An aggregated platform for e-commerce product comparisons

<Version 1.0>

Software Requirements Specification

Table of contents

Introduction

This document describes the software requirements specifications for "An aggregated platform for e-commerce product comparisons" specifically developed where user can see specifications of products, prices (price comparison) of products and also can write or read opinions of products or e-commerce companies from one place. This document includes a description of the software and its subsystems. Throughout this document, "An aggregated platform for e-commerce product comparisons" will sometimes be referred to as "this website" or "our website system".

Business Requirements

From the organizational perspective this website isn't like other typical e-commerce websites e.g. Daraz, Aarong, Yellow, Amazon, Alibaba, etc. where user can buy products and so on. So, in this website there is no option of buying products and so that no need of delivering products, payment issues, etc. As a result, no need of massive employees.

Besides, from the user perspective this website will help users to take decision about products in easier and faster way. This website will save more valuable time of the users which will be a really good sign for making profit for the organization.

System Requirements

The Server side will require a high-speed Internet connection to deal with multiple users visiting the website simultaneously and the presence of two external service systems necessary for processing a user's requests. The Windows 2000 or XP operating systems will be required for our website to run efficiently. On the Client side there is no connection speed or operating system restrictions, but they will need to be running Internet Explorer 10 or above.

Definitions, Acronyms, and Abbreviations

Term	Definition
FR	Functional Requirement
QR	Quality Requirement
DESC	Description
DEP	Dependency
TAG	A unique, persistent identifier contained in a PLanguage statement
GIST	A short, simple description of the Concept contained in a PLanguage statement
SCALE	The scale of measure used by the requirement contained in a PLanguage statement

WISH	A desirable level of achievement that may not be attainable through available means contained in a PLanguage statement
MUST	The minimum level required to avoid failure contained in a PLanguage statement

Functional Requirements

This section includes the requirements that specify all the fundamental actions of the website system.

User is someone who interacts with the website. There are 4 types of user who will use the system. Unregistered Normal User, registered Normal User, Super Admin and Normal Admin they are the 4 types of user.

User Class 1 - Unregistered Normal User

ID: FR1

TITLE: Browse website

DESC: A user should be able to browse the website through a browser.

DEP: None

ID: FR2

TITLE: User sign-up

DESC: Given that a user has browsed the website, then the user should be able to sign up through the website. The user must provide user-name, password and e-mail address. The user can choose to provide a regularly used phone number.

DEP: FR1

ID: FR3

TITLE: Website - Search by category

DESC: Categories of product should be displayed in the home page in a grid view at ascending order alphabetically by default. In home page 50 categories of product is displayed. A user should be able to find any product based on categories. If categories of product's number are more than then user should be able to go to next grid view or jump to specific grid view to find all the categories of product.

DEP: FR1

ID: FR4

TITLE: Website - Selecting the category

DESC: A user should be able to select the category of product from the categories, which is included on all result items. The link will direct the user to an information page, which includes a list of brand. Then, by selecting the brand it'll direct the user to an information page, which includes name and picture of the product. The result is displayed in a grid view by default at ascending order alphabetically.

For brands & product's list maximally 20 & 40 numbers respectively will be displayed. If the number is more than then user should be able to go to next grid view or jump to specific grid view to find the brand or product.

DEP: FR3

ID: FR5

TITLE: Website - Search by specific product

DESC: A user should be able to search by a specific product's name under the section of category. The result is displayed in a grid view by default at ascending order alphabetically.

DEP: FR4

ID: FR6

TITLE: Website - Free-text search

DESC: Given that a user has browsed the website, then the first page that is shown there should be the search field in where the user should be able to search anything related to the site.

DEP: FR1

ID: FR7

TITLE: Website - No match found

DESC: If no match is found the user should be informed but kept on the search page in order to get the possibility to conduct a new search right away.

DEP:FR5,FR6

ID: FR8

TITLE: Website - Search result in a grid view

DESC: There should be maximally 50 results displayed. If the result contains more products than what can be displayed on the screen at one time, the user should be able to scroll through them. Beside this, the grid view should include a header with different select able sorting options.

DEP: FR5, FR6

ID: FR9

TITLE: Website - Sorting results

DESC: When viewing the results in a grid view, a user should be able to sort the results according to ascending or descending order alphabetically.

DEP: FR8

ID: FR10

TITLE: Selecting preferred view on the website.

DESC: Although brands name and their products under a category are displayed in grid view by default but user should be able to select a preferred view between grid and list view.

DEP: FR1

ID: FR11

TITLE: Switch preferred view on the website.

DESC: A user should be able to switch a preferred view between grid and list view.

DEP: FR10

ID: FR12

TITLE: Selecting preferred language on the website.

DESC: In order to understand the website the user should be able to select a preferred language between English or Bengali for the website. The website is displayed in English language by default.

DEP: FR1

ID: FR13

TITLE: Website - Switch preferred language

DESC: A user should be able to switch between English and Bengali language.

DEP: FR12

ID: FR14

TITLE: See product specifications, prices and reviews

DESC: By clicking on the product's name and picture it will direct user on to another page to see the specifications, prices and reviews of the product in a page.

DEP: FR4

ID: FR15

TITLE: See similar products

DESC:A user should be able to see similar products related to the same category under the specifications, prices and reviews.

DEP: FR14

ID: FR16

TITLE: Take onto the linked e-commerce Company's site

DESC: By clicking on the desirable price user should be able to see the linked e-commerce site in a new window or tab.

DEP: FR14

ID: FR17

TITLE: Select review option

DESC: A user should be able to select between see and give review option.

DEP: FR14

ID: FR18

TITLE: See review about product.

DESC: By clicking on the see review option it'll direct link user to an information page of review sections where a user should be able to see review (ratings and comments) about the product.

DEP: FR17

ID: FR19

TITLE: See review about e-commerce Company

DESC: By clicking on the see review option it'll direct link user to an information page of review sections where a user should be able to see review (ratings and comments) about the e-commerce company.

DEP: FR17

ID: FR20

TITLE: Showing results of reviews

DESC: There should be maximally 20 results displayed in list view by default. If the result contains more reviews than what can be displayed on the screen at one time, the user should be able to scroll through them. Beside this, the list view should include a header with different selectable sorting options.

DEP: FR18/19

ID: FR21

TITLE: Reviews' sorting results

DESC: When viewing the results in a list view, a user should be able to sort the results according to newest first or oldest first or best rating.

DEP: FR20

ID: FR22

TITLE: Share product's info

DESC: A user should be able to share the information about the product on the social networking sites.

DEP: FR14

ID: FR23

TITLE: Rate usefulness of the product information

DESC: A user should be able to answer the usefulness about the Product's information.

DEP: FR14

ID: FR24

TITLE: Going previous page on the website

DESC: A user should be able to go to the previous page from the current page.

DEP: FR1

ID: FR25

TITLE: Jump to the home page on the website

DESC: A user should be able to go to the home page from any page.

DEP: FR1

ID: FR26

TITLE: Help by message on the website

DESC: A user should be able to send a message for any kind of query. A user must fill the email to send a message.

DEP: FR1

ID: FR27

TITLE: Help by FAQ on the website

DESC: A user should be able to see FAQ (frequently asked questions) on the website.

DEP: FR1

ID: FR28

TITLE: Website – User subscription

DESC: A user should be able to subscribe via email the website to keep in touch about all the latest news.

DEP: FR1

ID: FR29

TITLE: Notify users of new things

DESC: When new things are released, the user should be able to know and user checks these manually.

DEP: FR28

ID: FR30

TITLE: Website – giving feedback

DESC: A user shall able to give feedback about the website via email.

DEP: FR1

ID: FR31

TITLE: Going from bottom to top

DESC: A user shall able to go from bottom to top of a page of the website whenever he/she click on the upward direction button.

DEP: FR1

User Class 2 - Registered Normal User

Has all the FRs of unregistered normal user. Beside, this type of user has below FRs.

ID: FR32

TITLE: User log-in

DESC: Given that a user has registered, then the user should be able to log in. The log-in information will be stored on the website's server and also in the phone (if user wants) and in the future the user should be logged in faster.

DEP: FR1, FR2

ID: FR33

TITLE: Retrieve password

DESC: Given that a user has registered, then the user should be able to retrieve his/her password by e-mail.

DEP: FR1, FR2

ID: FR34

TITLE: Give review about product.

DESC: By clicking on the review section it'll direct link user to an information page of review sections where a user should be able to give are view (ratings and comments) about the product.

DEP: FR32, FR17

ID: FR35

TITLE: Give review about e-commerce Company

DESC: By clicking on the review section it'll direct link user to an information page of review sections where a user should be able to give review (ratings and comments) about the e-commerce company.

DEP: FR32, FR17

ID: FR36

TITLE: Edit review

DESC: A user should be able to edit (modify, delete) the posted review (rating and comment).

DEP: FR32, FR34/35

ID: FR37

TITLE: Showing Information in the profile account

DESC: After logging, on the profile home page a user should able to see his/her information, which includes personal information (avatar, password, e-mail address, phone number), history (browse or seen products) and activity log.

DEP: FR1, FR32

ID: FR38

TITLE: Showing results of history and activity log

DESC: There should be maximally 25 results displayed in list view according to newest to oldest by default. If the result contains more history and activity log than what can be displayed on the screen at one time, the user should be able to scroll through them.

DEP: FR1, FR32

ID: FR39

TITLE: Edit profile account on the website

DESC: On the profile page a user can edit his/her information, which includes the avatar, password, e-mail address and phone number.

DEP: FR1, FR32

ID: FR40

TITLE: Clear history and activity log

DESC: A user can clear history and activity log of his/her profile account.

DEP: FR1, FR32

ID: FR41

TITLE: Clear history and activity log by selected

DESC: A user should be able to clear selected history and activity log.

DEP: FR1, FR32

ID: FR42

TITLE: Clear history and activity log by all

DESC: A user should able to clear all history and activity log at once.

DEP: FR1, FR32

ID: FR43

TITLE: User log-out

DESC: A user should be able to logout.

DEP: FR1, FR32

User Class 3 - Normal Admin

Has some of the FRs of registered normal user which are FR32, 33, 37, 39 and 43. Beside, this type of user has below FRs.

ID: FR44

TITLE: Manage gadget Info

DESC: Should be able to manage gadget categories, brand categories, specifications categories, specifications info type, company info and reviews.
DEP: FR1, FR32

ID: FR45

TITLE: Manage User

DESC: Should be able to manage requested, blocked and registered user.
DEP: FR1, FR32

ID: FR46

TITLE: Manage Ad

DESC: Should be able to manage requested, activated and expired ad.
DEP: FR1, FR32

ID: FR47

TITLE: See notifications

DESC: Should be able to see notifications.
DEP: FR1, FR32

ID: FR48

TITLE: Apply for leave

DESC: Should be able to apply for leave permanently or temporary if he/she wants.
DEP: FR1, FR32

User Class 4 - Super Admin

Has not only some of the FRs of registered normal user which are FR32, 33, 37, 39 and 43 but also all the FRs of normal admin except FR48. Beside, this type of user has below FRs.

ID: FR49

TITLE: Manage admin

DESC: Should be able to create an admin, make an admin and manage exist admin.
DEP: FR1, FR32

ID: FR50

TITLE: Manage database

DESC: Should be able to backup or restore database.
DEP: FR1, FR32

Non-functional Requirements

ID: QR1

TITLE: Eminent search feature

DESC: The search feature should be eminent and easy to find for the user.

DEP: none

ID: QR2

TITLE: Usage of the search feature

DESC: The different search options should be evident, simple and easy to understand.

DEP: none

ID: QR3

TITLE: Usage of the result in the grid and list view

DESC: The results displayed in the list and grid view should be user friendly and easy to understand. Selecting an element in the result list should only take one click.

DEP: none

ID: QR4

TITLE: Usage of the information link

DESC: The information link should be eminent and it should be evident that it is a usable link. Selecting the information link should only take one click.

DEP: none

ID: QR5

TAG: Response Time

GIST: The fastness of the search.

SCALE: The response time of a

search.

MUST: No more than 3 seconds100% of the

time.

WISH: No more than 2 second 100% of the

time.

ID: QR6

TAG: System Dependability

GIST: The fault tolerance of the system.

SCALE: If the system loses the connection to the Internet or the system gets some strange input, the user should be informed.

MUST: 100% of the time.

ID: QR7

TAG: System Reliability

GIST: The reliability of the system.

SCALE: There liability that the system gives the right result on a search.

ID: QR8

TAG: System Availability

GIST: The availability of the system when it is used.

SCALE: The average system availability (not considering network failing).

MUST:

More than 98% of the time.

PLAN: More than 99% of the

time.

WISH: 100% of the time

ID: QR9

TAG: User Login Account Security

GIST: Security of account

SCALE: If a user tries to login to the account portal with a non-existing account then the user should not be logged in. The user should be notified about log-in failure.

MUST: 100% of the time.

ID: QR10

TAG: User Create Account Security

GIST: The security of creating account for users.

SCALE: If a user wants to create an account and the desired username is occupied, the user should be asked to choose a different username.

MUST: 100% of the time.

ID: QR11

TITLE: Website extendibility

DESC: The website should be easy to extend. The code should be written in a way that it favors implementation of new functions.

DEP: none

ID: QR12

TITLE: Website compatible

DESC: The website should be compatible with any

browser.

DEP: none

Choice of Prioritization Method

When prioritizing the requirements we used the MoSCoW method. We picked the requirements based on must have, should have, could have and won't or would have.

MUST (M)	SHOULD (S)	COULD (C)	WON'T or Would (W)
FR1-7	FR8-13		
FR14-20	FR21-23		
FR24-25	FR26		
FR27	FR28-31		
FR32-37	FR38		
FR39	FR40-42		
FR43-50			

Impact Analysis

For better result, we have to firstly implement all the functional requirements in the MUST column of MoSCoW method table. Then have to implement all the remaining requirements of under SHOULD column of MoSCoW table and then finally COULD of MoSCoW table. Here, all the requirements in each column are placed in detracts way that in the implementation phase implementation will be from upward to downward step by step. All the requirements are placed based on fewthings such importance, impact, dependency, etc. things.

The End