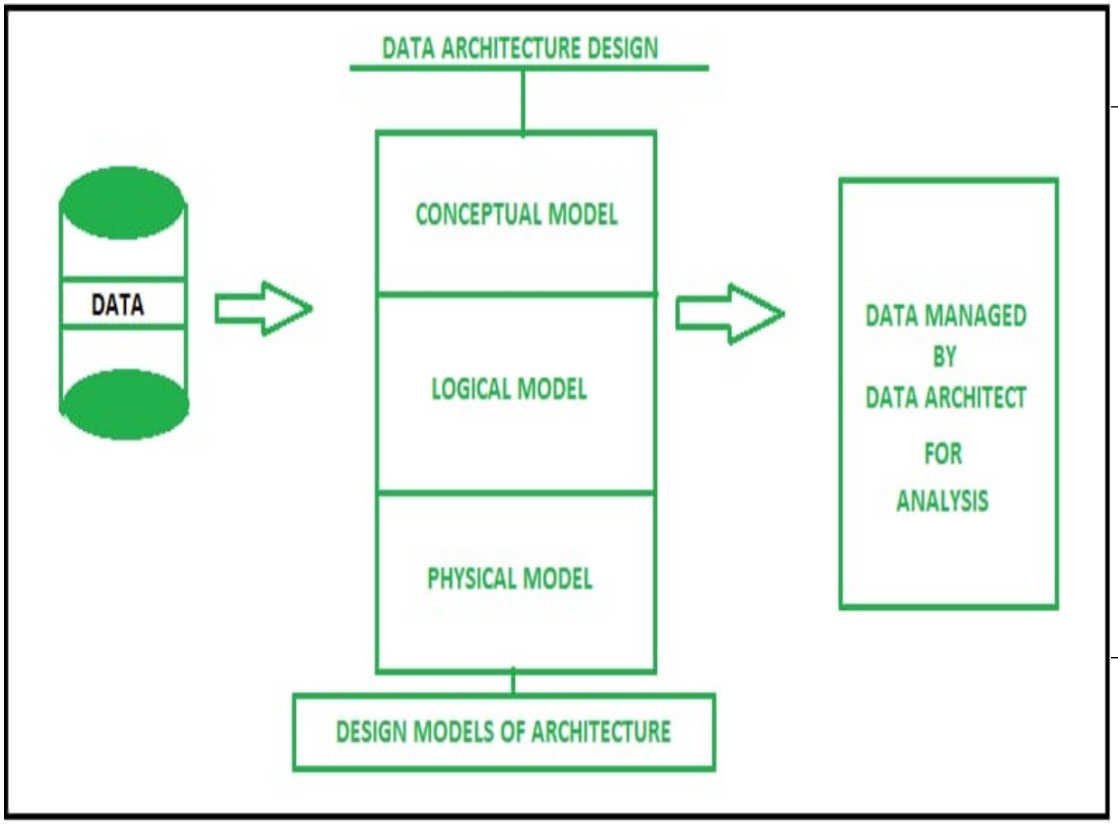
Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	24 october 2023
Team ID	NM2023TMID00931
Project Name	Empowering the Future: A literacy rate analysis
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	User can enter the dataset as a pdf , doc , Excel sheets … Into the program	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Application Logic-1	Greater than or lesser than	Java / Python
3.	Application Logic-2	Comparing the literacy rate of each other States , districts and cities.	Java / python
4.	Application Logic-3	Finding the change over time	Java / python
5.	Database	MongoDB	MySQL, NoSQL, etc.
6.	Cloud Database	IBM cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	File must be stored as a pdf , doc etc…	IBM Block Storage or Other Storage Service or Local Filesystem
8.	External API-1	Extracting possible datasets from internet	IBM Cloud etc.
9.	External API-2	Using to display the datasets	Tableau.. etc
10.	Machine Learning Model	Machine learning model for predictive analysis	Analysis Model, etc.
11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration:localhost Cloud Server Configuration : IBM clud	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Django , Flask	Technology of Opensource framework
2.	Security Implementations	Security policy and Transport layer security	e.g. SHA-256, Encryptions, IAM Controls, OWASP etc.
3.	Scalable Architecture	Micro services architecture	Technology used