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

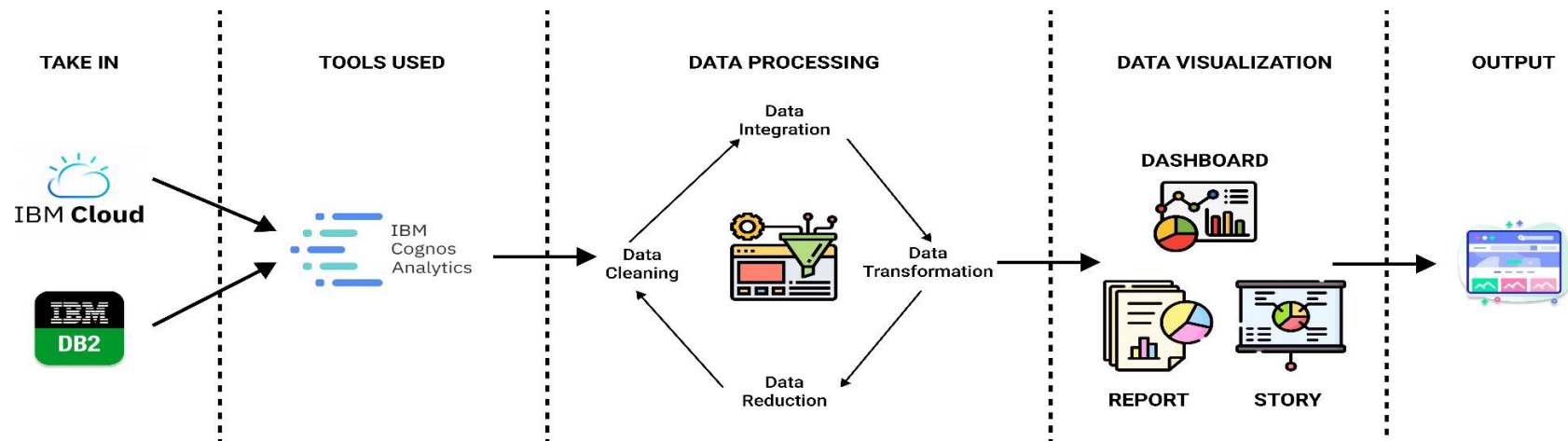| Team ID	NM2023TMID02641
Project Name	Empowering the Future: A Literacy Rate Analysis for a Better Tomorrow

Technical Architecture:

Table-1: Components & Technologies:

S. No	Component	Description	Technology
1.	User Interface	The user can access the Dashboard using a web application	IBM Cognos Analytics, HTML, CSS.
2.	Data Processing	The data from the dataset is pre-processed	Java / Python
3.	Cloud Database	Database Service on Cloud	IBM DB2
4.	Data visualization	The data is visualized in different forms	IBM Cognos Analytics
5.	Web Integration	An API used for web integration	Flask

Table-2: Application Characteristics:

S. No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Open-source frameworks used	IBM Cognos Analytics
2.	Security Implementations	Request authentication using Encryptions	Encryptions.
3.	Scalable Architecture	Scalability consists of 2-tiers	Dashboard – IBM Cognos Analytics Database Server – IBM Cloud
4.	Availability	The application is available for cloud users	IBM Cloud Hosting
5.	Performance	The user can view a visualization of the data	IBM Cognos Analytics