Introduction

1.1 INTRODUCTION

Online shopping has become call of the day. People are showing more inclination towards online shops, due to large variety of options at fingertips, ease of access, and access to global product. Further buyer also benefits from information regarding user reviews of products, comparison of similar products etc. Therefore the importance of product review is also escalating exponentially.

The proposed algorithm is more efficient as compare to some of the popular review analysis system with enormous datasets.

1.2 AIM & OBJECTIVES:

Aim:

The aim of the project is creation of this project which will have the following innovative features:-

- Best Recommendation of products.
- Easy Buying of product online.
- User Friendly system.
- Availability

Objective:

The objectives of the project are as follows:-

- Build a reliable system.
- We intend recommend best product to the user as per their requirements.
- Decision making & Analysis.
- Easy interpretation of large volumes of data.
- Cross selling

Literature Review

2.1 EXISTING SYSTEM

Online shopping has become call of the day. People are showing more inclination towards online shops, due to large variety of options at fingertips, ease of access, and access to global product. Further buyer also benefits from information regarding user reviews of products, comparison of similar products etc. Therefore the importance of product review is also escalating exponentially. People nowadays are inclined towards online shopping as it provides ease of access to all global products. Purchasing an item is just few clicks away. As there are wide variety of products available of each brand it becomes too time consuming to actually search best suited products as many people are not aware about reviews each product has. Also there is emergence of many ecommerce sites, so to buy product from which shopping site, is issue faced by many.

Drawbacks:

- It is very difficult for users to select products.
- Limited product availability.
- Waste of time to find and compare products.
- Availability is less.

Problem Definition

3.1 Detailed Problem Statement

- **CURRENT SITUATION:** People nowadays are inclined towards online shopping as it provides ease of access to all global products. Purchasing an item is just few clicks away.
- PROBLEM: As there are wide variety of products available of each brand it becomes too
 time consuming to actually search best suited products as many people are not aware about
 reviews each product has. Also there is emergence of many ecommerce sites, so to buy
 product from which shopping site, is issue faced by many.

3.1.1 Solution

• We aim to build a tool that recommends the best suited product for customer based on budget, brand and discount provided by user and also recommends the site from which it can be bought based on availability of reviews offered on site.

3.2 Scope of the Project

The web Server Log Processing has bright, vibrant scope in the field of Information Technology. Log files collect a variety of data about information requests to your web server. Server logs act as a visitor sign-in sheet.

They can answer questions such as:

Who visits your website?

What browsers do they use?

What pages do they view?

IT organizations use server log analysis to answer questions about:

- **Security** For example, if we suspect a security breach, how can we use server log data to identify and repair the vulnerability?
- Compliance Large organizations are bound by regulations such as HIPAA and Sarbanes-Oxley. How can IT administrators prepare for system audits?

Description of the Project

4.1 Proposed System (Block Diagram)

4.1.1 Block Diagram

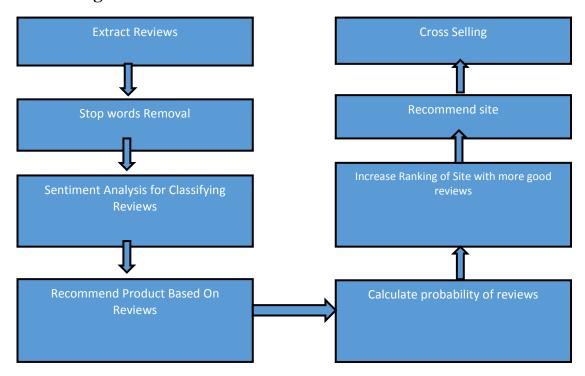
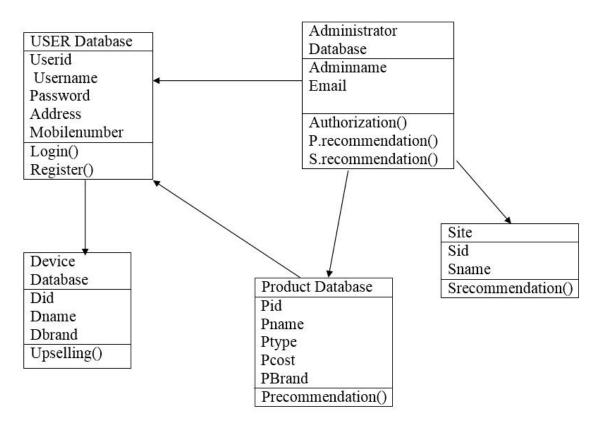
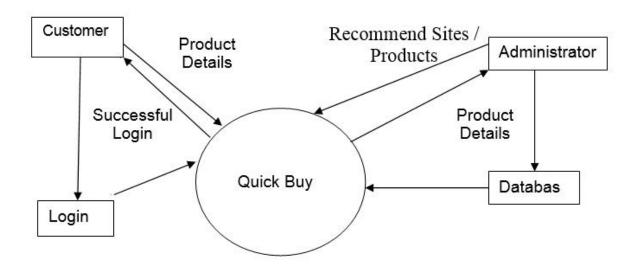


Fig 4.1: Block Diagram of system

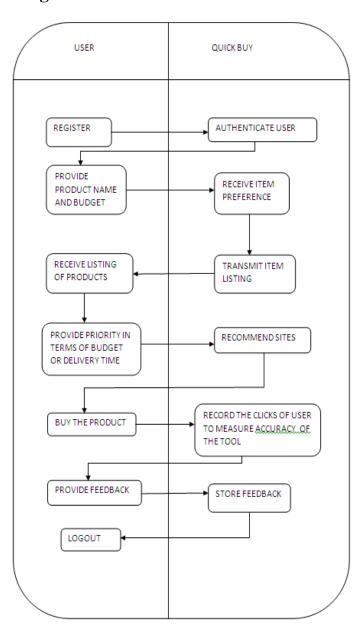
4.1.2 Class Diagram



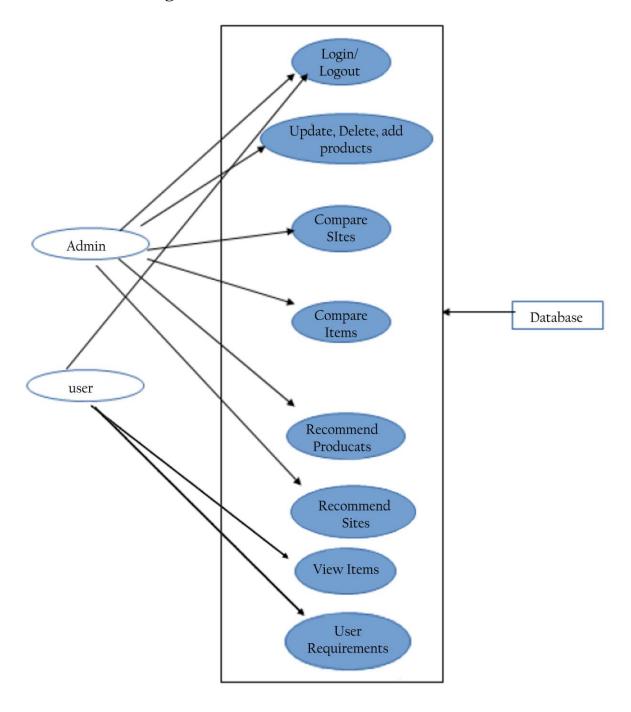
4.1.3 Context Level DFD



4.1.4 Sequence Diagram



4.1.5 Use Case Diagram



4.2 Methodology, Techniques and Algorithm

4.2.1 Methodology:

Proposed solution Recommendation system. This is helpful for users for buying products online. Online shopping has become call of the day. People are showing more inclination towards online shops, due to large variety of options at fingertips, ease of access, and access to global product. Further buyer also benefits from information regarding user reviews of products, comparison of similar products etc. Therefore the importance of product review is also escalating exponentially. The proposed algorithm is more efficient as compare to some of the popular review analysis system with enormous datasets. We aim to build a tool that recommends the best suited product for customer based on budget, brand and discount provided by user and also recommends the site from which it can be bought based on availability of reviews offered on site.

4.2.2 Techniques:

- Extraction of reviews : Using perl scripts and amazon api.
- Stop words removal : PHP
- Sentiment analysis : PHP and dictionary algorithm
- Classification of products : Decision tree algorithm
- Tracing of device brand : Platform.js library
- Recording clicks : JavaScript

4.3 Requirement Analysis

4.3.1 Hardware

- ❖ Operating System-Linux
- Processor-Dual core
- ❖ System RAM-2GB minimum
- ❖ Hard Drive 200 GB minimum

4.3.2 Software

- Perl
- ❖ Notepad ++
- Web Browser

4.3.3 Feasibility

Feasibility study depends on your organization. To create a feasibility study on your project, try to answer the following questions:

- 1. How the project help the organization and its user.
- 2. Time and cost involved
- 3. What technology in place right now and what is required?
- 4. Skills required implementing the project
- 5. Your organization current environment
- 6. Risk factors

<u>Technical feasibility</u>:- The technical feasibility study in our project involves technologies that will be used. We aim to use web browser for user and Microsoft Word for documentation of our project. All aspects of the project are covered using the available resources which is why our project is technically feasible.

<u>Economic Feasibility</u>:-The economic feasibility study evaluate the cost of the software development against the ultimate income or benefits available from the developed system. The softwares and technologies used like notepad is available free of cost .This makes our project economically feasible. The other cost involves cost of development and amount needed for analyzing, documentation, and internet connectivity, cost for generating hard copy report ads maintenance of software.

<u>Operational feasibility</u>:-Operational feasibility study tests the operational scope of the project to be developed. Our project offers a wide range of framework and platform to accomplish the ease of administrative operationality in web sector, thus making it highly recommended for those involved in administrative side and having extremely high operational scope, thus high usability.

4.3.4 Budget

PARAMETER	EXPENDITURE REQUIRED
Requirement gathering and analysis	1500.00
Documentation	1000.00
Stationary	700.00
Stationary	700.00
***	20000.00
Hardware cost	30000.00
Development	20000.00
Deployment	3000.00
Internet connectivity	1000.00
Development team salary	90000.00
Electricity and other miscellaneous things	10000.00
Maintenance	2000.00
TOTAL	1,59,200.00
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Table 4.3.4.1 : Estimated Budget

Design Detail

Our project will be developed using incremental Model. We aim in providing a very simple user interface to customers as it will be handy for them to navigate the entire tool. The design of the tool is responsive in nature and will acquire the screen size of devices it is viewed on. The various modules to be implemented are as follows:

- 1. Project documentation
- 2. Extraction of reviews
- 3. Data Preprocessing
- 4. Classification of products
- 5. GUI to be implemented
- 6. Recommending products and sites
- 7. Upselling
- 8. Deployment and testing of application

Implementation Plan

A Gantt chart, commonly used in project management, is one of the most popular and useful ways of showing activities (tasks or events) displayed against time. On the left of the chart is a list of the activities and along the top is a suitable time scale. Each activity is represented by a bar; the position and length of the bar reflects the start date, duration and end date of the activity. This allows you to see at a glance:

- What the various activities are
- When each activity begins and ends
- How long each activity is scheduled to last
- Where activities overlap with other activities, and by how much
- The start and end date of the whole project

Fig 6.1 Implementation Plan

Conclusion:

The proposed system is

- Reliable, fast and scalable approach.
- Recommends best products to user.
- Include numbers of products and website for recommendation.
- It is very easy to use and also have an good user interface.

References:

- [1] Xiaoyan Zhu Minlie Huang Jianshu Sun, Chong Long. Mining reviews for product comparison and recommendation. IEEE.
- [2] C.S. Kanimozhi Selv A. JeyaPriya. Extracting aspects and mining opinions in product reviews using supervised learning algorithm. IEEE.
- [3] Dr .M .P . Singh Ankita Shrivasta. Supervised semantic analysis of product reviews using weighted knn classier. IEEE.
- [4] http://www.flipkart.com/nikon-d7000-body-af-s-18-105-mm-vr-lens-dslrcamera/p/itmduzhmcucnhnga ? Pid = camcvydjzkyfzvugref = ld+7000otracker= fromsearch.
- [5] http://www.amazon.in/nikon-d3200-digital-camera-18-55mm/productreviews/b00jxel4ya/ref=dpxacrtxt?showviewpoints = 1.
- [6] http://www.snapdeal.com/product/hp-15ac116tx-notebook-n8m19pa5th/632029780937.