

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

Date	26 OCTOBER 2023
Team ID	5524E12E0263960BCCC414662E21FC25
Project Name	Project -Creating an Sponsored Post for Instagram

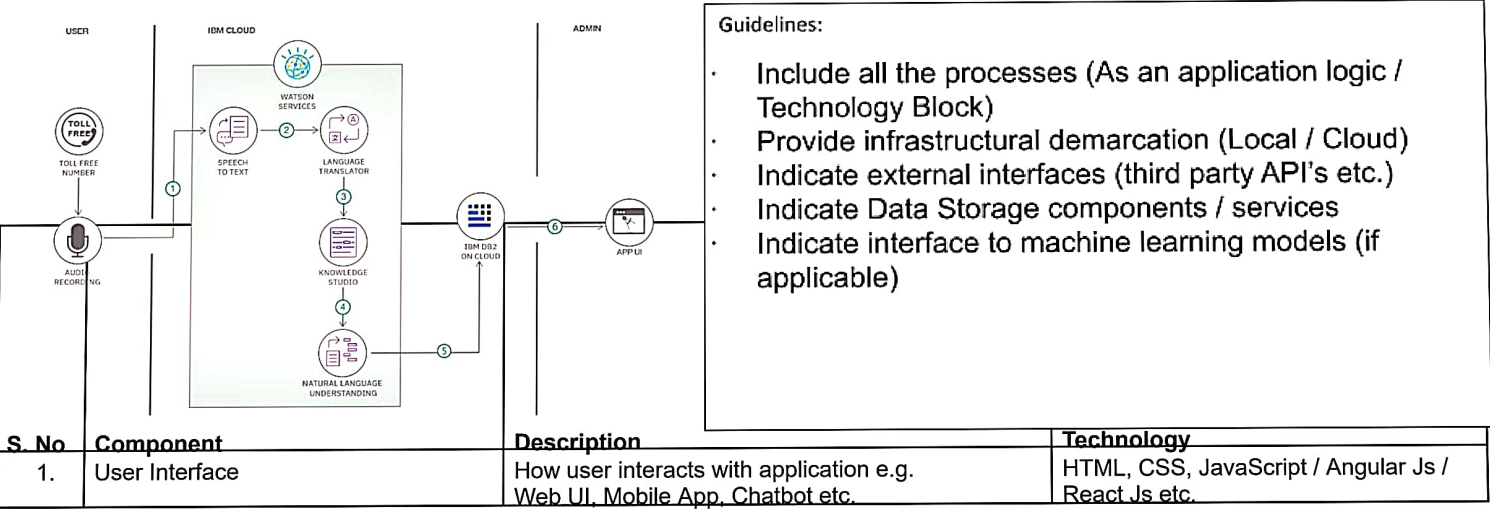
**Technical Architecture:**

The Deliverable shall include the architectural diagram as below and the information as per the table 1 & 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/>

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<https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d20c9fda90d>

2.	Application Logic-I	Logic for a process in the application	Java / 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 Cloudant 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 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.
12.	User interface (front end)	How the user will view the website and Application like (social media. APK)	HTML, CSS, Java script
13.	Logic applied for project-1	Logic or procedure that is used for making the process for given data/application	IBM Watson STT service, Canva
14.	Logic applied for project-2	process or procedure that is used for making the process for given application	IBM Cognos, Wix

15.	Logic applied for project-3	Logic or procedure that is used for making the process for given data and application	Jupyter or notepad type of fill (NUMPY, Python, Anaconda, etc
16.	Database	Explains about various data type that are used and their configurations	MySQL, SQL
17.	Cloud Database OR cloud type	Database Service on Cloud that will be used to store the data	IBM DB2, IBM cloud-ant ,IBM cloud,Canva
18.	Storing the data or cloud type	File storage requirements the space which is used to store the data or file	IBM block storage or other storage service or local filesystem,Wixx
19.	External API-I	Purpose of external API that is used in the application or website	IBM Weather API,Canva
20.	External API-2	Reason of external API or app that is used in the application	Aadhar API, e-Aadhar, UADHAI
21.	Machine Learning Model Used	Main aim of Machine, Learning model	Object Recognition Model
22.	Other or tools (WEB INTEGRATION)	Web integration from story, dashboard, report that created by BI tools	Bootstrap, HTML
23.	The Internal Architecture or Infrastructure (server/cloud) required	In ord er to exhibit the Application development	Local and IBM servers,Wixx

Table-2: Application Characteristics:

S. No	Characteristics	Description	Technology
1 .	Open-Source Frameworks	List the open-source frameworks used	Technology of Opensource framework
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	e.g. SHA-256, Encryptions, IAM Controls, OWASP etc.
3.	Scalable Architecture	Justify the scalability of architecture (3 — tier, Micro-services)	Technology used
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	Technology used
5.	Framework that are used as OpenSource	This will explain the open-source frameworks that is used in the project for social media website	Technology of opensource framework is BI tool named IBM could
6.	Implementing security features	List all the security / access controls implemented, By the usage of firewalls etc.	e.g. SHA-256, Encryptions, IAM Controls, OWASP, encrypted data etc.
7.	Architecture scalability	Justify the scalability of architecture (3 — tier, Micro-services)	Technology used
8.	Available services or Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	Technology used

9.	Performance	Design Consideration for the Performance of the application (Number of requests per sec, Use of Cache, use CDN's etc	Technology used
10.	Performance Or Performance Framework	Design Consideration for the Performance of the application (Number of requests per sec, Use of Cache, use CDN's etc	Technology used

References:

<https://c4model.com/>
<https://developer.ibm.com/patterns/online-order-processing-system-duringpandemic/>
<https://www.ibm.com/cloud/architecture>
<https://aws.amazon.com/architecture>
<https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams2d20c9fda90d>





