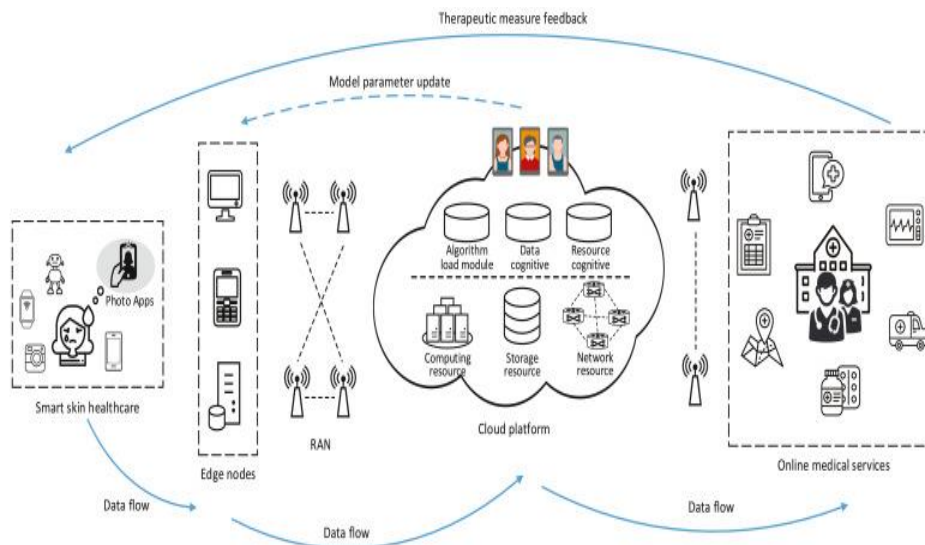


Project Design Phase-II Technology Stack (Architecture & Stack)

Date	03 October 2022
Team ID	PNT2022TMID10852
Project Name	Project – AI based localisation and classification of skin disease with erythema
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2



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	By web UI, the user interacts with the web application and fulfill the user requirements with good user experience	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Application Logic-1	User register themselves and once logged in, given with various features	Java / Python
3.	Application Logic-2	The user may post photo of the affected area in the skin	IBM Watson STT service
4.	Application Logic-3	Precautions and further medication are suggested to the user	IBM Watson Assistant
5.	Database	Data Type etc.	MySQL, NoSQL, etc.
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	File storage requirements.	Other storage services or Local file system.
8.	External API-1	To validate the user.	UserID API.
9.	External API-2	To validate the photo uploaded by the user.	Microsoft visual object tagging tool.
10.	Machine Learning Model	To classify the disease by validating the photo.	Object Recognition Model, etc.
11.	Infrastructure (Cloud)	Application Deployment on Cloud Cloud Server Configuration : Cloudant DB	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used: Angular JS	Angular JS
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	SHA-256.
3.	Scalable Architecture	It is scalable and provided by neural network, NLP, Watson assistant, Artificial intelligence, Cloudant DB.	
4.	Availability	It can be available for any time. If any of the page experiences the problems that must display a notification with timer showing when the system is going to up again.	
5.	Performance	The app will be loaded within few seconds(5 to 6) that access the website using the wi-fi.	