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

Date	03 October 2022
Team ID	PNT2022TMID02730
Project Name	Virtualeye - Life Guard For Swimming Pools To Detect Active
Maximum Marks	4 Marks

Technical Architecture:

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

Virtualeye - Life Guard For Swimming Pools To Detect Active

S.No	Component	Description	Technology
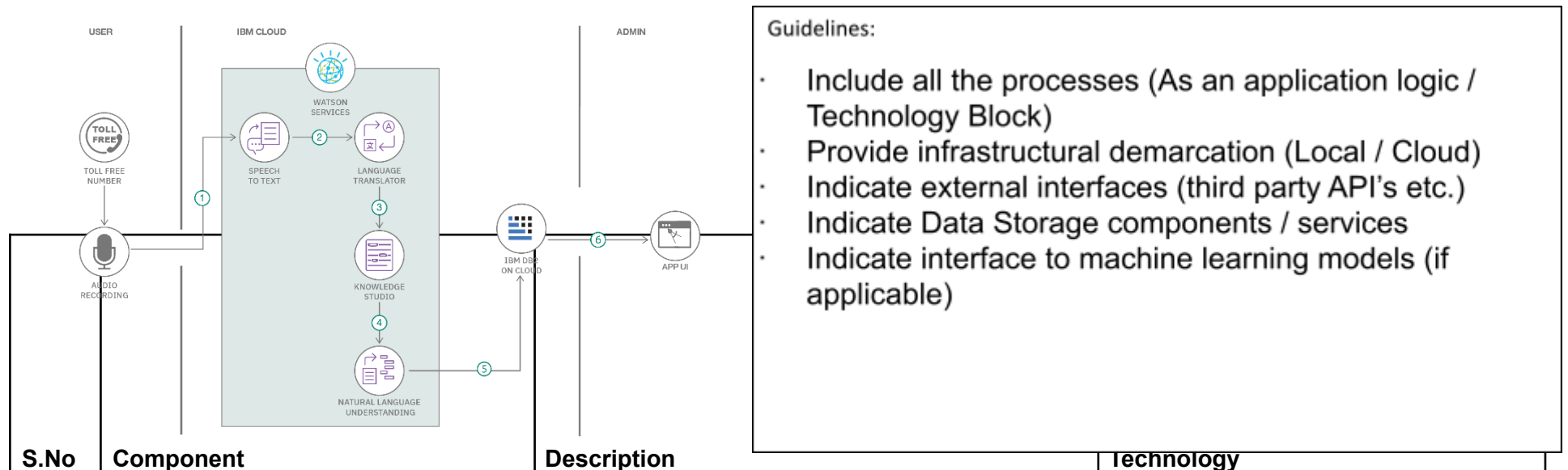
1.	User Interface	WebUI	HTML, CSS, JavaScript / Angular Js / React Js
2.	Application Logic-1	Probability of Face,Body Shape	JS
3.	Application Logic-2	Logic for a detecting person	IBM Watson STT service
4.	Application Logic-3	Logic for a detecting drowning person	IBM Watson Assistant
5.	Database	Store Logs to alert	MySQL
6.	Cloud Database	Database Service on Cloud	IBM DB2
7.	File Storage	File storage requirements	Local Filesystem
8.	External API-1	To Detect Person	TensorFlowAPI
9.	Machine Learning Model	To Recognize a person	Object Recognition Model
10.	Infrastructure (Server / Cloud)	Application Deployment on Local System	Local

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	TensorFlow API	API
2.	Security Implementations	Access to Camera	JS
3.	Scalable Architecture	Monitors to alert if drowning person is detected	API