Project Requirements

Project Name: Room Finder

Team: 5

Customer: Bledar Aga

Revision History

Version	Date	Revision Description
.01	2014-10-07	Initial version
.02	2014-10-14	Corrected version after meeting with Bledar Aga
.03	2014-10-29	Adapted according to Bledar Aga's notes on previous version
1.0	2014-12-10	Final Release Documentation

Date: December 10, 2014

1. Introduction

Purpose

The Purpose of this project is to enable the users to socially share advertisements of WG-rooms, either offer or search for ads. This is done by creating a website specifically designed as a social platform. Every user will have a profile, so it's simple for them to get in contact in case of interest. Additionally ad providers can manage appointments with interested and potential roommates on the platform itself.

Stakeholders

The Stakeholders of the project are people who want either to offer a WG-room or those who want to look for one.

Definitions

User: Persons who uses the website either for placing ads or for searching rooms
Renter: People who place an ad on the website on purpose to rent a room in a WG. A renter is a user.
Subtenant: People who search for a room. A subtenant is a user.
Account/Profile: Every User has an account where all his personal information is stored.
Ad / advertisement: an advertisement for letting a WG-room.

System overview

The website is based on Java technologies, Spring MVC, Spring Data and MySQL database.
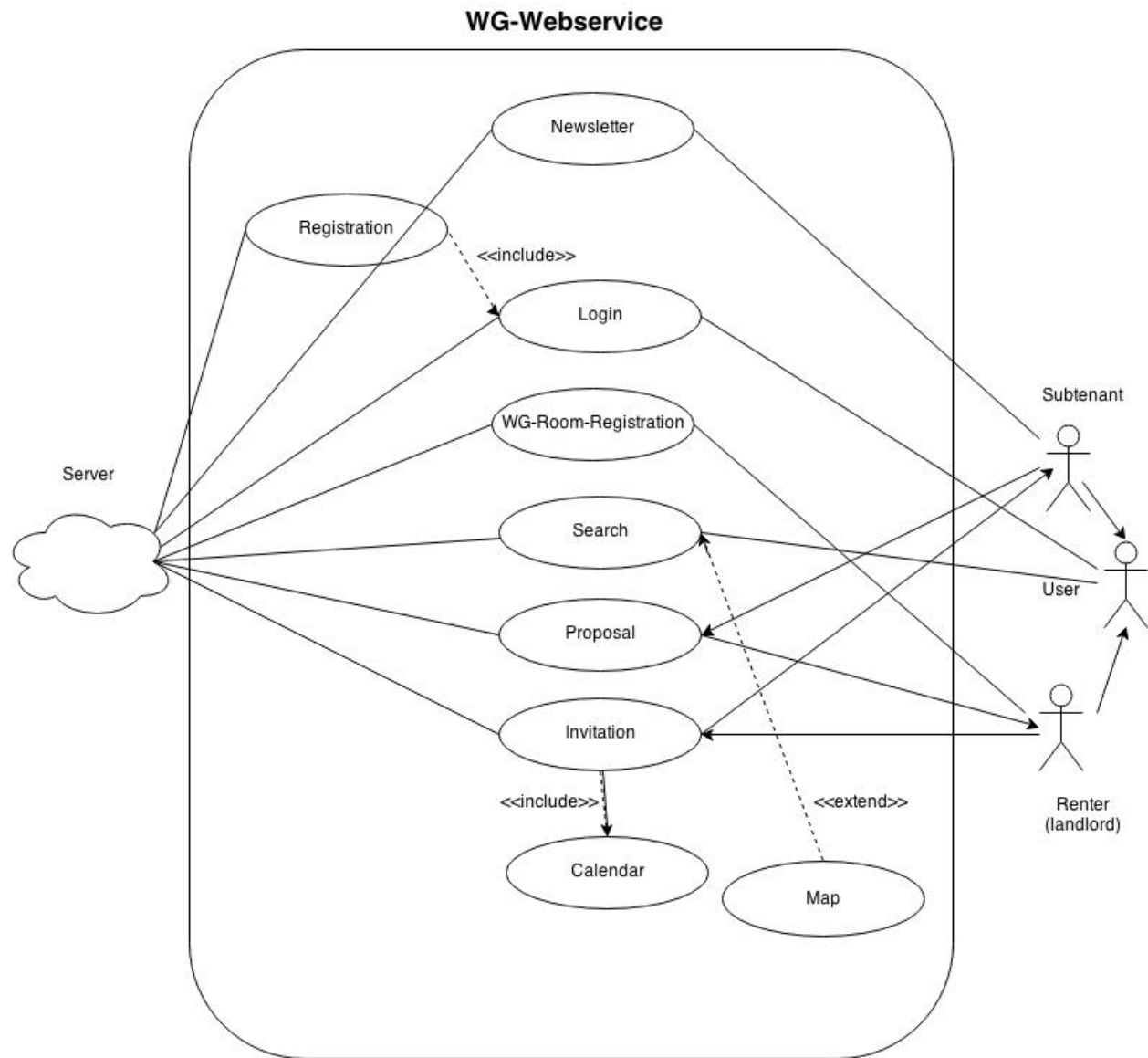
References

Java: http://docs.oracle.com/javase/7/docs/api/
Maven: http://maven.apache.org
Eclipse: https://www.eclipse.org

2. Overall description

Use Case Diagram

WG-Webservice

Use cases

1. <u>Registration (extends) Login</u>

1. **Actors**
    User

2. **Description**
    As a renter (puts ad) or a person who searches for rooms I want to register myself to get a profile to unlock all features on the webapp.

3. **Trigger**
    User opens Login-form on the webapp.

4. **Pre-conditions**
    The user needs to have an email address so he can register at all.

5. **Post-conditions**
    User is logged in to the system, i.e. has access to all privileged functionalities.

6. **Main scenario**
    1. User types in his email address and password if he's registered.
    2. The system checks if the user is in the system and the password matches the email address.
    3. If the user entered his data (email, password) correctly, he is stated as logged in. Otherwise the system asks the user to enter his information again.

7. **Alternative scenario**
    2a. User is not registered.
    1. User navigates to the registration form.
    2. User is redirected to the register page where he has to enter his email address and password.
    3. When the user submits the system checks the user's data (email, password, …). If everything is correctly filled, the system saves it to the database and states the user as logged in. Otherwise continue with step 2.

8. **Special requirements**
    The passwords have to be send secure (Hash).
    This data can be edited in the profile part of the software. There he can also add other personal information to the profile.

9. **Notes**

2. <u>Search</u>

1. **Actors**
    User

2. Description
As a user I want to search for relevant ads.

3. Trigger
User navigates to the search page.

4. Pre-conditions
For the alternative scenario the user has to be logged in.

5. Post-conditions
The user can see information about all relevant ads he searched for.

6. Main scenario
1. User sets filters (place, space, price, keywords, ...) so they match what he wants to search.
2. System shows matching entries from the database as a list with few information (title, place, small picture).
3. For more details the user can choose a list entry to get detailed information about that ad.

7. Alternative scenario
2a. User searches on map
1. User sets filters as in main scenario and chooses to search on map.
2. System shows a map with all relevant ads showing at their actual address on that map.
3. For more information the user can choose an ad on the map.

2b. The user is logged in.
1. The user can search for all ads he has favorised by going to the appropriate section in his profile.
2. Continue with step 3 from the main scenario.

8. Special requirements
When a list of found ads is shown, the user can – on the same page – set new search filters.

9. Notes
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3. WG-Room-Registration

1. Actors
User as a renter

2. Description
The renter should have a form which allows him to enter pictures of the WG(rooms, prospect, furnitures) and the following informations(in principle all informations duty): a) Number of persons in WG, versus free places in WG b) qM of WG and WG room, c) price of WG d) precise Address (and postal number) of WG e) description of WG living style, type of inhabitants for finding right new inhabitant. f) When is the WG free (availability)
In second step he should be able to change this form later if needed with edit function or even to remove it by button.

3. Trigger
Renter enters data on the submit/edit page for WGs. Or klick on the delete button.

4. **Preconditions**
   Renter is logged in

5. **Postconditions**
   If address is correct, it is visible on map feature of scenario 2.
   Profile gets visible for searchers in Search feature
   The Users can submit requests to the renter of the Entry

6. **Main Scenario**
   1. Renter open window for loading up WG
   2. Renter enters all needed informations
   3. Renter clicks submit button
   4. Informations are checked if needed (means is every part of submit form full, really numbers in price part, etc…
   5. Information is stored in database
   6. Information can be "used" for the other scenarios

7. **Alternative Scenarios**
   Change form
   1. Renter sees that form is incorrect
   2. Renter is logged in
   3. Renter clicks edit button
   4. Renter changes similar to main scenario and submit
   Delete the WG
   1. Renter is logged in
   2. Renter clicks on delete button
   3. Renter validates second time deletion
   4. WG is removed from database

8. **Special Requirements**
   Address must fit a strict form, or it is impossible to program the map-feature for the search scenario.

9. **Notes**
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4. <u>Proposal</u>

1. **Actors**
   Renter
   User as a subtenant

2. **Description**
   The user sends a proposal if he likes the WG. This proposal contains a text which the user writes. User sends this proposal by the form to the renter. The renter get's the proposal and can open it and read it.

3. **Trigger**
   User is interested in a WG, finds the WG by the search function and wants to live there.

4. **Preconditions**
   Entry of WG exists and is found by search

5. Postconditions

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6. Main Scenario

1. User does a proposal for an ad he found.
2. User fills out the proposal form and submits
3. User receives the proposal which he can find in the list of people interested in his room
4. User can decide if he accepts the person's proposal

7. Alternative Scenarios

User get an email Information if he receives a proposal.

8. Special Requirements

The user must be logged in to send the proposal
The renter must be logged in to receive the proposal

9. Notes

The user will get a notification from the subtenant and will be able to see his profile. The subtenant doesn't need to send personal information.

5. Invitation

1. Actors

User as a renter
Subtenant

2. Description

A user wants to invite interested people to a visitation of his room.

3. Trigger

User got a notification that a person is interested in his advert

4. Preconditions

At least one person (subtenant) sent a proposal for an advert of the user.
User is logged in.

5. Postconditions

All subtenants the user chose got an invitation for a room visit.
The invitation can be cancelled, everyone get's then an email to be informed.

6. Main Scenario

1. In his profile the user sees a list of all people who are interested in his room.
2. The user chooses which people to invite and a date from the date picker and writes an invitation text.
3. User submits to send the invitation.
4. System generates invitations and sends them to the chosen subtenants.

7. Alternative Scenario

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8. Special Requirements

There is also send an invitation notification by Email.

9. Notes

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6. <u>Newsletter</u>

1. Actors
User as a subtenant
Renter

2. Description
The user can save a done search for choosing his newsletter parameters. When a new ad matches those parameter ranges, it notifies the user by sending an email to him and also within the program.

3. Trigger
Renter creates a new ad.

4. Preconditions
User defined search parameters for his personal newsletter.

5. Postconditions
The email contains the new available ad with a direct link to the respective page.

6. Main Scenario
   1. Renter creates an ad
   2. System generates email according to match of the values and an internal notification
   3. Email is being sent to user

7. Alternative Scenario
Ad does not match any of the user's search parameters.
   4. Email is neither generated nor sent.

8. Special Requirements
System must be able to generate and send emails

9. Notes

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3. Specific requirements

Functional requirements (fr)

Word description:
Guest (= A site visitor who is not logged in), User (= A logged in visitor), Renter (= People who have created an ad on this site)

#	Requirement Group	Requirement Detail	Description	Iteration Nr.
1	User Profile	Login / Registration	A guest shall be able to register on the site by giving his **email**, a **password** and his **real name**. The website then sends him an email with a verification link. Furthermore he shall be able to log into his profile by using his given login data.	1
2		Additional Info	The registered user shall be able to enter additional information: **hobbies** and **biography**.	2
3	Ad	Content	An ad is consisting of one or more **pictures**, a **title**, a **description** of the **room** and the **people**, room **size** and the **location** on a map. The availability of the room shall be entered by giving the **start** and the **end date** (if it's limited).	1
4		Management	The renter shall be able to **create**, **delete** and **edit** his ads. He shall be able to see how many people have seen his ad so far. He's given an overview of the **incoming enquiries** and his sent invitations. He shall be able to see the **planned invitations** with respective **times** and **dates**. The renter shall be able to invite users who have sent an enquiry for this ad. He then enters the time and date when the invitation shall take place. He shall be able to give a **short message** with the invitation. The renter shall also be able to favor visitors by a **number (1-5)**.	1
5		Visibility	A guest shall not be able to send an enquiry or bookmark, or see user profiles. A user is shown all ad information, user profiles and he shall be able to **bookmark** ads, so that they are shown in his profile for later use. He shall be able to send an **enquiry** for an ad too.	2
6	Search	Criteria	A guest/user/renter shall be able to search for an ad by entering one or more of the following criteria: **location**, **size**, **price and free text.** Additional search criteria are: **No. of people, From Date, till Date**	1

7		Results list	The list shall contain the following information for each ad: a **thumbnail** of the first picture, **title**, **price** and **size** and **address** of the room.	1
8		Results Map	The search results shall be shown on a map centered by the median location. By hovering over a result icon, the result shall popup in a box with the same information as described in requirement 7.	2
9		Saving	Users shall be able to save searches for later use.	1

Non-Functional requirements (nfr)

#	Requirement Group	Requirement Detail	Description	Iteration Nr.
1	Design	Template	The template shall be responsive	1
2	Documentation	Code	The code has to be maintainable so that other developers will be able to continue with our work.	1
3	Documentation	SRS	Our customer has a documentation of the system he can understand.	1
4	Security	Password	It should not be possible to read a password clear text from the database.	2
5	Testability	Code	The code should be testable and has partially be covered by tests.	2
6	Compatibility	Platform compatibility	The app has to run correctly on Chrome and Firefox.	1