

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

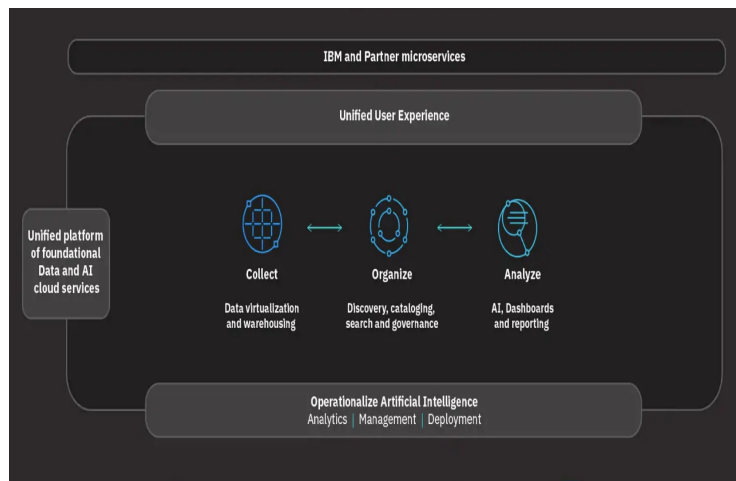
Date	03 October 2022
Team ID	PNT2022TMID2904
Project Name	Project –Health Care Data analytics
Maximum Marks	4 Marks

### Technical Architecture:

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

**Example: Precision and health wellness**

**Reference:** <https://www.ibm.com/cloud/architecture/images/architecture/cloud-pak-for-data.png>



### Guidelines:

1. Data in the form of excel sheet with data
2. These data stored in the IBM Watson
3. These used to build the graph in different ways
4. These help to used in future
5. Use jupyter notebook or google colab.

**Table-1 : Components & Technologies:**

S.No	Component	Description	Technology
1.	User Interface	All the data in Ms Excel sheet	IBM Cognitive analysis
2.	Application Logic-1	Then Upload the data in IBM Watson	Ms Excel Sheet
3.	Application Logic-2	Prepare the data	IBM Watson STT service
4.	Application Logic-3	Explore the Data	IBM Watson Assistant
5.	Database	Present data	MySQL, NoSQL, etc.
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	Dashboard	IBM Cognitive Analysis
8.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration:Tableu Cloud Server Configuration : IBM CLOUD	Python, R,Jupyter Notebook

**Table-2: Application Characteristics:**

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	<b>Software with a source code that anyone can inspect, modify or enhance.</b>	<b>Descriptive, Diagnostic, Predictive, and Prescriptive.</b>
2.	Security Implementations	Including administrative controls, physical security, logical controls, organizational	e.g. firewalls. authentication and authorization.

S.No	Characteristics	Description	Technology
		standards	encryption. data masking
3.	Scalable Architecture	<b>The ability of a hardware/software parallel system to exploit increasing computing resources effectively in the analysis of (very) large datasets.</b>	<b>a package delivery system</b>
4.	Availability	<b>An organization ensures that all of its business-related data is available to the organization, partners, or end-users at any time of the day, whenever and wherever required.</b>	NoSQL Databases. Knowledge Discovery Tools. Stream Analytics. , In-memory Data Fabric. Distributed Storage.
5.	Performance	<b>the process of quickly examining extremely large data sets to find insights</b>	hadoop

### References:

<https://towardsdatascience.com/10-key-technologies-that-enable-big-data-analytics-for-businesses-d82703891e2f>

<https://www.heavy.ai/technical-glossary/high-performance-data-analytics>

<https://journalofcloudcomputing.springeropen.com/articles/10.1186/s13677-019-0127-x>

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