A Synopsis on

AI based E-Commerce System for Organic Food

Submitted in partial fulfillment of the requirements
of the degree of

Bachelor of Engineering

in

Information Technology

by

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CERTIFICATE

This is to certify that the project Synopsis entitled ***"AI based E-Commerce System for Organic Food"*** Submitted by ***"Pranit Kadlag(16204005),Subodh khobrekar(16204007),Kunal Band(16204004),Rahul Vishwakarma(16204018)"*** for the partial fulfillment of the requirement for award of a degree ***Bachelor of Engineering*** in ***Information Technology.***to the University of Mumbai,is a bonafide work carried out during academic year 2018-2019

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Declaration

We declare that this written submission represents our ideas in our own words and where others' ideas or words have been included, We have adequately cited and referenced the original sources. We also declare that We have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in our submission. We understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

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Abstract

Foods are available in market which is made by using many artificial fertilizers. Many people get sick because of eating food which is growth using artificial fertilizers. These chemicals are very harmful for the human beings health especially for the children. In our propose system products get available which are grown without chemical fertilizer and made available for customers in a good price. so, this system help farmers to ensure greater profitability through direct farmer to supplier. In proposed system provide direct interaction between farmer and the customer. We are implementing forum for farmers, where each and every queries asked by the farmers are discussed and appropriate solution are given. Artificial Intelligence and Machine Learning Technologies in our system for product recommendation for our customers based on their product sales. To handle traffic running on our server will be balanced using tool Nginx.

Introduction

The term organic refers to the way agricultural products are grown and processed. Organic produce and other organic ingredients in retail products are grown without the use of synthetic pesticides and fertilizers, sewage sludge, genetically modified organisms or ionizing radiation. Proposed System provide online product which are growth in natural way so, anyone can buy it online and eat healthy food which help them to stay fit. There are log in for customer and vendor. By log in customer can choose product, add to cart and purchase. Farmers and vendor can add their product by their log in. Also it provides great profit to farmers. Many people get sick because of eating food which is growth using artificial fertilizers. These chemicals are very harmful for the human beings health especially for the children. Our motive is to provide food that are carefully grown by our Indian Farmers from 100% organic manure and compost, without use of any artificial pesticides and fertilizers. we have started this website to ensure the best saying "Prevention is better than Cure". We are going to use a novel collaborative filtering based personalized recommendation method for E-commerce platform. That contain 3 modules 1) Behavior record module, 2) Model analysis module, and 3) Recommendation algorithm module[4]. It helps to recommend product to customer, it will also help customer to reach their interested product. For secured transaction we provides payment portal. There are various type of electronic payment system[3]. so we proposed secured payment portal in our system. When more request come towards the server load balancing is required that provide smooth service to the user. There are various algorithm are useful to handle load balancing i.e openflow, sflow [2].

Literature Review

Sr No.	Author name	Paper name	Merits	Demerits
1	Ruchika, Ajay Vikram Singh, Mayank Sharma Amity Institute of Information Technology, Amity University, Uttar Pradesh, Noida	Building an Effective Recommender System Using Machine Learning Based Framework,2017	In this paper, describes recommendation bases on implicit and explicit feedback using adaption of collaborative filtering in Apache Mahout platforms via Eclipse on a sample data set.	In this paper the problem of scalability was solved by the mahout to a certain extent because of the presence of hadoop framework. But with the increasing size of data sets it does not fit all.
2	S.Wilson Prakash, Dr.P.Deepalakshmi, Department of Computer Science and Engineering	Server-based Dynamic Load Balancing, 2017	In this paper,proposed a dynamic server load balancing algorithm based on OpenFlow and sFlow to distribute the load efficiently among the cluster of servers.	In this paper switches reactively based on the load of the servers measured based on the memory usage, CPU usage, & active connection counts.
3	Mr. Sunil A. Sushir, Ms.Rujata Chaudhari, Asst.Prof., Department of Information Technology.	Survey of Electronic Payment Systems, 2018	The different categories of electronic payment systems in terms of online payment processes, authentication mechanisms, and authentication types.	Paper will be further demonstrate application of the different authentication mechanisms and types in the categories of the electronic payments system highlighted.
4	Liu Yan Department of Business Administration, Shenyang Polytechnic College, Liaoning Shenyang110045, China	Personalized Recommendation Method for E-Commerce Platform based on Data Mining Technology, 2017	In this paper proposed personalized recommendation algorithm. This algorithm contain on three modules 1) Behavior record module, 2) Model analysis module, and 3) Recommendation algorithm module.	This paper describes recommendation based on personal behavior only, recommendation based on personal information will be further demonstrate.

Table 1: Literature Review

Objectives

1. To make people aware about Organic Food.
2. Provide secure payment portal.
3. User friendly Design.
4. Get notification when new offer/product available.
5. Load balancing using Nginx.
6. Recommendation Email notification.

Problem Definition

Most of people get sick by what they eat .Food available in market is made by pesticides and fertilizers, sewage sludge etc. To make aware people about organic food and make available food online easily. Organic food which is growth in natural environment and made available from direct farmers or vendor.

Proposed System Architecture/Working

1. **Single Sign On :-**
   User can register them self By using Gmail and facebook ID.

2. **In proposed system products service available 24x7 :-**
   Online accessible for 24x7. Can add or buy product 24x7.

3. **Email notification:**
   Email notification for new offers.
   Invoice for buy product.

4. **Forum for Farmers.**
   Farmers can add any queries .Anyone can provide solution who knows about it.

5. **Recommendation**
   Product recommendation
   Search recommendation

6. **Load Balancing**
   Load Balancing using Nginx.

7. **Online payment.**

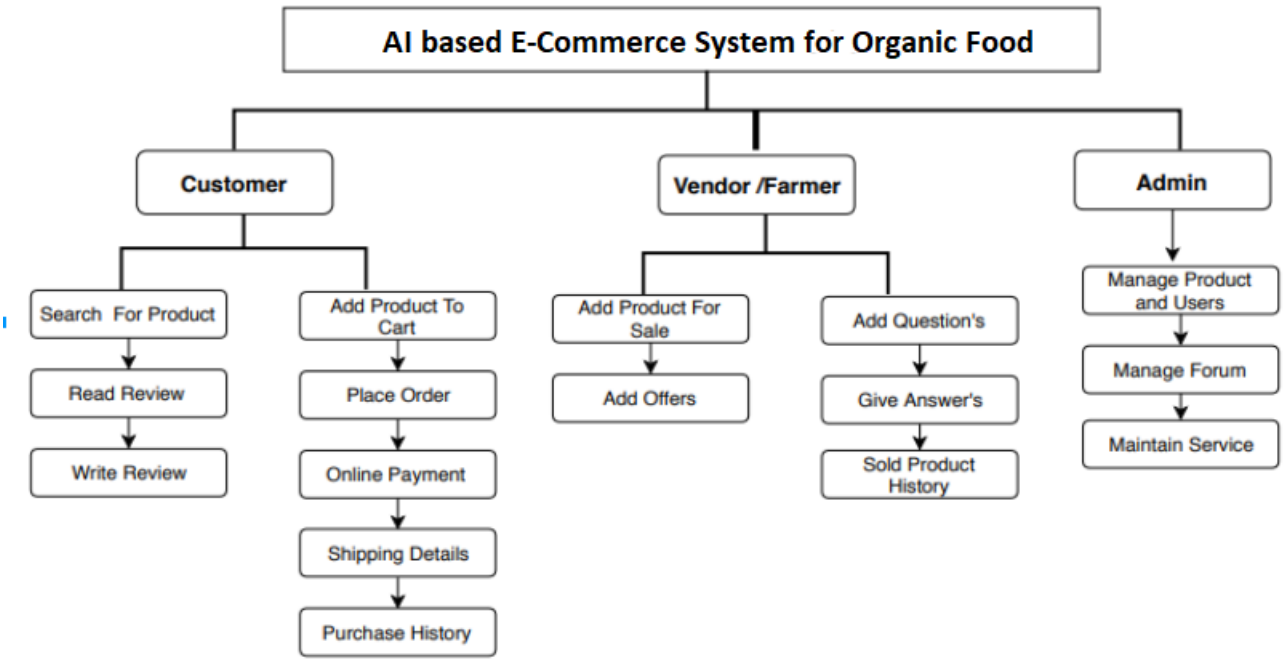

Figure 1: workflow

Summary

The propose model provides food which is made without use of any artificial pesticides and fertilizers. It is available online 24 x7 so anyone can buy it easily. our proposed model give direct interaction of customer to farmer. It provides great profit to farmers. We will be looking for recommendation of product based on customer sales and their interest. We also look forward to discover notification feature which is notified to customer when any new product or offer is launched. Also discover forum for farmers.

References

[1] Ruchika, Ajay Vikram Singh, Mayank Sharma, "Building an Effective Recommender System Using Machine Learning Based Framework", Amity Institute of Information Technology, Amity University, Uttar Pradesh, Noida

[2] S.Wilson Prakash, Dr.P. Deepalakshmi, "Server based Dynamic load balancing", Department of Computer Science and Engineering,Kalasalingam University,20-22 july,2017.

[3] Mr. Sunil A. Sushir, Ms. Rujata Chaudhari, "Survey of Electronic Payment Systems", Asst. Prof., Department of Information Technology,A. P. Shah Institute of Technology,April 20-21, 2018.

[4] Liu Yan " Personalized Recommendation Method for E-Commerce Platform based on Data Mining Technology " Department of Business Administration, Shenyang Polytechnic College, Liaoning Shenyang110045, China

[5] http://www.zbnfonline.org