INVESTMENT NAMED ENTITY RECOGNITION

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Abstract : Entity recognition plays an important role in many natural language processing tasks, such as relation detection and information extraction. This paper presents a novel method to recognize entities in financial news. Investment named entity recognition helps the investors by validating the start-up in which they can invest by predicting the profit they get. Investment named entity help to know how much profit investors get by spending how much money in a start-up. The prediction of profit is made by using a machine learning method that is multiple linear regression.

Keywords: Multiple linear regression, Machine learning, Profit.

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1. INTRODUCTION

The aim of this project is to predict the profit from the given multiple input variables. Recent studies have shown that there is a dramatical change in investments over the last 4-5 years. In 2020 the rate of investment has increased to 73 % where 70 % of people are in the age group of 18 to 35 years and remaining 3 % of people belongs to +35 years. Investment is the process of allocating money with the expectation of a positive benefit/ return in the future. Investments are made with the view of earning returns which grows our amount invested to a higher sum. Apart from that making regular investments forces people to set aside a sum regularly, therefore it helps people to instil sense financial discipline in the long run. So, we have done our project on investment with an idea that it should help investors.

2. DESIGN

Investment named entity recognition consist of the following modules. Modules used in this system are:

1. Web Application Module:

We have developed a web application where the user should enter the details like name, email Id, R and D spend, administration spend, marketing spend and state. So, our system takes the input from the user with the help of this web application and it displays the output in the same html page.

2. Importing Dataset Module:

A dataset of size 50 start-ups is taken and it is in the type of csv file type. It contains 4 features.
They are:
1) R and D Spend
2) Administration Spend
3) Marketing Spend
4) State

3. Pre-processing Dataset Module:

Pre-processing is a process of preparing raw data and make it suitable for machine learning. Based on the problem statement, data should be taken then the identification of input variables and output variables is done, then missing values are identified, and at last categorical data is transformed into non categorical data by using one-hot-encoder.

4. Appling Machine Learning Models:

Based on the dataset we have taken machine learning models should be applied. As our system know the target-variable i.e. profit we used supervised learning and as it also contains multiple independent variables regression models are applied. The basic steps that lead to machine learning will teach you how it works are described below
1) Gathering data
2) Preparing the data
3) Choosing a model
4) Training
5) Evaluation
6) Prediction

3.Figure
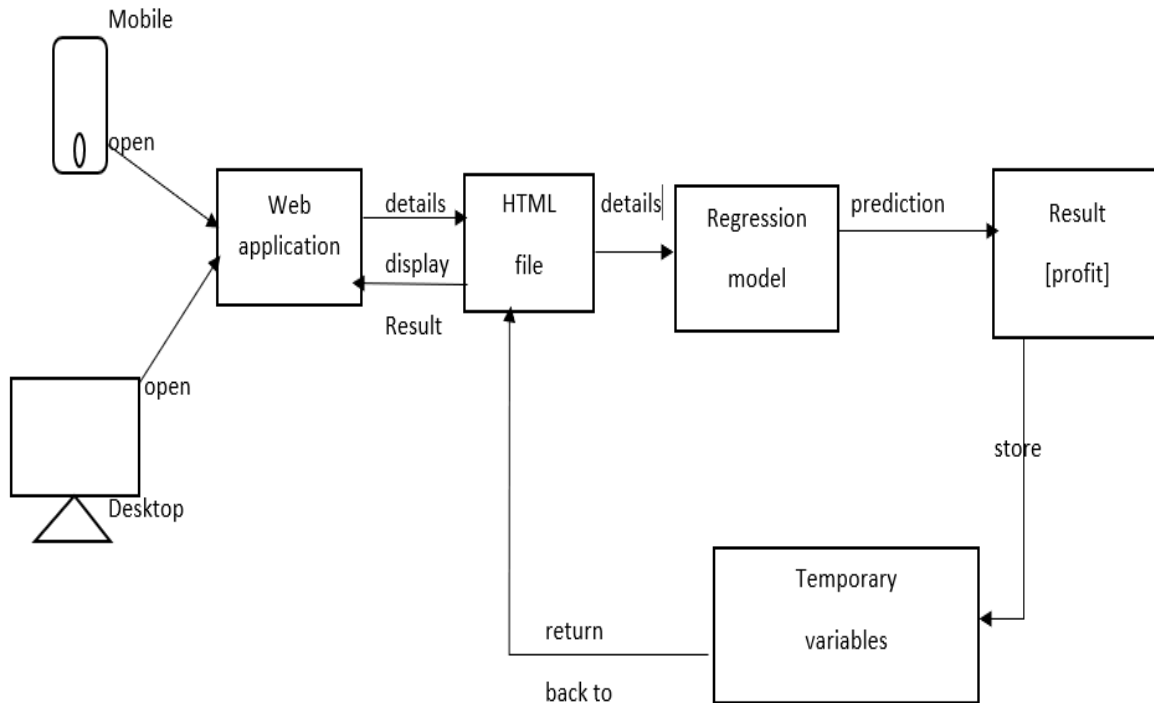
4.ANALYSIS

The major idea of our project is we use regression models from machine learning domain to predict the profit from the given multiple independent variables by the users. So, our project helps investors as they can use our application to know the estimated profit from the investment they do in various departments in a start-up.

5. RESULTS

User need to open the website and enter the details required to see the prediction of profit.

6. CONCLUSION

The Investment named entity recognition helps the investors by predicting the profit they get. It validates the start-up in which investors want to invest and it helps to know how much profit they get by spending how much many in each department in the start-up.

REFERENCES

[1]   J. Bergstra, O. Breuleux, F. Bastien, P. Lamblin, R. Pascanu, G. Desjardins, J. Turian, D. Warde-Farley, Y. Bengio, '', Proceedings of the Python for Scientific Computing Conference (SciPy), Jun. 2010.

[2]   F. Pedregosa, G. Varoquaux, A. Gramfort, V. Michel, B. Thirion, O. Grisel, M. Blondel, P. Prettenhofer, R. Weiss, V. Dubourg, J. Vanderplas, A. Passos, D. Cournapeau, M. Brucher, M. Perrot, E. Duchesnay, " Machine learning in Python", Journal of Machine Learning Research, vol. 12, pp. 2825-2830, 2011.