Department of Computer Science and Engineering
Walchand College of Engineering, Sangli

Mini Project

The TechShoppy

T.Y in Computer Science and Engineering

Project Members

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Project Guide

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Academic Year

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CERTIFICATE

This is to certify that the Third year B.Tech. project entitled "**The TechShoppy**" submitted by 2013BIT039,2013BIT042,2013BCS100 for the partial fulfillment of the requirement for the award of the degree of Bachelor of Computer Science and Engineering of the Walchand College of Engineering, Sangli is a bonafide work carried out during academic year 2015-16.

Head

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Department of C.S.E.

Examiner(s)

1._____

2._____

Date:
Place:

ACKNOWLEDGEMENT

We wish to take this opportunity to express our deep gratitude to all the people who have extended their cooperation in various ways during our project work. It is our pleasure to acknowledge the help of all those individuals.

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ABSTARCT

E-commerce site grows rapidly since it allows someone to shop online quickly and easily without having to meet seller directly. This saves time, effort, and cost in transaction although it doesn't always provide what the student need. They must visit several e-commerce sites to get appropriate product. Google shopping has already accumulated some foreign e-commerce sites, but not available specially for Engineering Students who uses Indian E-commerce websites. Therefore, it is necessary to have an Indian website or site summary that can show product summary from several Indian e-commerce site. Site summary built with applying web content mining by using web data extraction technique. Some processes in web data extraction are e-commerce site file crawling, parsing html file then displaying the data into a site summary. By applying these processes, data from several e-commerce sites can now be displayed on a site called site summary.

List of Figures

Chapter 1

Introduction

Today, technology has already changed human behavior on society globally. This changes lead the world to borderless, especially in social, economic and cultural. One example is e-commerce site. E-commerce is the use of the Internet and the Web to transact business. More formally, we focus on digitally enabled commercial transactions between and among organizations and individuals [1]. Many e-commerce sites allow customer to shop online quickly and easily without having to meet with the seller directly. Customer just adds product to cart, pay electronically, and receive their product soon. Each e-commerce provides many kinds of product, such as clothes, food, furniture, electronics and accessories.

Many companies compete in the e-commerce market. In fact, there are some researches was did to win the competition in ecommerce market. The research is not only about technology but also prediction when a customer will purchase and web recommendation for customer.

There is a technique used for making a site summary (to get data from some sites and show the relevant product in one page) called web mining. There are three type of web mining, they are: Web structure mining, web content mining, and web usage mining.

1.Web structure mining or web log mining is a technique used to find link structure from hyperlink and build summary of website. Web structure mining is often used to decide a website pagerank.

2.Web content mining is an extraction process to find useful information from data, document, audio, video or metadata in the web. This technique extracts the keyword from the web to build useful

information

3.The latter one, web usage mining is a technique used to discover pattern of user behavior related to one site from web data, log, click stream, cookies to improve the site service to the user. This method use data mining techniques to discover interesting usage patterns from Web data, in order to understand and better serve the needs of Web-based applications.

1.1 Purpose

For buying a product an online shopper visits several e-commerce websites, then compares the product from these sites and chooses the suitable one. This takes a lot of time and efforts. So a price comparison website is a way to reduce the customer efforts. Also the another purose of this project is that there is not a single price comparison site that is fully dedicated for engineering students to simplify the search of academics books required by students.

1.2 Scope

The TechShoppy website enlists all categories of Engineering branches.Every category includes a good collection of books of respective category. For each selected book we display a book having minimum price from amazon and flipkart websites. It also includes all other results from amazon and flipkart websites. Student can also search for book which is not listed in category.

This website can also be used by teachers.

Chapter 2

OVERALL DESCRIPTION

2.1 Project perspective

The aim of this website is to let students search for engineering books

2.2 Project Functions

User Panel

1. Home Page contains header which includes logo , search box , menus like categories, contact, about and body section contains information about website.

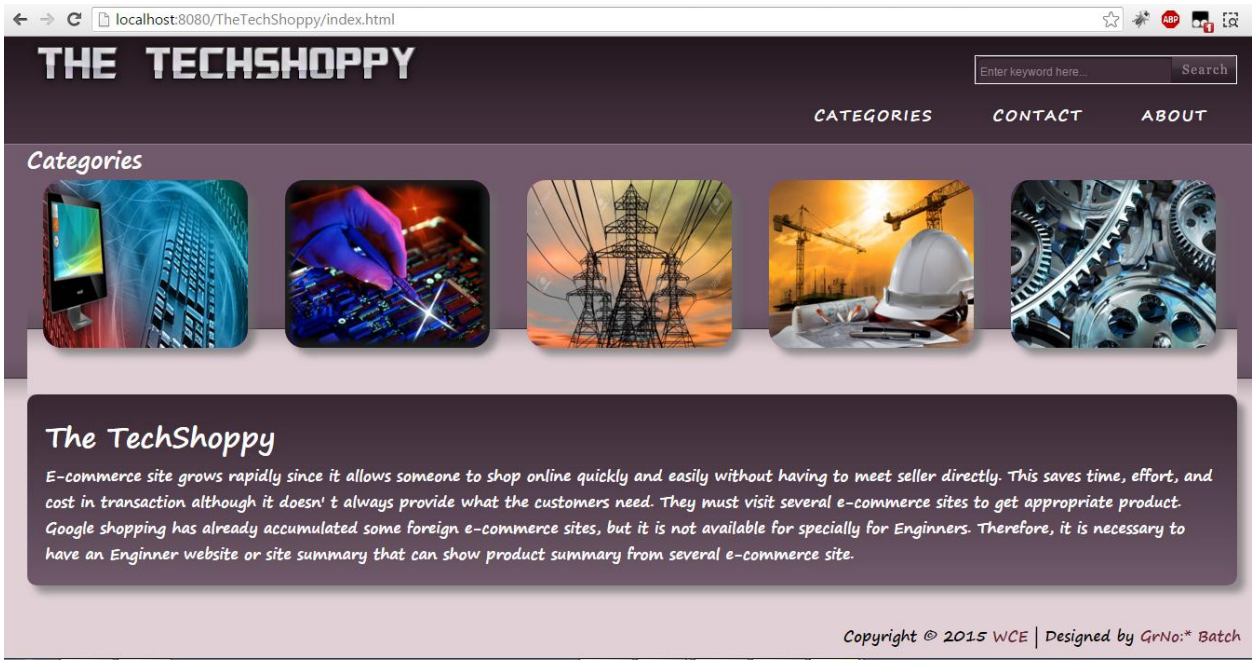
2. After Selecting particular category, books related to that category are displayed.

3. After Selecting particular book or searching a book in search bar, result page displayed. The result page consist of best result and all related result from amazon and flipkart websites.

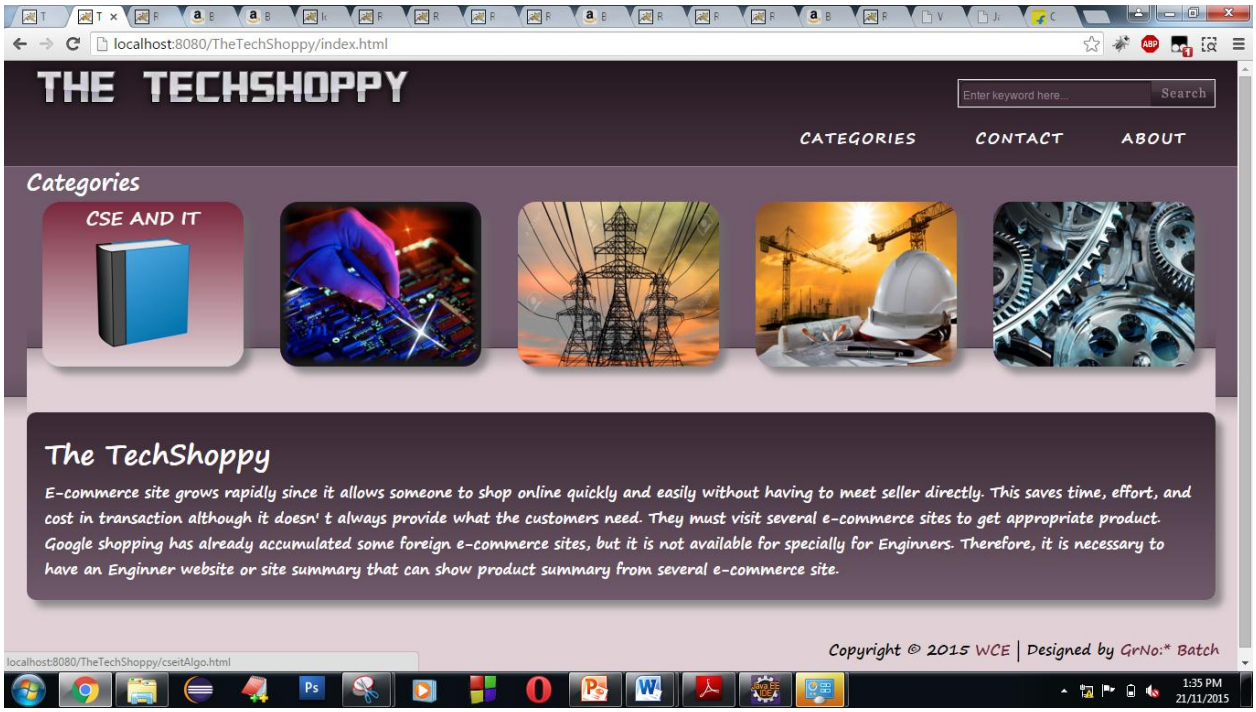
4. After clicking on go to store button ,user is redirected to respective webpage from where user can actually buy the book.

Screenshots

1.Home Page



1.1.Category Selection



2.Categories:

- **CSE&IT**
  - **Algorithms and Data Structures**

- Programming
- Database
- Networking
- Operating System

- Electronics
- Electrical
- Civil
- Mechanical

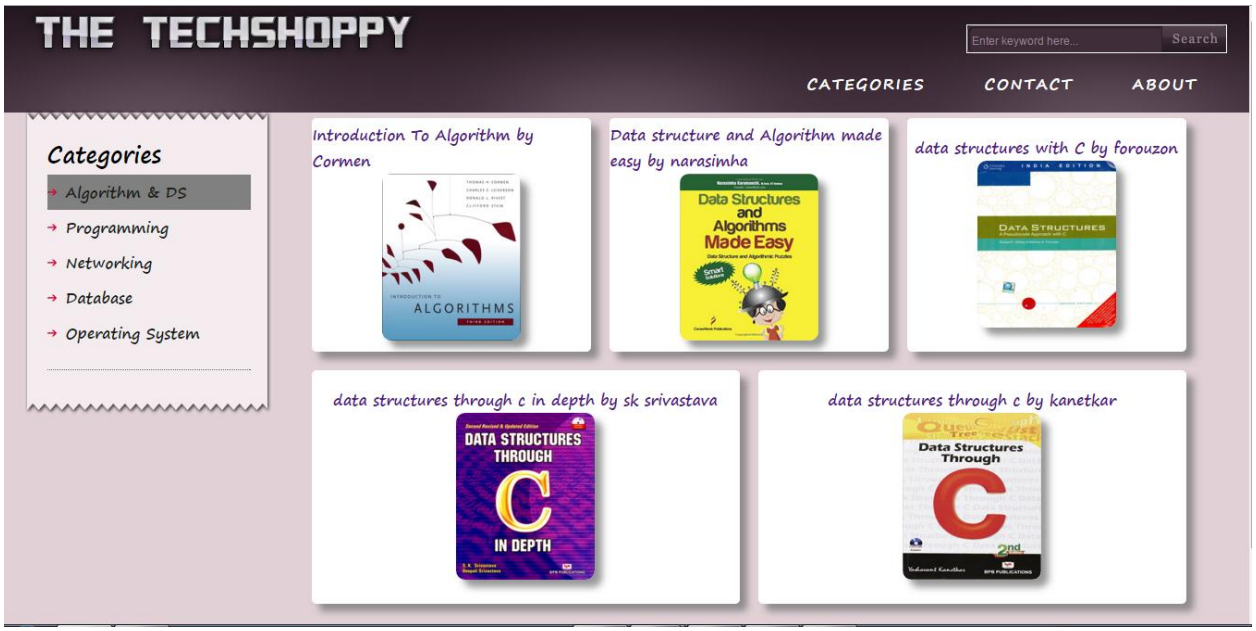


fig.Category CSE&IT and its subcategories

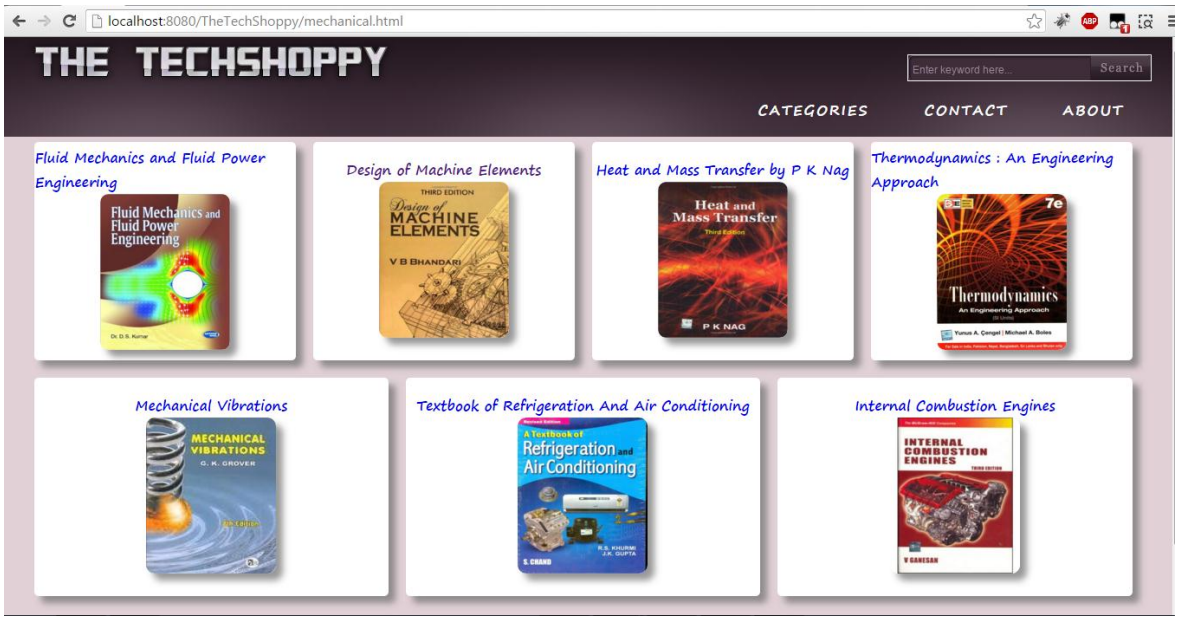
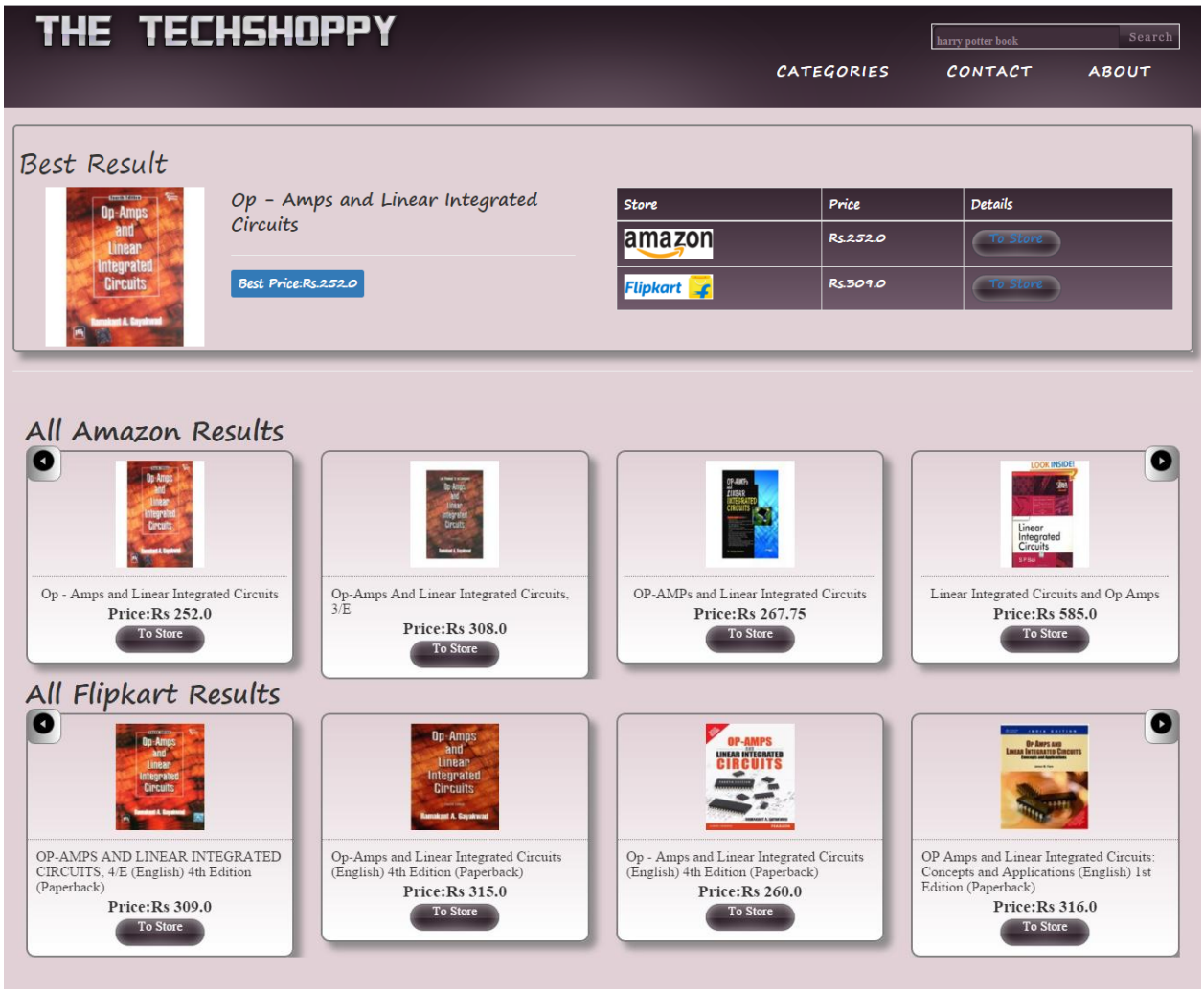


fig. Category Mechanical

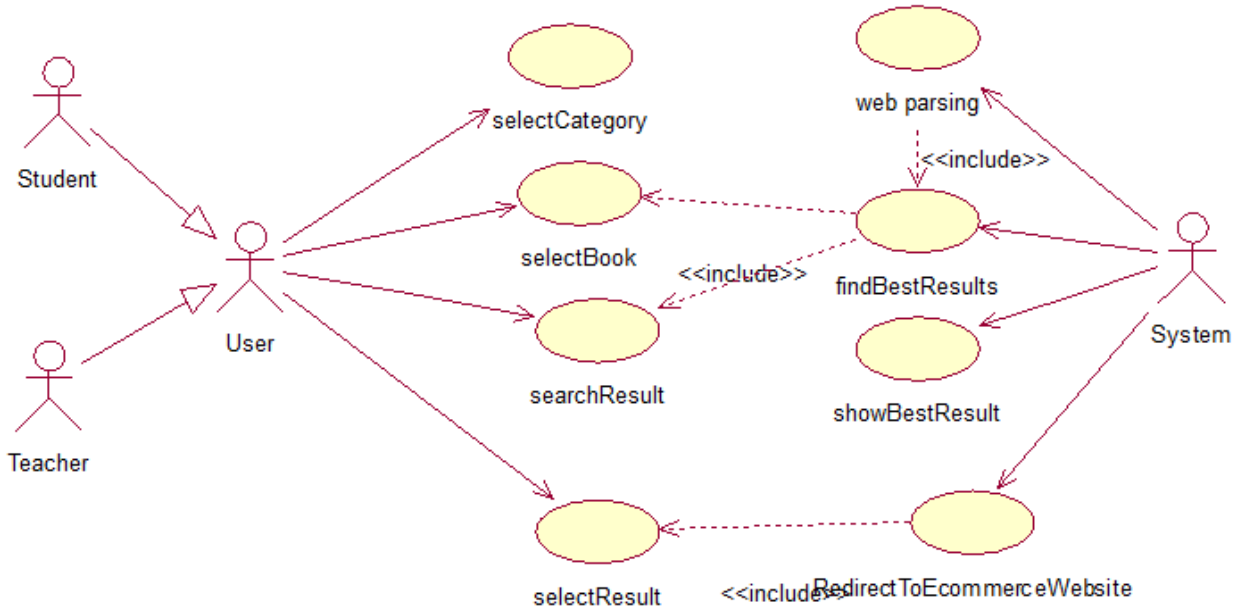
3. Result of Selected Book



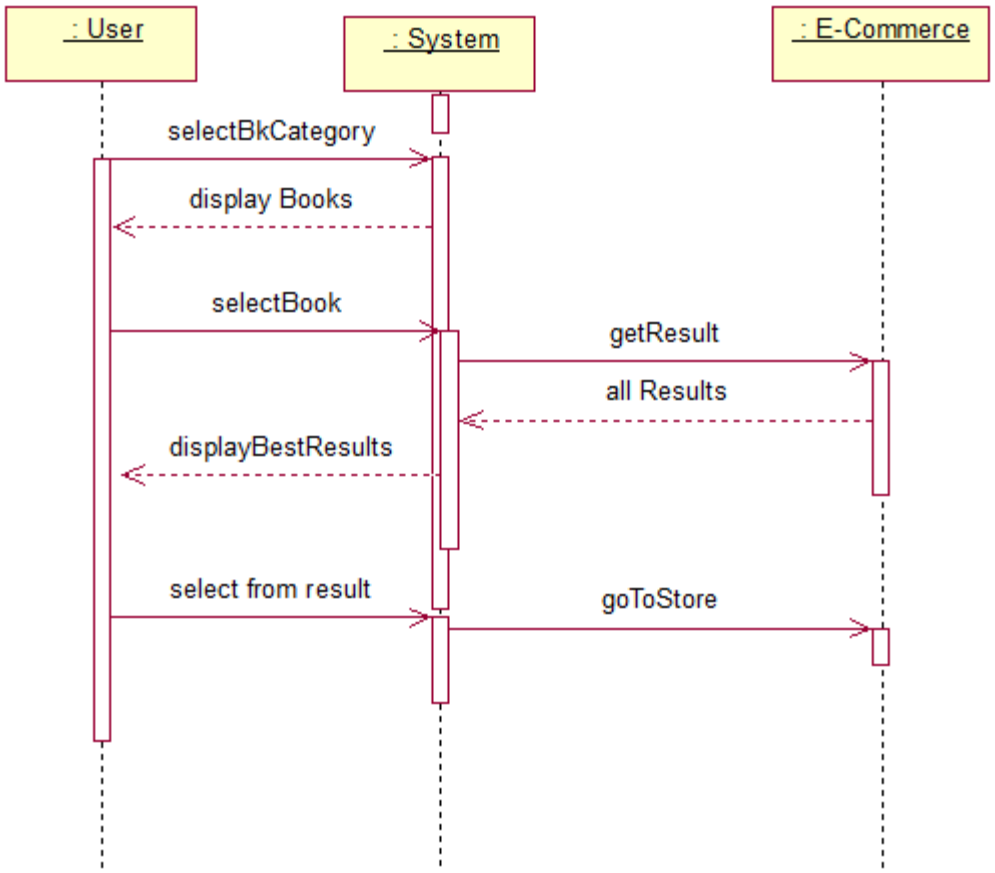
4.After clicking go to store button

UML Diagrams:

1.Use Case Diagram:

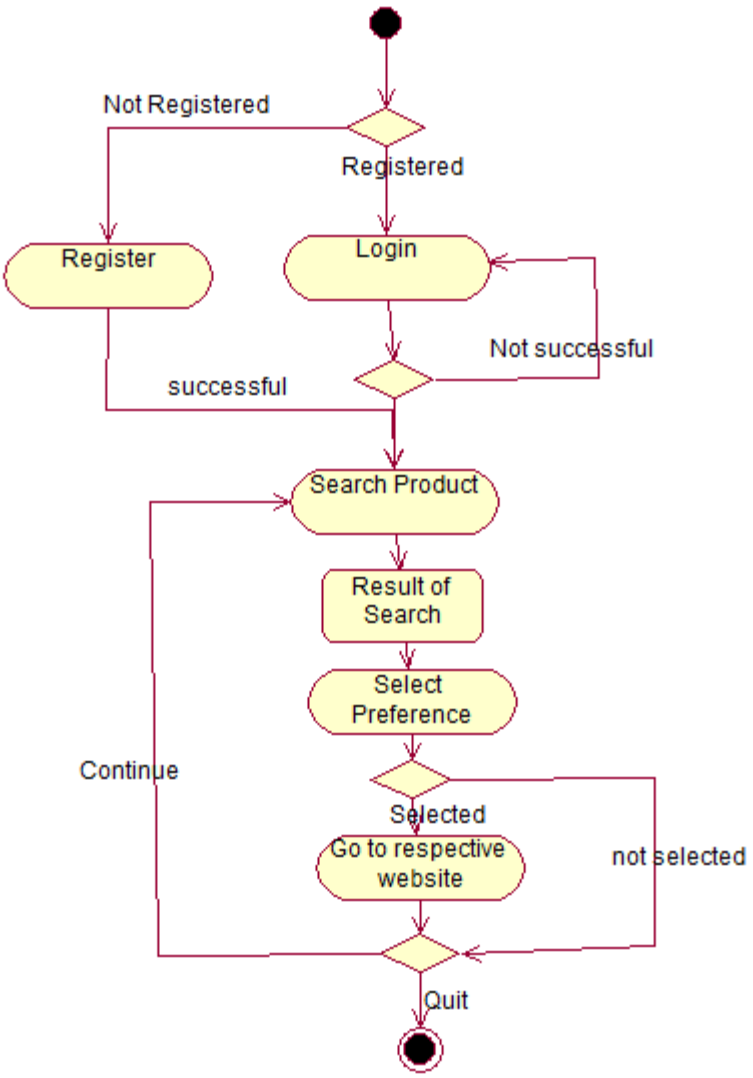


2. Sequence Diagram



3. Activity Diagram

Activity Diagram



CHAPTER 3

SYSTEM REQUIREMENTS

User Interface:

The TechShoppy is a price comparison website. It provides a very clear and simple user interface. The interaction of user with the system has no complex factors as the website is completely user friendly. As all the online shoppers are comfortable with the view of the e-commerce website interface, the handling of The TechShoppy website is much easier.

Hardware and Software Interface:

The TechShoppy is a price comparison website. Hence it can run on any platform having web browsers like Google Chrome, Opera, etc.

CHAPTER 4

Technologies used

Front end:-

- HTML5
- CSS3
- BOOTSTRAP

Back end:-

MVC Architecture

MVC stands for Model View and Controller. It is a **design pattern** that separates the business logic, presentation logic and data.

Controller acts as an interface between View and Model. Controller intercepts all the incoming requests.

Model represents the state of the application i.e. data. It can also have business logic.

View represents the presentaion i.e. UI(User Interface).

JAunt api

Jaunt is a new, free, Java library for web-scraping & web-automation, including JSON querying. The library provides an ultra-light headless browser (ie, no GUI). By using Jaunt your Java programs can easily perform browser-level, document-level, and DOM-level operations. Jaunt is the ideal tool when Javascript support is not required, for tasks including:

- filling out and submitting web forms
- creating web-bots or web-scraping programs.

- interfacing with REST APIs or web-apps (JSON, HTML, XHTML, or XML).

Apache Tomcat server:-apache-tomcat-8.0.24

Editor:-Eclipse Mars Enterprise Edition

CHAPTER 5
SYSTEM TESTING

System testing is the stage of implementation, which is aimed at ensuring that the system works accurately and efficiently before live operation commences. The ultimate aim is quality assurance. Tests are carried out and the results are compared with the expected document. In the case of erroneous results, debugging is done. Using detailed testing strategies a test plan is carried out on each module. The various tests performed are unit testing, integration testing and user acceptance testing.

5.1 Unit Testing

The software units in a system are modules and routines that are assembled and integrated to perform a specific function. Unit testing focuses first on modules, independently of one another, to locate errors. This enables, to detect errors in coding and logic that are contained within each module. This testing includes entering data and ascertaining if the value matches to the type and size supported by java. The various controls are tested to ensure that each performs its action as required.

5.2 Integration Testing

Data can be lost across any interface, one module can have an adverse effect on another, sub functionswhen combined, may not produce the desired major functions. Integration testing is a systematic testing todiscover errors associated within the interface. All the modules are combined and tested as a whole.

5.3 User Acceptance Testing

User acceptance of a system is the key factor for the success of any system. The system under

Consideration is tested for user acceptance by constantly keeping in touch with the system users at time of developing and making changes whenever required.

CONCLUSION

The created website was able to do web content mining for Amazon and Flipkart site. It is ensured that it will display the product based on user needs. User can compare every book in amazon and flipkart only in one site summary. But, there are some limitations of this website related to the different css tag and product category. Therefore, the expected future development is to mine all Indian e-commerce site with define all the related css tag that exists in e-commerce site. The proposed method also can improve with implementing natural language processing or ontology to identify product data in e-commerce site. Data mining method also can be used to improve the accuracy.

The result of this research acts as initial research for future large application development which is able to mine all Indian e-commerce site like google shopping.

BIBLIOGRAPHY

1. **Other price comparison websites:-**
    - Google Shopping
    - mysmartprice.com
    - junglee.com
    - Shopzila.com
2. **Jaunt API:- http://jaunt-api.com/**
3. **Research Paper:-**

    WEB MINING ON INDONESIA E-COMMERCESITE : LAZADA AND RAKUTEN

    By Humasak Simanjuntak, Novitasari Sibarani, Bambang Sinaga and Novalina Hutabarat,Department of Informatics Management, Institut Teknologi Del, Indonesia