Scalable Architecture	AWS ml dataset	Technology used
4.	Availability	load balancers, distributed servers etc	Technology used
5.	Performance	Design consideration for the performance of the	Technology used

S.No	Characteristics	Description	Technology
		application (number of requests per sec, use of Cache, use of CDN's) etc.	

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>