Cairo University  
Faculty of Computers and Information



**CS251**

**Software Engineering I**

Masro2a

Software Requirements Specifications

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October 2018

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# Team

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# Document Purpose and Audience

* This document specifies the Software Requirements Specification (SRS) for Masro2a Application, It describes scope of the system, both functional and non-functional requirements for the software and the system models.
* Our target audience to read this document are the customer, the project manager and any non-technical interested in the project.

# Introduction

## Software Purpose

* We often miss our things and do not find them easily. There are many ways to find your lost things like making an advertising and publish it in the place that you think you lost your things in it or you can keep searching in that place but technology always offers the solution so we are going to develop a software application that will enable you to search for your missing things by a simple and easy way with just a few steps.

## Software Scope

* Masro2a provides the ability for its users to share anything which they believe that it’s lost from someone.
* The owner will be able to check periodically the system to hopefully find the lost thing.
* Our system provides and facilitate the communications between anyone lost something and the one who found this missing thing with smart and secured tools.

## Definitions, acronyms, and abbreviation

|  |  |
| --- | --- |
| Word | Definition |
| * Share a post | Upload data on application or website and this data may be text, photos or videos |

# Requirements

## Functional Requirements

1. Passerby
   1. Passerby can share a post about anything which s/he believes that it has been lost by someone.
      1. The passerby must write a description about the lost thing.
      2. Passerby can take a photo for the lost thing and add it to his/her post.
   2. Passerby must check his/her mailbox in the account periodically to know if anyone suspect that one of the posts of this passerby is about his/her lost thing.
   3. If a passerby finds the person who lost the item and make sure that s/he is the correct person by the security officer, s/he will communicate with him/her.
2. Item owner
   1. The owner can search in posts that was shared in our application to be able to get his/her missing thing.
   2. If the owner suspect that there is a post talk about his/her lost thing s/he must send the post number to the security officer.
      1. S/he must send strong evidence such as pictures of the missing item or images proving that this lost thing was with him/her in the same place where they found the thing.
   3. The item owner will be able to communicate with the passerby who found his/her lost thing after the investigations of the security officer.
3. Security officer   
   1. Get posts’ numbers from people who lost something and they suspect that this post talks about their missing things.
   2. Verify and make some investigations that the owner is right and the missing thing in the post belongs to him/her not to anyone else by getting strong evidence such as pictures of the missing item or images proving that this lost thing was with him/her in the same place where they found the thing.
   3. Accept and facilitate the communication between passersby and the item owner.

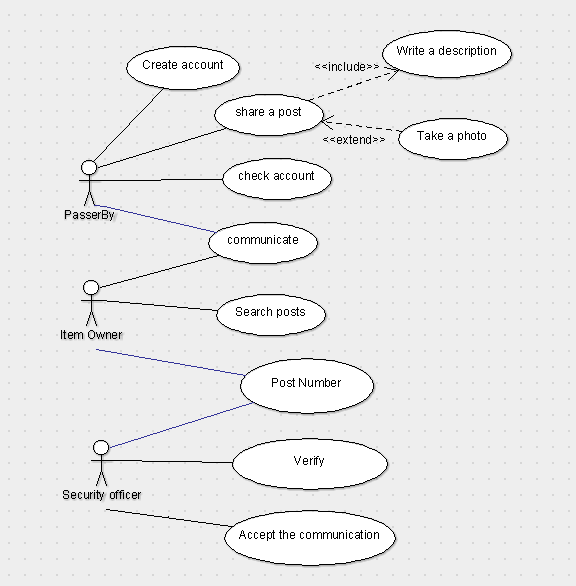
## Non Functional Requirements

|  |  |
| --- | --- |
|  | **Details** |
| **Performance** | * Sharing a post should be done in less than 3 seconds |
| **Availability** | * The application is required to be available to all users all times excluding  the updates times |
| **Usability** | * Any user can use the application easily and without the need for any help or clarification |
| **Scalability** | * The application will be able to accept 1000 concurrent users |
| **Security** | * In our software we make a lot of investigations and use high security techniques in order to connect the missing items to their actual owners |
| **Supportability** | * Developers will be able to add new features and functions without making any modifications to the existing system |
| **Robustness** | * We developed the software to be able to deal with most of the abnormal situations. |
| **Legal** | * we support the application with some experts to deal with the legal issues such as the privacy of information |

# 

# System Models

## Use Case Model



## Use Case Tables

|  |  |  |
| --- | --- | --- |
| Use Case ID: | 1 | |
| Use Case Name: | Share a post | |
| Actors: | Passerby | |
| Pre-conditions: | User must have an account on our application  User logged in his/her account successfully | |
| Post-conditions: | - | |
| Flow of events: | **User Action** | **System Action** |
| 1- User login his account |  |
|  | 2- System verify user data |
|  | 3- System displays a dialogue box |
| 4- User writes the description of the lost thing and upload photos |  |
| 5-User selects share a post |  |
|  | 6-System gives a number to the post  7-System stores all the data in the post at its database including the post number as identifier to the post |
| Exceptions: | **User Action** | **System Action** |
| 1- User enter invalid e-mail or password when logging in his account. |  |
|  | 2-System requests user to re-enter valid data about his account. |
|  | 3-User share a post without a description. |  |
|  |  | 4-The system refuses to publish this post and asks the user to enter a description. |
| Includes: | - | |
| Notes and Issues: | - | |

|  |  |  |
| --- | --- | --- |
| Use Case ID: | 2 | |
| Use Case Name: | Check account | |
| Actors: | Passerby | |
| Pre-conditions: | User must have an account on our application  User logged in his/her account successfully | |
| Post-conditions: | - | |
| Flow of events: | **User Action** | **System Action** |
| 1- User open his/her mailbox in the system |  |
|  | 2- System displays all the message which were sent to this user |
| 3- The user may find a message that contains information about the owner of the lost things |  |
| Exceptions: | - | |
| Includes: | - | |
| Notes and Issues: | Information about the owner will include all data that the user need to be able to communicate with the owner like mobile number, address or e-mail | |

|  |  |  |
| --- | --- | --- |
| Use Case ID: | 3 | |
| Use Case Name: | Communicate | |
| Actors: | Passerby  Item owner | |
| Pre-conditions: | The communication must be accepted via the security officer  Mail must be sent to the passerby to inform him/her that they found the owner | |
| Post-conditions: | Passerby successfully gave the lost things back to the owner | |
| Flow of events: | **User Action** | **System Action** |
| 1- The man will communicate with the stolen person and they will determine together how to meet |  |
| 2- After the meeting, the lost thing would be returned to the owner |  |
| 3- The passerby informs the system via mailbox that s/he gave the lost things back to the owner |  |
|  | 4- The system removes the post about this lost thing as it isn’t considered now as a lost thing |
|  |  |
| Exceptions: | **User Action** | **System Action** |
| 1- The passerby does not have sufficient information to be able to communicate with the owner |  |
|  | 2-The system will ask the owner to send additional clear information |
| Includes: | - | |
| Notes and Issues: | - | |

|  |  |  |
| --- | --- | --- |
| Use Case ID: | 4 | |
| Use Case Name: | Search in posts | |
| Actors: | Item owner | |
| Pre-conditions: | - | |
| Post-conditions: | - | |
| Flow of events: | **User Action** | **System Action** |
| 1- The owner inputs a description about his/her lost thing |  |
|  | 2- The system searches in its database for posts have description similar to the input description |
|  | 3-The system displays the result of the search to the user |
| 4-The owner searches the results for his/her desired post to be able to get the desired post’s number |  |
| Exceptions: | **User Action** | **System Action** |
| 1- The owner inputs a description about his/her lost thing |  |
|  | 2- The input description is written in an incomprehensible language or contains unintelligible words  3-System rejects this description and asks the user to re-enter the input |
| Includes: |  | |
| Notes and Issues: | There is no Post-conditions as s/he may find his/her lost things or may not | |

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| --- | --- | --- |
| Use Case ID: | 5 | |
| Use Case Name: | Post number | |
| Actors: | Item owner  Security officer | |
| Pre-conditions: | The owner already make a search and found a post identical to his/her desired one | |
| Post-conditions: | The post number will be sent to the Security Officer | |
| Flow of events: | **User Action** | **System Action** |
| 1- The owner sends the number of the post that identical to his/her desired one to the system |  |
|  | 2- The system makes sure that this number belongs to a post already exists |
|  | 2- The system takes this number and sends it to the Security Officer |
|  | 3-The system displays a massage to the user telling him/her that the number was sent successfully |
| 4-The owner read the massage to make sure that the number was sent successfully |  |
| Exceptions: | **User Action** | **System Action** |
| 1- Owner send a number that doesn’t belong to any post |  |
|  | 2- The system displays a massage to the user telling him/her that the number was wrong  3-The system asks the user to re-enter the number |
| Includes: | - | |
| Notes and Issues: | The owner must send strong evidences to the system such as pictures of the missing item or images proving that this lost thing was with him/her in the same place where they found it as the system provides high security technique | |

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| --- | --- | --- |
| Use Case ID: | 6 | |
| Use Case Name: | Verify | |
| Actors: | Security officer | |
| Pre-conditions: | The owner has sent the number of the post which s/he suspects is talking about his/her lost thing | |
| Post-conditions: | The security officer decides whether the one who sent the post number is the actually owner or not | |
| Flow of events: | **User Action** | **System Action** |
| 1-Officer searches for the description of the post by the post’s number |  |
|  | 2- System gets from its database the description of the post related to the sent number |
|  | 3-The system sends the description to the security officer |
| 4-The security officer gets the description |  |
|  | 5- System gets from its database the evidences sent by the owner who sent that post number |
|  | 6-System sends the evidences to the security officer |
| 7-The security gets the evidences |  |
| 8- The security officer starts making his investigations |  |
| Exceptions: | - |  |
| Includes: | - | |
| Notes and Issues: | - | |

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| --- | --- | --- |
| Use Case ID: | 7 | |
| Use Case Name: | Accept the communication | |
| Actors: | The security officer | |
| Pre-conditions: | The security officer carried out all his investigations | |
| Post-conditions: | - | |
| Flow of events: | **User Action** | **System Action** |
| 1- Security officer informs the system that s/he accepted the communication between the owner and the passerby |  |
|  | 2- System establishes and facilitates the communication between the owner and the passerby  3-The system send a mail to the passerby to inform him/her that they found the owner |
| Exceptions: | **User Action** | **System Action** |
| 1- Security officer doesn’t accept the communication between the owner and the passerby. |  |
|  | 2-System sends to the owner message telling him/her that his/her suspicion was misplaced and the lost item in the post doesn't belong to him/her |
| Includes: | - | |
| Notes and Issues: | - | |

# Ownership Report

* We had several meetings and worked together in every part of this phase of the project.