|  |
| --- |
| Universität Bern |
| SRS – Group 2 – ESE 2014 |
| Software requirements specification document |

|  |
| --- |
| Raffael Hertle, Carl Balmer, Peter Allemann, Mathias Fuchs  10/5/2014 |

# 1. Introduction

## 1.1. Purpose

The purpose of this document is to present a detailed description of the Web Publishing System. It will explain the purpose and features of the system, the interfaces of the system, what the system will do, the constraints under which it must operate and how the system will react to external stimuli. This document is intended for both the stakeholders and the developers of the system and will be proposed to the Regional Historical Society for its approval.

## 1.2 Stakeholders

The stakeholders of this project are as follows:

* For team two especially: Andrea Caracciolo
* Ese- 2014 Staff

## 1.3 Definitions

To come

## 1.4 System overview

This software system will be a webpage which helps users find their desired apartment and/or set up an ad to find a suitable member to join their housing commune.   
The system will be designed to assist the ad placer’s to find their optimal housing mate match, by offering them various options to filter Users.   
On the other hand the system will offer various filter options for Users who are looking for an apartment, so that they are offered a good overview over places which might be suitable for them.

The system will be built around flexibility, to fit every user’s needs. Therefore it will be possible to put up/ manage/ watch ads, without having to have an account on the website. However it will be possible to register accounts, to make the managing of different ads/ applicants even easier.

## 1.5 References

The project should mainly improve existing Software systems with the same purpose. Therefore it is necessary to get an overview of other existing systems, to be able to fully understand the purpose of this project.

Other housing commune sites:

* [www.wgzimmer.ch](http://www.wgzimmer.ch/)
* [www.students.ch/wohnen/](http://www.students.ch/wohnen/)
* [www.tutti.ch/ganze-schweiz/immobilien/wg-zimmer](http://www.tutti.ch/ganze-schweiz/immobilien/wg-zimmer)

Similar real estate websites:

* [www.immoscout24.ch](http://www.wgzimmer.ch/)
* [www.homegate.ch](http://www.students.ch/wohnen/)

Furthermore the project description of the ese-2014 staff:

* [https://github.com/ese-unibe-ch/ese2014-wiki/wiki/Task-FirstApp](http://www.students.ch/wohnen/)

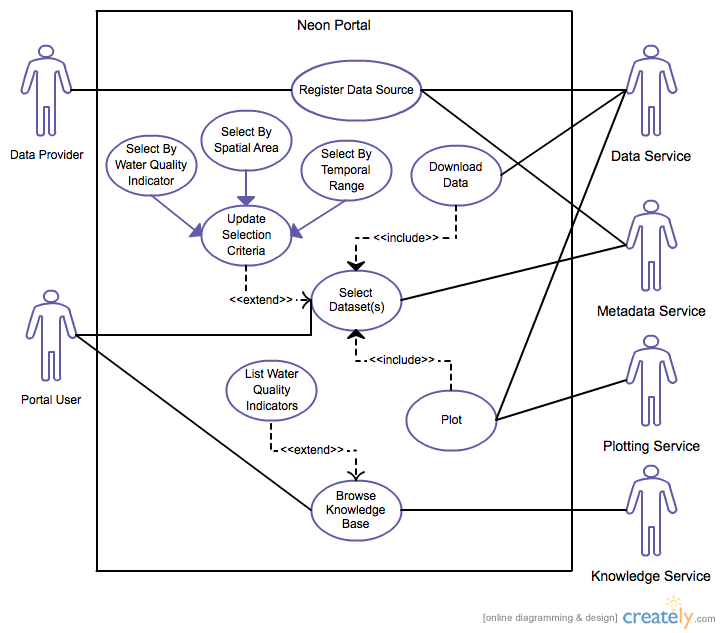
# 2. Overall description

## 2.1 Use Cases

### 2.1.1 Overview Diagram

We recommend using the following authoring tool: www.draw.io

***EXAMPLE***



### 2.1.2 the use cases

#### 0. register on the website

##### **0.1 Actors**

User

##### **0.2 Description**

As a user I want to be able to register on the website and get my personal account, with my own login.

##### **0.3 Trigger**

Click on the “register” button on the website, and filling out the required form.

##### **0.4 Pre-conditions**

0. The user has access to the internet.  
1. The user owns a valid e-mail account.   
 2. The user is willing to give his correct name and first name.   
 3. The user provides a username and a password.

##### **0.5 Post-conditions**

1. The user receives the confirmation of the registration in an e-mail.  
 2. The user is able to login into the website, using the given username and password.

##### **0.6 Main Scenario**

1. The user clicks on the “register” button on the website  
 2. The user fills out the form with valid credentials  
 3. The user clicks “submit” to submit the information and register his account

##### **0.7 Alternative Scenarios**

A) the user is not providing valid information  
 1. Print out error: “ information not valid”.   
 2. Fill out form again with valid information.

##### **0.8 Special Requirements**

None

##### **0.9 Notes**

Link facebook account?   
 The user is responsible for keeping his username, and password.

#### 1. login on the website as a registered user

##### **0.1 Actors**

Registered user

##### **0.2 Description**

As a user I want to be able to log in to my personal account.

##### **0.3 Trigger**

Click on the “login” button on the website.

##### **0.4 Pre-conditions**

0. The user has access to the internet.  
 1. The user still owns his login credentials.

##### **0.5 Post-conditions**

1. The user is logged in to the website and has access to his personal profile

##### **0.6 Main Scenario**

1. The user enters his password and username on the website.   
2. System prompts the user to the login successful page.

##### **0.7 Alternative Scenarios**

A) the user is not entering a valid username and/ or password  
 1. Print out error: “ password/ username not valid”.   
 2. Ask if he wants to reset password.

##### **0.8 Special Requirements**

None

##### **0.9 Notes**

None

#### 2. put up an ad without registering

##### **0.1 Actors**

User

##### **0.2 Description**

As a user I want to be able to quickly put up an ad without having to go through the process of registering an account.

##### **0.3 Trigger**

Click on the “put up ad” button on the website, and filling out the required form.

##### **0.4 Pre-conditions**

0. The user has access to the internet.  
1. The user owns a valid e-mail account.   
 2. The user is willing to give his correct name and first name, and flat address. For contact purposes.  
 3. The user is willing to share information about the apartment in question.

##### **0.5 Post-conditions**

1. The user receives the confirmation of the ad in an email, and with it a link to edit the ad.  
 2. The ad placer gets notified if someone is interested in the ad.

##### **0.6 Main Scenario**

1. The user clicks on the “put up ad” button on the website  
 2. The user fills out the form with valid credentials  
 3. The user clicks “submit” to submit the ad.

##### **0.7 Alternative Scenarios**

A) The user is not providing valid information  
 1. Print out error: “information not valid”.   
 2. Fill out form again with valid information.

##### **0.8 Special Requirements**

None

##### **0.9 Notes**

The user is responsible for keeping the edit link and the password to edit the ad.

#### 3. edit ad as non-registered user

##### **0.1 Actors**

User

##### **0.2 Description**

As a User I want to be able to edit the ad, I put on the website without registering an account.

##### **0.3 Trigger**

open the link, which was in the ad confirmation e-mail.

##### **0.4 Pre-conditions**

0. The user has access to the internet.  
1. The user registered an ad successfully, without owning an account.   
 2. The user still owns the link, and the password given to him.

##### **0.5 Post-conditions**

1. The user recieves a confirmation e-mail, that the ad was edited.

##### **0.6 Main Scenario**

1. The user opens the given link, and enters the given edit password.  
2. The user gets prompted to his ad.  
 3. The user edits the desired fields in his ad.  
 4. The user clicks “submit” and the ad will get saved.  
5. A confirmation e-mail will be sent to the user.

##### **0.7 Alternative Scenarios**

None

##### **0.8 Special Requirements**

None

##### **0.9 Notes**

None

#### 4. delete ad as a non-registered user

##### **0.1 Actors**

User

##### **0.2 Description**

As a user I want to be able to delete the ad I put up.

##### **0.3 Trigger**

Open the link, which was in the ad confirmation e-mail.

##### **0.4 Pre-conditions**

0. The user has access to the internet.  
1. The user registered an ad successfully, without owning an account.   
 2. The user still owns the link, and the password given to him.

##### **0.5 Post-conditions**

1. The user recieves a confirmation e-mail, that the ad was deleted.

##### **0.6 Main Scenario**

1. The user opens the given link, and enters the given edit password.  
2. The user gets prompted to his ad.  
 3. The user clicks “delete ad” and the ad will be deleted.  
5. A confirmation e-mail will be sent to the user.

##### **0.7 Alternative Scenarios**

None

##### **0.8 Special Requirements**

None

##### **0.9 Notes**

None

#### 5. Put up an ad as a registered user

##### **0.1 Actors**

Registered user

##### **0.2 Description**

As a user I want to be able to log into my account, and put up an ad.

##### **0.3 Trigger**

Login to the personal user account, and click on “create new ad” button.

##### **0.4 Pre-conditions**

0. The user has access to the internet.  
1. The user owns an account on the website.   
 2. The user still owns his login credentials.

##### **0.5 Post-conditions**

1. The user now has a new add under his “adds” tab in his personal account.  
2. The user is able to edit/ delete the ad at anytime.

##### **0.6 Main Scenario**

1. The user logs into his account, with his login credentials.  
2. The user clicks on “my account”  
 3. The user clicks on “ads”  
4. The user clicks on “create new ad”  
 5. The user fills out the form with valid information about the room/flat.   
6. The user clicks on submit.  
7. The ad will be added to his “ads” tab, in his personal account.   
8. A confirmation e-mail will be sent to the user.

##### **0.7 Alternative Scenarios**

A) The user is not providing valid information  
 1. Print out error: “information not valid”.   
 2. Fill out form again with valid information.

B) The user can’t log in to his account anymore  
 1. The user forgot his username/ password.

##### **0.8 Special Requirements**

None

##### **0.9 Notes**

How should the form look exactly?

#### 6. edit ad as a registered user

##### **0.1 Actors**

Registered user

##### **0.2 Description**

As a user I want to be able to log into my account, and edit my ads.

##### **0.3 Trigger**

Login to the personal user account, and click on “edit ad” in the “ads” tab.

##### **0.4 Pre-conditions**

0. The user has access to the internet.  
1. The user owns an account on the website.   
 2. The user still owns his login credentials.   
3. The user has already put up an ad.

##### **0.5 Post-conditions**

1. The user now has the edited ad under his “ads” tab.

##### **0.6 Main Scenario**

1. The user logs into his account, with his login credentials.  
2. The user clicks on “my account”  
3. System prompts the user to the “my account” tab.  
 4. The user clicks on “ads”  
5. System prompts the user to the “ads” tab.  
6. The user clicks on “edit ad”, beside the desired ad.  
7. System prompts the user to the corresponding ad page.  
 8. The user changes the information he wants to edit.   
9. The user clicks on submit.  
10. System prompts the user to the “submitted” page.  
11. The ad will be updated in his “ads” tab, in his personal account.   
12. A confirmation e-mail will be sent to the user.

##### **0.7 Alternative Scenarios**

A) The user can’t log in to his account anymore  
 1. The user forgot his username/ password.

##### **0.8 Special Requirements**

None

##### **0.9 Notes**

How should the form look exactly?

#### 7. filter ads when searching for a room

##### **0.1 Actors**

User

##### **0.2 Description**

As a user I want to be able to search for a room using predefined filters.

##### **0.3 Trigger**

None

##### **0.4 Pre-conditions**

0. The user has access to the internet.

##### **0.5 Post-conditions**

1. The user now has the edited ad under his “ads” tab.

##### **0.6 Main Scenario**

1. The user clicks on “search for a room” on the website.  
2. System prompts the user to the “room ads” site.  
3. The user can check, and fill out various filters, like Price range, location, how many people he wants to have, the type of people(e.g. calm, party etc.), the gender of the people, age of the people, room size.  
 4. The user clicks on “filter”  
5. System prompts the user to the “results” page.  
6. The user gets presented with all ads, that match his filter criteria.

##### **0.7 Alternative Scenarios**

None

##### **0.8 Special Requirements**

None

##### **0.9 Notes**

How should the form look exactly?

#### 8. filter ads when searching for roommates

##### **0.1 Actors**

User

##### **0.2 Description**

As a user I want to be able to search for a roommate using desired filters.

##### **0.3 Trigger**

None

##### **0.4 Pre-conditions**

0. The user has access to the internet.

##### **0.5 Post-conditions**

1. The user now has the edited ad under his “ads” tab.

##### **0.6 Main Scenario**

1. The user clicks on “search for a room” on the website.  
2. System prompts the user to the “room ads” site.  
3. The user can check, and fill out various filters, like Price range the contestants are willing to pay, the type of people(e.g. calm, party etc.), the gender of the people, age of the people, the minimum time someone wants to live in the room. Etc.  
 4. The user clicks on “filter”  
5. System prompts the user to the “results” page.  
6. The user gets presented with all ads, that match his filter criteria.

##### **0.7 Alternative Scenarios**

None

##### **0.8 Special Requirements**

None

##### **0.9 Notes**

How should the form look exactly?

#### 9. public question system

##### **0.1 Actors**

User

##### **0.2 Description**

As a user I might have questions about a room/ person. I want that questions that are asked often, are displayed publicly on the ad.

##### **0.3 Trigger**

None

##### **0.4 Pre-conditions**

0. The user has access to the internet.  
1. The user clicked on an ad.

##### **0.5 Post-conditions**

The user can read the publicly displayed FAQ, before he asks a question.

##### **0.6 Main Scenario**

1. The user clicks on “search for a room” and/or “search for a person” on the website.  
2. System prompts the user to the “room ads”/ “person ads” site.  
3. The user clicks on the “ask question” button.   
 4. System prompts the user to the “questions” site for the ad.  
5. There will be a display of all frequently asked questions.  
6. The user can now chose to write the owner of the ad, or not.

##### **0.7 Alternative Scenarios**

None

##### **0.8 Special Requirements**

None

##### **0.9 Notes**

How should the form look exactly?

#### 10. Questions over private message system( as a registered user)

##### **0.1 Actors**

Registered user

##### **0.2 Description**

As a user I might have questions about a room/ person. The question is not answered by the FAQ of the ad. I want to contact the ad owner.

##### **0.3 Trigger**

Click on the “send PM” button.

##### **0.4 Pre-conditions**

0. The user has access to the internet.  
1. The user clicked on an ad.  
2. The user is logged in to the webpage

##### **0.5 Post-conditions**

1. The user was able to send a message to the owner of the ad.

##### **0.6 Main Scenario**

1. The user arrived on the questions site for the ad.(See 9.)  
2. The user clicks on “contact owner via PM” button  
3. System prompts the user to “send message” tab.  
3. The user can freely write his question to the owner of the ad. The user can chose if he wants a copy of the message to his email or not.  
4. The user clicks on “send” button.  
5. System prompts the user to “message successfully sent” page.

##### **0.7 Alternative Scenarios**

None

##### **0.8 Special Requirements**

None

##### **0.9 Notes**

How should the form look exactly?

#### 11. Questions over email ( as a non-registered user)

##### **0.1 Actors**

User

##### **0.2 Description**

As a user I might have questions about a room/ person. The question is not answered by the FAQ of the ad. I want to contact the ad owner. And he does not have an account on the website.

##### **0.3 Trigger**

Click on the “send email” button.

##### **0.4 Pre-conditions**

0. The user has access to the internet.  
1. The user clicked on an ad.

##### **0.5 Post-conditions**

1. The user was able to send a message to the owner of the ad.

##### **0.6 Main Scenario**

1. The user arrived on the questions site for the ad.(See 9.)  
2. The user clicks on “contact owner via E-mail” button  
3. System prompts the user to “send message” tab.  
3. The user can freely write his question to the owner of the ad. The user can chose if he wants a copy of the message to his email or not.  
4. The user clicks on “send” button.  
5. System prompts the user to “message successfully sent” page.

##### **0.7 Alternative Scenarios**

None

##### **0.8 Special Requirements**

None

##### **0.9 Notes**

How should the form look exactly?

#### 12. Bookmark/ favorite ads (registered users only)

##### **0.1 Actors**

Registered user

##### **0.2 Description**

As a registered user I want to be able to bookmark my favorite ads and review them later.

##### **0.3 Trigger**

Click on the “add to favs” button.

##### **0.4 Pre-conditions**

0. The user has access to the internet.  
1. The user clicked on an ad.  
2. The user is logged in to the webpage

##### **0.5 Post-conditions**

1. The user finds the ad under his “favorite” tab.

##### **0.6 Main Scenario**

1. The user logged in to his account  
2. The user found an ad that he likes  
3. The user clicks on the “add to favs” button in the add  
4. The system will prompt him to the “successfully added” page  
5. The user clicks on his “favorite” tab.  
6. The user now sees every ad, that he added to favorites.

##### **0.7 Alternative Scenarios**

None

##### **0.8 Special Requirements**

None

##### **0.9 Notes**

How should the form look exactly?

#### 13. Appointment finding ( for registered users)

##### **0.1 Actors**

Registered user who put an ad for a room

##### **0.2 Description**

As a user I want to be able to find a suitable appointment with all the applicants.

##### **0.3 Trigger**

Click on the “find suitable date” button.

##### **0.4 Pre-conditions**

0. The user has access to the internet.  
1. The user found suitable candidates for his room.   
2. The user is logged in to the webpage

##### **0.5 Post-conditions**

1. A message will be sent out to all the applicants, to choose the time, when they can visit the flat and take a look at the room.

##### **0.6 Main Scenario**

1. The user logs in to the website  
2. The user goes to his “ads” tab.  
3. System prompts the user to his “ads” website  
4. The user can click “find suitable date” beside the ad.  
5. System prompts the user to “find appointment “ site for the ad.  
6. The user can choose all the dates, when it is possible for him / or doodle  
7. User clicks on “send out dates” button.   
8. System prompts user to “successfully sent” page.  
9. All the applicants will receive a PM/ E-Mail with the possible dates and they can chose

##### **0.7 Alternative Scenarios**

None

##### **0.8 Special Requirements**

None

##### **0.9 Notes**

How should the form look exactly?

3. filter ads

4. public question system

5. contact over private messages

6. contact for not registered users

7. appointment finding

8. manage applicants

9. notifications

## 2.2 Actor characteristics

The User is expected to be Internet literate, be able to register on a website and is capable of managing his e- mails.

The website administrators are expected to be Internet literate, be able to manage a user database, be capable of reading emails with attachments and use an internet search-engine, like Google.

# 3. Specific requirements

## 3.1 Functional requirements

## 3.2 Non-functional requirements