

Project Design Phase-II TECHNOLOGY STACK (ARCHITECTURE & STACK)

Date	03 October 2023
Team ID	NM2023TMID06915
Project Name	Analytics Tools For Placement
Maximum Marks	4 Marks

Technical Architecture:

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

The goal of Analytic Tools For Placement is to develop a Tableau-based analytics tool that can assist students and job seekers in making informed decisions about their career placement by analyzing historical placement data, job market trends, and other relevant information.

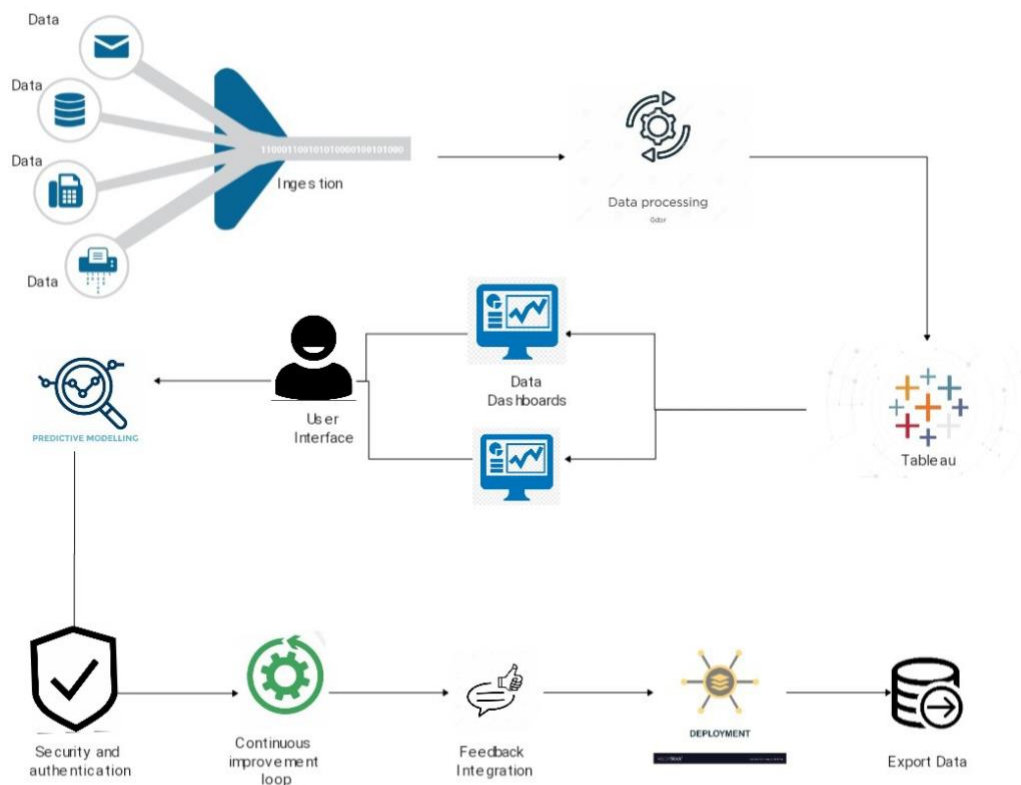


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Create a Dashboard	JavaScript , React .
2.	Data Import	Collect Data Sources	APIs,Python
3.	Data Storage	Store collected data	Relational DB
4.	Data Analysis	Analyze placement data	Python, Pandas
5.	Machine Learning	Build predictive models	Scikit-Learn
6.	Reporting	Generate placement reports	Tableau, Power BI
7.	Data Visualization	Visualize data	D3.js, Matplotlib
8.	Security	Protect data privacy	Encryption, OAuth
9.	Scalability	Ensure system scales	AWS, Docker
10.	Testing	Verify system integrity	Unit Testing

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Data Collection	Gather placement data sources	Python, REST APIs
2.	Data Processing	Clean and preprocess data	Pandas, NumPy
3.	Machine Learning	Build placement prediction models	Scikit-Learn, TensorFlow
4.	Visualization	Create interactive dashboards	Power BI, Plotly, D3.js
5.	Security	Ensure data protection	Encryption, OAuth