Group#1

Okaz library

Software Requirements Specification (SRS)

Version: 1.0

CM Identifier: G1_SE02_v1.0

Revision History

Sl. No.	Prepared/ Modified by	E-mail	Version	Date	Approved by	Descriptions/ Remarks
1.	Mohamed Mayla	mohamed.mayla @gmail.com	1.0	March 20, 2013	N/A	Requirement specification
2.	Eslam Hashem	eslam.hashem7 @gmail.com	1.0	March 20, 2013	N/A	Market survey
3.	Hagar Badr	hagar.bedr @yahoo.com	1.0	March 21, 2013	N/A	Introduction , high level plane
4.	Nada Karam	nada_karam23 @yahoo.com	1.0	March 21, 2013	N/A	Cost estimate , feasibility study

Distribution list

Name	E-mail	Notes
Dr. Sayed Hemayed	hemayed@ieee.org	For approval
Eng. Omar Khaled	eng.oks@gmail.com	For approval

Table of Contents

1. Introduction 6
- 1.1 Purpose 6
- 1.2 Scope 6
- 1.3 Definitions, Acronyms and Abbreviations 6
- 1.4 References 7
- 1.5 Overview 7

2. Market Survey 7
- 2.1 Book Crossing 7
  - 2.1.1 Project Description 7
  - 2.1.2 Functional Specifications 7
  - 2.1.3 Non-Functional Specifications 7
  - 2.1.4 Limitations 7
- 2.2 Book Mooch 8
  - 2.2.1 Project Description 8
  - 2.2.2 Functional Specifications 8
  - 2.2.3 Non-Functional Specifications 8
  - 2.2.4 Limitations 8
- 2.3 Summary 8
  - 2.3.1 Functional Specifications 8
  - 2.3.2 Non-Functional Specifications 9
  - 2.3.3 Limitations 9

3. Cost Estimate 9

4. Feasibility Study 9
- 4.1 Added Value 9
- 4.2 Technology, cost and time feasibility 10

5. Requirements Specifications 10
- 5.1 User Requirements (User Stories) 10
  - 5.1.1 US01 – loan a book (2): 10
  - 5.1.2 US02 – borrow a book (2): 10
  - 5.1.3 US03 – sign in (for admin and managers) (2): 10
  - 5.1.4 US04 – confirmation of loan/borrow book (2): 10
  - 5.1.5 US05 – delete book from Okaz library (1): 10
  - 5.1.6 US06 – notification list of borrower and loaner users (2): 10
  - 5.1.7 US07 – list of all loaner users (1): 11
  - 5.1.8 US08 – request code for users (1): 11
- 5.2 System Requirements (Use Cases) 11
  - 5.2.1 Loan a book 11
  - 5.2.2 Borrow Book 12
  - 5.2.3 Confirm request 13
  - 5.2.4 Borrower/loaners list 14
- 5.3 Non-functional Requirements 15
  - 5.3.1 NFR01 15
  - 5.3.2 NFR02 15
  - 5.3.3 NFR03 15
  - 5.3.4 NFR04 15

6. High level plan 16

7. Supporting Information 17

Software Requirements Specification

1. Introduction

This SRS is for Okaz Library, which is a website for Okaz activity on Cairo University to let them easily manage the book shared with peoples (students).

1.1 Purpose

The purpose of this SRS is to describe the Okaz library website. As the basic idea of the project is to manage sharing books between students and make it easy to managed with Okaz library managers (activity).

The website provide users (students) who want to loan a book to the library, easily upload the book cover (to make sure he has the book) with his name and phone number, after that he should deliver the book to the library managers, after that the book will appear on the website that is available to borrow.

The users (students) who want to borrow a book, should send request to borrow selected book from the website with his/her name and phone number, and then go the receive the book from the library for a certain time.

The manager of the Okaz library will manage all the above activities.

1.2 Scope

The scope of this SRS was discussed thoroughly by the team members developing this website with Okaz library activity managers. It's was agreed upon that in the version 1.0 will have the full functionality of the website.

The system will provide the "smart confirmation code" feature that let managing all the activity by the managers more easy and fast, and the system will save the data on an online server.

The website will be ready to be published on the internet and ready to be used by the users.

The application will support simple use cases such as upload cover book, borrow a book and request confirmation by the managers with some complex use cases such as the generation of the "smart confirmation code" , the admin activity like delete a book.

1.3 Definitions, Acronyms and Abbreviations

HTTP: Hypertext Transfer Protocol

HTTPS: Hypertext Transfer Protocol Secure

IP: Internet Protocol

ASP.net: server-side Web application framework

HTML: Hyper Text Markup Language

1.4 References

- ASP.net:

  http://www.asp.net

1.5 Overview

The rest of this SRS will contain some important information about the market surveys we carried on. The feasibility study we made, the cost estimate of and of course the traceability matrix of the project and our future plan.

2. Market Survey

In Cairo university Okaz library is the first web site for this purpose.
And such a project is rarely around the world wide.

But there is some of similar projects and we will show you why is the best using out web site rather than any other book sharing websites.

2.1 Book Crossing

2.1.1 Project Description

Share your book around the world and know its place.

2.1.2 Functional Specifications

- register
- Each book marked with smart code (BCID) for easy recognizing
- print labels for each book you want to share
- you can know the place of your book, each time someone enter your book unique ID from the label on the website

2.1.3 Non-Functional Specifications

- Website respond in less than 1 second
- Have an easy interface , you can learn it in at least 5 minutes

2.1.4 Limitations

- Need sign-in
- It’s not an Arabic website (English interface)
- You can’t actually borrow a certain book
- You might lose your book

2.2 Book Mooch

2.2.1 Project Description

Community for exchanging used books, lets you give away books you no longer need in exchange for books you really want

2.2.2 Functional Specifications

- Give & receive books: Every time you give someone a book, you earn a point and can get any book you want from anyone else at BookMooch. Once you've read a book, you can keep it forever or put it back into BookMooch for someone else, as you wish.
- Register account
- No cost
- Points for entering books
- World wide
- Wish list
- Feedback score

2.2.3 Non-Functional Specifications

- Website respond in less than 1 second
- Have an easy interface , you can learn it in at least 10 minutes

2.2.4 Limitations

- Need sign-in
- It’s not an Arabic website (English interface)
- You might lose your book

2.3 Summary

From the above information, we can see all the above websites don’t match the Egyptian people, Because the language and not secure enough.
The most common advantage is those projects are universal around the world.
The most common disadvantage is they required sign-up to use the websites

2.3.1 Functional Specifications

2.3.1.1 Essential Specifications

- Each book marked with smart code (BCID) for easy recognizing
- Give & receive books.
- No cost (pay method)

2.3.1.2 Non-Essential Specifications

- Register account
- World wide
- Wish list
- Score system

2.3.2 Non-Functional Specifications

2.3.2.1 Essential Specifications

- Website respond in less than 1 second
- Have an easy interface , you can learn it in at least 10 minutes

2.3.2.2 Non-Essential Specifications

- Have secure pay method

2.3.3 Limitations

From the above survey, all websites with English language and didn't have secure way to make sure your book is safe.
Okaz managers can review and maintain the borrowing process and decrease the risk issue that come with the sharing process.

3. Cost Estimate

We gave it a good through of all the possible ways that we are going to spend money on, and we came up with a good plan that will help us minimize out cost estimate while maintaining the same level of sophistication to the project.

Item	Estimated Cost	
	US Dollars	**L.E.**
1. **Fixed Expenses**		
1.1. 4 PCs	1195	8000
1.2. Printer	53	350
1.3 Papers and Notes	8	50
1.4 Electrical Appliances	15	100
Total	1271	8500
2. Monthly Expenses		
1.1 Salaries	0	0
1.2 Office Rent	112	750
1.3 Web server Hosting	3	20
1.4 Domain Hosting	2	13
Total	117	783
Total Estimated Cost for first time	1388	9283

Table 2: Cost Estimate

4. Feasibility Study

4.1 Added Value

- a lot of students buying books but that cost them a lot of money
- a lot of student have some books and finished reading them

- okaz library will provide a secure and trusted way to sharing books between students
- okaz library will encourage students to read and share books

4.2 Technology, cost and time feasibility

- After our market survey, such a web site doesn't exist in our university
- Make it web application that will let the Okaz library spread on the university and between students and maybe will spread to the other universities
- The project team will make this project for free, that because the great value we will add to the community
- The website will be suitable to the most internet browsers and not need to add any plugin
- According to the time plan, the system won't take much time to release

5. Requirements Specifications

5.1 User Requirements (User Stories)

Priority will range between 1 – 2, 2 for the most priority

5.1.1 US01 – loan a book (2):

Any user of the website can loan their books by uploading a cover photo for the book and write their name and phone number that will send a notification to the manager with your request and will show you the request code (the user should deliver it with the book).

5.1.2 US02 – borrow a book (2):

The users that want to borrow a book, by selecting a book from the website and click on borrow button, the website will ask the user to enter his/her name and phone number that will send a request to the manager and will show you the request code (the user should deliver it when receiving the book).

5.1.3 US03 – sign in (for admin and managers) (2):

Only the admin and manager can sign in to their registered accounts.

5.1.4 US04 – confirmation of loan/borrow book (2):

With the smart confirmation code system, manager can confirm that they receive or give a book to the user, with no human mistakes or errors and much more fast.

5.1.5 US05 – delete book from Okaz library (1):

Only admin can delete a book from Okaz library

5.1.6 US06 – notification list of borrower and loaner users (2):

Show a list with all current requests of the books and the end time of each

5.1.7 US07 – list of all loaner users (1):

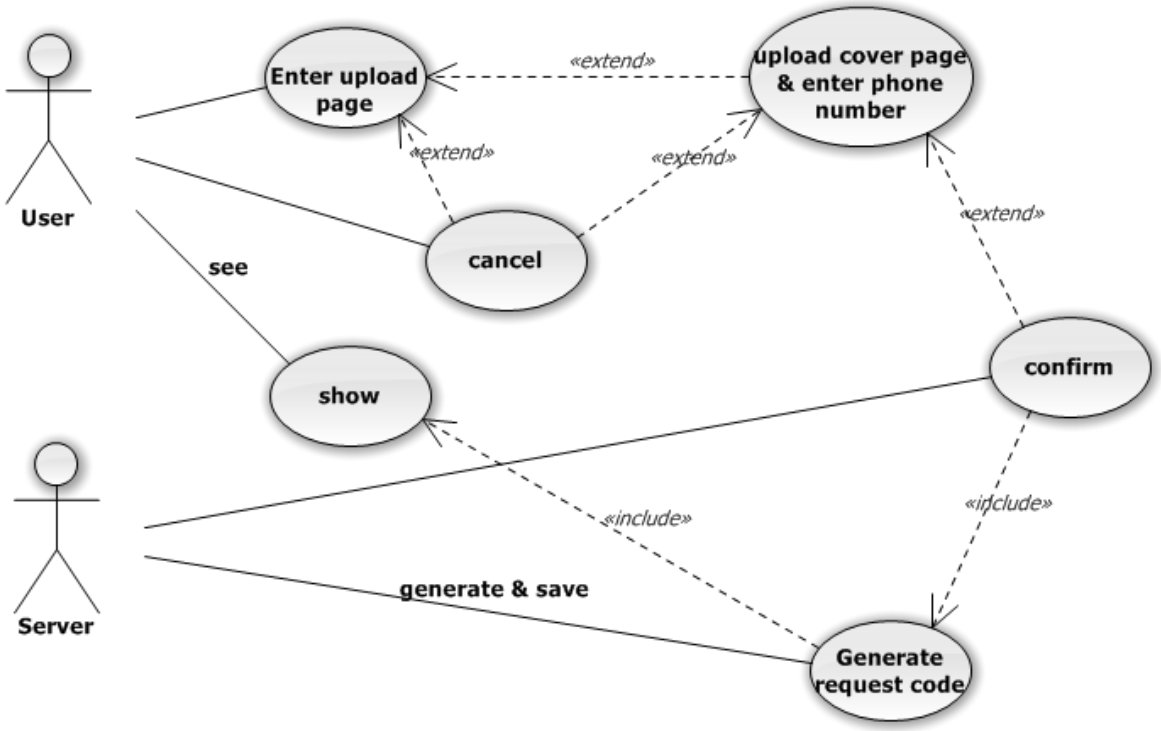
List of all details of the users that loan a book in the library.

5.1.8 US08 – request code for users (1):

Each borrower/loaner users can see all request codes they establish with each end time for it that with the emails and phone number as a security method to enter this page.

5.2 System Requirements (Use Cases)

5.2.1 Loan a book



Name: Loan a book

Identifier UC01

Preconditions

1. In home page
2. Other website or page (user enter the upload page from URL).

Basic Course

1. Use case begins when user enter the upload page
2. Upload the cover image
3. Type Name
4. Type phone number

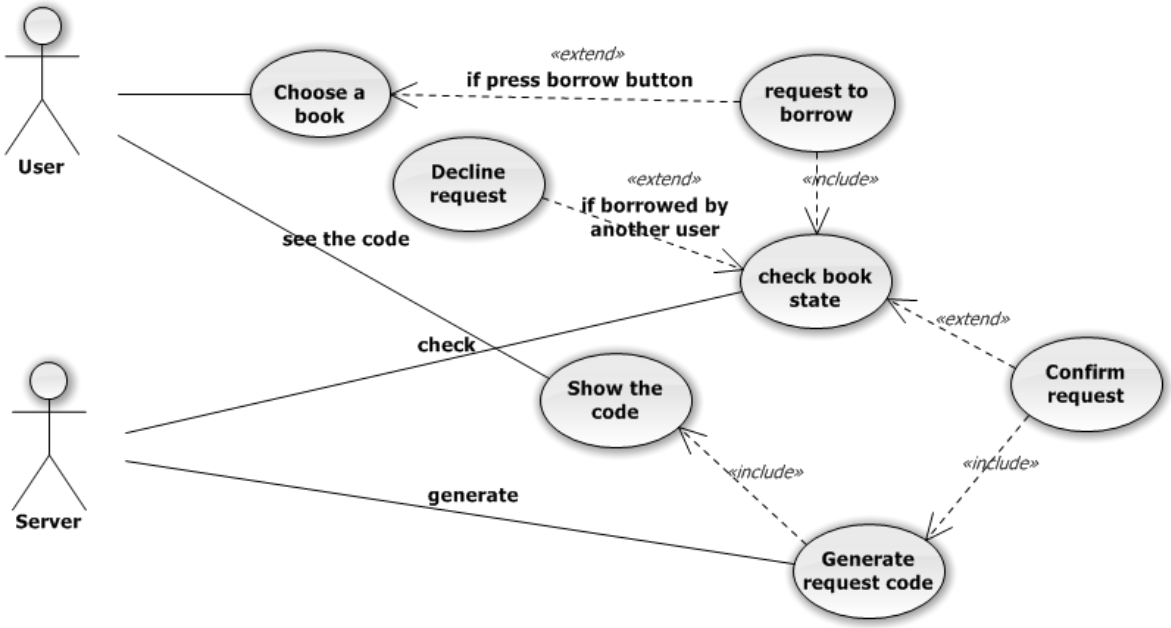
5. Type email
6. Enter the confirm button
7. Use case ends when system show the request code for the user

Alternate Course A: Description of the alternate course
Condition: The users leave the upload page
A.1. there is no image will saved
A.2. no data will be saved of the user
A.3. will reload the upload page with empty data boxes

Post conditions
1. Upload page
2. Home page
3. Other website

Map to: US01

5.2.2 Borrow Book



Name: borrow a book

Identifier UC02
Preconditions
1. In home page
2. Other website or page (user enter the book list page from URL)

Basic Course
1. Use case begins when user enter the book list page
2. Send request by click on borrow button
3. Enter the request page for the book and write name
4. Write phone number and email

5. Press confirm button
6. Use case ends when system show the request code for the user

Alternate Course A: Description of the alternate course
Condition: The users enter cancel button

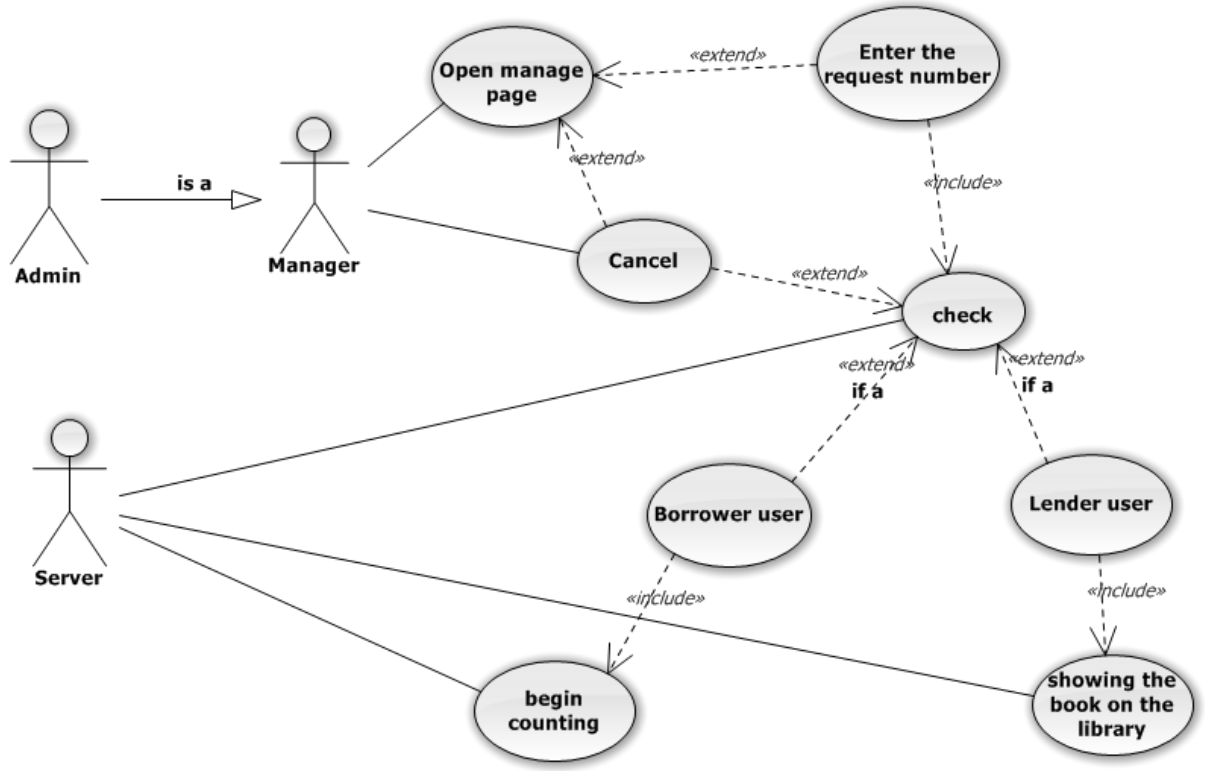
A.1. there is no request will be send
A.2. the book will still free to borrow by other user

Post conditions

1. Book list page
2. Home page
3. Other website

Map to: US02

5.2.3 Confirm request



Name: confirm request

Identifier UC03

Preconditions

1. Sign in page
2. Other website or page (user enter the sign in page from URL)

Basic Course

1. Use case begins when admin/manager enter the manage page
2. Type in the request code
3. Press confirm
4. The page will appear show confirmation and request details like book name , cover page …etc
5. Use case ends when system show the details page

Alternate Course A: Description of the alternate course
Condition: the request code is incorrect

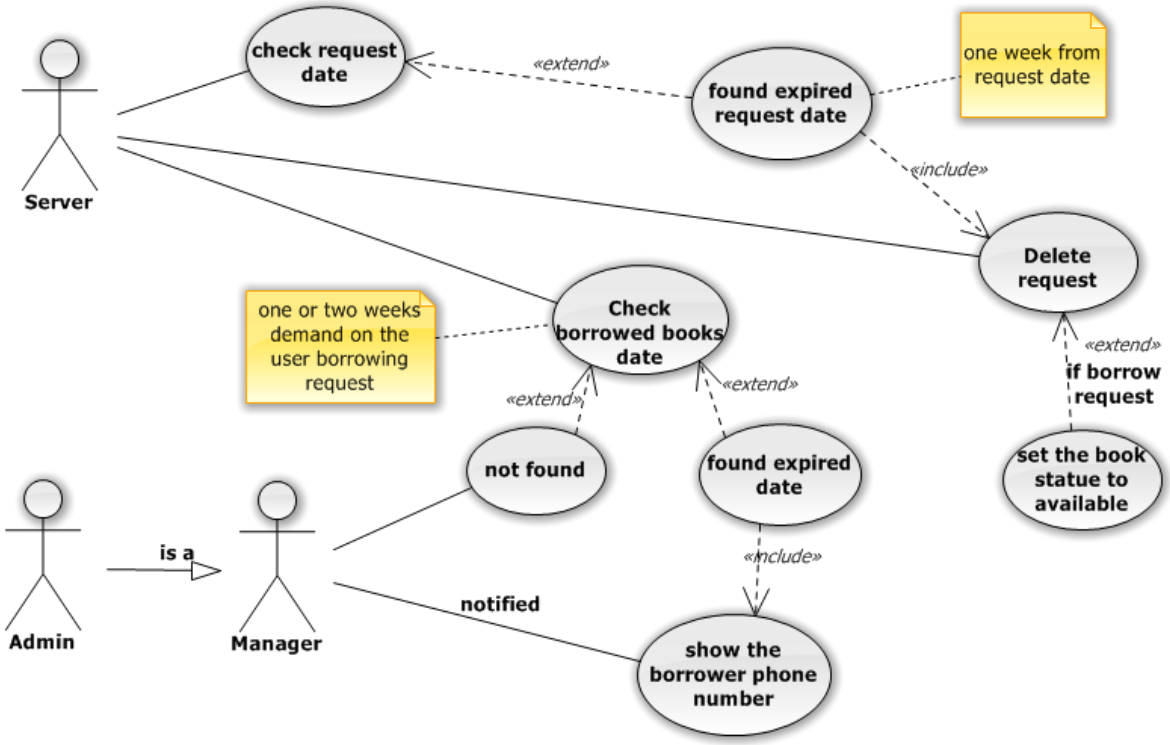
A.1. system will show message with the error
A.2. will empty the box

Post conditions

1. Same page (manage page)
2. Home page
3. Other website

Map to: US04

5.2.4 Borrower/loaners list



Name: borrower/loaner list

Identifier UC04

Preconditions

1. Sign in page
2. Other website or page (user enter the sign in page from URL)

Basic Course

1. Use case begins when admin/manager enter the list page
2. Press on the wanted list tab
3. The list will appear
4. Use case ends when system show list

Post conditions

1. Same page (list page)
2. Home page
3. Other website

Map to: US06, US07

5.3 Non-functional Requirements

5.3.1 NFR01

The website shall has easy interface to the user so that he/she can easily borrow or loan a book, can learn the website in at most 5 minutes

5.3.2 NFR02

The website shall has high privacy for each user information like phone number and email

5.3.3 NFR03

The website shall work probably on the most web browser (firefox , chrome)

5.3.4 NFR04

The system shall be light and fast (responds in at least 1 second)

6. High level plan

Task	Estimated Time
1.Putting SRS	3 Days
2.Putting web page design	1 Week
3.Putting software testing plan	1 Week
4.Design the database	3 Days
4Impliminting the website	2 Weeks
5.Testing system	1 Week
Total Time	6 Weeks

Table 1: High Level Plan

7. Supporting Information

Traceability Matrix

RID	US01	US02	US03	US04	US05	US06	US07	US08
UC01	✓							
UC02		✓						
UC03				✓				
UC04						✓	✓	
NFR01	✓	✓						
NFR02	✓	✓						
NFR03								
NFR04	✓	✓		✓				

Dependability Matrix

RID	US01	US02	US03	US04	US05	US06	US07	US08
US01		✓			✓	✓		
US02	✓							
US03								
US04	✓	✓						
US05								
US06	✓	✓						
US07								
US08								