

A Project Report on

# **Product Comparison System**

Submitted in partial fulfillment of the requirements for the award  
of the degree of

**Bachelor of Engineering**

in

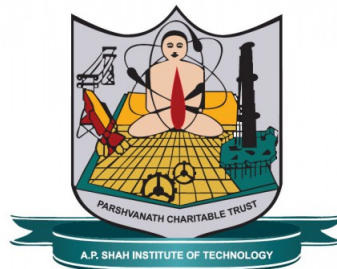
**Computer Science**

by

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Under the Guidance of

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UNIVERSITY OF MUMBAI

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## Approval Sheet

This Project Report entitled “*Product Comparison System*” Submitted by “*Mukesh Singh*”(15102041), “*Radheshyam Yadav*”(15102048), “*Raj Surve*”(16202015) is approved for the partial fulfillment of the requirement for the award of the degree of *Bachelor of Engineering* in *Computer Science* from *University of Mumbai*.

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## CERTIFICATE

This is to certify that the project entitled “**Product Comparison System**” submitted by “**Mukesh Singh**” (15102041), “**Radheshyam Yadav**” (15102048), “**Raj Surve**” (16202015) for the partial fulfillment of the requirement for award of a degree **Bachelor of Engineering** in **Computer Science**.,to the University of Mumbai,is a bonafide work carried out during academic year 2019-2020.

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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**

In this large growing ecommerce industry there are so many products with different brand's price range are available in ecommerce store such as (Amazon, Flipkart, Snapdeal, Paytm Mall, etc.) where product price range varies with same product, there are different prices on different ecommerce websites there may be some seasonal offers on the product or on that store due to which price may vary. In this busy digital environment searching about same product in different ecommerce websites may be time consuming for consumers to ease that effectively and efficiently we are creating a Product Comparison System named as Buy Smart which will compare product price from different ecommerce websites with their offers and current availability.

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# List of Abbreviations

PHP:	Hypertext Preprocessor
JS:	Java Script
PCS:	Price Comparison System
DB:	Database

# Chapter 1

## Introduction

Buy Smart is a production comparison system to compare prices of products in different websites at same time based on its availability at the user's location. It will display the exact amount by taking data from different websites in which products are available. The system is based on massive data manipulation and content based analysis technique to analyse the price in different websites.

### 1.1 Objective

The primary objective is to build a system to compare product prices and accordingly show their availability with a respective portal's buy link. Another objective is to show availability of particular product based on user's location.

### 1.2 Methods

#### 1.2.1 Data Crawling

The function of data crawling is to crawl the similar products information from various online stores according to the requirements of consumers.

#### 1.2.2 Data Parsing

The crawling data exists in the form of web pages and images, so that web data should be extracted, fit in order to get the relevant information. This format processing is called data parsing

#### 1.2.3 Information Searching

When users enter a keyword, the system will search the information in index library, then the search results will be presented in the form of a list of pages.



# Chapter 2

## Literature Review

### **1.Price Comparison System Based on Lucene DOI 10.1109/ICCSE.2013.6553894:**

Lots of online shopping systems are proposed and used practically due to the rich opportunities provided by the Internet. The traditional 088, however, essentially provides basic browsing via category and "advanced" keyword without any analysis. The paper presents a price comparison system of online products to show all the possible prices of products for customers. In particular, the proposed system develops a multithreaded crawler to implement web information crawling, and uses Lucene, a very popular full-text search library, to implement the data indexing and retrieval. The experimental results demonstrate that the proposed system improves shopping efficiencies for the consumers in a flexible and advanced way. The reasoning why online shopping has become so popular. Many authors (Chaing and Dholakia, 2003, Monsuwé et al., 2004 and Poulter, 2013) believe one of the key reasons is convenience. Shopping online offers pronounced convenience. A key reason some consumers favour online shopping is also due to price comparisons. 85 percent of consumers compares price information online, although it is not evident whether these consumers continue and purchase the products online or on the high street.

**2.Comparing different quality models for portals:** Web portals are Internet-based applications that enable access to different sources through a single interface. They provide personalization, single sign-on and content aggregation from different sources. Moreover, they can help users to find the information,service or product desired from among a large number of providers without having to navigate through them all one-by-one. A web portal is defined as " a Web site or service that offers a broad array of resources and services, such as e-mail, forums, search engines, and on-line shopping malls.". As yet, however, the concept of "portal" is not well defined, and its use, even within the industry, remains problematic.

# Chapter 3

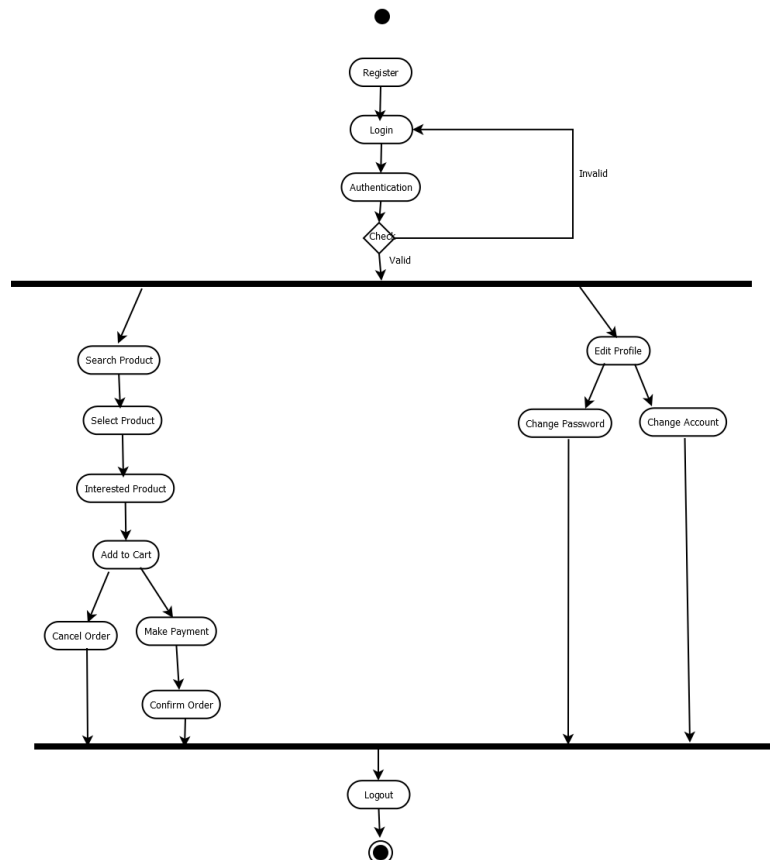
## Proposed Concept and Design

### 3.1 Proposed System

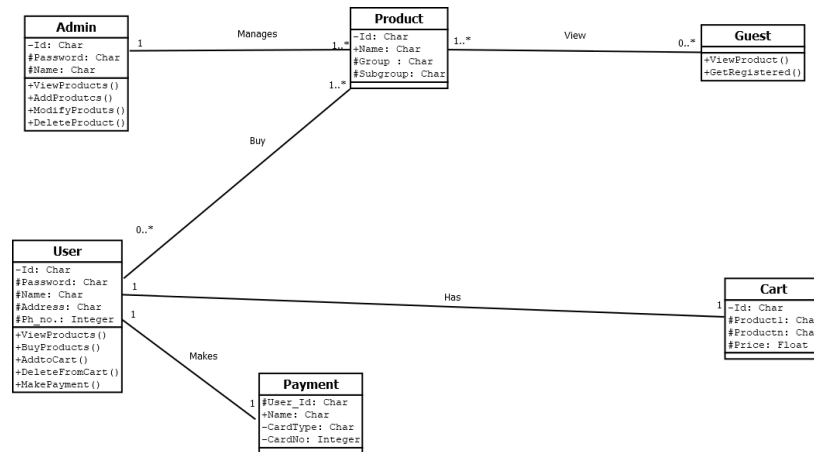
Our system will show the availability status of product. Once, the link of shopping site is pressed it will directly go to to user's respective account, user wont need to enter its login-id again.

### 3.2 Design

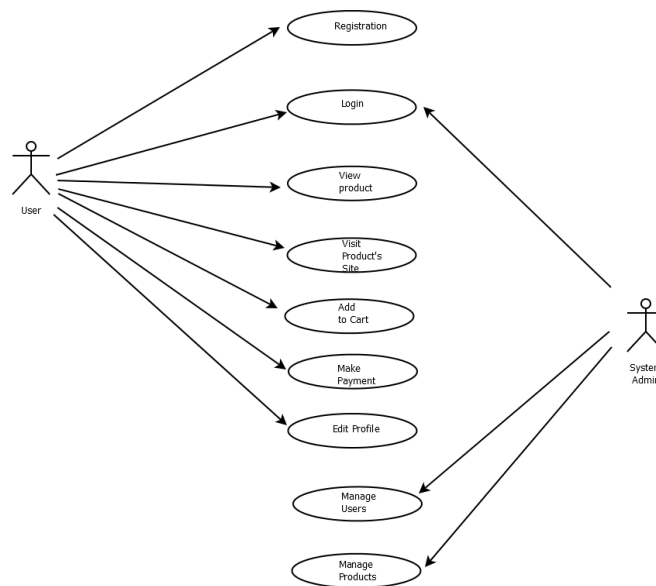
#### 3.2.1 Activity Diagram



### 3.2.2 Class Diagram



### 3.2.3 Use Case Diagram



# Chapter 4

## Result

Since some of shopping sites does not provide their API directly, so for now we are creating dummy sites of some data-sets for extraction of data for comparison. There is method for extracting data which is possible through python library known as beautiful soup 4 but it also has its own risks. In future we will use the data from actual shopping sites.

# Chapter 5

## Conclusions and Future Scope

By making a single platform available for users to compare and buy products from multiple shopping portals will make their shopping experience much more efficient. In future We can add local vendors and compare prices with shopping sites.

# Bibliography

- [1] A Price Comparison System Based on Lucene : DOI 10.1109/ICCSE.2013.6553894
- [2] Ángeles Moraga Coral Calero Mario Piattini, (2006),”Comparing different quality models for portals”, Online Information Review, Vol. 30 Iss 5 pp. 555 - 568 Permanent link to this document: <http://dx.doi.org/10.1108/14684520610706424>
- [3] METHOD AND SYSTEM FOR PROVIDING ONLINE COMPARISON SHOPPING  
Inventor: Geoffrey D. Alexander, Chapel Hill, NC (US) Assignee: International Business Machines Corporation, Armonk, NY (US) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 527 days. Appl. No.: 09/863,342 Filed: May 23, 2001

# Appendices

## **Steps to install apache server in windows:**

- Step 1: download the files.
- Step 2: extract the files.
- Step 3: configure Apache.
- Step 4: change the web page root (optional).
- Step 5: test your installation.

## Acknowledgement

We have great pleasure in presenting the report on **Product Comparison System**. We take this opportunity to express our sincere thanks towards our guide **Prof. Sukhada Aloni** & Co-Guide **Prof. Amol Kalugade** Department of Computer Science, APSIT thane for providing the technical guidelines and suggestions regarding line of work. We would like to express our gratitude towards his constant encouragement, support and guidance through the development of project.

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