



SMART LOAN PORTAL WITH AI MODEL FOR ELIGIBILITY ANALYSIS

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1. What This Project Is

- This project is a complete loan application website.
- Users can apply for a loan online.
- The system uses an AI model to check if the loan will be
 - **Approved or Rejected**
- Everything happens automatically with no manual checking.

2. What I Built

I created the full system including:

- User login & registration
- A loan prediction form
- A history page showing past results
- An admin dashboard with charts
- A machine learning model connected to Django
- Clean and simple frontend design

3. The Machine Learning Model

- I used a loan dataset with many past records.
- I cleaned the data and removed missing values.
- I trained the model to learn patterns of people who get loans.
- The model becomes smart and predicts with high accuracy.
- I saved the model and connected it with Django.

4. Technologies I Used

- **Frontend:** HTML, CSS
- **Backend:** Django (Python)
- **Database:** MySQL
- **ML Libraries:** pandas, numpy, scikit-learn
- **Tools Used:** VS Code

5. Output

Approved when:

- High income
- Good credit history
- Low or reasonable loan amount
- Stable job / graduate

Rejected when:

- Low income
- Weak credit history
- Very high loan amount
- Unstable profile

6. Output Screenshot – login , register

Smart Loan Portal

Login

Enter Username

Enter Password

Login

Create New Account

Smart Loan Portal

Create Account

Enter Username

Enter Email

Enter Password

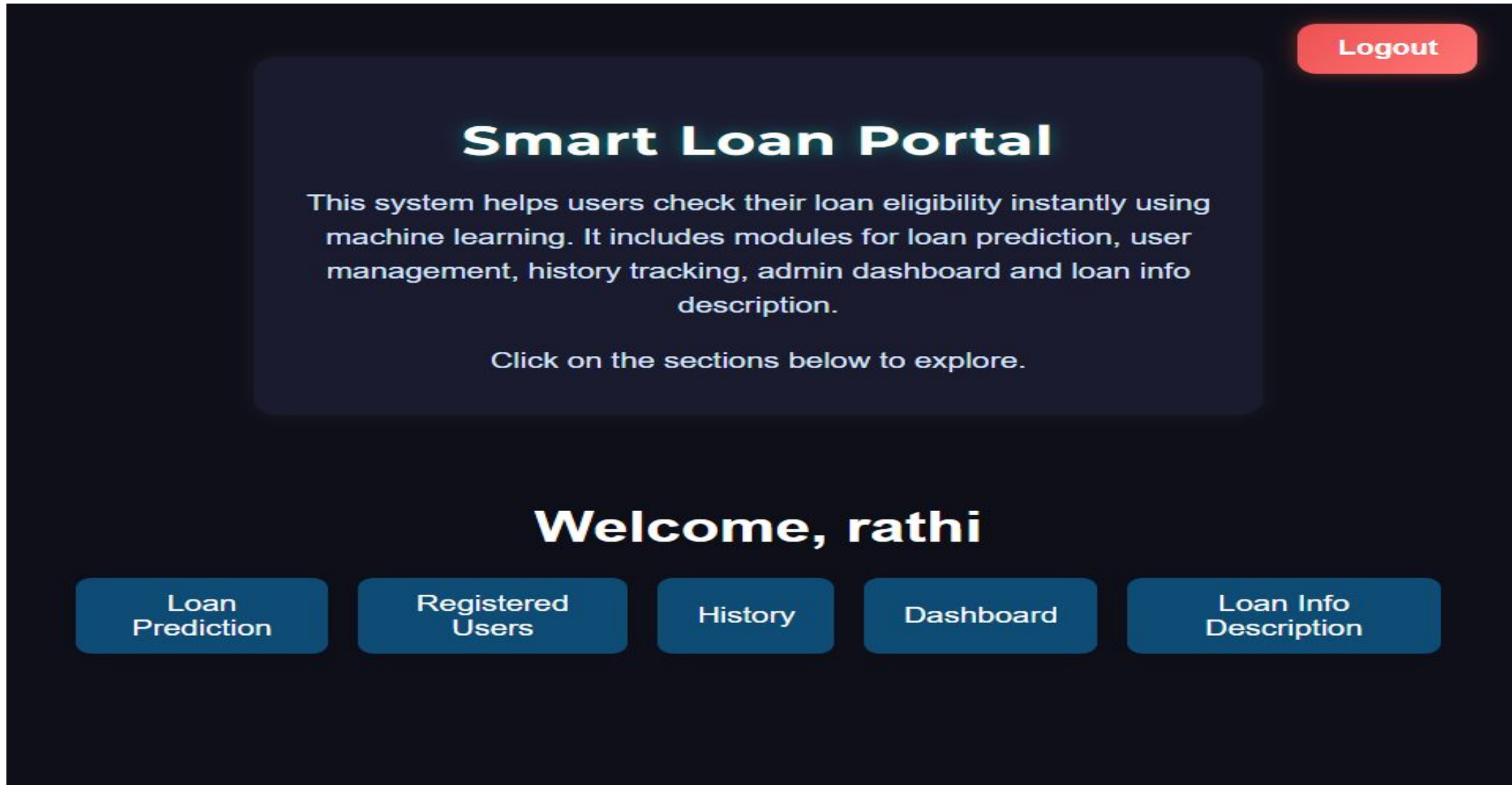
Enter Age (Optional)

Enter Permanent Address (Optional)

Register

Already have an account? [Login](#)

6. Output Screenshot



6. Output Screenshot



Welcome, rathi

Loan Prediction

Registered Users

History

Dashboard

Loan Info Description

Loan Eligibility Prediction

Gender

Male

Married

Yes

Dependents

0

Education

Graduate

Self Employed

Yes

Applicant Income

Co-applicant Income

Loan Amount

Loan Amount Term

360

Credit History

Good (1)

Property Area

Urban

Predict Loan Eligibility

6. Output Screenshot



Welcome, rathi

Loan Prediction

Registered Users

History

Dashboard

Loan Info Description

Loan Eligibility Prediction

Gender

Female

Married

No

Dependents

2

Education

Graduate

Self Employed

Yes

Applicant Income

50000

Co-applicant Income

5000

Loan Amount

500000

Loan Amount Term

200

Credit History

Bad (0)

Property Area

Semi-Urban

Predict Loan Eligibility

Prediction: Rejected

6. Output Screenshot



Welcome, dia

[Loan Prediction](#)[Registered Users](#)[History](#)[Dashboard](#)[Loan Info Description](#)

Loan Eligibility Prediction

Gender Male	Married Yes	Dependents 0
Education Graduate	Self Employed Yes	Applicant Income 8000
Co-applicant Income 2000	Loan Amount 120	Loan Amount Term 360
Credit History Good (1)	Property Area Urban	

Predict Loan Eligibility

Prediction: Approved

6. Output Screenshot

Pre

Prediction: Approved

Decision Explanation

- Low total income

Prediction: Approved

Decision Explanation

- Good credit history
- Sufficient income
- Affordable EMI
- Low financial risk

Pre

Prediction: Rejected

Decision Explanation

- Poor credit history

6. Output Screenshot

Welcome, rathi

[Loan Prediction](#)[Registered Users](#)[History](#)[Dashboard](#)[Loan Info Description](#)

Registered Users

ID	Username	Email	Edit	Delete
1	rathi	poornarathi32@gmail.com	Edit	Delete
2	Poorna	poornarathi@gmail.com	Edit	Delete
3	dia	dia@gmail.com	Edit	Delete

6. Output Screenshot

Your Loan History

ID	Applicant Income	Co-applicant Income	Loan Amount	Credit History	Property Area	Prediction
50	4000.0	2000.0	50.0	0.0	Urban	Rejected
49	5000.0	8000.0	5000.0	1.0	Urban	Rejected
48	8000.0	2000.0	1.0	1.0	Urban	Approved
47	8000.0	2000.0	1.0	1.0	Urban	Approved
46	8000.0	2000.0	0.12	1.0	Urban	Approved
45	8000.0	2000.0	0.12	1.0	Urban	Approved
24	5000.0	3000.0	80000.0	1.0	Urban	Rejected
23	5000.0	3000.0	80000.0	1.0	Urban	Rejected

Welcome

Loan
Prediction

Registered
Users

His

Admin Dashboard

Total Users: 3

Total Loans: 50

Approved: 4

Rejected: 46

6. Output Screenshot

Loan Status Guide

Approved: When your income is good, credit history is strong (1), loan amount is reasonable, and your repayment capability is clear.

Rejected: When income is low, credit history = 0, loan amount is too high, or financial risk is high.

Input Field Meaning

- **Applicant Income:** Your monthly salary.
- **Co-applicant Income:** Family/partner's supporting income.

- **Credit History:** 1 = Good record, 0 = Poor record.
- **Loan Amount:** Total loan you are requesting.
- **Loan Amount Term:** Number of months to repay (usually 360).
- **Dependents:** Number of people financially depending on you.
- **Self Employed:** Yes/No – shows income stability.
- **Property Area:** Urban/Semi-Urban/Rural (Urban has higher approval chance).

Close



Thank You