eMarketting portal

Project Proposal
Software Engineering Project 2014

Project ID: WE-SEP-004

Submitted by:

1. IT12088942– (K. M. K. N. B. Gamhatha)
2. IT12009978– (A. N. M. R. H. S Athurupana)
3. IT12015122– (H. M. C. I. Gunathunga)
4. IT12021512– (U. D. R. Piumal)

Submitted to:

…………………………..

Mr. Thilina Halloluwa

………………………

Date of submission

Abstract

This website is an e-marketing website which allows the people to publish advertisements of their products and services or their product and service requirements for free. The entire internet users can visit this website and can search for any product or service that a person needs or can provide. If they find an advertisement related to that they will be able to contact the owner of that advertisement through their contact details and talk about the business. If people need to publish their advertisements they must first register in the system and then login to the website. When publishing an advertisement the users must agree to all the rules and policies of the website so that the users of the website will be able to get a quality user experience. The website will provide various features to the users in order to make their work easy in registering, publishing and searching advertisements, managing advertisements and contacting the advertisement owners. Most importantly the website will provide an overall better user experience than other e-marketing websites out there in the internet.

Table of Contents

List of Figures

List of Tables

1. Introduction and Description of the Project

1.1   Problem Specification

Currently if a seller (private or business) need to sell a product the seller has to advertise through different media such as televisions, radios, newspapers and internet by paying money. The sellers always cannot find the best buyers for their products. Some sellers, especially private sellers are not able to market their product to get a good income.

When the buyers are considered they always want to buy a product easily and quickly. The buyers do not want to spend more time and money on buying. So they need to find a product which is near their location which will reduce the time taken by them to purchase.

1.2   Solution Outline

The proposed solution for the previously mentioned matter is a web based application. It will allow any person who wants to sell a product to a buyer quickly and easily.

The proposed website is mainly focus on the advertising about different products through the internet. This website has three main types of users

- Sellers (Registered Users)
- Buyers(Registered/ Unregistered Users)
- Administrator

The overall structure and the functions of the system is demonstrated on the following High level architecture diagram (Figure 1.2)
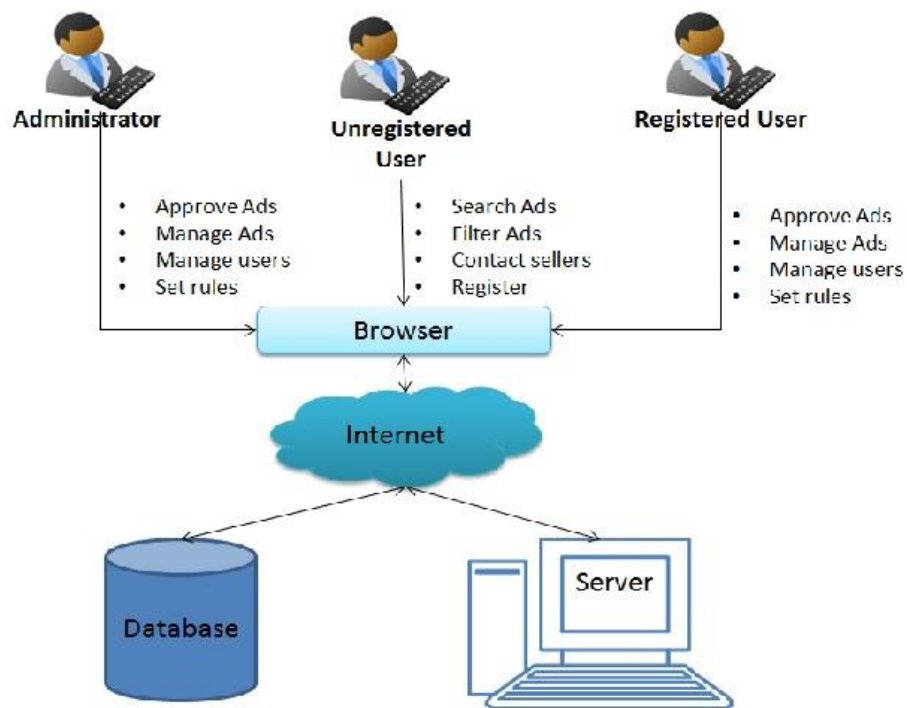
1.2 High level architecture diagram

This website allows the sellers to publish the advertisements about the product they need to sell for free. They must first register in the system by providing needed information. Then the sellers must login to the system and post their advertisement.

The sellers are categorized to two different categories as Private sellers and Business sellers. When they post an advertisement they can categorize the advertisement.

They buyers can easily find the product that they want by searching the products and filtering through different categories. The buyers can find the sellers near him by filtering through the location.

The Administrator is the main responsible party to maintain the standards and the quality of the site. Administrator has the privileges to approve advertisements, manage advertisements, manage registers users, and manage the rules of the website.

1.3 Key Benefits

- Solution will be easily access by all the users around the country as it is a web based application.
- Users, who registered on the site, can publish their advertisements totally free.
- All users can search for their needs easily whether they are registered or not.
- User can find exactly what they need, using the search function, which provides category wise sharp search.
- Through the user-friendly search on the site, users can find products from their region quickly.
- User can contact the seller via e-mail, which is provided on the site.
- Less time consuming as the finding a product is very convenient.
- It reduces unnecessary cost.
- Sellers will not have to use alternative methods such as television, newspaper advertising or alternative ways to do their current work.
- Increase the efficiency as work will be categorized
- It will be a user friendly application which will handle the requirements.
- It will save the time to fulfill the objectives of the company.

2. Overall Description

The proposed system has a main focus on the posting advertisement for free. The website allows the registered users who are sellers to post the advertisement by categorizing the well. It will allow the buyers to find a product easily and quickly without any delay.

Main functions of the system

- User Registration
- Search
- Contact the seller
- Report/ Complain about advertisements
- Filter advertisements by category
- Share the details of an advertisement
- Login
- Publish advertisements
- Enable/ disable comments
- Edit advertisements
- Delete advertisements
- Post comments on a specific advertisement
- Rank the business seller
- Add advertisements to my favorites
- Change/update account details
- Reset password
- Get notifications
- Approve advertisements
- Manage advertisements
- Manage sellers (registered users)
- Set rules
- Modify/remove rules

2.1   System Requirements

2.2.1 Functional Requirements

User Registration

Number	1	Size	3
User story	As an unregistered user I can register in the website So that I can use the services of the website		
Acceptance Criteria	Success: A new user is added to the system. Error: Display error message and allow user to re-enter the details.		
Priority	High		

2.1.1.1 User Registration

Search

Number	2	Size	3
User story	As an user I can search for advertisements So that I can find details about a product that I need to buy		
Acceptance Criteria	Success: Display the details about the products, which are searched. Error: Indicate the user that there are no match results to the search		
Priority	High		

2.1.1.2 Search

Contact the seller

Number	3	Size	2
User story	As an user I can contact the seller (via email/ phone) So that I can get more details about the product that I need to buy and to complete my purchase		
Acceptance Criteria	Success: E-mail is sent to the seller. Error: Display error message and allow user to re-try.		
Priority	High		

2.1.1.3 Contact the seller

Report/ Complain about advertisements

Number	4	Size	2
User story	As an user I can report / complain about advertisements So that I can ensure whether the advertisement is not harming or discriminating any party and trust the details of the advertisement		
Acceptance Criteria	Success: A complain about an advertisement is sent to administrator. Error: Display error message and allow user to re-try.		
Priority	Medium		

2.1.1.4 Report/ Complain about advertisements

Filter advertisements by category

Number	5	Size	5
User story	As an user I can filter advertisements by category So that I can easily/ quickly find the products according to my need		
Acceptance Criteria	Success: Display filtered result. Error: Display error message and allow user to re-try.		
Priority	High		

2.1.1.5 Filter advertisements by category

Share the details of an advertisement

Number	6	Size	3
User story	As an user I can share the details of an advertisement So that I can I can notify other people about the advertisement quickly and efficiently		
Acceptance Criteria	Success: The details of the advertisement are shared on social networks. Error: Display error message and allow user to re-try.		
Priority	Low		

2.1.1.6 Share the details of an advertisement

Login

Number	7	Size	2
User story	As a Seller (registered user) I can login So that I can use services of the web site		
Acceptance Criteria	Success: The user directed to user's account page. Error: Display error message and allow user to re-try.		
Priority	High		

2.1.1.7 Login

Publish advertisements

Number	8	Size	5
User story	As a Seller (registered user) I can publish advertisements So that I can get a publicity for my product and earn money by selling the product		
Acceptance Criteria	Success: Advertisement details are sent to approval. Error: Display error message and allow user to re-try.		
Priority	High		

2.1.1.8 Publish advertisements

Enable/ disable comments

Number	9	Size	2
User story	As a Seller (registered user) I can enable/ disable comments So that I can notify whether the users that I can get their opinion or not		
Acceptance Criteria	Success: Allow or does not allow the buyer to post comments on the advertisement.		
Priority	Medium		

2.1.1.9 Enable/ disable comments

Edit my advertisements

Number	10	Size	3
User story	As a Seller (registered user) I can edit my advertisements So that I can notify the updated advertisements details to the buyers		
Acceptance Criteria	Success: Advertisement details are edited. Error: Display error message and allow user to re-try.		
Priority	High		

2.1.1.10 Edit my advertisements

Delete my advertisements

Number	11	Size	2
User story	As a Seller (registered user) I can delete my advertisements So that I can remove any information regarding a finished business		
Acceptance Criteria	Success: Advertisement is deleted. Error: Display error message and allow user to re-try.		
Priority	High		

2.1.1.11 Delete my advertisements

Post comments on a specific advertisement

Number	12	Size	3
User story	As a logged user I can post comments on a specific advertisement So that I can give my opinion regarding the advertisement		
Acceptance Criteria	Success: A comment is posted on the relevant advertisement. Error: Display error message and allow user to re-try.		
Priority	Medium		

2.1.1.12 Post comments on a specific advertisement

Rank the business seller

Number	13	Size	5
User story	As a logged user I can Rank the business seller So that I can provide feedback on the reliability of the seller to the other buyers		
Acceptance Criteria	Success: The seller's rating is increased. Error: Display error message and allow user to re-try.		
Priority	Medium		

2.1.1.13 Rank the business seller

Add advertisements to my favorites

Number	14	Size	5
User story	As a logged user I can add advertisements to my favorites So that I can select the best product that I want after looking at similar kinds of products and refer details later		
Acceptance Criteria	Success: The advertisement is added to user's favorites list. Error: Display error message and allow user to re-try.		
Priority	Low		

2.1.1.14 Add advertisements to my favorites

Change/update account details

Number	15	Size	3
User story	As a logged user I can change/update my account details So that I can update my details according to the real changes		
Acceptance Criteria	Success: The user's account details are updated. Error: Display error message and allow user to re-enter the details.		
Priority	High		

2.1.1.15 Change/update account details

Reset password

Number	16	Size	5
User story	As a registered user I can reset my password So that for the convenience of mine if I forget the password		
Acceptance Criteria	Success: The user's password is reset. Error: Display error message and allow user to re-enter the details.		
Priority	High		

2.1.1.16 Reset password

Log out from the account

Number	17	Size	2
User story	As a logged user I can log out from the account So that I can finish using the services		
Acceptance Criteria	Success: The user re-directed to the home page.		
Priority	High		

<div align="center">2.1.1.17 Log out from the account</div>

Get notifications

Number	18	Size	3
User story	As a registered user I can get notifications So I can make sure my add has been posted if not I can correct the mistakes and repost it		
Acceptance Criteria	Success: The user receives a notification on a specific advertisement.		
Priority	Medium		

<div align="center">2.1.1.18 Get notifications</div>

Approve advertisements

Number	19	Size	5
User story	As an Administrator I can approve advertisements So that all advertisements are according to the standard and advertisements can be displayed in the website		
Acceptance Criteria	Success: The advertisement is approved and displayed. Error: The advertisement is not approved and displayed.		
Priority	High		

2.1.1.19 Approve advertisements

Manage advertisements

Number	20	Size	5
User story	As an Administrator I can manage advertisements So that the posted advertisements can be checked for errors and necessary changes can be made		
Acceptance Criteria	Success: Advertisement details are edited / deleted and managed according to the policy. Error :		
Priority	High		

2.1.1.20 Manage advertisements

Manage sellers (registered users)

Number	21	Size	3
User story	As an Administrator I can manage sellers (registered users) So that all users can be maintained if there's an issue and they are according to the rules of the site		
Acceptance Criteria	Success: Details of sellers can be edited or removed successfully. Error: An error message is displayed and asked to redo		
Priority	High		

2.1.1.21 Manage sellers (registered users)

Set rules

| Number	22	Size	2
User story	As an Administrator I can set rules So that the web site has a general set of accepted policies to all users		
Acceptance Criteria	Success: The rules are added and a success message is displayed Error: An error message is displayed and asked to reenter details		
Priority	High		

2.1.1.22 Set rules

Modify/remove rules

| Number	23	Size	2
User story	As an Administrator I can modify/remove rules So that the rules must be updated according to the time		
Acceptance Criteria	Success: Rules are modified/deleted and success is notified Error: An error message is displayed and asked to redo		
Priority	High		

2.1.1.23 Modify/remove rules

Use Case diagrams

Overall functions which were previously described are demonstrated using use case diagrams (Figure 2.1.1.1, Figure 2.1.1.2)
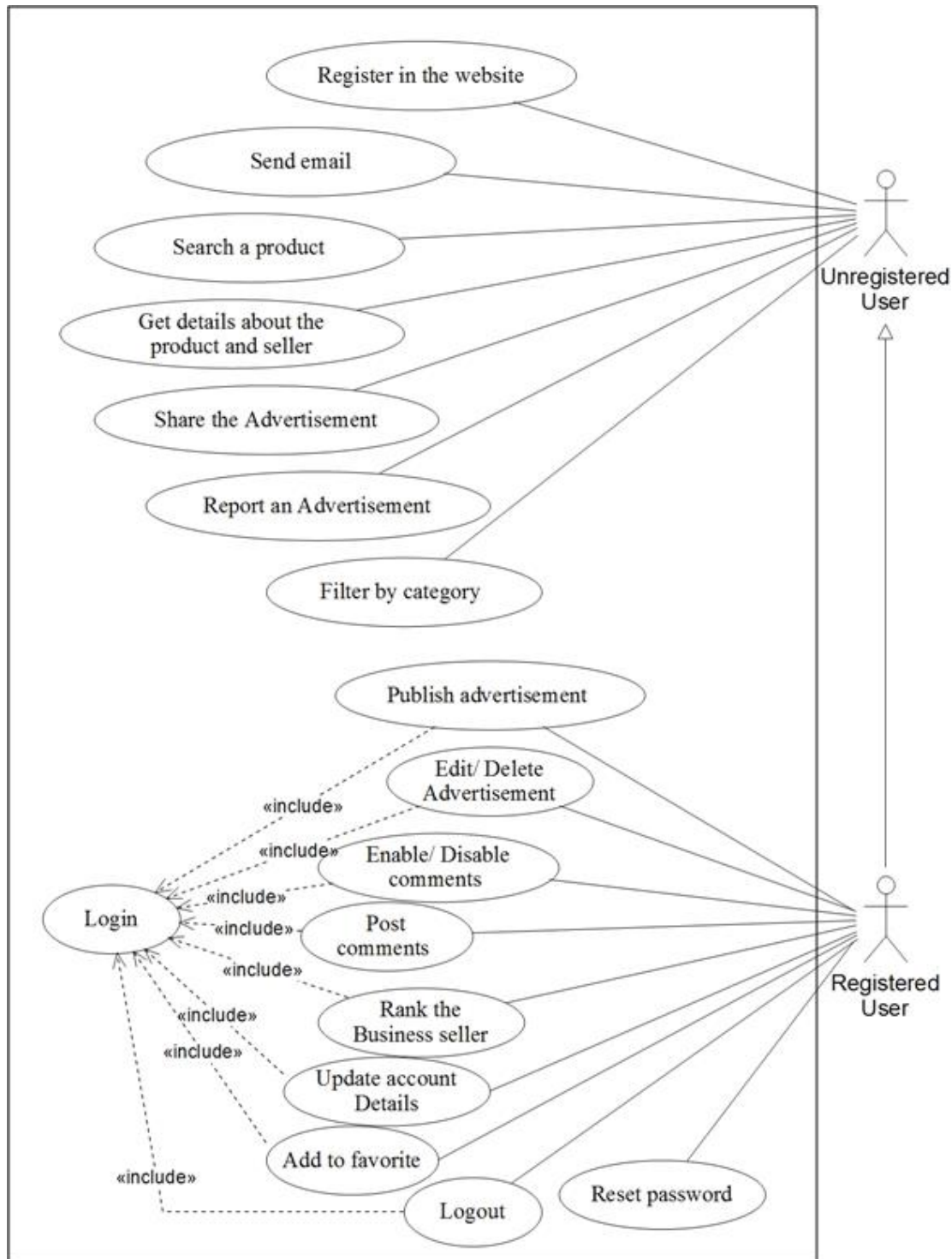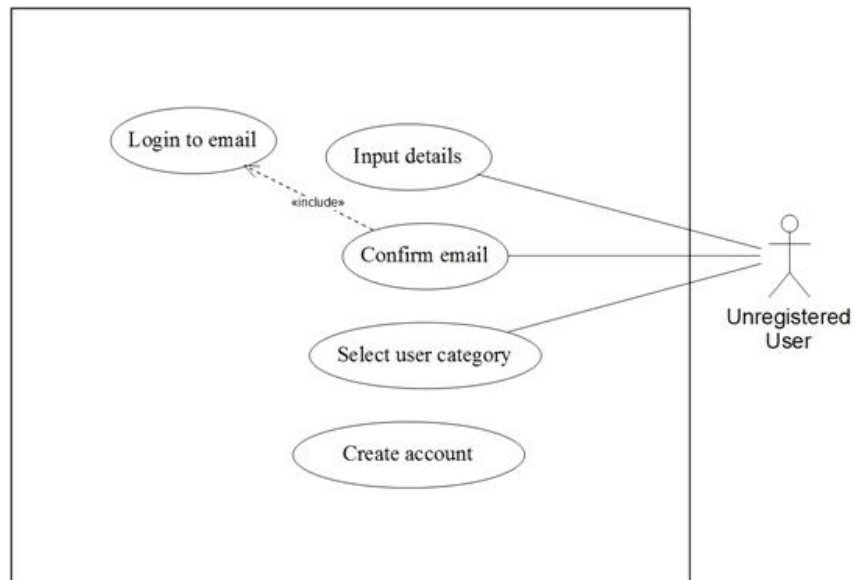

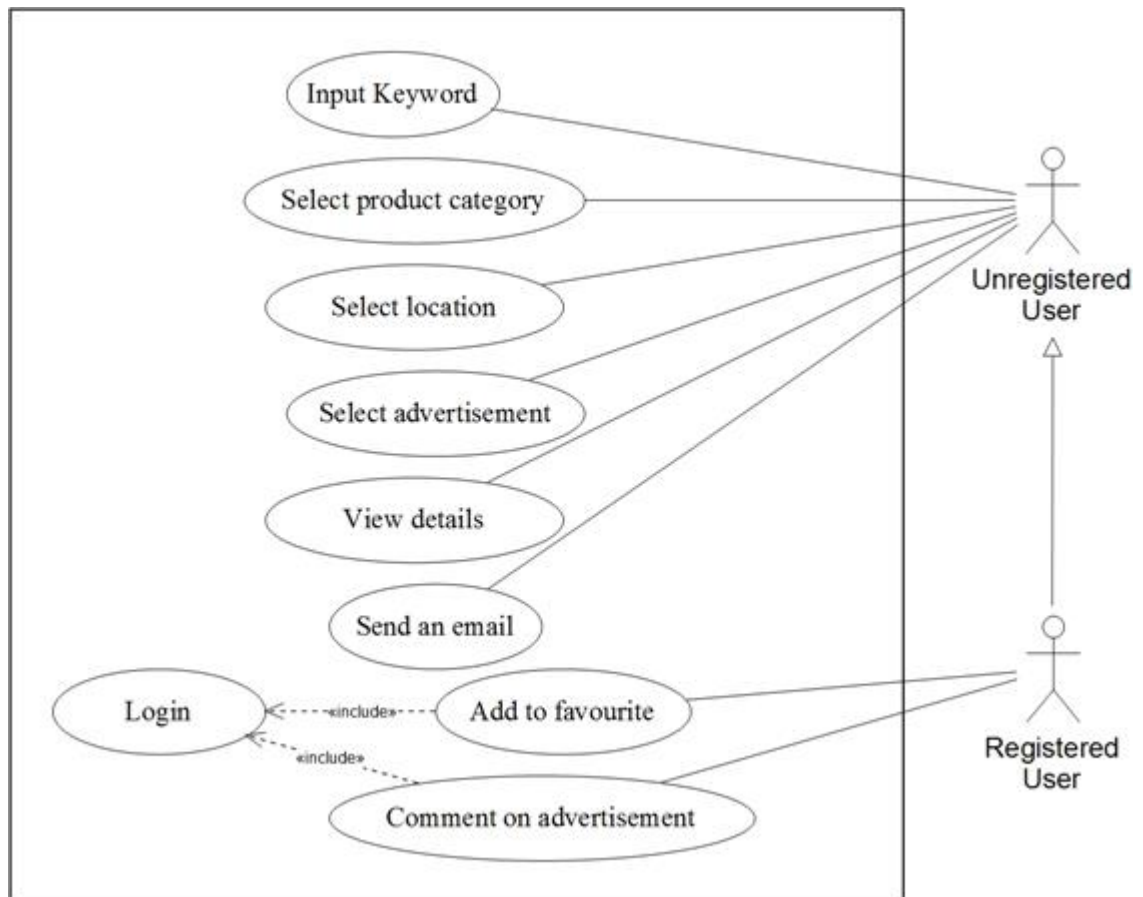2.1.1.1 Use case diagram 1(Overall functions)
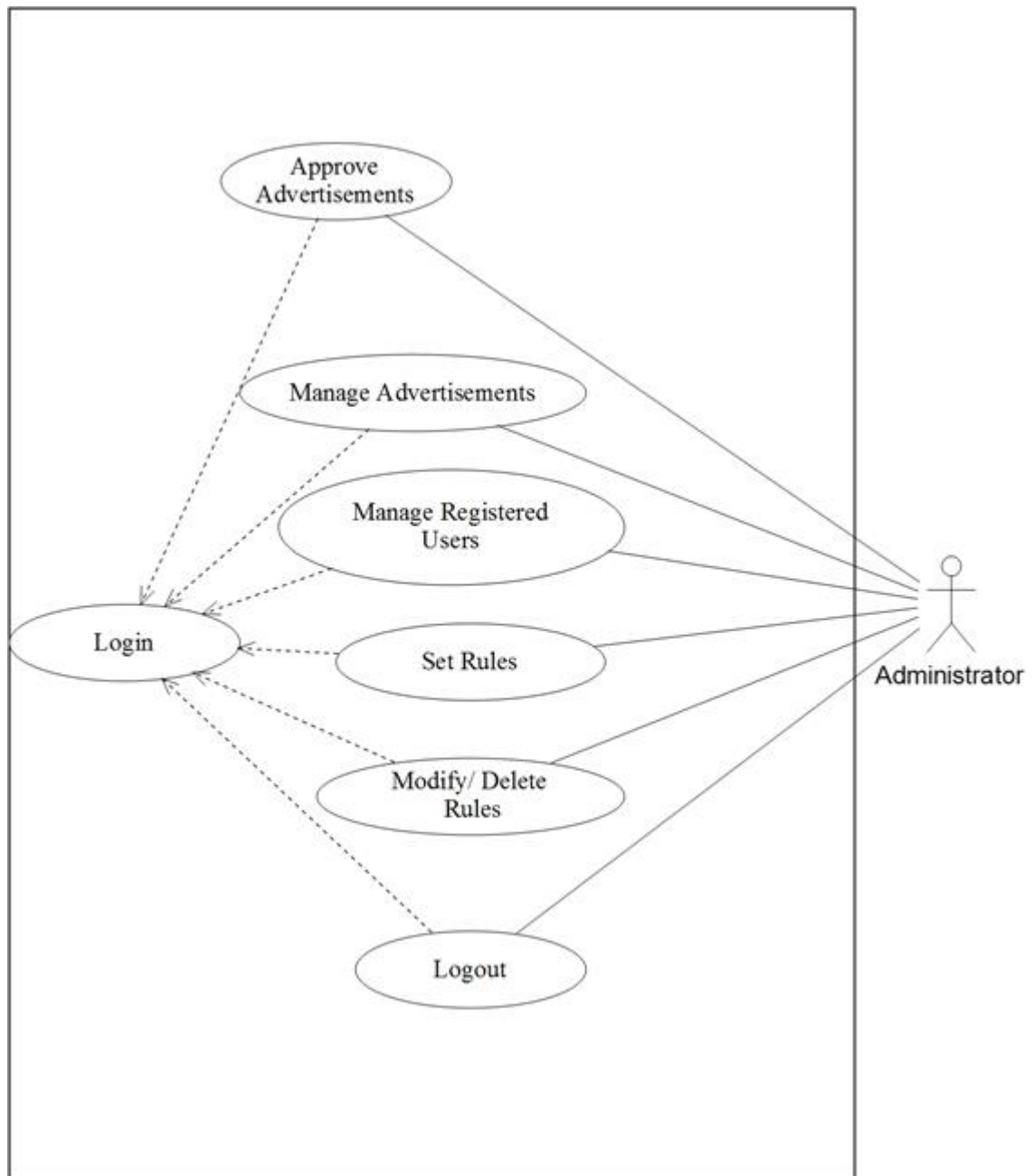
2.1.1.2 Use case diagram 2(Overall functions)
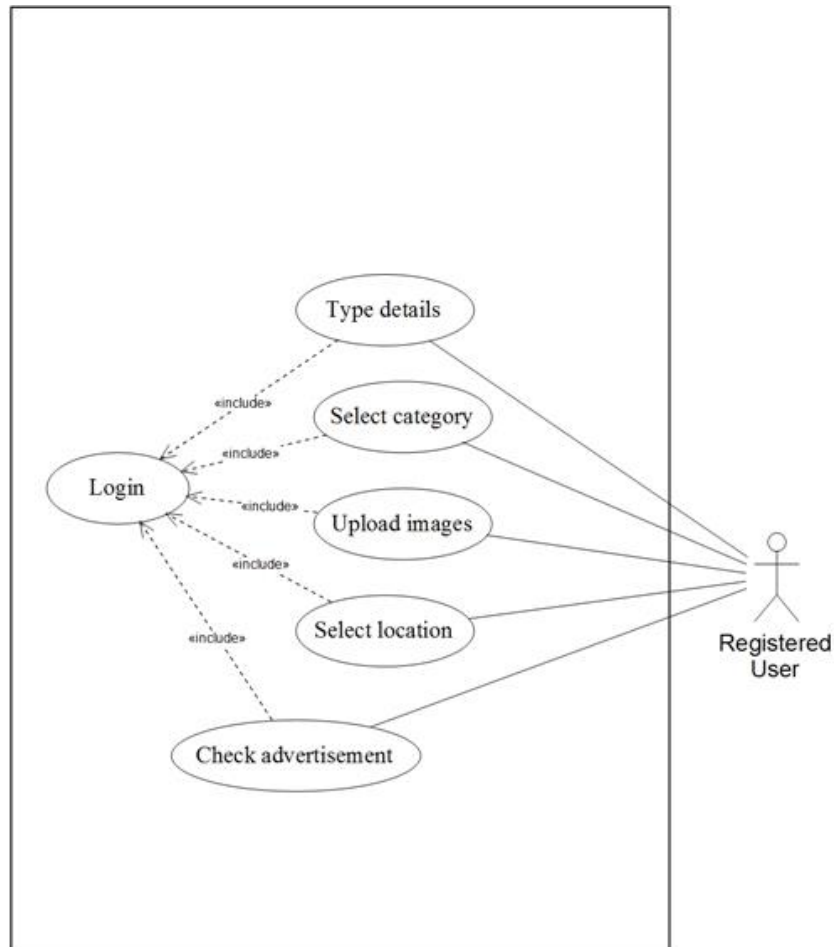
2.1.1.3 Posting an advertisement Use case diagram



2.1.1.4 Registration Use case diagram

2.1.1.4 Search and find product details Use case diagram

2.2.2 Non Functional Requirements

- Availability – System availability to the end user at any given time. When the sellers or Buyers are trying to visit the web site they must be able to access the web site without any problem using a normal internet connection.

- Reliability/Fault Tolerance – The website must be reliable and it must be able to tolerate any fault and continue it operation until maintenance is done.

- Usability - System ease of use and navigability to a layman user. Example: Should not take more than 3 mouse clicks to reach any feature/screen in the system.

- Performance – The tasks in the web site must be completed in a less time period to achieve the required functionality. Response time requirements.

- Security – The system must be secure to store personal information and the contact information. Secure the system is from hackers and unauthorized users

- Portability - System's ability to adapt to different environments. A computer user and a mobile device user should be able to use the web site without any problem.

- Scalability - The system's ability to scale and support number of active users at a given point of time.

2.4 Project Plan

The project plan for the first iteration is shown in the form of a Gantt chart which will includes the subtasks of the project to be accomplished on provided time interval. (Figure 2.4.1)
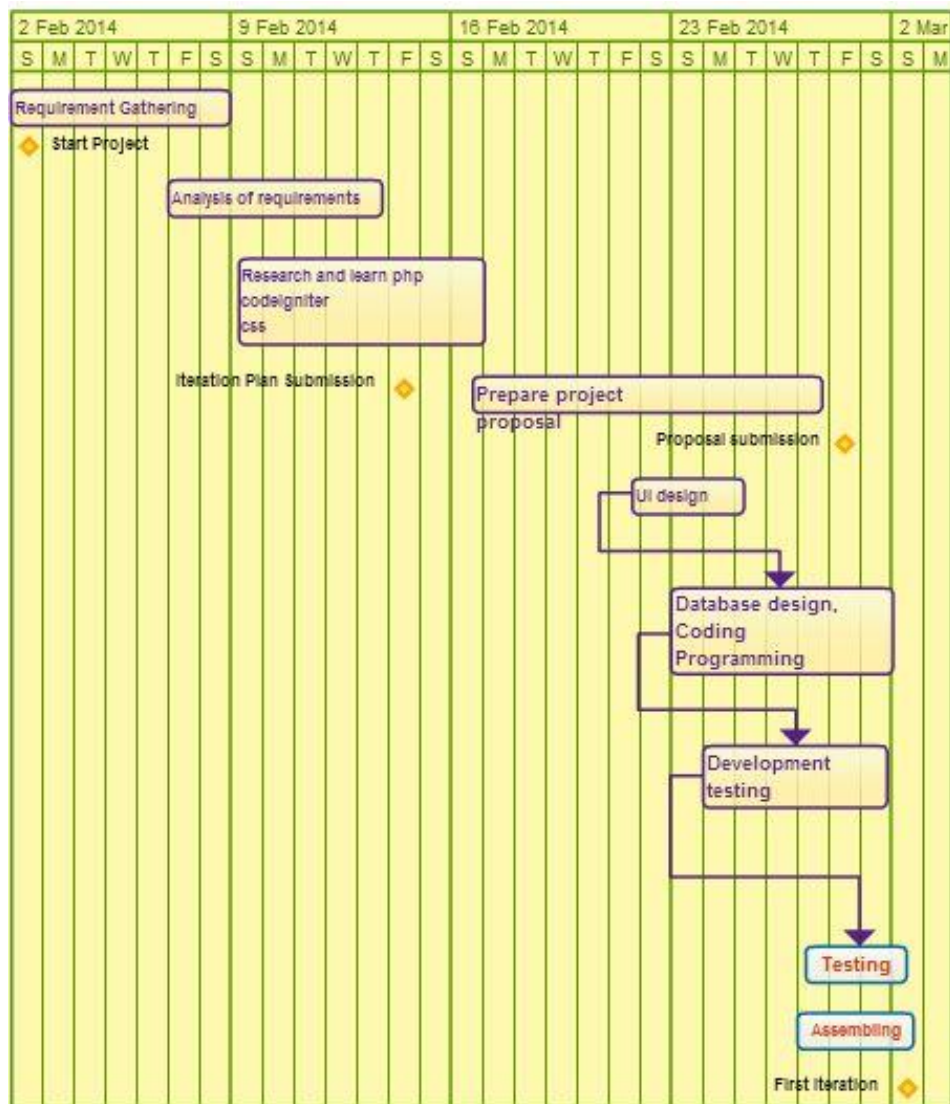
2.4.1 Gantt chart for first iteration

2.5 Assumptions/Constrains

- Using the scrum software development methodology to complete the system in short iterations

- Develop the website and host it in the local Apache server for testing

- Using software such as XXAMP or WAMP server which has integrated web server, database to develop and test the product locally.

- Develop the website using the MVC (Model View Controller) design pattern, for the separation of the code logic from the views.

- Use a centralized MySQL database.

- Responsive User Interface to support multiple screens.

3. Personnel and Facilities

IT Number	Name	Role
IT12088942	K. M. K. N. B. Gamhatha	All members will be doing UI design, front end validations ,database coding , programming language coding and development testing of separate functions
IT12009978	A.N. M. R. H. S Athurupana	
IT12015122	H. M. C. I. Gunathunga	
IT12021512	U. D. R. Piumal	

3.1 Personnel and Facilities

Resources

- PHP programming language

- Apache Server

- CodeIgniter framework (Version 2.1.4)

- Bootstrap CSS framework (Version 3)

- NetBeans IDE (Version 7.4)

4. Hardware, Software Requirements

The software and hardware required to implement,

- PHP programming language (Version 5.4)
- CodeIgniter framework (Version 2.1.4)
- MySQL database (Version 5.6)
- Bootstrap CSS framework (Version 3)
- NetBeans IDE (Version 7.4)
- Normal computer for the development

The software and hardware required to deploy the proposed software system,

- Apache Server
- A PHP engine Version 5.6
- A hosting account and an FTP account on a remote server Provides free FTP account hosting.

The hardware and software required to run the proposed software system,

- Normal computer of a mobile device which supports web browsing
- Internet connection
- Web browser compatible with HTML 5 and CSS 3

5. Conclusion

The website allows users to publish advertisements of their products for free. Any internet user can visit this website and can search for any products that a person needs. It provides and enhances the e-marketing facility to the people of the Island. By completion of this solution selling a product to a best buyer, who is the ideal person to buy a product is an easy task. Any person who wants to find and buy a product can purchase the best product which is closest to him.

6. References

[1] Ramez Elmasri, Shamkant B. Navathe, Fundamentals of Database System Page-Jones, M (2000).

[2] Grady Booch, Fundamentals of Object- Oriented Design in UML. Chapters 1 & 2. eta (2007)

[3] Grady Booch, Robert A. Maksimchuk, Michael W. Engle, Bobbi J. Young, Jim Conallen, Object Oriented Analysis and Design with Applications 3rd Edition, Chapter 1

[4] L. Bass, P. Clements, and R. Kazman, Software Architecture in Practice, 2nd ed. Reading, MA: Addison Wesley, 2003. [E-book]