

Fraud Detection System:

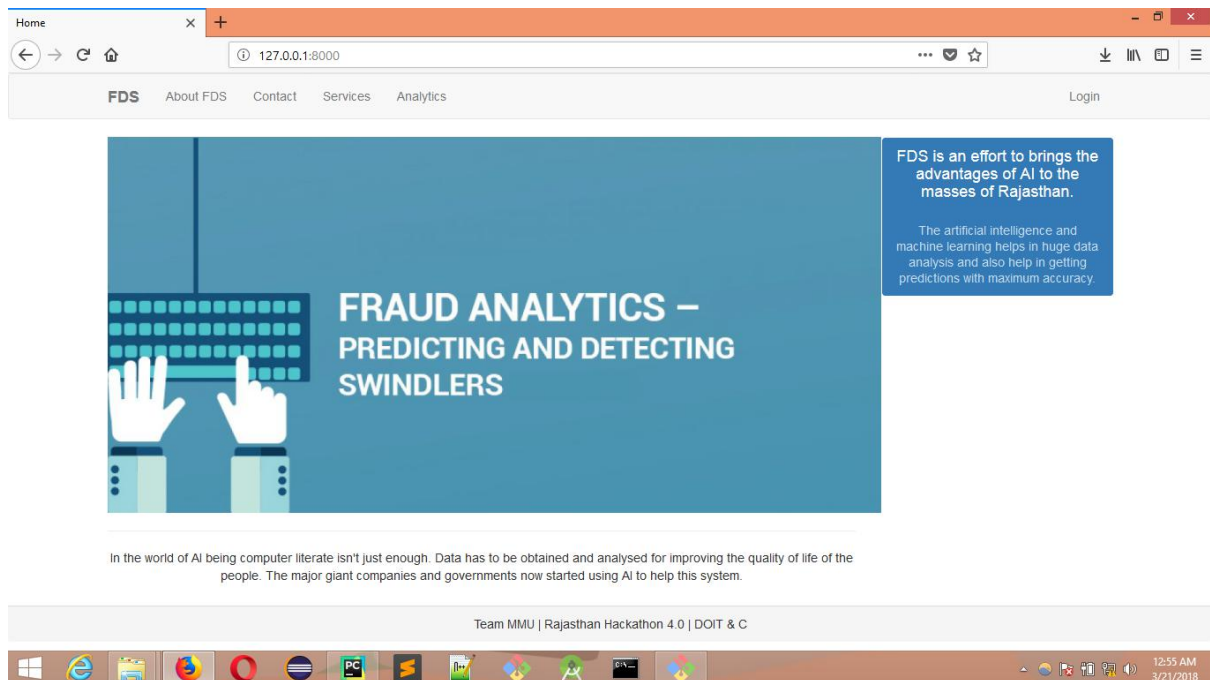


Fig. Home page of FDS

Providing AI services to the organizations of Rajasthan and enhance this technique globally.

The concept is to introduce a new service in financial organizations which allows them to make use of AI for their everyday needs. We provide the advances of AI to the financial organizations i.e. A system that can predict the chances of fraud to be done by customers in various ways.

First we collect data from the organizations, this is an essential step. Once the data is collected we perform analysis on it and create a training dataset to train our AI on.

Once enough data has been collected, we train an AI model on it. The model can be tuned to maximize Accuracy / Precision or Recall as needed. The predictions of this model are provided as a service to the people via FDS.

In this system we are performing a task i.e. Given a data by entering the field names. Our system will Analyse and generate a report whether a person can do fraud or not?

Predictions:

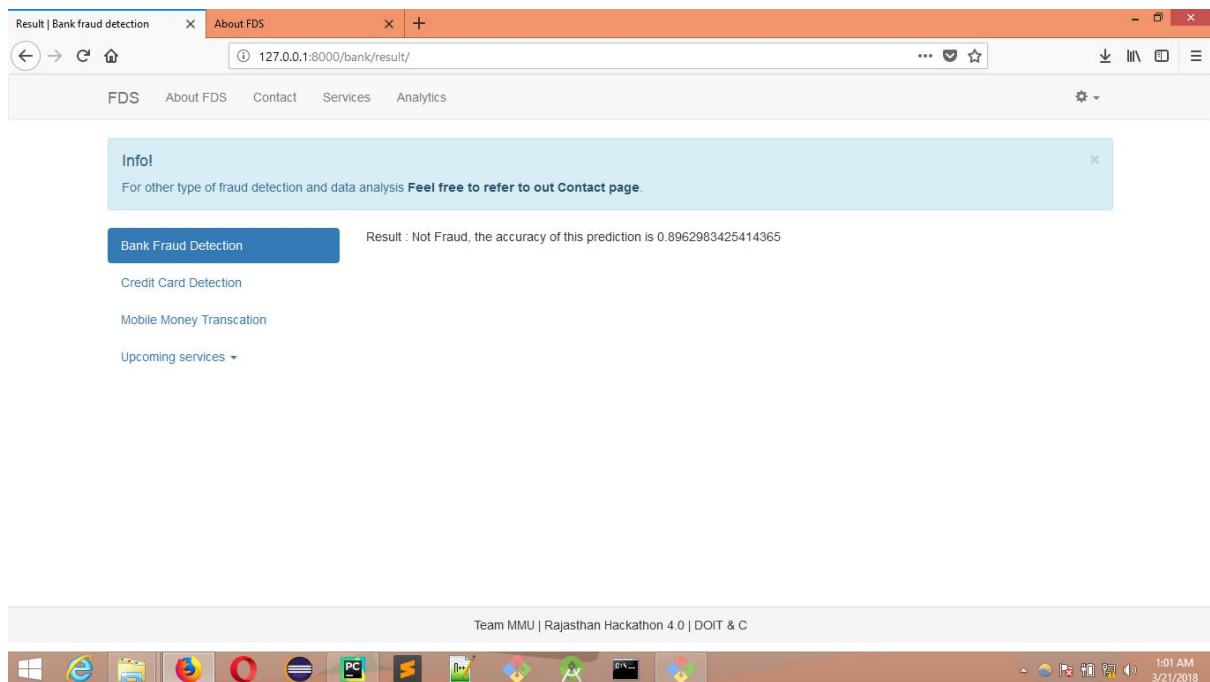


Fig. Prediction result by FDS

As an example images uploaded to the site that the system will generate prediction with their accuracy rate.

Impacts:

The expertise of this system is only available to Government or financial organizations. By mapping their expertise to an AI system we can provide that expertise to a wider range of organizations. This will help Rajasthan and also our country to grow well. This system also provides employment opportunities which do not require skill and knowledge in some cases. With the help of this system, the government/financial organization keep track the threat of fraud before they fall prey to the perpetrators.

Walkthrough of website:

1. Home • Landing page. Nothing to discuss
2. About FDS • About the idea
3. Contact • Contact page
4. Services • Three services are available as of now:
 - Bank Fraud Detection
 - Credit Card Fraud Detection
 - Mobile Transaction Fraud Detection

In all of the provided services user have to input the field names provided there and press the submit button. The system will automatically generate the prediction with an accuracy rate based on system AI training. The system also provides analysis of the data by generating a graph report.

Demo Video Link:

<https://www.youtube.com/watch?v=6xjlY4YKVxE>

Explaining the Folders in code tree:

- FDS: Django project directory
- migration: Database files for login module
- images: images used to train the classifiers
- notebooks: Analysis notebooks
- static: static files
- templates: templates for pages
- requirement.txt: all required libraries