

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

Date	03 October 2022
Team ID	PNT2022TMID15762
Project Name	Project – Corporate Employee Attrition Analytics
Maximum Marks	4 Marks

Technical Architecture:

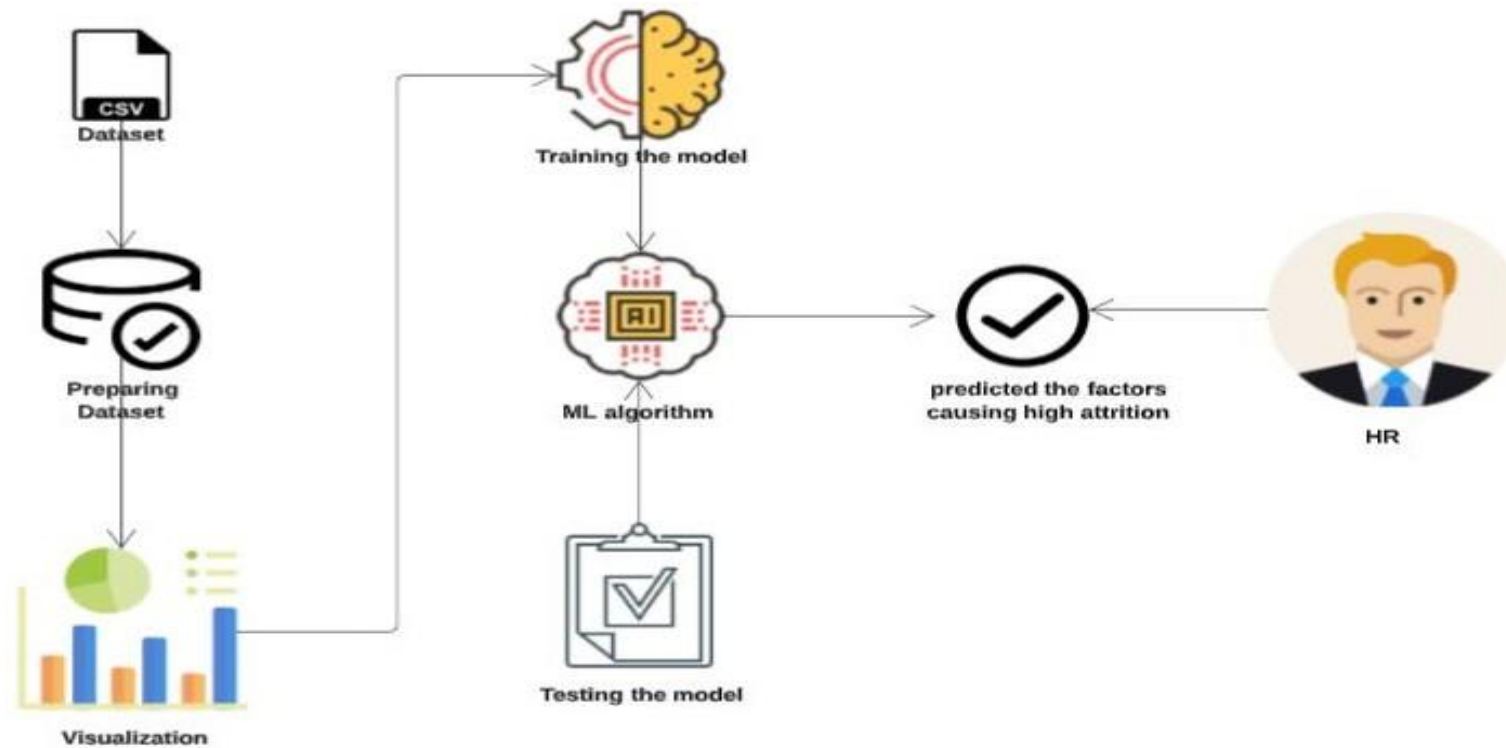


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	User interacts with application using Google colab or IBM Cloud	Google colab,IBM Cloud
2.	Application Logic	To obtain the factor causing attrition of an employee	Python
3.	Database	Dataset of the organization which contains all details of an employee.	Any dataset from Kaggle
4.	Cloud Database	Used to store the dataset	IBM Cloud, Google colab
5.	Visualization	Prepare ,explore and visualize the data	IBM Cognos Analytics
6.	Machine Learning Model	Application of particular algorithm and to predict the correct factor affecting the attrition	Algorithm in ML
7.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	An opensource framework is a template for software development that is designed by a social network of software developers. These frameworks are free for public use and provide the foundation for building a software application	Google Colab
2.	Security Implementations	All the security / access controls are implemented and the dataset is secured	Google Colab
3.	Scalable Architecture	It supports higher workloads without any fundamental changes to it and python provides scalability.	Python
4.	Availability	Availability is easy to get or to access since Google colab is open source it is available at any time	Google Colab

S.No	Characteristics	Description	Technology
5.	Performance	The process of creating, implementing, and managing projects that contribute to the performance of an organization and its strategy	Python