Stubble Aggregation : An E-Commerce Website

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Abstract - Agriculture has always been a vital element of our life since it feeds our expanding population. Many people rely on farmers, and farmers rely on environmental conditions, thus protecting the environment is everyone's responsibility. However, as the population and businesses have grown, pollution has increased, making weather conditions more unpredictable.

Farmers are burning stubble because they need to clear the fields as soon as possible in order to plant the next crop; the stubble, which farmers consider waste, is useful in a variety of applications, including power generation, cellulosic ethanol production in PPP mode, and paper/board/panel/packaging material. Farmers are burning stubble because they lack a marketplace to sell or buy it. With our idea, we will provide a platform for farmers to sell or acquire stubble in an environmentally beneficial manner. We'll create an app to buy and sell stubble, as well as hire crop residue cutting machinery.

Key Words: Agriculture, population, business, cellulosic ethanol, power generation

1.INTRODUCTION

As a result of the rise of agro-pollution in a country that is already dealing with severe pollution from all aspects of life, such as automotive, construction, and household pollution, the system tends to solve agricultural sector pollution in the best possible way by employing innovative ideas and technology, which will eventually assist the country in addressing the problem of pollution and making people's lives easier. Farmers will be the primary users, followed by businesses looking to purchase stubble and traders looking to rent crucial agricultural machines.

1.1 Motivation

Encourage farmers and companies to work together so that both can contribute more to the economy and reduce losses from stubble burning in the United States. As needed, assist other farmers in renting and renting out machines. Make it possible for farmers and companies to readily buy and sell stubble online.

1.2 Problem statement

The major goal of the crop it system is to make it easy for farmers and businesses to buy and sell stubble online, which will reduce crop burning and, as a result, air pollution.

2. Methodology

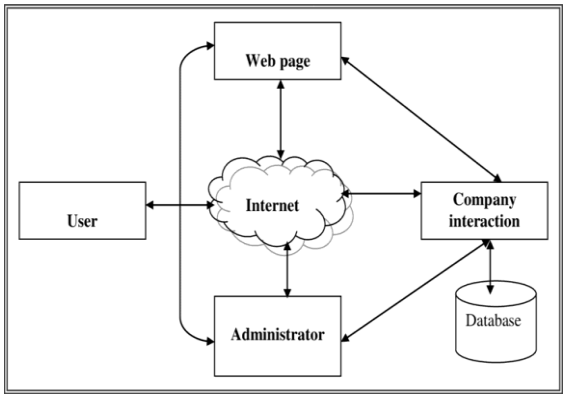


Fig -1: System Architecture

As part of a machine learning system that uses Google api and Logistics Regression, we will train our individual datasets of thousands of records to predict precise costs for the various stubble trades. It is possible to predict a data value using the statistical analysis method known as logistic regression. When predicting an output value, weighting or coefficient values are used to linearly blend input values (x) (y).

There are numerous algorithms used in E-Commerce to discover the best products to its customers. For the most part, these search engines use a wide range of data to present items that are far more likely to purchase the product.

3. Modules

His stubble can be sold and machinery rented using the FARMER MODULE. We've included features like translating the site's content and make the module more user-friendly.

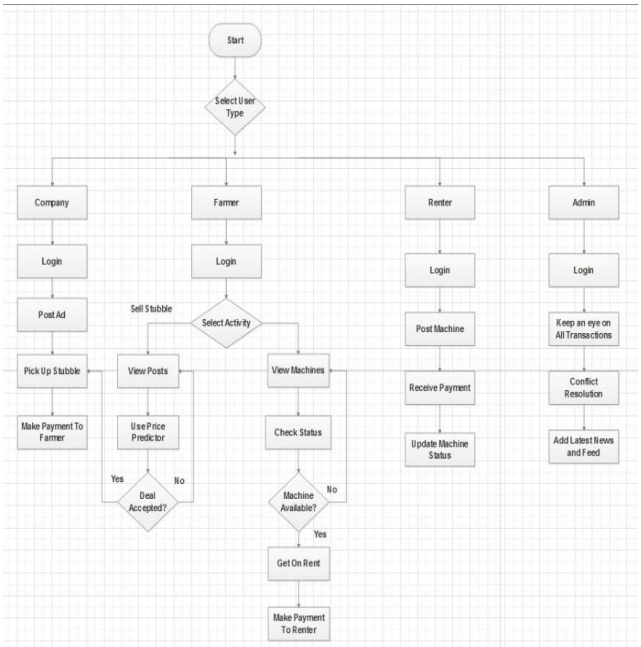
As many farmers as possible accept a company's offer for the stubble they wish to acquire, and the company will

verify their needs by analysing their profiles and then confirm the order to buy from farmers based on their location, price, and stubble.

TRAILERS AND HARVESTERS RENTAL MODULE: We're building a platform that will allow farmers to rent tractors and harvesters on-demand. In these modules, farmers can rapidly locate and price important commodities from nearby areas. Farmers can rent and even provide goods for rent using the post items.

Farmer's information, transactions, approved requests and company information are all stored inside this module. The Admin module is the most important component in keeping track of all of this information.

Our machine learning algorithm will use Google API and Logistics Regression to calculate the distance between a farmer's land and the corporate, utilising our own dataset of thousands of records to predict precise cost estimates for each stubble exchange.



4. Algorithm

SVM Algorithm:

A support vector machine (SVM) is a supervised machine learning model that employs classification techniques for two-group classification problems. After being provided sets of labelled training data for each category, SVM models are capable of categorising new text.

They have two significant advantages over newer algorithms like neural networks: they are faster and perform better with less data (in the thousands). This makes the approach appropriate for text classification problems, which typically require a dataset of a few thousand labelled samples. So, we trained and classified our datset using the SVM method.

5. Conclusion

So, using our approach, we hope to connect farmers and businesses so that both may contribute more to the economy and assist to lessen the nation's losses from stubble burning. We also aim to educate farmers about the reasons that will encourage them to use our application, as well as the significance of the financial rewards that they will obtain from this E-Commerce Website, which will also assist to reduce the nation's losses caused by stubble burning.

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