Software Requirements Specification

for

<EcompareApp(ECA)>

Version 1.0 approved

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<28/07/2020>

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Revision History

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| --- | --- | --- | --- |
| **Name** | **Date** | **Reason For Changes** | **Version** |
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|  |  |  |  |

# Introduction

## Purpose

The purpose of this document is to develop a system for compare E-commerce products to make the online shopping more efficient than even. By using this system people can find the best products in best prices from the best sellers.

## Document Conventions

* Entire document should be justified.
* Convention for main title
* Font face: Times New Roman
* Font style: Bold
* Font size: 14
* Convention for Sub title
* Font face: Times New Roman
* Font style: Bold
* Font size: 12
* Convention for body
* Font face: Times New Roman
* Font size: 12

Definitions, Acronyms and Abbreviations:

* ECA: ‘ECA’ is a short form of Ecompare App we used in this document.
* *H*: These System features priority level is high.
* *M:* These System features priority level is medium.
* L:These system features priority level is low.

## Intended Audience and Reading Suggestions

Indendent Audience:

* Software Developers/engineers
* Project Manager
* Researchers or engineer who wants to modify or extend the existing reference implementation.
* Interested person who wants to working with us.

Reading suggestion:

This document is organized in accordance with the IEEE SRS template and will provide an overall description of the project with regards to features, user classes, implementation constraints and assumptions followed by details of the system features in the form of block diagram and descriptions and closing with Non-Functional Requirements

## Product Scope

* The purpose of this E compare App(ECA) for compare E-commerce products to make the online shopping more efficient than ever.
* This Software contain some fascinating features By using this features& it’s comparing mechanism people can find the best products in best prices from the best sellers.
* This software contain some top E-commerce websites and it’s news and a huge database of sellers details and reviews those are the most essential things for buying a product.
* Online shopping has become popular. Sometimes people can’t easily pick a good product and sometimes it became difficult to find it .But with the help of this software people can get out of this problem and they will be able to gain a much better experience.

## References

* <https://krazy.com/projects>
* Software Engineering: A Practitioner’s Approach,7/e by Roger S. Pressman

# Overall Description

## Product perspective

ECA is an independent software. This origin of this product is Bangladesh. It is not a paid software. Every person can use it online without a fee. This is product is not a member of other product family or not a replacement of any existence system. This product if fully new and independent. People will be able to buy things of their choice through the comparing mechanism of this software. It will compare through product price and seller reviews. The software contains some to Ecommerce websites products with details. There is a newsfeed option that will show the product related news. ECA has also a control mechanism. People can share their feedbacks. ECA administration will take actions based on user’s feedback.

## Product Functions

This software will show best price product from different E-commerce Websites. It contains some popular E-commerce websites products, seller details. It has also a newsfeed option which will show the websites or products related news. First the user has to login. There is a option for select websites by his/her own interest. At a time, user an also select all the websites together. Then a search option will come. With the help of its user can search their desired products. If the user can’t find the product, it will show an advanced search option. There is a category system for manual product search. If user can find his/her desired product, then the application will show a result with best products in best price according to higher order. User can see also seller’s details and review. Below the product details there is an order option with which the user can order. After completing the order, coupons of different amount for different price range product will be credited to their login account. These Coupons will be used to buy another product later. There is a feedback option for this software

The major functions of ECA as shown in below Block Diagram:

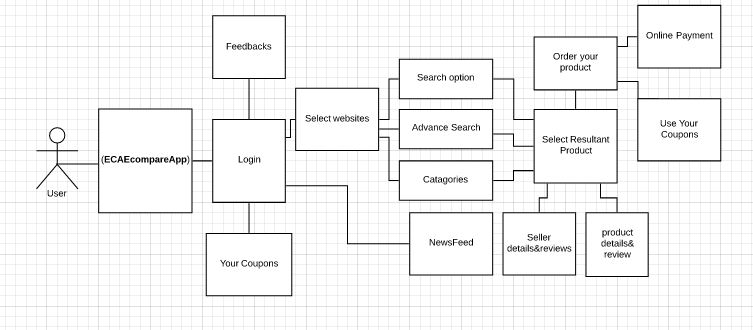


Fig: A Block Diagram of Product Function

## User Classes and Characteristics

**Customers:**

* Customer can be Member or visit who are accessing this system.
* They should iT illiterate and know to use devices like computer, Mobile.

**Staff:**

* Staff which act as administrator and controlling overall system.

**Manager:**

* Manager should have knowledge of internet and browsing.

## Operating Environment

Operating environment of ECA software is as listed below:

* Hardware: Laptop, Desktop PC, Mobile Phone, Tablet.
* Operating System: Windows, Android Os.
* Data Base: MYSQL
* Platform: Java

## Design and Implementation Constraints

There are some constraints which cost more for the system. If those constraints can overcome then this whole system will perform best. They are-

* If it is implemented and designed for iOS the number of customers would increase.
* Faster server system such as Linux server.
* Bengali Language for Bangladesh and Other language for other countries.
* C# can be used for more security.
* User friendly interface so that user can easily use the application

## User Documentation

* YouTube Channel: ‘ECA IT’ is a YouTube channel where user can find the tutorial about how they use this software or more about its features.
* URL: https:// beacon.Project/ECA/User Guideline where user can find the user guideline/manual
* Email: [ECAonlineCare@gmail.com](mailto:ECAonlineCare@gmail.com) user can mail for their any kind of query or problems.
* Face book Page: [www.facebook.com/ECAIT](http://www.facebook.com/ECAIT) they will communicate with us through this face book page

## Assumptions and Dependencies

Assumptions:

* It is assumed that the user is familiar with the basic computer fundamentals.
* It is assumed that maintenance of the database will be assigned to the authorized person only.
* Only authorized person will be allowed inside the system.

Dependencies:

* MYSQL server to store the database
* E-Commerce websites because we need product &seller information, product & seller review.

# External Interface Requirements

## User Interfaces

The user interface shall follow basic Window style and functionally conventions. The interface has

a tab at the middle side of the screen named ‘Select Websites’. After tapping on it user could see the website list. Then They have to select. Every selectant websites would show with a tick mark. Then at the bottom of the screen there will come a ‘Go’ tab. After clicking/tabbing it there will be another page will come. This page will be containing tabs and these tabs allow users to easily switch between the different parts of the program. There are is Shortcut for windows if a user press ‘se ‘with keyboard the search option will come.

## Hardware Interfaces

This software can run on any hardware which supports Window OS, Android Os. The system must have at least 150 mb megabytes of free space to install the program and 512MB -1GB of memory is required to load the application for windows. For Android Os this system must have 50 mb free space and Android Os Version 4.1+.

The program does not write information directly to the user’s computer, but instead uses a database which is located on a network server. The user’s computer transfers and receives data from the server using basic networking protocols. All system’s information is stored in the server’s database which stores the data on the server’s disk.

## Software Interfaces

A software interface may refer to a wide range of different types of interfaces at different “level” In

Software interface Ui code on front end and in back-end server application and database read write

work code.

The first request or data coming on system is user login information check request when user login with their login information system verify if valid or not checking on database if the request is valid then the system return valid message to user to user logged in and in if not valid system will give error massage to user. All this communication will be encrypted with encryption method for security.

## Communications Interfaces

* This System supports Google chrome and Mozilla Firefox Web browsers.
* This System involves FAQ forms for the requesting information, queries and problem etc.
* ECA system should shall use HTTPS protocol for communication over the internet and for the internet communication will through TCP/IP protocol suite.

# System Features

## Create account

### Description and Priority

To be a user of this software, you must create an account in the software. Here the necessary information like email, login password of this software, phone number, Location of the users will be stored through this feature. The priority ranking of this feature is ‘*H’*. No one can use the software by skipping it.

### Stimulus/Response Sequences

* Choose ‘Create Account’ option.
* Fill up the First Name, Last Name, Name, Email id, Phone number, password
* Click/press’ Signup ‘
* If the information is successfully imputed then show successful if not then will show error at the wrong point and have to give the information again

### Functional Requirements

INPUT: Request for First Name, Last Name, Email id, Phone Number, Password

PROCESSING: Retrieves the provided information and makes a new account for user

OUTPUT: Displayed created account

REQ-1: User Information

## LogIn

### Description and priority:

To use this software user have to login. User have to give user name/email & password. This is mandatory to login. So, the priority ranking of this feature is ‘H’

### Stimulus/Response Sequences

* Have to Fill up the two boxes with Name/Email & password.
* Have To press the ‘Log IN’ button.
* If the information is successfully imputed then show successful if not then will show error at the wrong point and have to give the information again.

### Functional Requirements

INPUT: User Name/Email & password

PROCESSING: Retrieves the provided user Name/Email & password and make sure the login successful

OUTPUT: Display the home page.

REQ1: User Name/email

REQ2: User Password

## Select Websites

### Description and priority:

User have to select the websites from the websites list in this software. They can select all these websites or one websites or multiple websites. This is also mandatory without this the next action will not come. So, the priority ranking of this feature is’ H’.

### Stimulus/Response Sequences

* Have to select the websites with tick marks.
* Then have to press ‘Go’ button
* If there is at least one website is not ticked buy user then the next action will not come.

### Functional Requirements

INPUT: User selected websites with tick marks.

PROCESSING: Retrieves the provided selected tick marks and processing for next step

OUTPUT: Display another page with some features

REQ1: Selected Websites

## Search With Comparing

### Description and priority:

To Find a product user have to search a product. If they do search it will be automatically compared it is mandatory to search a product. Search their product the priority level of this feature is ‘M’

### Stimulus/Response Sequences

* Have to press on ‘Search’ option
* Then have to search with product name
* After successful search they will see the desire product

### Functional Requirements

INPUT: Product name

PROCESSING: Retrieves the provided Product name and if the product found the comparing processing will beginning at the background

OUTPUT: Display the resultant product. if not found then show Not Matches.

REQ1: product name

## Advance Search

### Description and priority:

If the product not found after general search, then have to go for ‘Advance search’ In advance search user can search by categories. To get any user desired product have to go for it. The priority ranking of this product is ‘M’

### Stimulus/Response Sequences

* After a failure of general searching there will automatically come an Option named Advance search option.
* After pressing advance search option there will come ‘Categories’. They have to select category
* Then again, a search option will come
* Then have to search with name
* After successful search they will see the desire product with product details and seller details and review. if not matched show Unavailable Product

### Functional Requirements

INPUT: Category name & product name.

PROCESSING: Retrieves the provided Category name and product name if the product found comparing process will be start background

OUTPUT: Display the resultant product with product details and seller detail & review or ift not found will show ‘Unavailable Product’

REQ1: Category name

REQ2: Product Name

## Online Payment

### Description and priority:

After select a product for buy the next step is online payment. It is mandatory because without payment order is not successfully happened. The priority ranking is ‘H’

### Stimulus/Response Sequences

* Have to press on ‘Order’ option
* Then Select Online payment
* After that the payment platforms will come
* Have to select a platform

### Functional Requirements

INPUT: Online payment, Payment platform

PROCESSING: Retrieves the provided option in background and show

OUTPUT: Display the Payment platforms and’ Order Successful ‘message

REQ1: payment platform should be selected

## Coupons

### Description and priority:

Coupons is a special feature in this software. when people buy products. coupons will be added in them

ECA account, next time they could be use it for buy a product. The ranking of this feature is M.

### Stimulus/Response Sequences

* Have to choose Use Coupons
* If the coupons amount is equal or higher than selected products coupons user can buy the product
* The message ‘Order successful’ message will be shown

### Functional Requirements

INPUT: Use Coupons

PROCESSING: Retrieves the provided coupons amount at background

OUTPUT: Display the Order successful message

REQ1: Have to select Use Coupons option

## News Feed

### Description and priority:

This feature will show some news related with some product or E-commerce websites.

It is not mandatory. People can skip it. So, the priority rank of this feature is ‘L’

### Stimulus/Response Sequences

* Have to press in ‘Newsfeed’ option
* Then show the news
* Have to press ‘next’ option for see more news

### Functional Requirements

INPUT: News Feed, Next

PROCESSING: Retrieves the Option and will processing at background

OUTPUT: Display the news

REQ1: Have to press ‘News Feed’

REQ2: Have to press ‘next, for more news

## User Feedbacks

### Description and priority:

This a option for giving feedback about our software. It is not mandatory The priority rank of this feature is ‘L’.

### Stimulus/Response Sequences

* Have to press on User Feedback option
* Then there will come a box for writing.
* After completing the written user have to press ‘Send’
* After sending Successfully There is a message ‘Thanks For Your Feed Back ’ will show.

### Functional Requirements

INPUT: User feedbacks send

PROCESSING: Retrieves the options and processing at the background

OUTPUT: Display the Message ‘Thanks for Your Feedback’

REQ1: Feedback written by user.

## Log Out

### Description and priority:

User can Log out from their account of ECA by this feature. It’s depends on user .if they felt not important to log out they can still login this software. So the priority ranking of this feature is ‘L’

### Stimulus/Response Sequences

* Have to press on Log out
* After Logout user can see Login Option

### Functional Requirements

INPUT: Logout

PROCESSING: Retrieves the option and processing at the background

OUTPUT: Display the Login Option

REQ1: Have to tap ‘Log Out’.

# Other Nonfunctional Requirements

## Performance Requirements

Performance requirements define acceptable response times for system functionality. Although the system is developed suiting for the least system performances, the performance of the system will highly depend on the performance of the hardware and software components of the installing computer. When consider about the timing relationships of the system the load time for user interface screens shall take on longer than two seconds. It makes fast access to system functions. The log in information shall be verified with in five seconds causes efficiency of the system.

## Safety Requirements

The users of this software have to login in this system. User password is mandatory for login.

They have some requirement for create their password

* Have to use at least 8 string passwords
* They have to use both Upper case & lower-case characters
* They have to use at least one symbol or operator like +, \* @, #,$,%.

## Security Requirements

The system uses SSL (secured socket layer) in all transaction that include any other confidential passenger information. The system must automatically log out in all customers after a period of inactivity

The system should not leave any cookies on the customer’s computer containing the user’s password, system’s back-end servers shall only be accessible to authenticated administrator.

## Software Quality Attributes

**Standards Compliance**

There shall be consistency in variable names within the system The graphical interface shall have a consistent look and feel.

**Availability:** The system shall be available 24\*7 times

**Maintainability:** The ability to maintain, modify information and update fix problem of the system.

**Usability:** software can be used again and again without distortion

**Accessibility:** Administrator and many other users can access the system but the access level is controlled for each user according to their work scope.

## Business Rules

* Want to take the responsibility of failures due to hardware malfunctioning
* Warranty period of maintaining the software would be one year.
* Additional payment will be analyzed and charged for further maintenance
* If any error occurs due to user’s improper use. Warranty will not be allocated to it
* No money back returns for the software
* Trust bond placement should be done before designing and coding. An advance or an agreement.

# Other Requirements

<Define any other requirements not covered elsewhere in the SRS. This might include database requirements, internationalization requirements, legal requirements, reuse objectives for the project, and so on. Add any new sections that are pertinent to the project.>

Appendix A: Glossary

<Define all the terms necessary to properly interpret the SRS, including acronyms and abbreviations. You may wish to build a separate glossary that spans multiple projects or the entire organization, and just include terms specific to a single project in each SRS.>

Appendix B: Analysis Models

<Optionally, include any pertinent analysis models, such as data flow diagrams, class diagrams, state-transition diagrams, or entity-relationship diagrams.>

Appendix C: To Be Determined List

<Collect a numbered list of the TBD (to be determined) references that remain in the SRS so they can be tracked to closure.>