CREDIT CARD DEFAULT PREDICTION

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Introduction

- In an era where financial stability is paramount, our project, "Credit Card Default Prediction: Mitigating Financial Risk through Predictive Modeling," takes center stage.
- Discover the key factors that contribute to credit card default risk through our intuitive and user-friendly interface. Our platform aims to provide insights into the likelihood of default, helping you navigate the complexities of financial management with confidence.

Problem Statement

- The project focuses on predicting whether the person's credit card is defaulted or not using a dataset.
- From the perspective of risk management, the result of predictive accuracy of the estimated probability of default will be more valuable than the binary result of classification - credible or not credible clients.

Dataset Description

- The Dataset includes information such as demographic data and Payment Details.
- Key features include ID,Gender, Age, Marital status,Payment delays,Amount used,Completed Payments
- The target variable is to find whether the client is credible or not credible .

Model Building

Three classification models have been implemented in the project:

- Logistic Regression
- Support vector Classifier

Evaluation Metrics

The performance of the models is assessed using common classification metrics:

- F1-Score
- CV-score
- Confusion Matrix

Deployment

- Framework : stream lit
- Programming Language: Python
- Version Control : Git Hub

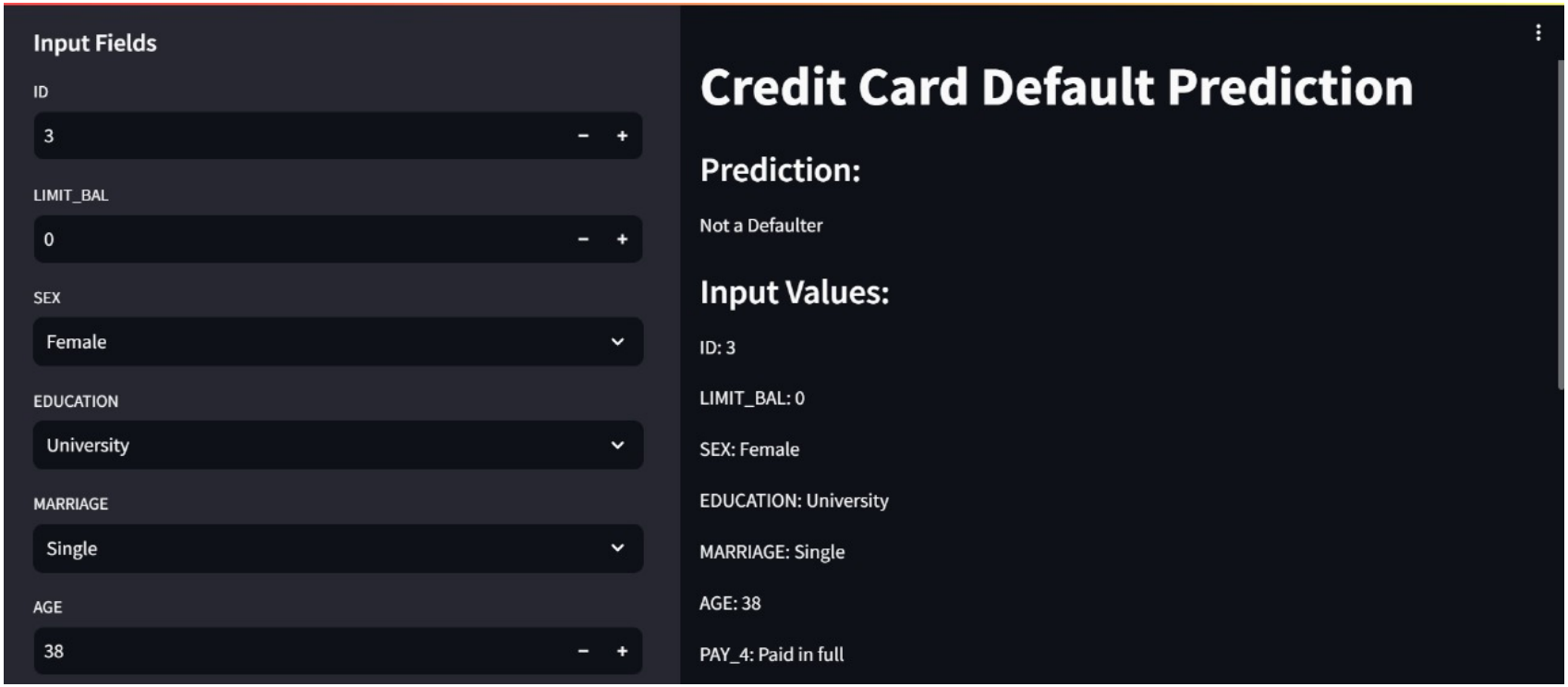
Accuracy Results

Table 1: **Models with Accuracy**

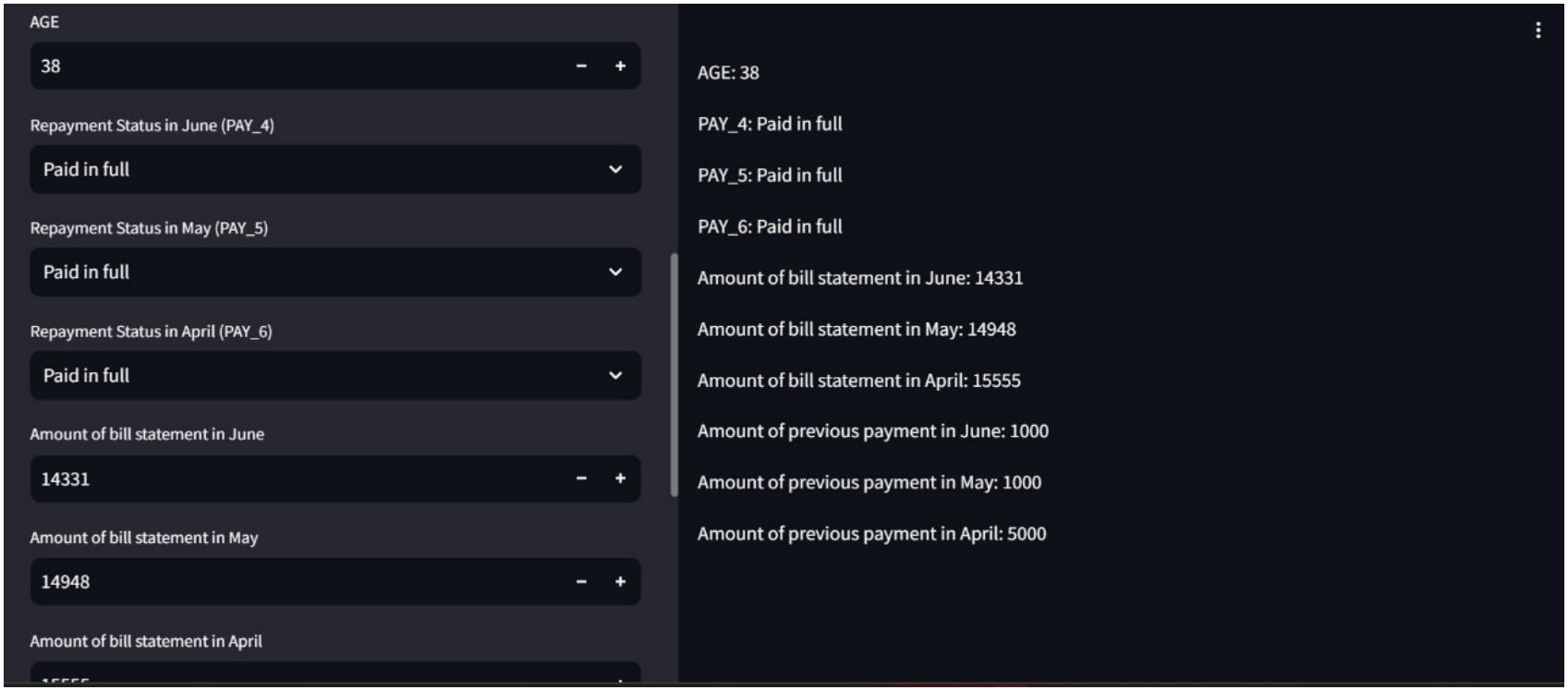
Model	**Accuracy**
Support Vector Classifier	0.993
Logistic Regression	100

- Selected Model : Logistic Regression

OUTPUT


Input Fields
ID
3
LIMIT_BAL
0
SEX
Female
EDUCATION
University
MARRIAGE
Single
AGE
38
Credit Card Default Prediction
Prediction:
Not a Defaulter
Input Values:
ID: 3
LIMIT_BAL: 0
SEX: Female
EDUCATION: University
MARRIAGE: Single
AGE: 38
PAY_4: Paid in full

OUTPUT


AGE
38
Repayment Status in June (PAY_4)
Paid in full
Repayment Status in May (PAY_5)
Paid in full
Repayment Status in April (PAY_6)
Paid in full
Amount of bill statement in June
14331
Amount of bill statement in May
14948
Amount of bill statement in April
AGE: 38
PAY_4: Paid in full
PAY_5: Paid in full
PAY_6: Paid in full
Amount of bill statement in June: 14331
Amount of bill statement in May: 14948
Amount of bill statement in April: 15555
Amount of previous payment in June: 1000
Amount of previous payment in May: 1000
Amount of previous payment in April: 5000

Thank You