An aggregator for e-shopping

A PROJECT REPORT

Submitted by

HASNAIN SAJJAD

In partial fulfilment for the award of the degree of

MASTER OF COMPUTER APPLICATIONS

Under the guidance of

Dr. Vinod Pathari

(Assistant Professor, Dept. of Computer Science and Engineering)

Department of Computer Science and Engineering,
National Institute of Technology, Calicut
NITC Campus PO, Calicut
Kerala, India 673601

JUNE 2015

DECLARATION

"I, hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which has been accepted for the award of any other degree or diploma of the university or the other institute of higher learning, except where due acknowledgement has been made in the text."

Place: NIT Calicut

Date: March 16, 2015

Signature:

Name: HASNAIN SAJJAD

Reg. No.: M120389CA

CERTIFICATE

*This is to certify that the project report entitled: "**An Aggregator for e-shopping"**. Submitted by **Mr. Hasnain Sajjad** to the Department of Computer Science and Engineering, National Institute of Technology Calicut towards the partial fulfilment of the requirements for the award of the degree of Master of Computer Applications, is a bona fide record of the work carried out by him under our supervision and guidance.*

(Dr. Vinod Pathari)

Place:

Date:

Signature of Head of the Department

(Office seal)

Contents

ABSTRACT

The title of the project is “An Aggregator for e-shopping”. As the title suggests, this online portal provides the ease for searching proper product as per the requirement. The features present in this project include login credentials, search option for products, result links with appropriate information helping user to choose the correct product in best possible price. The main functionality of the project is to aggregate data from web and display it in a proper format to user. Once the user chooses most suitable option, the portal will redirect to corresponding shopping site.

INTRODUCTION

1.1 Problem Definition:

This project attempts to bring many of the online shops on one platform, where user can easily access items from different websites. When a user enters a query, this site generates a query for different e-shopping websites. Then based on the searched query it gathers links of all resulting e-shopping websites with their price on a webpage. Now, user has an option to choose links based on their prices. After clicking on the link it will display the corresponding e-shopping website, where the user can see the details of the product and choose to buy.

1.2 Background:

There are a lot of online e-shopping websites from where user can directly navigate to the website and purchase the suitable product after comparing from different websites. Users usually purchase product from particular trusted e-shopping sites, and many times the users are unable to find actual product which they want. The user will have to go with the remaining options in the site, which may not be the exact product he/she wants. A single online site access may not be in the best interest of the user.

“An aggregator for e-shopping” is to provide ease of access to the persons who are shopping from e-commerce sites.

1.3 Motivation:

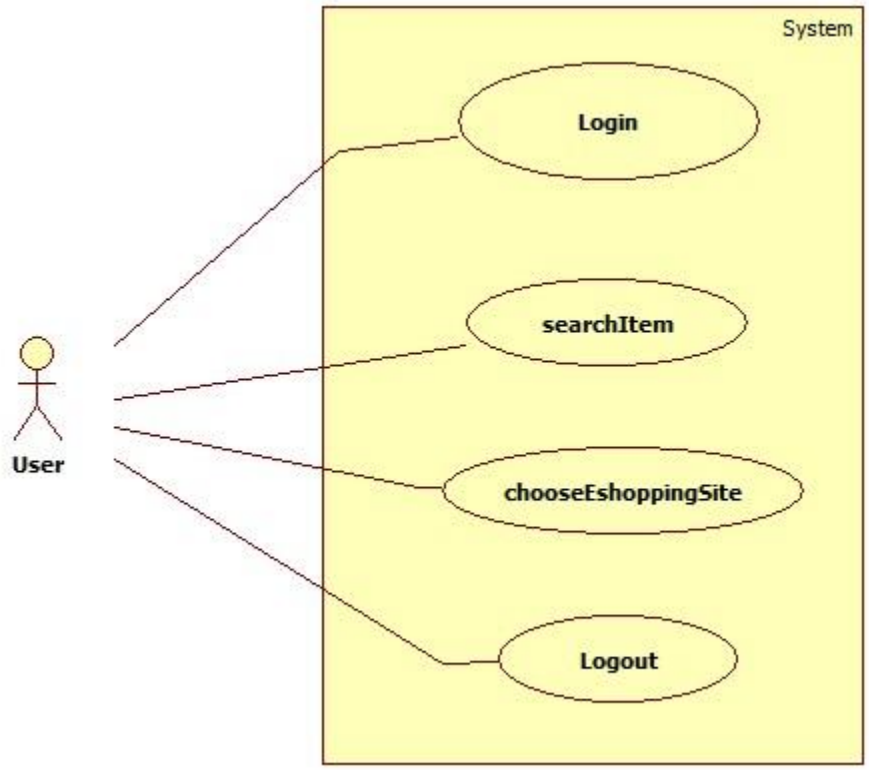
With boom in ecommerce sites there is increase in competition. People are in search for best discounts offered by different websites for the same product. When a user searches for a product to be bought he/she has to go to different websites priory known to him/her. This work is to provide an automated aggregator to do this job on the user's behalf. Thus the required item is given prominence – what are wants – and not what the online seller has.
An aggregator for e-shopping is an approach to allow its users to get the best price for the product from various websites.

The system has the following features:

1. It has a search box which takes input (details of the product).
2. It uses this information to run complex queries to search various websites with matching result.
3. Shows all the matched result in a page making it time efficient for users to choose a product with best deal.

SYSTEM DESIGN

2.1 Use case Diagram

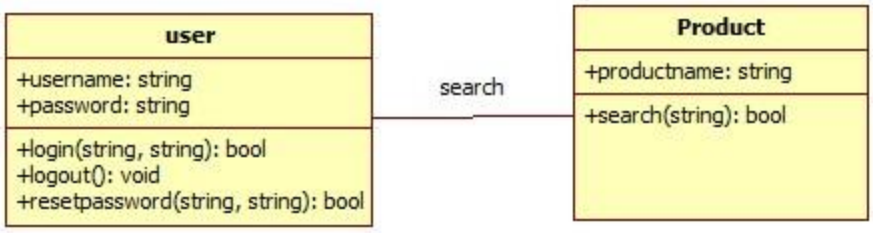


Brief description: User will have to register with particular user Id and Password, which will help him later to access the search mechanism of our website. User will search any item by its name then a query will be generated to all e-shopping websites. The links of the websites will be shown on the page if the product is available there, user can click on the available website links based on the searched result and get the access of e-shopping website to purchase item.

Precondition: User must be logged in.

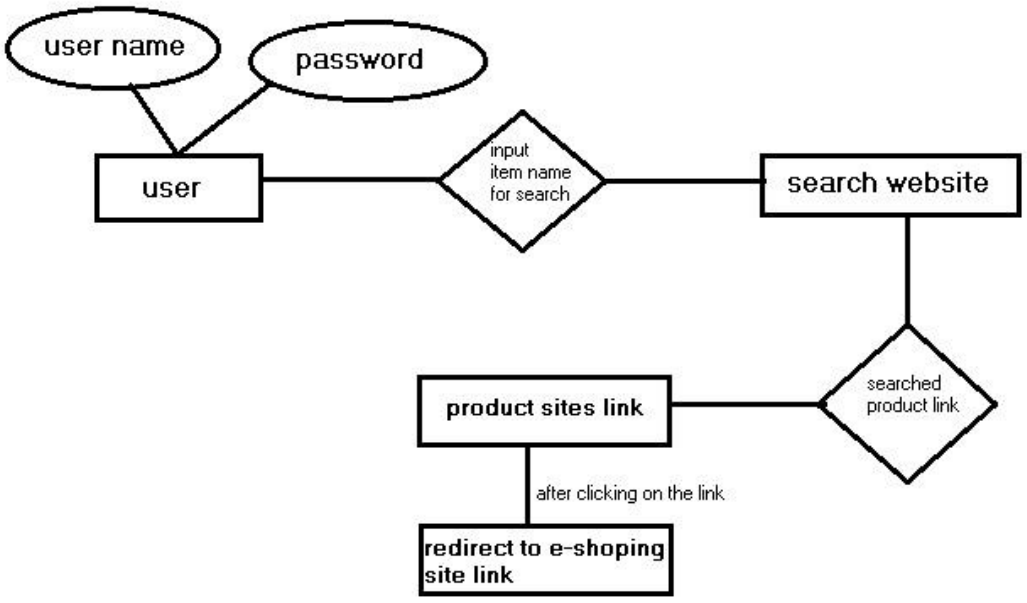
Step by Step: i) User will access the webpage and user will log in by their User Id and password**.**
ii) Main page will be shown.
iii) User will enter the item's name.
iv) Web page will list out all the e-shopping website links with price details.
v) User will choose the most appropriate link.
vi) After clicking on the link e-shopping site will be open in a new window.

2.2 Class diagram



In our system there are two classes: user and product. User will register himself/herself in the system by giving first name, last name, username, password, email, and mobile number. After that user should login to search any product by entering its name.

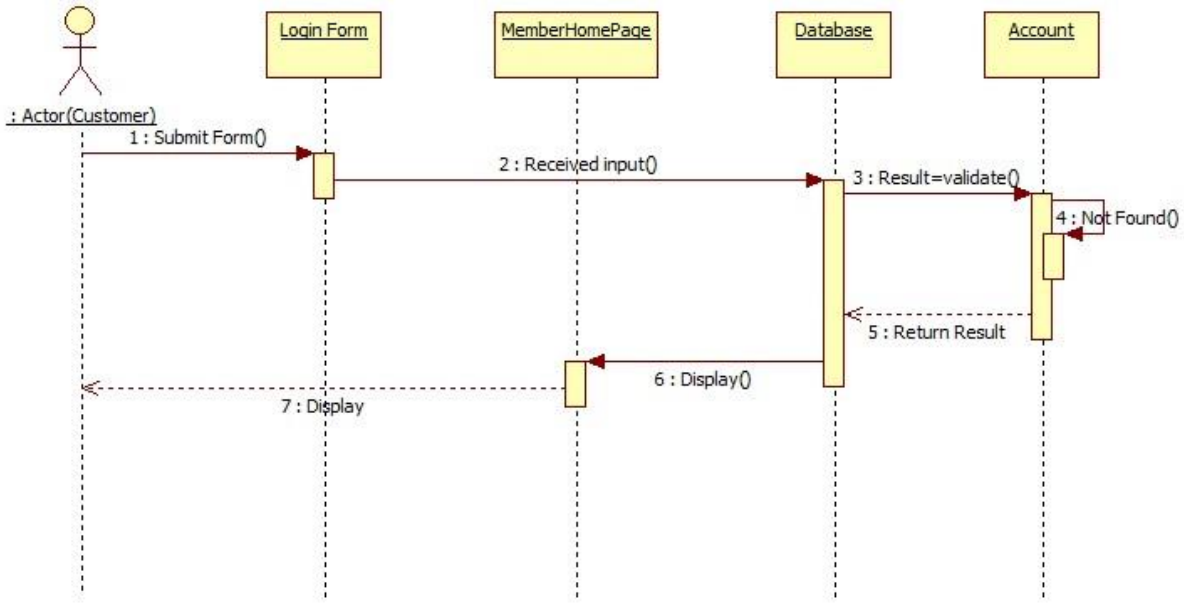
2.3 ER-Diagram:



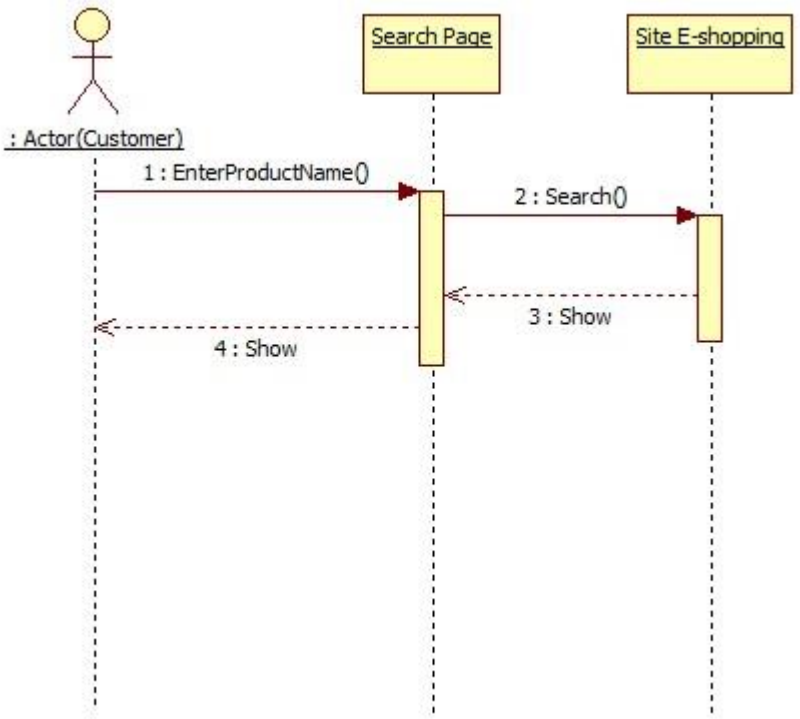
There are three entities: user, search, and product website. User will enter the user name and password. Then the user enter the name of the product to be searched and the number of results he/she wants. Then he/she will select the order in which the results will appear on the screen, it means the results are either in the ascending or descending order as per the choice of the user. After that the entered item will be searched in the available website and the list of products available on the different sites will appear on the display. The user will select the best option among the available websites and if the user need more products he/she will repeat the same process. After that the user is automatically redirected to the product website from where the user can purchase it.

2.4 Sequence Diagram:

2.4.1 Login:



2.4.2 Search Product:



2.5 System features:

2.5.1 Login page

Case name	Login
Priority	High
Trigger use	Home page
Precondition	User should visit the site.
Basic path: login	User will be asked to enter the username and password and user type. If authenticated he will be directed back to the current page with access more service.
Alternate path: invalid username/password	If the username/password is not authenticate the user will be notified and will be asked to enter again.

2.5.2 Search

case name	Search
Priority	High
Trigger use	Search box
Precondition	User is already logged in
Basic path: index	Gets activated when user hits the return key after entering some text in the search box.

Post condition	It will return a list of all data matching the search query, and user will have to figure out the best result.

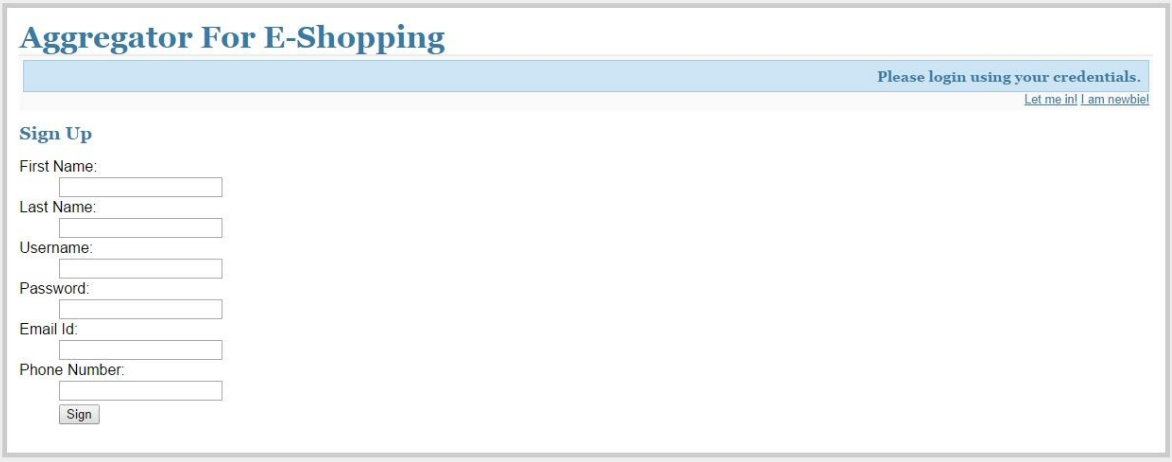
USER INTERFACE

An aggregator for e-shopping website will have a complete web based user interface which can run on any browser. This interface will be interactive form based which will be capable to get mouse inputs and keyboard strokes.

Main interfaces of the system are as below:

1. Home page: Displays the landing page from where user can choose different actions.

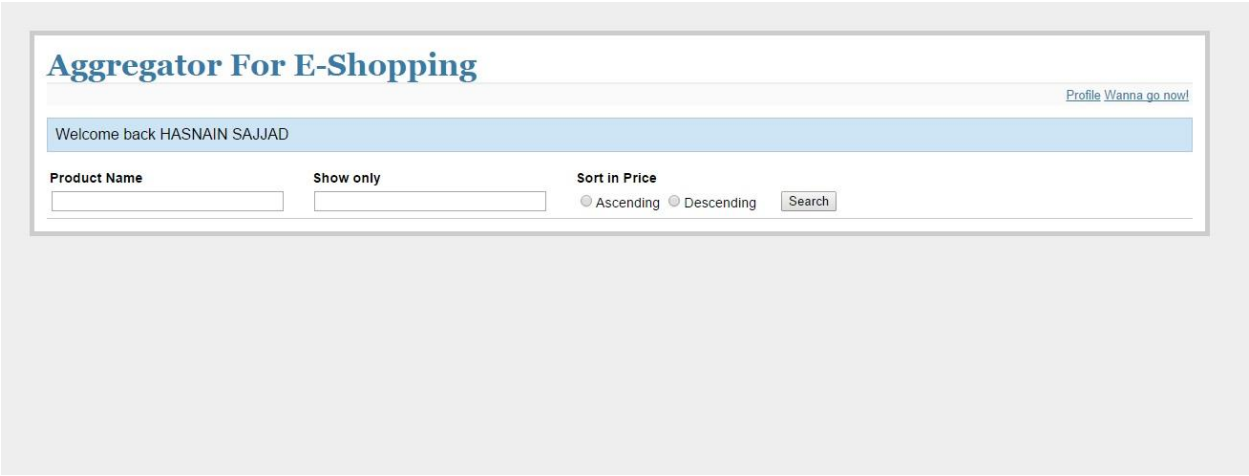
2. Sign Up page: User can sign up with their personal details.



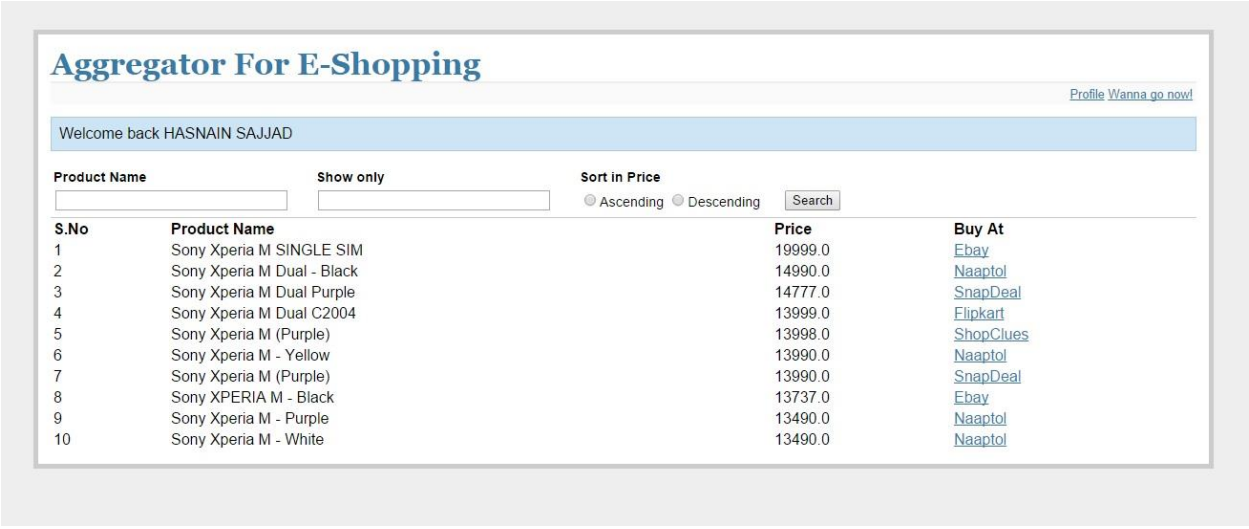
3. Login Page: User can login with username and password.

4. Edit Page: User can edit their details except username.

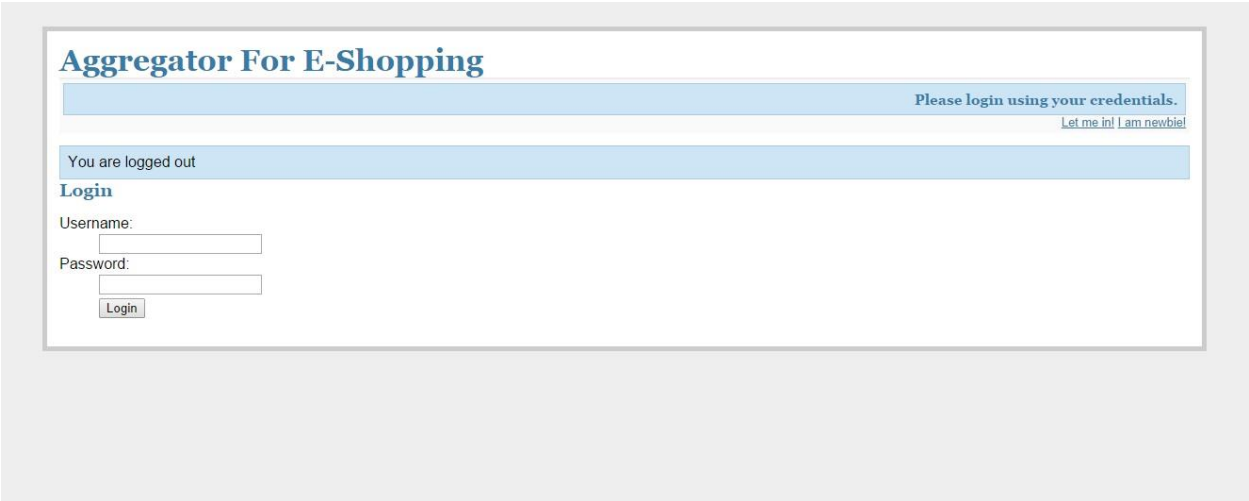
5. Search Page: Search field where user can search the specific product.



6. Search Result Page: Shows results of the search query entered by the user.



7. Logout Page: Display the successful logout.



CONCLUSION:

- ✓ An Aggregator for e-shopping saves time.
- ✓ More efficient and more accurate results.
- ✓ A user gets what he/she wants; not what a single site has to offer.

5.1 Work Done:

i) Understood the concept of "An aggregator for e-shopping".
ii) Created login system for user.
iii) Created search item GUI.
iv) Created search item mechanism.
v) Generated interface for website links in the searched item page.

REFERENCES:

[1]. https://www.python.org/ Accessed on Jan 2015.

[2]. http://www.codecademy.com/en/tracks/python Accessed on Jan 2015.

[3]. http://www.tutorialspoint.com/python/ Accessed on Feb 2015.

[4]. Elmasri, Navathe, *Fundamentals of Database Systems*, Pearson-2013 Edition06.