**Project Requirements**

Project Name: [working title]

Team: Team1

Customer: Andrea Caracciolo

Revision History

| Version | Date | Revision Description |
| --- | --- | --- |
| 0.01 | 7.10.2014 | First version after one client talk. |
| 0.02 | 14.10.2014 | Greatly redesigned use case scenarios. Now covers many more use cases. |

# Introduction

## Purpose

This project has the purpose of connecting people who are searching for a room in a shared apartment with people who want to rent out such a room. It aims to combine the advantages of classical apartment search platforms with those of platforms tailored to students.

Users can advertise a room and search for such a room.

Through extensive searching capabilities the user should be able to find fitting rooms quickly, while still making a fast search easily possible. With the help of messaging the users will be able to communicate and stay connected.

## Stakeholders

The stakeholders of this project are:

• The users, consisting of advertisers and searchers

• The customer. In our case our customer is Andrea Caracciolo

## Definitions

Terms defined for the scope of this project:

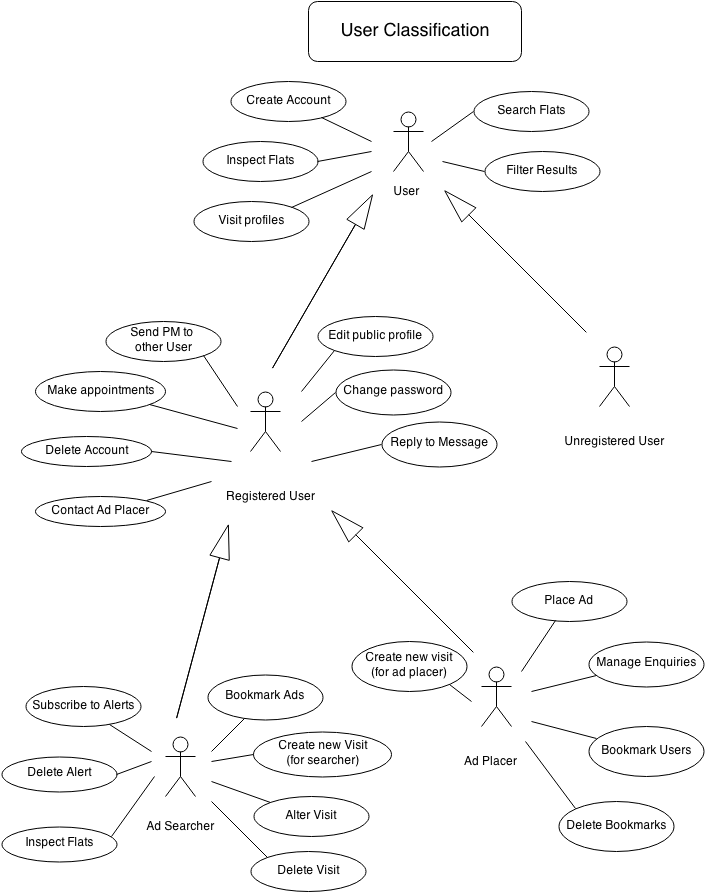
• The advertiser is the user who puts a room or an apartment on the platform.

• The searcher is the user who looks for a room or an apartment on the platform

# Overall description

## Use cases

### Diagram



### Use Cases

**Prolegomena**

As can be seen in the preliminary GUI (<https://www.fluidui.com/editor/live/preview/p_TdQC0LvCEZNWfFXhgyCLDTJllt7S2bJa.1412955407265>), three menu points are always available: Place, Search, and Account. By far the most functionality can be accessed by clicking on “Account” and selecting a submenu from the list presented. It is only the core activities of our product - searching for and advertising flats - that merits a link in the top bar.

We have grouped all the use cases in 5 thematical blocks for improved readability and structure.

Use cases:

**0. Account**

0a. Create Account

0b. Edit public profile

0c. Change Password

0d. Logout

0e. Delete Account

**1. Searching and advertising**

1a. Search Flats

1b. Filter Results

1c. Inspect Flat

1d. Visit other user’s profile

1e. Place Ad

**2. Contacting users**

2a. Contact an Ad Placer

2b. Reply to Message

**3. Alerts**

3a. Subscribe to Alerts

3b. Delete Alert

**4. Bookmarks**

4a. Bookmark Ads

4b. Bookmark Users

4c. Delete Bookmarks

**5. Visits**

5a. Create new Visit (for Searcher)

5b. Create new Visit (for Ad Placer)

5c. Alter Visit

5d. Delete Visit

**0 Account**

**0a. Create Account**

0a.1 Actors

Users

0a.2 Description

Users - advertisers and searchers both - want to use the opportunities of our platform and create an account.

0a.3 Trigger

Visitor enters site and clicks on “create account”

0a.4 Pre-conditions

1. No account with the same username or email address exists.

2. User has a valid email address.

0a.5 Post-conditions

1. New account has been created in the DB.

0a.6 Main Scenario

1. User visits our platform.

2. User clicks on “create account”.

3. User enters desired username, real name, email address.

4. System checks validity of entered data.

5. Enters all the other relevant information (general information about the person)

6. User gets redirected to start page, now logged in.

0a.7 Alternative Scenarios

0a’. Username already exists

1. User is prompted to enter another username. Continue with step 3.

0a’’. Email address faulty or already taken

1. User is prompted to enter another email address, or to reset his/her pwd. Continue with step 3.

0a.8 Special Requirements

User validation (Step 4) must not take more than 3 seconds.

0a.9 Notes

Which characters are allowed in usernames?

Which character types are required in passwords?

**0b. Edit public profile**

0b.1 Actors

User

0b.2 Description

The user wants to fill in missing information or change the information entered before in his private profile

0b.3 Trigger

User enters the private profile screen.

0b.4 Pre-conditions

The user is logged in.

The entered data is compliant with the input rules.

0b.5 Post-conditions

He will have updated his profile with the newly entered data.

0b.6 Main Scenario

1. Within the private profile screen the user enters or changes the information regarding his profile.

2. The user will save the altered information.

3. A confirmation will be shown to the user, that the information has been saved correctly.

0b.7 Alternative Scenarios

User enters wrong input in fields that are checking the input for correctness. The user will be given feedback, that the input is wrong and that it needs to be re-entered. Submitting the form with wrong input will not be possible

0b.8 Special Requirements

Checks for specific fields

0b.9 Notes

Checks for specific fields will need to be discussed.

**0c. Change Password**

0c.1 Actors

User

0c.2 Description

The user wants to change her password

0c.3 Trigger

User enters her personal settings screen where she has the option to change her password

0c.4 Pre-conditions

The user needs to be logged in as current user.

She needs to know her current password.

0c.5 Post-conditions

She will have changed her current password to a new one. It is immediately effective.

0c.6 Main Scenario

1. The user enters the screen where she can change her password.

2. She enters her current password

3. She enters her new password

4. Re-entering the new password is needed.

5. Screen appears with the feedback, that the password has been changed successfully.

0c.7 Alternative Scenarios

The user has forgotten her current password or typed it wrong.

0c.8 Special Requirements

The password must be changed immediately.

0c.9 Notes

If the password has been forgotten shall the user get the changed to reset it via email?

Is the user allowed to enter wrong passwords an infinite amount of times or will the account be blocked after 5 tries?

**0d. Logout**

0d.1 Actors

User

0d.2 Description

The user wants to log out of the current session.

0d.3 Trigger

User hits the logout icon/button.

0d.4 Pre-conditions

The user needs to be logged in as current user.

0d.5 Post-conditions

He will have terminated the current session.

0d.6 Main Scenario

1. After hitting the logout icon/button, the user will be shown a new page with the confirmation that he was logged out correctly.

0d.7 Alternative Scenarios

None

0d.8 Special Requirements

None

0d.9 Notes

It need to be defined where and how to get the Logout buttons / icons placed.

**0e. Delete Account**

0e.1 Actors

User

0e.2 Description

The user wants to delete his account.

0e.3 Trigger

In the settings to his account he calls the function to delete his account.

0e.4 Pre-conditions

The user is logged in as valid user.

0e.5 Post-conditions

The account will be deleted and no longer accessible.

0e.6 Main Scenario

1. After calling the function to delete the account, the user will be warned that his data will be lost if he continues.

2. The user confirms his intention.

3. The user will be logged out of his account and redirected to the index page.

0e.7 Alternative Scenarios

User changes his mind and cancels the deletion.

0e.8 Special Requirements

None

0e.9 Notes

Will an ad placer and an ad searcher be treated equally? What happens to the DB? Will it be stored at some other place temporarily or deleted for good?

**1. Searching and Advertising**

**1a. Search Flats**

1a.1 Actors

Users

1.2 Description

Users enter some criteria of their choosing and are presented with all the flats in the DB satisfying all criteria.

1a.3 Trigger

User clicks on “Search” in the top bar.

1a.4 Pre-conditions

1. User is on our website. Does not necessarily have to be logged in.

1a.5 Post-conditions

1. User now sees a (possibly empty) list of flats.
2. User is shown a list of parameters by which s/he can further parameterise the results. (see use case 1b).

1a.6 Main Scenario

1. User clicks “Search”
2. User enters basic criteria, i. e. type of rental (room or studio), location and a maximum price.
3. System checks DB for matching entries.
4. System returns matching entries in a list.

1a.7 Alternative Scenarios

1a’ User doesn’t enter any data, clicks on “search”

1. System returns all Flats in the DB. Flow continues with step 4.

1a.8 Special Requirements

Displaying a list of 100 or less flats with thumbnails and text must not take more than 5 seconds.

1a.9 Notes

**1b. Filter Results**

1b.1 Actors

Searchers

1b.2 Description

A user has performed a search via the limited parameters of the raw search function (type of rental, location and max. price). Typically, such a search yields a lot of results. The searcher now wants to narrow the results down.

1b.3 Trigger

1. User enter some parameters into the “Filter results” interface, e. g. square footage, date of availability, furnished/non-furnished etc.
2. User clicks “Filter” (button not yet visible in GUI)

1b.4 Pre-conditions

1. User has performed a basic flat search before.
2. This search has yielded at least two results. Otherwise, the “Filter” box mustn’t even be shown.

1b.5 Post-conditions

1. User is in a very similar environment than before. She is still looking at a list of flats matching some criteria.
2. The list is not longer than the one which has been filtered.

1b.6 Main Scenario

1. User finds herself on the “Results” page of a search.
2. User enters desired specifications, e.g. if it’s a smoker flat, square footage, etc.
3. User clicks “Filter” (Button not yet visible in GUI).

1b.7 Alternative Scenarios

1b’ Database error

1. System returns error message and redirects user to the page she was on before, i.e. the results page of the first search.

1b.8 Special requirements

For the alternative scenario, the previous search must be stored somewhere, in order to be able to return to it quickly.

1b.9 Notes

**1c. Inspect Flat**

1c.1 Actors

Ad searcher

1c.2 Description

An ad searcher has found a flat with a compelling enough title and basic information and wants to find out more about it.

1c.3 Trigger

Ad searcher clicks on an ad in a non-empty search list.

1c.4 Pre-conditions

Ad searcher has either performed a flat search before or has clicked on a link directing her directly to the flat in question.

1c.5 Post-conditions

The ad searcher is now looking at the ad page of one individual flat.

1c.6 Main Scenario

1. Ad searcher clicks on a flat in a flat search results list
2. System shows user the page of the individual flat/room.
3. Criteria shown are: (sure) price, location, floor, square feet, available from/to, flatmates, (maybe) diverse categories like “washing machine yes/no” etc.

1c.7 Alternative Scenarios

1c’. Database error

1. Retrieving information from DB is not possible.
2. System shows user an error message and directs her back to the “Search” page.

1c.8 Special Requirements

The flat page including all pictures must load in no more than 3 seconds.

1c.9 Notes

Flatmate profiles now handled; see the next use case.

**1d. Visit other User’s Profile**

1d.1 Actors

Users (both searchers and placers)

1d.2 Description

A searcher wants to know more about her future roommate(s). And an ad placer wants to know more about pepople applying for visits in the flat. So they have a look at the other’s profile.

1d.3 Trigger

1. Searcher is inspecting a flat (see use case 1c) and clicking on the placer’s username under “Placer”
2. Any user is in the message inbox and clicks on the username on one of the messages in the inbox.

1d.4 Pre-conditions

1. Either the user is viewing at the detail view of one flat/studio, or
2. User is in message in- or outbox.

1d.5 Post-conditions

1. User is now on someone’s public profile site. They can see publicly displayed info, such as job, hobbies, smoking habits etc.

1d.6 Main Scenario

1. User is on detail view of flat/studio or in message in-/outbox.
2. User clicks on the username of some other user.

1d.7 Alternative Scenarios

1d’ Database error

1. System shows error message, returns to the detail view of the flat or to the message inbox.

1d’’. Nothing to display

1. This can’t happen, because in order to write messages or advertise flats, you need to be registered.

1d.8 Special Requirements

A central part of the public profile is one or more (up to 5) pictures. We need to allocate enough space to store a lot of pictures (10GB at the very least).

1c.9

It is yet unclear how to secure that kind of storage space.

**1e. Place Ad**

1e.1 Actors

Users (Advertisers)

1e.2 Description

A user wants to place an ad for advertising a room in a shared apartment.

1e.3 Trigger

A registered user clicks on "create ad"

1e.4 Pre-conditions

1. User needs to be logged in, visitors can't place ads

1e.5 Post-conditions

1. New ad has been created in the DB.

1e.6 Main Scenario

1. User browses to the home directory of our platform
2. User clicks on "create ad"
3. User fills out the form consisting of duration (starting point and an optional end point), price per month, Region (necessary for the short description for search-results), room description, pictures, preferences (e.g. a girl apartment looking for girls only), square footage, roommates (gender, age or even user profile), animals, smokers
4. User clicks on "place ad"
5. System checks validity of entered data
6. User is shown a confirmation that his ad has been placed

1e.7 Alternative Scenarios

1e’. Mandatory fields were left blank / filled with invalid input

1. User is prompted (typically with red font) to enter valid input.

Continue with step 3.

1e.8 Special Requirements

1. Input validation (Step 5) must not take more than 5 seconds.
2. Step 5a: Valid input should remain in the form (must be probably saved and reentered by us.
3. Notes

* Point 3 in main scenario isn't final yet.
* For sites like wgzimmer.ch, one doesn't need to be registered (the ad placer can write his address, name, phone etc. directly in the form). How do we handle it? Registration mandatory or not? If not how do we implement the calendar? Doodle like? Google like?
* For a studio, it would probably make sense to use a separate form since many points such as smokers, animals, roommates etc. are not existent.

**2. Contact other Users**

**2a. Contact an Ad Placer**

2a.1 Actors

Users (searchers)

2a.2 Description

A user has found a flat and wants to contact the ad placer.

2a.3 Trigger

1. Searcher clicks on “contact advertiser” in a displayed ad.

2a.4 Pre-conditions

1. User is currently looking at an active ad.

2a.5 Post-conditions

1. A copy of the sent message text is saved both in the sender’s “sent” folder as well as in the receiver’s “new messages” folder.
2. An email has been sent to the receiver’s email address informing him that he got a message.

2a.6 Main Scenario

1. User clicks on an ad for a flat.

2. User clicks on “contact advertiser”.

3. User enters text message, subject line and cell phone number.

4. User clicks “send”.

5. System validates input (non-empty message, non-empty subject line, valid cell phone number)

6. System notifies sender that the message has been sent, and notifies the receiver.

2a.7 Alternative Scenarios

2a’: User doesn’t enter any text in message or subject field.

1. System prompts user to enter text in message or subject field. Continue with step 3.

2a’’: User enters invalid cell phone number.

1. System prompts user to enter a valid cell phone number. Continue with step 3.

2a.8 Special Requirements

Message must not be longer than 1’000 characters. Cannot contain images or files.

Every message and every reply must be connected to exactly two users.

2a.9 Notes

Divided original message use case in two new ones.

**2b. Reply to a Message**

2b.1 Actors

Users

2b.2 Description

One user has sent a message to another user via the messaging system. The other user now wants to respond to it.

2b.3 Trigger

1. User clicks on “reply” when viewing a message in their inbox.

2b.4 Pre-conditions

b1. At least one message has been sent between the two exact same accounts already.

b2. User is currently looking at one of these already sent messages.

2b.5 Post-conditions

1. A copy of the sent message text is saved both in the sender’s “sent” folder as well as in the receiver’s “new messages” folder.
2. An email has been sent to the receiver’s email address informing him that he got a message.

2b.6 Main Scenario

1. User clicks on “Account”, then “Messages”.

2. User clicks on one of the messages.

3. User clicks on “reply”.

4-7: see use case 2a, Main Scenario, Steps 3-6.

2b.7 Alternative Scenarios

see use case 2a.

2b.8 Special Requirements

see use case 2a.

2b.9 Notes

**3 Alerts**

**3a. Subscribe to Alerts**

3a.1 Actors

Searchers

3a.2 Description

Users searching for a flat don’t want to visit the site every day to see if there’s a new ad fitting their criteria. They might want to save those criteria and be notified automatically when a new ad matching them is entered.

3a.3 Trigger

1. A logged in searcher clicks on “Account”, then “Alerts”, then fills out the information and subscribes.

3a.4 Pre-conditions

1. User is logged in.

2. User has entered a valid email address beforehand.

3a.5 Post-conditions

1. System shows a confirmation that the searcher is now subscribed to an alert.

1. User is now subscribed to an alert.

3a.6 Main Scenario

1. User clicks on “Account”, then “Alerts”.
2. A box with some parameters is waiting to be filled out.
3. As soon as the user has filled out all desired criteria, she clicks “Create”.

3a.7 Alternative Scenarios

3a’. User enters invalid data in mask

1. See error handling in use case 1a (“searching for flats”)

3a.8 Special Requirements

Performance: Whenever a new flat is entered into the database, all alert patterns must be checked and, if the criteria therein are met, emails must be sent out. Not more than one minute shall pass between entering a flat into the database and sending out an alert email.

3a.9 Notes

It may be a performance issue if we have 1000s of subcribers listening to every single new entry. May be we generate a list according to the specs and send it daily to the user?

**3b. Delete Alert**

3b.1 Actors

Searchers

3b.2 Description

A searcher has either found a flat or changed his criteria (or other reason). Thus, he no longer wants to subscribe to an alert and deletes it.

3b.3 Trigger

1. A logged in user with at least one subscribed alert clicks on “Account”, then “Alerts” and clicks “Delete” next to one alert.

3b.4 Pre-conditions

1. User is logged in.
2. User has previously subscribed to at least one alert.
3. User does not want to receive alerts anymore.

3b.5 Post-conditions

1. User is now unubscribed from alert.
2. The data about the alert (criteria, user) are not saved anywhere.

3b.6 Main Scenario

1. Logged in user clicks on “Account”, then “Alerts”
2. User chooses one of the alerts and clicks “Delete” right next to it.
3. System looks up the alert list and deletes the corresponding entry.
4. System notifies user that she is now unsubscribed from that particular alert.

3b.7 Alternative Scenarios

3b’ Database error.

1. System warns user that DB connection was faulty and that she is still subscribed to the alert.
2. Return to “Alerts” view.

3b.8 Special Requirements

(See above). With a large user database, performance issues will be very important.

3b.9 Notes

**4. Bookmarks**

**4a. Bookmark Ads**

4a.1 Actors

Ad searcher

4a.2 Description

User wants to bookmark interesting ads

4a.3 Trigger

In the detailed description of an ad, user clicks on "safe for later"

4a.4 Pre-conditions

1. User is logged in
2. The flat search has yielded at least one result

4a.5 Post-conditions

1. The advertisement has been correctly added to the ad searchers' bookmarks

4a.6 Main Scenario

1. Ad searcher visits detailed description page of an advertisement (typically via a list of a search result)
2. Ad searcher clicks on "safe for later"
3. System ads ad for this user to the DB
4. (In case we display the ads somewhere in the current site: System updates the rendering of the ads)

4a.7 Alternative Scenarios

3a. Ad has been deleted meanwhile

1. System shows error message
2. System redirects the user to last window before Main Scenario

4a.8 Special Requirements

1. Limit ads?

4a.9 Notes

1. 4a.3: Should there also be a "bookmark ad" button in the list of a search-result next to the corresponding ad?
2. Precondition 1: If user is not logged in, we would have to save these information about the bookmarks in his browser, correct? (probably complicated)

**4b. Bookmark Users**

4b.1 Actors

Users (advertisers)

4b.2 Description

The ad placer wants to compile a list of his most promising candidates.

4b.3 Trigger

User clicks on "bookmark user".

This can be done in the internal message system, at the page of his current advertisements or at the profile page of the prospected user.

4b.4 Pre-conditions

a1. User is logged in

a4/b1. User has at least one advertisement

4b.5 Post-conditions

The list must be properly extended by the added candidate

4b.6 Main Scenario

a1. User visits internal message system or profile page of prospected user.

a2. User clicks on "bookmark user"

a3. User selects one of his current advertisements

a4. User clicks on "add candidate"

a5. System adds the candidate to the appropriate table in the DB

b1. User visits one of his advertisements and browses to the list of favourite candidates

b2. User clicks on "add candidate"

b3. User chooses one of his contacts

b4. User clicks on "add candidate"

b5. System adds the candidate to the appropriate table in the DB

4b.7 Alternative Scenarios

a3: User has no advertisements.

1. Button "add candidate" isn't clickable, only the "cancel" button is.

a5/b5: User has been deleted meanwhile

1. System shows error message

2. User clicks "back"

3. Flow continues a1/b1

b3: User has neither added contacts nor at least one conversation.

1. Button "add candidate" isn't clickable, only the "cancel" button is.

4b.8 Special Requirements

Nonfunctional requirements:

1. The list is limited to 20 candidates.

4b.9 Notes

**4c. Delete Bookmarks**

4c.1 Actors

User

4c.2 Description

The user wants to delete one or several bookmarked ads.

4c.3 Trigger

In the overview of all bookmarked ads, the user calls the function to delete a/several bookmark/s.

4c.4 Pre-conditions

The user is logged in as valid user.

The user has bookmarked ads in his DB.

4c.5 Post-conditions

She will get her bookmarks reduced/updated in her DB

4c.6 Main Scenario

1. The user selects one or more bookmarked ads.

2. She calls the function to delete the bookmark/s.

3. The view with all the bookmarks will be updated immediately giving her the correct feedback.

4c.7 Alternative Scenarios

User does not select any bookmarked ads and tries to delete.

4c.8 Special Requirements

None

4c.9 Notes

Possible solution to alternative scenario could be greyed out button or an error message popping up informing the user.

Maybe a warning should be considered.

**5. Visits for Searchers**

**5a. Create new Visit (for Searcher)**

5a.1 Actors

Searcher

5a.2 Description

An ad searcher has found a flat she likes and would like to visit it.

5a.3 Trigger

Searcher clicks on “Visit” on the detailed flat view page (not yet visibe in UI).

5a.4 Pre-conditions

1.Searcher is looking at a detailed flat view page.

2. Both users must not have another visit scheduled at the same date and time.

5a.5 Post-conditions

1. Both users now have a visit scheduled in their respective calendars at the same date and time.

5a.6 Main Scenario

1. Searcher clicks on “Visit” on the detail view page of a flat.
2. Searcher enters relevant data (date, time and duration).
3. System checks both users’ schedules, validates date.
4. System sends message to Ad Placer concerning the visit.
5. Ad Placer approves the suggested visit specs by a single click.
6. System adds a visit into both users’ respective schedules.

5a.7 Alternative Scenarios

5a’. Searcher is not vacant at the proposed date & time.

1. System returns an error. Flow starts again at 1.

5a’’. Ad Placer is not vacant at the proposed date & time.

1. System sends a message to the Ad Placer, informing him that the Searcher wanted to visit the flat at the specific time given.
2. System also sends a message to the Searcher, telling her that the Ad Placer isn’t available then.
3. That’s it, nothing more happens. No visit is created.

5a. Ad Placer doesn’t approve the visit.

1. System sends a message to the Searcher, telling her the date was not approved.

5a.8 Special Requirements

1. A graphical calendar is not needed, since users typically won’t have to manage a great deal of visits. We will implement a maximum of 20 visits scheduled at any one time for one user, that should easily suffice.

5a.9 Notes

The system should check for alternative scenario 5a’ before 5a’’ (will also be followed if neither user is vacant at the time.)

Important: This is only *one* possible point in the flow where a searcher can request a visit. Some more thinking is needed to determine all the other slots and write use cases for them.

**5b. Create new Visit (for Ad Placer)**

5b.1 Actors

Ad Placer

5b.2 Description

An ad placer has found a potential roommate and wants to invite her.

5b.3 Trigger

Ad Placer clicks on “Invite” on the “Bookmark users” page.

5b.4 Pre-conditions

1.Ad placer must have at least one person on his “Bookmark users” page.

5b.5 Post-conditions

1. Both users now have a visit scheduled in their respective calendars at the same date and time.

5b.6 Main Scenario

1. Ad Placer clicks on “Invite” next to one person on the “Bookmark users” page.
2. Ad Placer enters relevant data (date, time and duration).
3. System checks both users’ schedules, validates date.
4. System sends message to Searcher concerning the visit.
5. Searcher approves the suggested visit specs by a single click.
6. System adds a visit into both users’ respective schedules.

5b.7 Alternative Scenarios

5b’. Ad Placer is not vacant at the proposed date & time.

1. System returns an error. Flow starts again at 1.

5b’’. Searcher is not vacant at the proposed date & time.

1. System sends a message to the Searcher, informing her that the Ad Placer wanted to visit the flat at the specific time given.
2. System also sends a message to the Ad Placer, telling him that the Ad Placer isn’t available then.
3. That’s it, nothing more happens. No visit is created.

5b. Searcher doesn’t approve the visit.

1. System sends a message to the Ad Placer, telling him the date was not approved.

5b.8 Special Requirements

See use case 5a.

5b.9 Notes

The system should check for alternative scenario 5b’ before 5b’’ (will also be followed if neither user is vacant at the time.)

Important: This is only *one* possible point in the flow where an ad placer can request a visit. Some more thinking is needed to determine all the other slots and write use cases for them.

**5c. Alter Visit**

5c.1 Actors

Users

5c.2 Description

Due to some complication, a searcher cannot make it to a visit previously agreed upon (see use case 5a/b). The visit will take place some other time.

5c.3 Trigger

User clicks on “Account”, then “Calendar”, selects a visit and clicks “Alter”.

5c.4 Pre-conditions

1. User is logged in.
2. User has at least one visit scheduled in the calendar.

5c.5 Post-conditions

1. Exactly one of the visits has altered date and time specifications.

2. This is the case in both the searcher’s and in the placer’s calendar.

5c.6 Main Scenario

1. User clicks on “Account”, then “Calendar”.
2. User selects one of the visits he has scheduled and clicks “Alter”.
3. System prompts user to enter a new date, time and duration.
4. User enters new date, time and duration.
5. System checks the other user’s availability at that point (see use case 5a/b).
6. Other user is available. System sends him a confirmation window with the new date and time.
7. Other user agrees to new date and time (with a single click).
8. System alters the visit in both the placer’s as also the searcher’s calendar to the newly specified date, time, and duration.

5c.7 Alternative Scenarios

5c’. Database error

1. System issues a warning stating that the alteration of the visit was not possible.
2. User is redirected to the “Calendar” page.

5c’’. Other user is not available.

1. System sends first user a message stating that the other user won’t be available.
2. User is redirected to the “Calendar” page.

5c.8 Special Requirements

Loading times for the calendar must be reasonably quick (less than 2 seconds for 100 or less calendar events).

5c.9 Notes

**5d. Delete Visit**

5d.1 Actors

Users

5d.2 Description

Due to some complication, a searcher or ad placer cannot make it to a visit previously agreed upon (see use case 5a/b). The visit will not take place at all.

5d.3 Trigger

User clicks on “Account”, then “Calendar”, selects a visit and clicks “Delete”.

5d.4 Pre-conditions

1. User is logged in.
2. User has at least one visit scheduled in the calendar.

5d.5 Post-conditions

User has exactly one less visit scheduled in the calendar.

5d.6 Main Scenario

1. User clicks on “Account”, then “Calendar”.
2. User selects one of the visits he has scheduled and clicks “Delete”.
3. System verifies that the user really wants to delete the visit with a warning.
4. User states that he really wants to delete the visit.
5. System removes the mentioned visit from the calendar view.
6. System removes the mentioned visit from the other party’s calendar view, and writes them an automatic message (or email?) to inform them that the visit has been cancelled.

5d.7 Alternative Scenarios

5d’. Database error

1. System issues a warning stating that the deletion of the visit was not possible.
2. User is redirected to the “Calendar” page.

5d.8 Special Requirements

Loading times for the calendar must be reasonably quick (less than 2 seconds for 100 or less calendar events).

5d.9 Notes

## Actor characteristics

The typical users of this platform can be divided into two groups:

* Searchers: searchers will probably be mostly students or young adults doing apprenticeships. They cannot spend too much money on an apartment and therefore look for a room in a shared apartment. Most of them will be rather young and thus quite proficient in using the internet. Because of that, an online platform for searching for these rooms is a good fit for this target audience.
* Advertisers: the advertisers can again be split up into two groups:
  + Users looking for a roommate: these users are similar to those from the first group, with the exception that they already have a room or an apartment and are looking for one or several roommates to complete the group
  + Apartment owners: these users are owners of (small) apartments which they want to rent to someone. They will not live in the apartments themselves

1. Specific requirements
   1. Functional requirements

Overview of the functions that should be implemented throughout the course of this project (see the use cases for more detail):

• Search available flats/rooms: the user should be able to search through the available advertisements

• Messaging: send private messages to other users to allow communication with them

• Manage on-site visits: both searchers and advertisers need to manage on-site-visits

• Bookmarking: searchers have the possibility of bookmarking interesting advertisements for later

• Alerts: users should be able to subscribe to alerts which result in notifications

• Placing an ad: advertisers can place an ad on the platform

• Enquiries: searchers should be able to send enquiries to the advertiser, while the advertisers can manage these enquiries

• Candidate list: advertisers can keep a list of the promising candidates for an advertisement

* 1. Non-functional requirements

• A user new to the platform should be able to start using it within 5 minutes

• If a searcher tries to find an apartment, the initial search should be very easy. There should not be a lot of properties that are mandatory to be entered. Only then can the user, if desired, filter the apartments further.