

Project Design Phas e-II
Technology Stack (Architecture
Stack)

Technical Architecture :

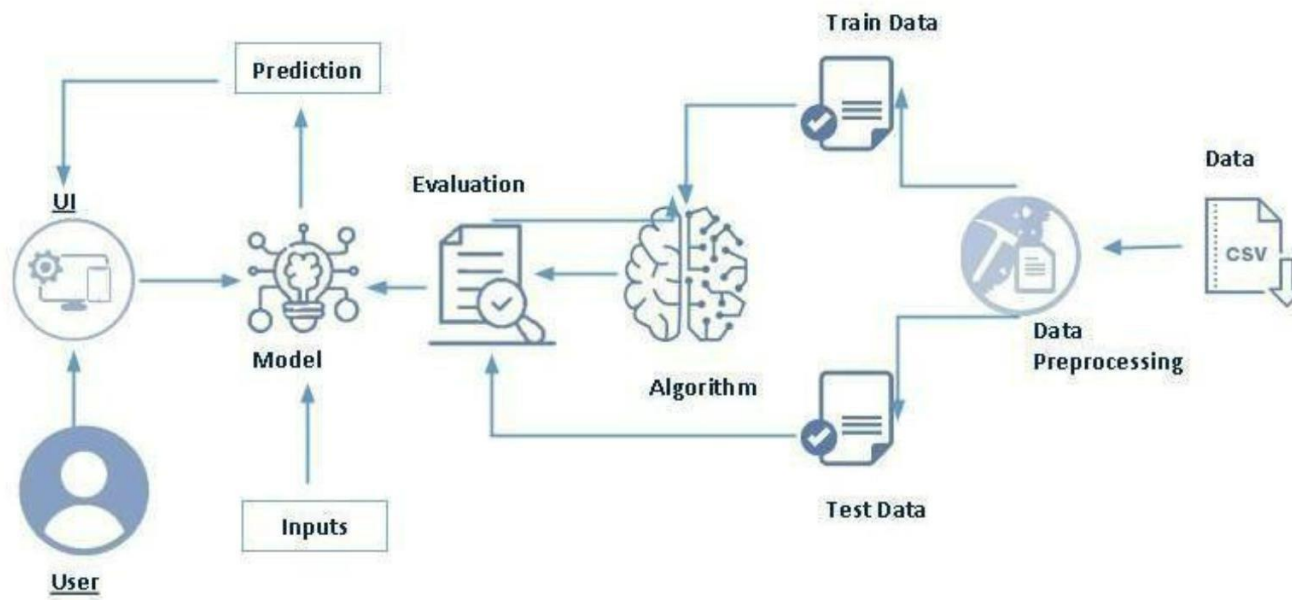


Table-1 : Components &Technologies:

S.No	Component	Description	Technology
1.	UserInterface	Users interactwiththe application withthe help of a web UI	HTML, CSS etc.
2.	Buildingapplication	GettinguserinformationfromUIand feeding itto MLmodel	PythonFlask
3.	Visualizingand analysing data	Readingand understanding the data properly with the helpof visualizationand analyzing techniques.	Pythonpandas, numpy, pickle, matplotlib, seaborn
4.	Pre-processing orcleaning data	Handling missing values, Handlingcategorical data, Handlingoutliers, Scaling Techniques	Pythonpandas
5.	Database	Loan Approval dataset	.csv file
6.	Cloud Database	Deploying the model on cloud	IBMcloud
7.	Machine Learning Model	Using machine learning model forpredicting loan approval	Model buildingusing classification algorithms such as Decision tree, Randomforest, KNN, and xgboost.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open Source Frameworks	List the open source frameworks used	IBM Cloud
2.	Security Implementations	Its secure information and data	IBM Cloud provides layered security controls across network and infrastructure
3.	Scalable Architecture	Its supports various data sizes	Web 3.0 IBM Cloud
4.	Availability	Creating multiple pages for comfortable user interface experience	HTML, CSS, JavaScript
5.	Performance	Withstand huge data and process them without crashing.	Python