

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

Date	09 October 2022
Team ID	PNT2022TMID06904
Project Name	Smart Lender Applicant Credibility Prediction for Loan Approval
Maximum Marks	4 Marks

Technical Architecture:

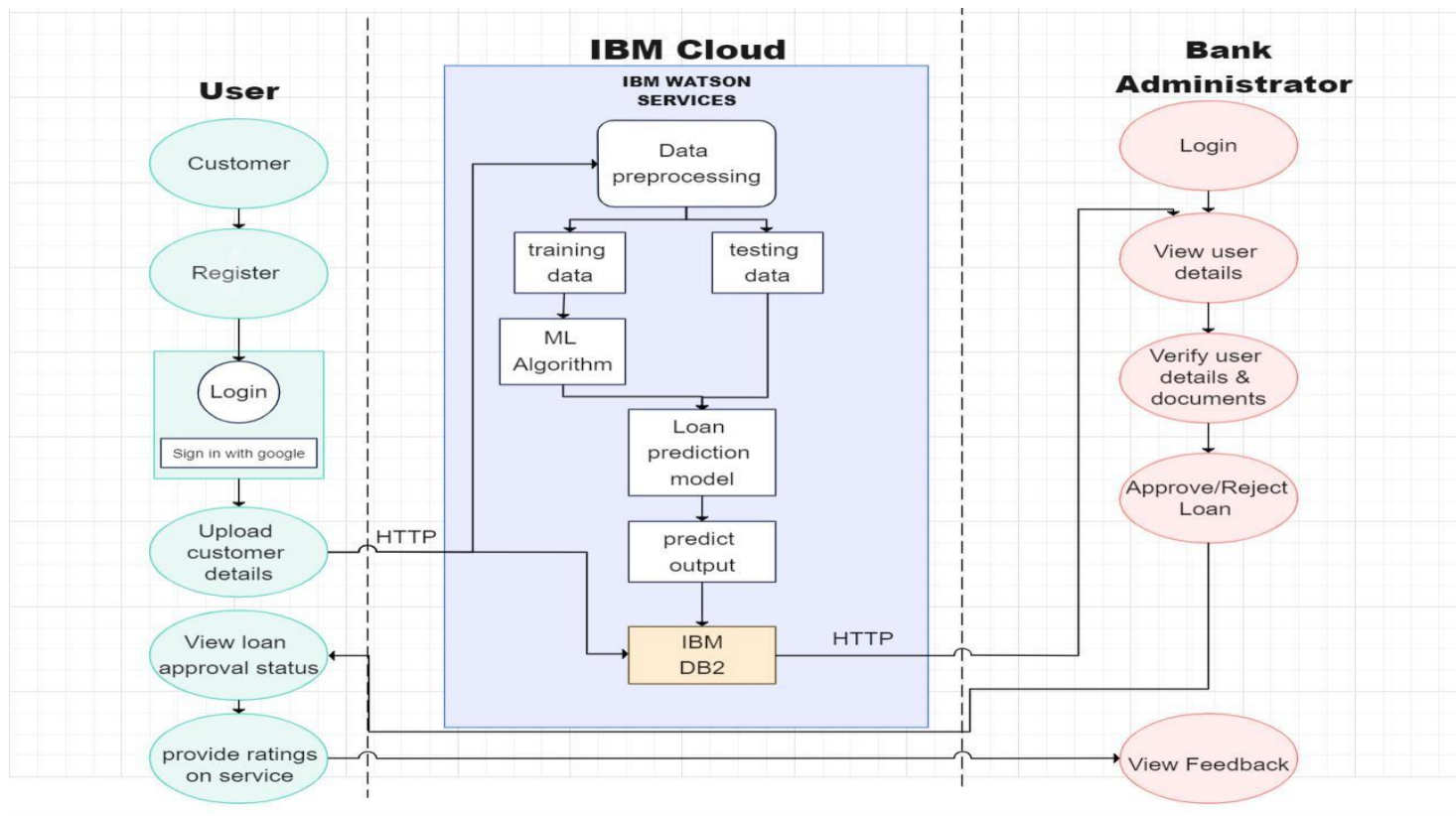


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Web UI -Customer UI,Bank Admin UI,Loan approval UI	HTML, CSS, JavaScript
2.	Registration	User register with their credentials	HTML,CSS ,JavaScript,PHP,Bootstrap
3.	Login	User login with their username and password and bank login with their credentials	HTML,CSS,JavaScript
4.	Upload user details and documents	The customer will upload their personal details,Loan details and documents	JavaScript,PHP
5.	Bank Verification	Bank will verify the details of the customer and documents	PHP
6.	Loan Approval status	The Loan prediction model gives the eligibility of loan and the bank admin will give the loan approval status	Python,JavaScript
7.	Ratings and Reviews	User provide their feedback	JavaScript
8.	Database	Data type -String,Integer,Float,Boolean RDBMS database Stores user details,review details,document details	MySQL
9.	Cloud Database	Platform as a service Used to store,analyze and retrieve the data Configuration: Abort-slave-event-count 0 Allow-suspicious-udfs false Archive on Auto-increment-increment 1 Auto-increment-offset 1 Autocommit True Automatic-sp-privileges True Avoid-temporal-upgrade False Back-log 80 /home/jon/bin/mysql -8.0/ Tmpdir /tmp	IBM DB2(MYSQL online)

		Transaction-alloc-block-size 8192 Transaction-isolation REPEATABLE- READ Transaction-prealloc-size 4096 Transaction-read-only FALSE Transaction-write-set-extraction XXHASH64 Updatable-views-with-limit YES Validate-user-plugins TRUE Verbose TRUE Wait-timeout 28800	
10.	File Storage	Network File Storage	IBM Cloud object storage IBM Watson studio
11.	Sign in	User login with google	Google API
12.	Machine Learning Model	To predict the Loan approval status of the user	Python,IBM Watson Service
13.	Infrastructure	Cloud Server Configuration: Speed Feature flag Central configuration storage Virtual processors 2vcpu RAM 8GB Storage 100GB	IBM Cloud Server

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Bootstrap Flask Scikit,numpy.	HTML,CSS JavaScript Python

S.No	Characteristics	Description	Technology
2.	Security Implementations	Captcha Security	JavaScript
	Scalable Architecture	3-tier architecture	HTML,CSS,JavaScript Python IBM D2
3.	Availability	Single server	IBM cloud server
4.	Performance	More Accurate Prediction Cookie Free Domain	Python