

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

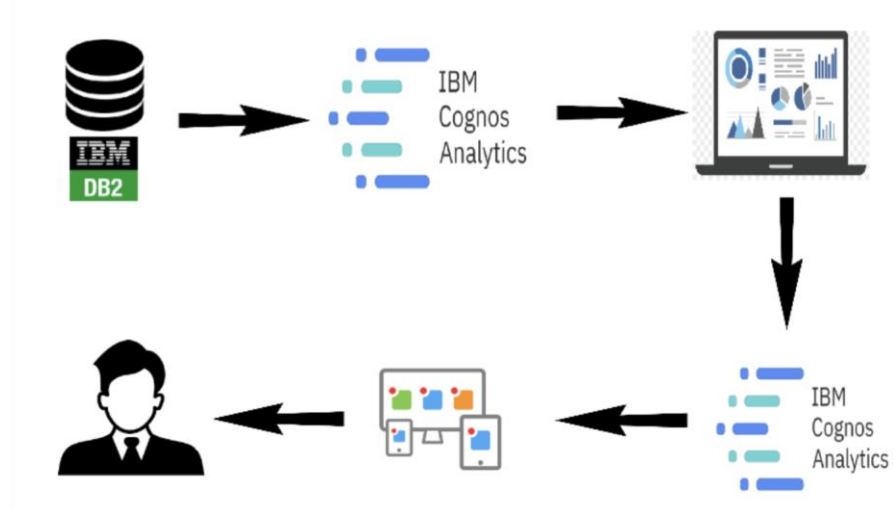
Date	21 October 2023
Team ID	20979A7A3AF46B4BFBD4E6887F9CEE4D
Project Name	The Future of Work : Data Analysis of Glassdoor jobs
Maximum Marks	4 Marks

Technical Architecture:

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

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
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1.	Job Posting Data	Collect job postings from Glassdoor.	Web Scraping Tools
2.	Data Cleaning	Preprocess data, handle missing values.	Python, Pandas
3.	Sentiment Analysis	Analyze text data for positive/negative sentiment.	Natural Language Processing (NLP)
4.	Skill Identification	Identify skills and qualifications mentioned.	NLP, Machine Learning
5.	Trend Analysis	Explore industry trends and growth areas.	Data Visualization, Analytics
6.	Salary Trends	Analyze salary data for compensation insights.	Data Analytics Tools
7.	Company Insights	Extract information about company culture and benefits.	Web Scraping, NLP
8.	Gap Analysis	Identify job market gaps and supply-demand imbalances.	Data Analytics, Statistics
9.	Decision Support	Provide insights for informed career decisions.	Data Visualization, Reporting

Table-2: Application Characteristics:

S.N o	Characteristics	Description	Technology
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1.	Job Roles	Identification of job positions and roles	- Job search algorithms
2.	Essential Skills	Skills and qualifications sought	- Keywords matching
3.	Industry Trends	Trends and growth areas in industries	- Data analytics for trend analysis
4.	Salary Trends	Salary information and trends	- Data scraping for salary data
5.	Company Culture	Insights into the company's work culture	- Employee reviews and feedback
6.	Benefits	Description of employee benefits	- Parsing and text analysis
7.	Job Market Gaps	Identifying demand-supply imbalances	- Market research and statistics
8.	Technology Utilized	Technologies relevant to job postings	- Job posting data analysis tools

References: <https://www.glassdoor.co.in/Community/index.html> <https://developer.ibm.com/patterns/online-order-processing-system-during-pandemic/> <https://www.ibm.com/cloud/architecture> <https://aws.amazon.com/architecture> <https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d20c9fda90d>