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Web Engineering Assignment 3: Report

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Contents

Preface	v
1 Mission statement specification	1
1.1 Mission statement	1
1.1.1 Purpose	1
1.1.2 Target audience	1
1.1.3 Subject	1
2 Audience modeling	2
2.1 Audience classification	2
2.1.1 Audience class visitors	2
2.1.2 Audience class registered users	3
2.1.3 Audience class singles	4
2.1.4 Audience class administrators	5
2.2 Audience class hierarchy	5
2.3 Audience Characterization	6
2.3.1 Audience class Visitors	7
2.3.2 Audience class Registered Users	7
2.3.3 Audience class Singles	7
2.3.4 Audience class Administrators	7
2.3.5 Conclusion	7
3 Conceptual Design	8
3.1 Task Modeling	8
3.1.1 Audience class Visitors	8
3.1.2 Audience class Registered Users	11
3.1.3 Audience class Administrators	24
3.2 Information modeling	28
3.3 Navigational modeling	29
3.3.1 Conceptual Structural Model	29
3.3.2 Visitor navigational track	29
3.3.3 Registered user navigational track	30
3.3.4 Singles navigational track	31
3.3.5 Administrator navigational track	31
3.3.6 Login	32
3.3.7 Register new user	33
3.3.8 Search for members	33
3.3.9 Information about the 10 last logged in members	34
3.3.10 Change profile information	35

3.3.11	Add profile information	36
3.3.12	Delete profile information	37
3.3.13	Search for users	38
3.3.14	Browse user profiles	39
3.3.15	Put message on user wall	39
3.3.16	Answer to a message on personal wall	40
3.3.17	Delete message on personal wall	40
3.3.18	Send private message	41
3.3.19	Like user	41
3.3.20	Manage liked list	42
3.3.21	Notify user in case of profile updates	42
3.3.22	Send attention to a user	43
3.3.23	Send private message to a user	43
3.3.24	Block or report a user	44
3.3.25	Log out	44
3.3.26	Terminate account	45
3.3.27	Display personal information	45
3.3.28	Display foreign information	46
3.3.29	Browse user profile	46
3.3.30	Send message to any user	47
3.3.31	Block, disable and delete user account	48
3.4	Functional Modeling	49
3.4.1	Overview of the modules	49
3.4.2	Login	49
3.4.3	Register new user	49
3.4.4	Logout	50
3.4.5	Update user profile	50
3.4.6	Delete account	51
3.4.7	Terminate account	51
3.4.8	Send message	52
4	Implementation design	53
4.1	Site structure design	53
5	Presentation design	54
5.1	Style and template design	54
Bibliography		55

List of Figures

2.1 Audience class hierarchy	6
3.1 Login CTT	9
3.2 Register CTT	9
3.3 Search CTT	10
3.4 Visitor search CTT	10
3.5 Last logged in members CTT	11
3.6 Edit personal profile CTT	12
3.7 Add personal profile CTT	13
3.8 Delete personal profile CTT	13
3.9 Search personal profile CTT	14
3.10 Browse member profile CTT	15
3.11 Put message on user wall CTT	15
3.12 Answer message on user wall CTT	16
3.13 Delete message on user wall CTT	17
3.14 Send private message CTT	17
3.15 Like user CTT	18
3.16 Manage liked list CTT	18
3.17 Notify user CTT	19
3.18 Send attention CTT	20
3.19 Notify for attention CTT	21
3.20 Send message to any user CTT	21
3.21 Block user CTT	22
3.22 Log off user CTT	22
3.23 Terminate account CTT	23
3.24 Personal information CTT	23
3.25 Foreign user information CTT	24
3.26 Browse profiles CTT	24
3.27 User blocking message CTT	25
3.28 Send message to any user CTT	25
3.29 Send message to any user CTT	27
3.30 Domain model	28
3.31 Conceptual structural model	29
3.32 Visitor track	30
3.33 Registered User track	30
3.34 Singles track	31
3.35 Administrator track	32
3.36 Login WSDM model	32
3.37 Register user WSDM model	33

3.38	Search for members WSDM model	33
3.39	10 last logged in members WSDM model	34
3.40	Change profile information	35
3.41	Add profile information	36
3.42	Delete profile information	37
3.43	Search users	38
3.44	Browse user profiles	39
3.45	Put message on user wall	39
3.46	Answer message on user wall	40
3.47	Delete message on user wall	40
3.48	Send private message	41
3.49	Like a user	41
3.50	Manage liked list	42
3.51	Notify user of profile updates	42
3.52	Send attention	43
3.53	Send private message	43
3.54	Block or report user	44
3.55	Log out	44
3.56	Terminate account	45
3.57	Display personal information	45
3.58	Display foreign information	46
3.59	Browse user profile	46
3.60	Send message to any user	47
3.61	Block, disable and delete user account	48
3.62	Login module	49
3.63	Register module	50
3.64	Logout module	50
3.65	Update user profile module	51
3.66	Delete user account module	51
3.67	Terminate user account module	52
3.68	Module to send a private message	52

Preface

This document describes the development process of the website “Date4Life” created by Laurent De Wilde and Mathias Alame.

The website has been created by using WSDM - Web Semantic / Site Design Method, an audience driven design method for Web Applications [Castelyn et al., 2015b].

This design method consists of five major phases and the output of each phase serves as the input for the following (next) phase. Subsequently, each phase consists of multiple sub-phases, which are described extensively in this document.

1

Mission statement specification

In the mission statement specification, the purpose, the subject (topics) and the targeted users of the web site are specified [Castelyn et al., 2015a]. The mission statement serves as a starting point for the design process. It will set boundaries for the design by identifying purposes of the website [Castelyn et al., 2015b, 2009].

The target users of the website are the users that will use and interact with the website. The subject must fulfill the purpose of the website and must be adapted for the target users [Castelyn et al., 2015b].

After the completion of the design process, the mission statement is used to verify if the goals of the website have been fulfilled [Castelyn et al., 2009].

1.1 Mission statement

The purpose of the dating site is to make sure that singles and couples, regardless of their age, gender or sexual interest, find new friends or the love or their life by displaying user profiles and detailed information about a possible suitable opponent and to provide search functionality, a private chat system and liking other users.

1.1.1 Purpose

Finding friends or the love or their live.

1.1.2 Target audience

Singles who want to participate in a relationship, or people currently involved in a relationship who are looking for friendship.

1.1.3 Subject

User profiles

2

Audience modeling

In the audience modeling phase, the target audiences / users defined in the mission statement phase are refined into audience classes [Castelyn et al., 2015b]. In these classes, the users are grouped that have the same functional and information requirements. Users with additional requirements form audience subclasses [Castelyn et al., 2009].

So the audience classes form a hierarchy, where the most general class - the visitor class, is at the top of the hierarchy - that is, the common requirements for all visitors. For each additional level, more specific requirements are formulated [Castelyn et al., 2009].

2.1 Audience classification

These are the different audience classes for the website:

- **Visitors:** the most general class. They can only search for user profiles and see some basic information about the last members that logged in.
- **Registered users:** have the same privileges as the visitors + much more functionality such as the possibility to login and send messages.
- **Singles:** have the same privileges as the registered users + much more functionality such as the liking other users, request friendships with other users and to send attentions.
- **Administrators:** have the same privileges as the registered users + they are able to see all information about all the users and can manage any user, including disabling and deleting a user.

2.1.1 Audience class visitors

This is the most general audience class and they have the least number of privileges. They can only search for existing members - the so-called “singles”, register a new account or login using an existing user account. Additionally, information is shown about the last 10 members that have logged in.

Information requirements Information about the top 10 members they searched for and information about the last 10 members that logged in. In both cases, the information includes nickname, age, location, picture and gender.

Functional requirements

- Visitors should be able to search based on age, range, location and gender.
- Visitors should see the nickname, age, location, picture and gender of the last 10 members that logged in.
- Visitors should be able to login, specifying a username and a password.
- Visitors should be able to register a new account, thereby providing a nickName, password, email address, location, gender, interest and a free description.

Usability & navigational requirements

- The user should be able to quickly search for members.
- The search results should easily be readable in a comprehensive way.
- It should clearly be visible how to login.

2.1.2 Audience class registered users

The “registered users” audience class is a subclass of the visitors user class. They have extra privileges and functionality: they are able to edit their personal profile, to search for users, to send them private messages, to logout and to terminate their account.

The “registered user” class is a superclass for the “singles” and “administrator” audience classes.

Information requirements

- Detailed personal information
- Detailed information about other users’ profiles.

Functional requirements

- The users should be able to change, add or delete any information on their personal profile.
- The users should be able to search for other users, based on the profile information.
- The user profiles of other members can be seen by the users.
- The users should be able to communicate to other registered users by sending them private messages.
- The users should be able to log out and terminate their account.

Usability & navigational requirements

- The user should be able to quickly search for members.
- The returned search results should easily be readable in a comprehensive way.

2.1.3 Audience class singles

The “singles” audience class is the actual target audience of the web application. They have all the functionality and privileges of the “registered users” audience class and in addition, very much more functionality is available. For example, they can put messages on another user’s wall, delete messages on their own wall, like users, and so on....

Information requirements

- Detailed personal information
- Detailed information about other users’ profiles.
- Information on private messages.
- Information on updates of liked user profiles.
- Information on sent intentions.

Functional requirements

- The users should be able to put messages on any user’s wall, answer to a message on their own wall or deleting messages from their wall.
- The users should be able to communicate to other registered users by sending them private messages.
- The users should be able to “like” other users and should be able to manage their “liked” list.
- The users should be notified in case of profile updates of their “liked users”.
- The users should be able to send another user an attention. These attentions should be the following:
 - A bouquet of flowers
 - A handshake
 - A Smiley
 - A kiss
 - A tap on the back
 - A thumbs up
 - A bottle of wine
- The users should be informed about a received attention and should be able to return the favor.
- The users should be able to message with randomly selected users, based on the selected gender and age.

Usability & navigational requirements

- Updates about other “liked” users should be eye-catching.
- Attentions received from other users should clearly be visible.
- ...

2.1.4 Audience class administrators

The “administrator” audience class is a subclass of the “registered users” class. They have the same privileges as them, but can browse all user profiles, send a message to any user, as well as deleting any user account.

Information requirements Information about users and information about blocked and reported users.

Functional requirements

- The users should be able to browse through all user profiles.
- The user should receive a message when another user blocks or reports a user.
- The users can send a message to any other user.
- The users can block, disable or delete any user account.

Usability & navigational requirements

- No additional usability requirements.

2.2 Audience class hierarchy

The figure below depicts the audience class hierarchy.

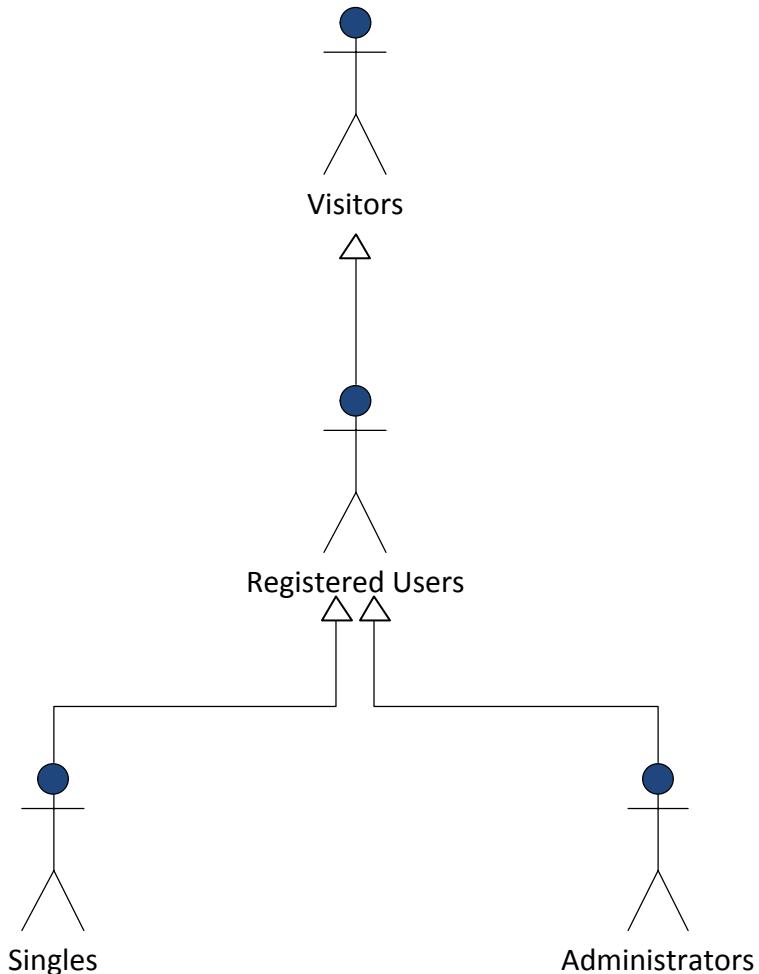


Figure 2.1: Audience class hierarchy. **Visitors** is the superclass from which the subclasses **Registered Users** extends. This class, in his turn, is superclass for the **Singles** and **Administrators** classes.

2.3 Audience Characterization

The target users of the Date4Life website are quite a broad audience. There all have their own local language, but at the same time, they are able to communicate in English as well. Also, the experience with the Web may vary; some have much experience, while others do not. The age varies as well; some visitors are elderly adults, while others are young adults. Finally, not all audience may be familiar with the concept of a dating site. Furthermore, it is assumed that administrators have more experience with the WWW in comparison to other users as well as more technical experience in general.

2.3.1 Audience class Visitors

- All ages starting from 18 years old.
- Experience with a dating site may vary.
- Are able to communicate in English.
- Familiarization / experience with a dating site may vary.
- Familiarization / experience with the WWW in general may vary.

2.3.2 Audience class Registered Users

- All ages starting from 18 years old.
- Experience with a dating site may vary.
- Are able to communicate in English.
- Familiarization / experience with a dating site may vary.
- Familiarization / experience with the WWW in general may vary.

2.3.3 Audience class Singles

- All ages starting from 18 years old.
- Experience with a dating site may vary.
- Are able to communicate in English.
- Familiarization / experience with a dating site may vary.
- Familiarization / experience with the WWW in general may vary.

2.3.4 Audience class Administrators

- All ages.
- May be unfamiliar with a dating site.
- Are able to communicate in English.
- Have experience with the WWW varying from above-average to great.
- Have an above-average technical background and experience.

2.3.5 Conclusion

From the audience class characterizations, one can conclude that all audience classes are able to communicate in English and thus there is no need to make any audience class variants.

3

Conceptual Design

In the previous phases, the information-, functional-, navigational- and usability requirements as well as the characteristics of the different audience classes have been identified.

In the third phase - the conceptual design phase, the requirements mentioned above are turned into formal descriptions, which can be used in a later phase to generate the website.

This phase consists of two sub-phases: the task modeling phase and the navigational design phase.

3.1 Task Modeling

3.1.1 Audience class Visitors

Requirement: “The users should be able to login, specifying a username and password.”

Task: Login with a username and password.

When a user wants to login, he or she can enter their credentials, being the username and the password. After submitting, the system validates the provided credentials and redirects the user to the main page.

Decomposition:

- Enter the username.
- Enter the password.
- Submit the filled in data.
- Process the authentication.
- Redirect to the main page.

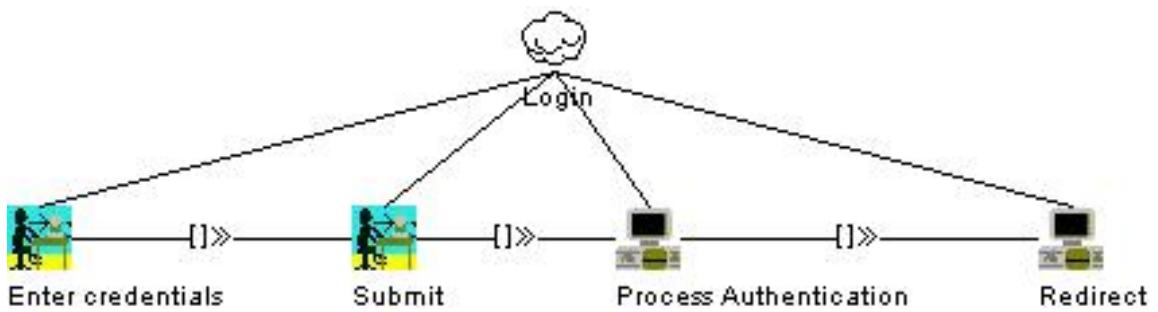


Figure 3.1: CTT to login using a username and password.

Requirement: “A visitor should be able to create an account.”

Task: Register new user.

A visitor needs to be able to create a new user account on the website. I.e., he needs to be able to register himself. The following information is required upon registration: date of birth, nickname, password, email address, location, interest and a free description.

Decomposition:

- Enter the credentials.
- Register account.
- Redirect to profile page.

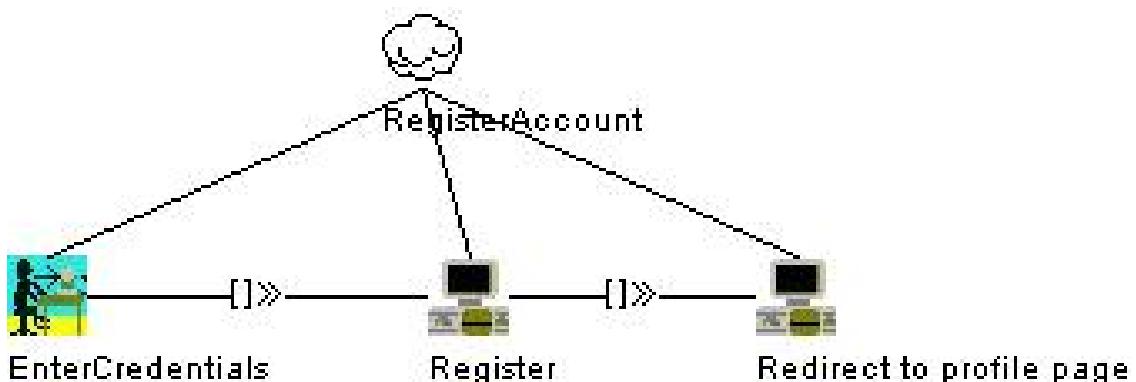


Figure 3.2: CTT to register new user account.

Requirement: “Information about the top 10 members they searched for.”

Task: Show information about the top 10 members that match a search query.

When a non-logged in user enters a search query, the nickname, location, gender, age and picture have to be displayed in any order.

Decomposition:

- Enter the nickname of the user.
- Enter the age of the user.
- Enter the location of the user.
- Enter the gender of the user.
- Show the top 10 matches.

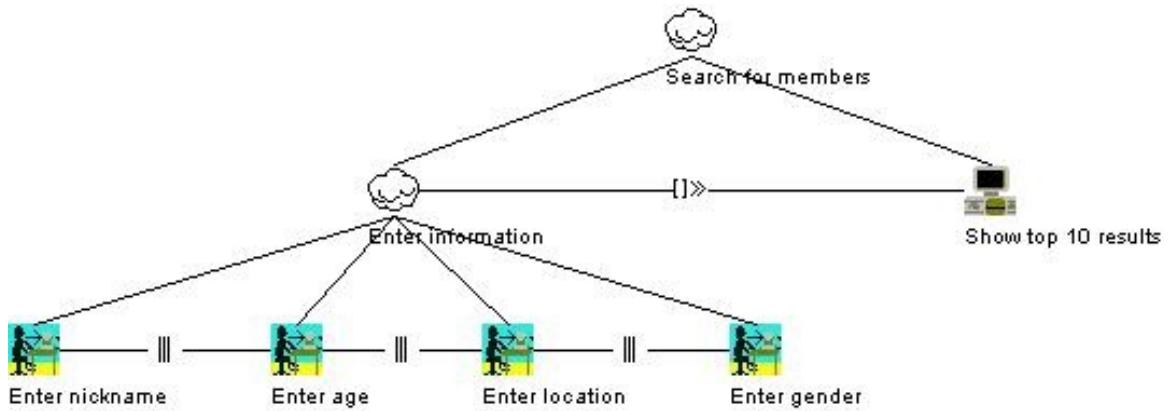


Figure 3.3: CTT search for members and returning the top 10 results.

Requirement: “Visitors should be able to search based on age, range, location and gender.”

Task: Search on age, range, location and gender.

Decomposition:

- Enter the age of the user.
- Enter the range of the user.
- Enter the location of the user.
- Enter the gender of the user.
- Display the results.

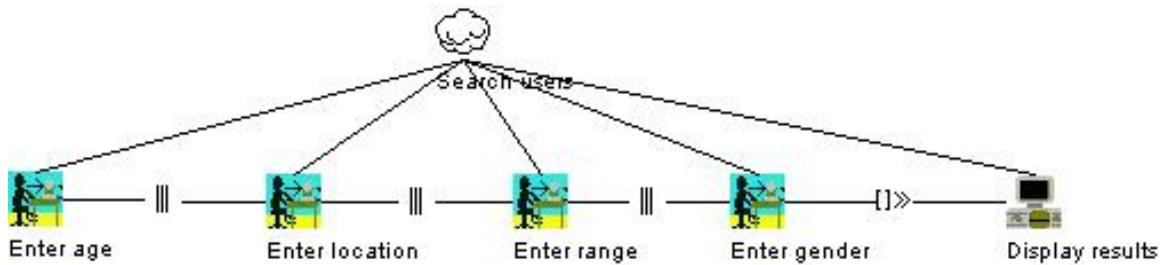


Figure 3.4: CTT search for membersbased on age, range, location and gender and returning the top 10 results.

Requirement: “information about the last 10 members that logged in.”

Task: Show information about the last 10 members that logged in.

The nickname, location, gender, age and picture of the 10 last logged in members have to be displayed in any order.

Decomposition:

- Display the nickname of the member.
- Display the location of the member.
- Display the gender of the member.
- Display the age of the member.
- Display the picture of the member.

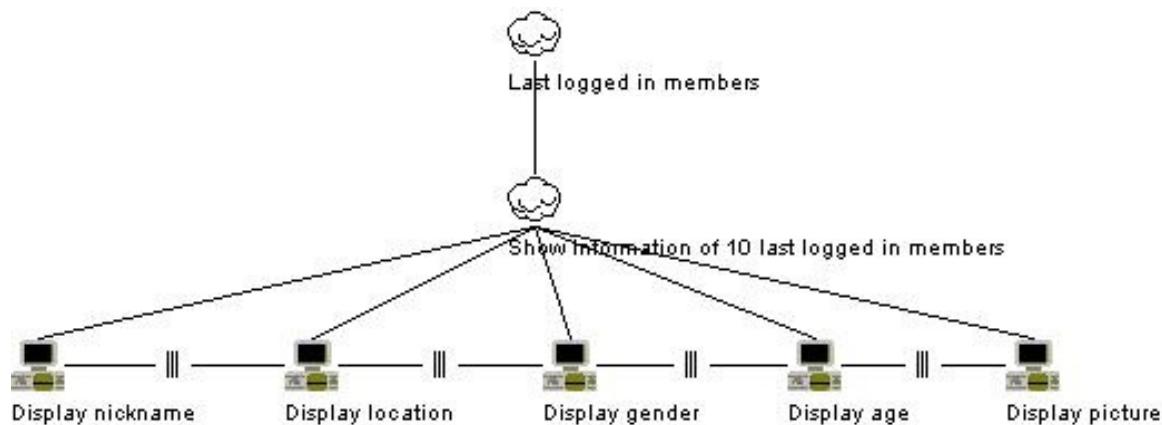


Figure 3.5: CTT for showing the last 10 members that logged in.

3.1.2 Audience class Registered Users

Requirement: “The registered users should be able to change any information on their personal profile.”

Task: Change information of the personal profile.

When a user wants to change any information of their personal profile, he or she should first navigate to the profile information, edit the desired information and save the changes made.

Decomposition:

- Access the personal profile.
- Edit the nickname.
- Edit the age.
- Edit the location.

- Edit the gender.
- Edit the picture.
- Commit the changes.

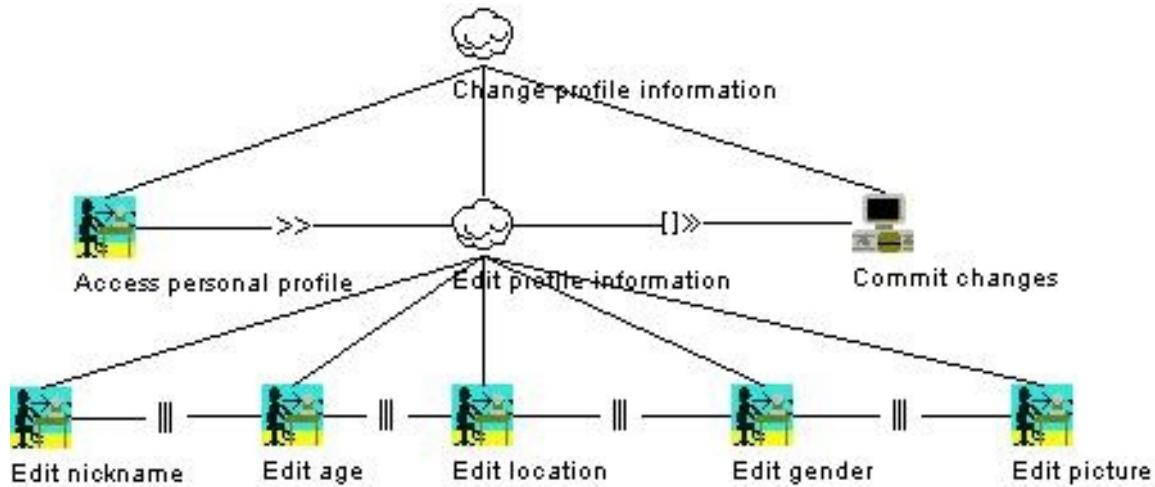


Figure 3.6: CTT to change information on the personal profile.

Requirement: “The registered users should be able to add any information on their personal profile.”

Task: Add information on the personal profile.

When a user wants to add any information of their personal profile, he or she should first navigate to the profile information, add the desired information and save the additions made.

Decomposition:

- Access the personal profile.
- Add the nickname.
- Add the age.
- Add the location.
- Add the gender.
- Add the picture.
- Commit the changes.

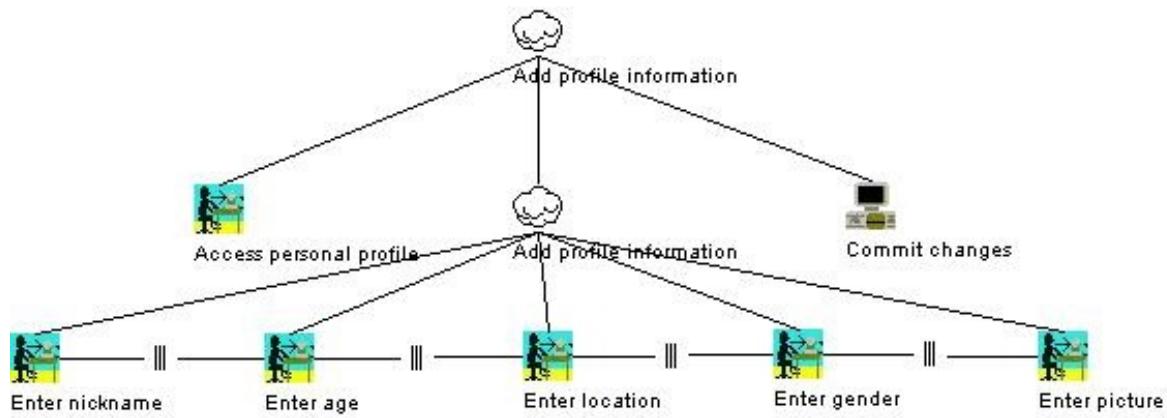


Figure 3.7: CTT to add information on the personal profile.

Requirement: “The registered users should be able to delete any information on their personal profile.”

Task: Delete information on the personal profile.

When a user wants to delete any information of their personal profile, he or she should first navigate to the profile information, delete the desired information and save the deletions made.

Decomposition:

- Access the personal profile.
- Delete the nickname.
- Delete the age.
- Delete the location.
- Delete the gender.
- Delete the picture.
- Commit the changes.

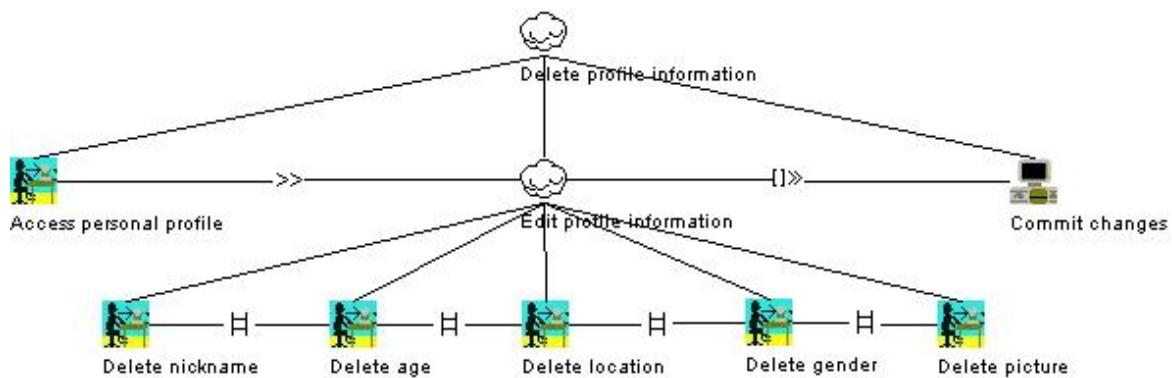


Figure 3.8: CTT to delete information on the personal profile.

Requirement: “The users should be able to search for other users, based on the profile information.”

Task: Search for other members, based on their profile information.

A user must be able to search for other members, based on the username / nickname, age, gender, range or location.

Decomposition:

- Enter the username.
- Enter the age.
- Enter the gender.
- Enter the range.
- Enter the location.
- Display the results.

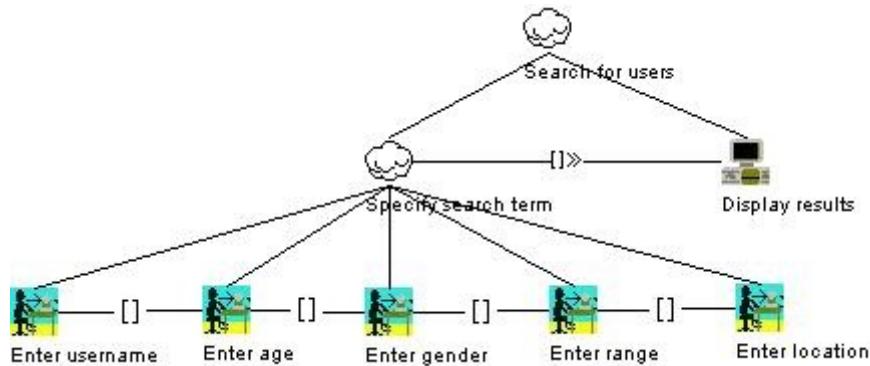


Figure 3.9: CTT to search for other users, based on the profile information.

Requirement: “The user profiles of other members can be seen by the users.”

Task: Browse the user profiles of other members.

Each registered user can browse and see the profile of any other registered user. To do so, a user accesses the browsing function and the system displays an alphabetic list of users.

Decomposition:

- Access the browsing function.
- Display an alphabetic list.

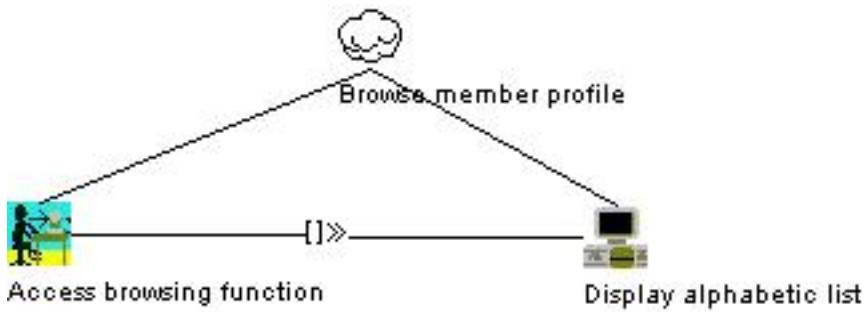


Figure 3.10: CTT to browse (through) other member's profiles. This implies they (the profiles) can be seen by the users.

Requirement: “The users should be able to put messages on any user’s wall.”

Task: Put messages on a user’s wall.

Each registered user can put messages on the personal wall of any other registered user. Therefore, a user navigates to the wall of the desired user, writes the message in a destined box and saves the changes. Next, the message is made visible on the profile.

Decomposition:

- Navigate to the user wall of the desired user.
- Enter the message (write the message).
- Save changes and make the message visible to others.

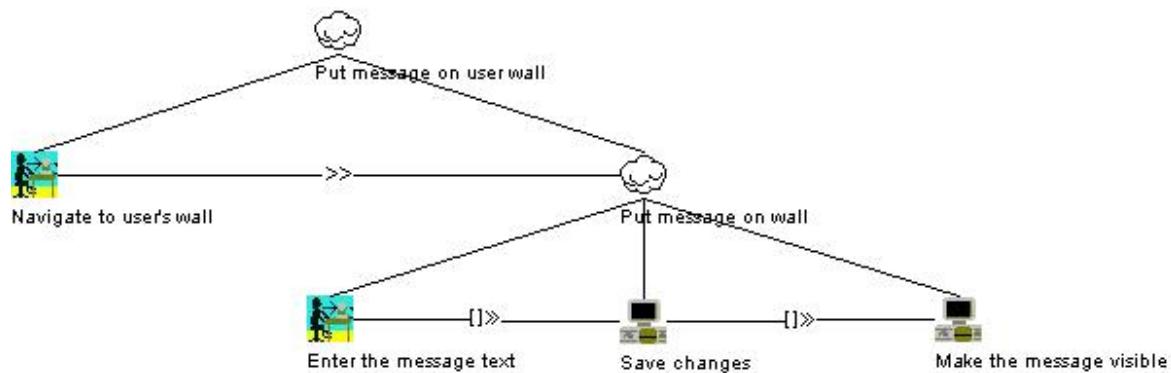


Figure 3.11: CTT to put a message on the wall of a user.

Requirement: “The users should be able to answer to a message on their own wall.”

Task: Answer to a message on their own wall.

Each registered user is able to answer to a message that has been put before on their personal profile wall. Therefore, a user navigates to their own wall, selects the desired message, writes the answer to a message in a therefore destined box and saves the changes. Next, the answer

(the message) is made visible on the profile.

Decomposition:

- Navigate to the personal user wall.
- Select the desired message.
- Enter the answer to a message.
- Save changes and make the answer visible to others.

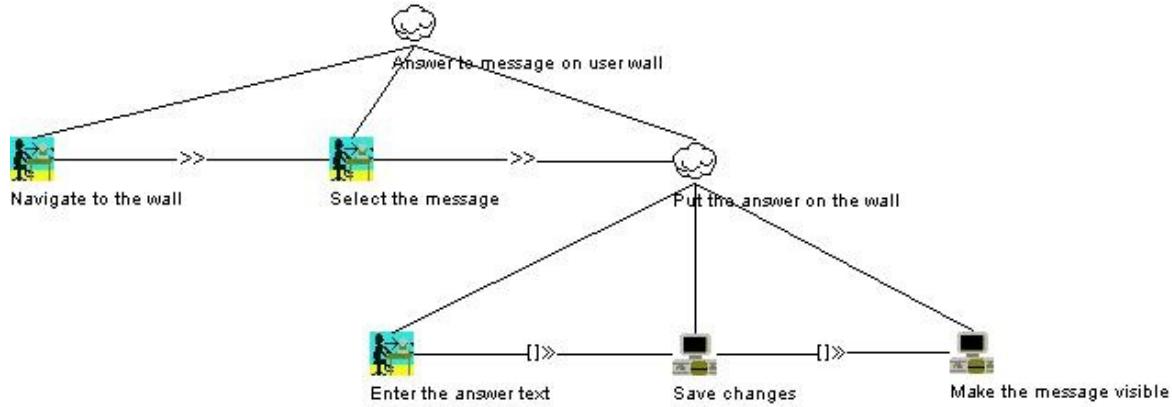


Figure 3.12: CTT to answer to a message already posted on the user's wall.

Requirement: “The users should be able to delete a message from their personal wall.”

Task: Delete a message from their personal wall.

In order to delete a message from the personal wall, the user navigates to their personal wall, selects the message and after the confirmation the message is actually deleted.

Decomposition:

- Navigate to the personal user wall.
- Select the desired message.
- The system asks for confirmation.
- The user confirms the deletion.
- The message gets actually deleted.

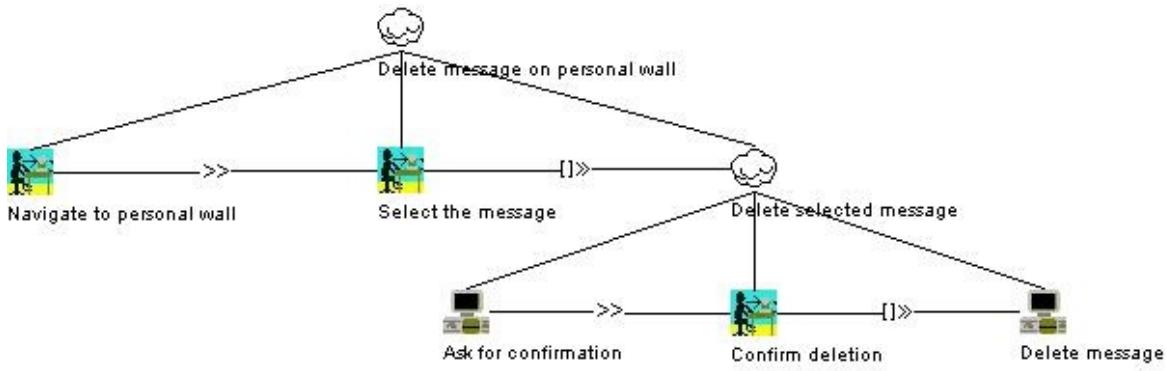


Figure 3.13: CTT to delete to a message from the user's wall.

Requirement: “The users should be able to communicate to other registered users by sending them private messages.”

Task: Send a private message to a registered user.

To send a message to a registered user, a user navigates to the profile (possibly after performing a search) of the user he wishes to send a message to and clicks on a link to send the private message. After typing the message text, the user confirms the sending of the message.

Decomposition:

- Search for the user (optional).
- Navigate to its user profile.
- Click on a link to send the message.
- Type the message text.
- Confirm sending the message.

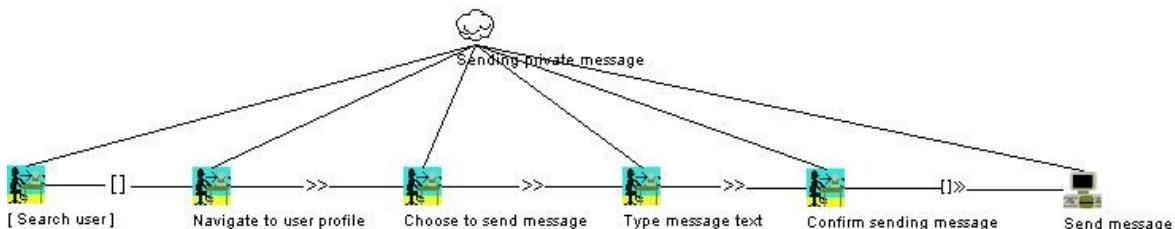


Figure 3.14: CTT to sent a private message to a registered user.

Requirement: “The users should be able to ‘like’ other users.”

Task: “Like” another user.

To “like” another user, a registered user navigates to its user profile, possibly after performing a search to find the user he or she wishes to like. The user clicks on a “like” button and the like is registered.

Decomposition:

- Search for the user (optional).
- Navigate to its user profile.
- Click on a “like” button.
- The “like” is registered.

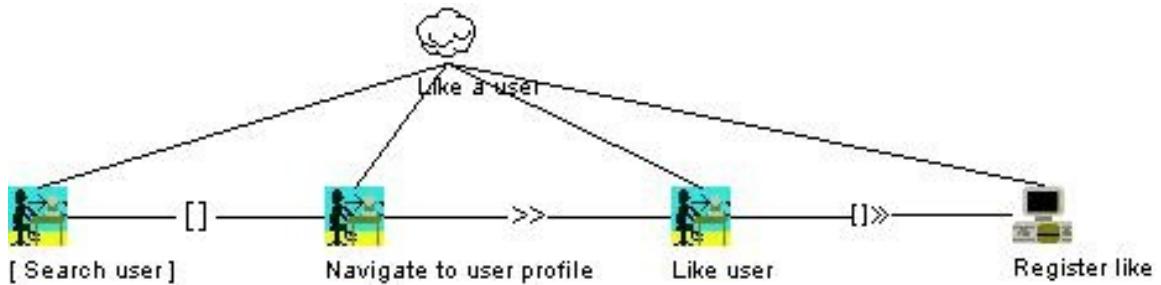


Figure 3.15: CTT to like another user.

Requirement: “The users should be able to manage their ‘liked’ list.”

Task: Manage their personal ‘liked’ list.

Each time a user likes another user, this user is added to their “liked” list. To manage this list, a user is able to remove (VOORLOPIG ALLEEN REMOVE) users from the list.

Decomposition:

- Navigate to the “liked” list.
- Select the desired user.
- Choose to remove the user from the list.
- Ask for confirmation.
- Confirm the deletion of the user from the list.
- Remove the user.

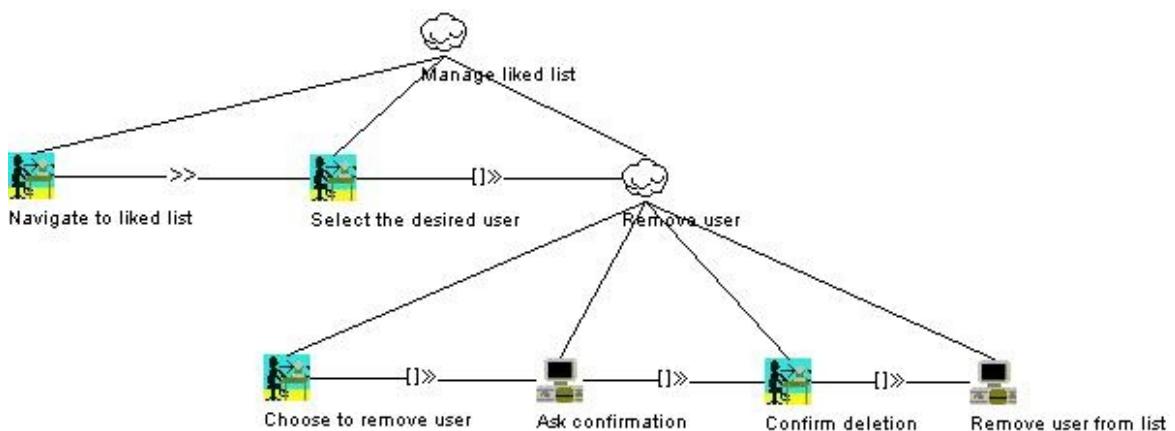


Figure 3.16: CTT to manage the personal liked list.

Requirement: “The user should be notified in case of profile updates of their ‘liked’ users.”

Task: Notify a user in case of profile updates.

Each time a “liked” user on the “liked” list updates its profile, a notification to the user is sent as a pop-up message and sound.

Decomposition:

- Monitor profile updates.
- If profile is updated:
 - Show notification message.
 - Play sound.

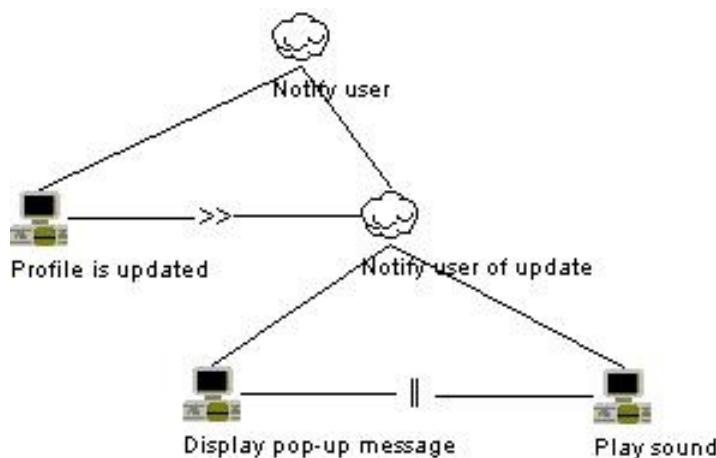


Figure 3.17: CTT to notify a user by means of a pop-up message and sound when the profile of a user on their liked list changes.

Requirement: “The users should be able to send another user an attention. These attentions should be the following:

- A bouquet of flowers
- A handshake
- A Smiley
- A kiss
- A tap on the back
- A thumbs up
- A bottle of wine”

Task: Send an attention.

An attention can be send to a user in the form of a bouquet of flowers, a handshake, a smiley, a kiss, a tap on the back, a thumbs up or a bottle of wine. To do so, a user navigates to the

user's profile of whom he or she wants to send the attention to (possibly after a search) and chooses which kind of attention he or she wants to send.

Decomposition:

- Search for a user's profile (optional).
- Navigate to the user's profile.
- Choose to send an attention.
- Choose the desired attention.
- Confirm.

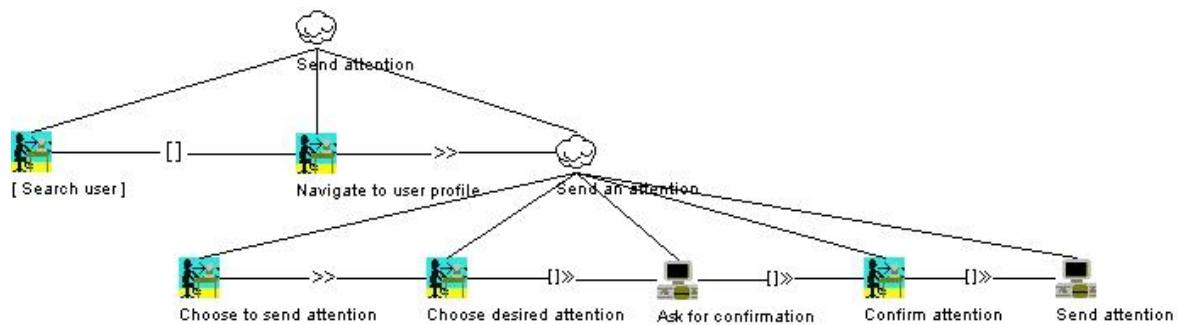


Figure 3.18: CTT to send an attention to a desired user.

Requirement: “The users should be informed about a received attention and should be able to return the favor.”

Task: Inform user about a received attention.

In case of a user sending an attention to another user, the user should be notified by a pop-up screen where the user can directly return the favor or just ignore it.

Decomposition:

- Attention has been sent.
- User receives the attention.
- Show a pop-up screen.
- Ignore the attention or reply to it.
- In case of replying to it, choose the attention and send it.

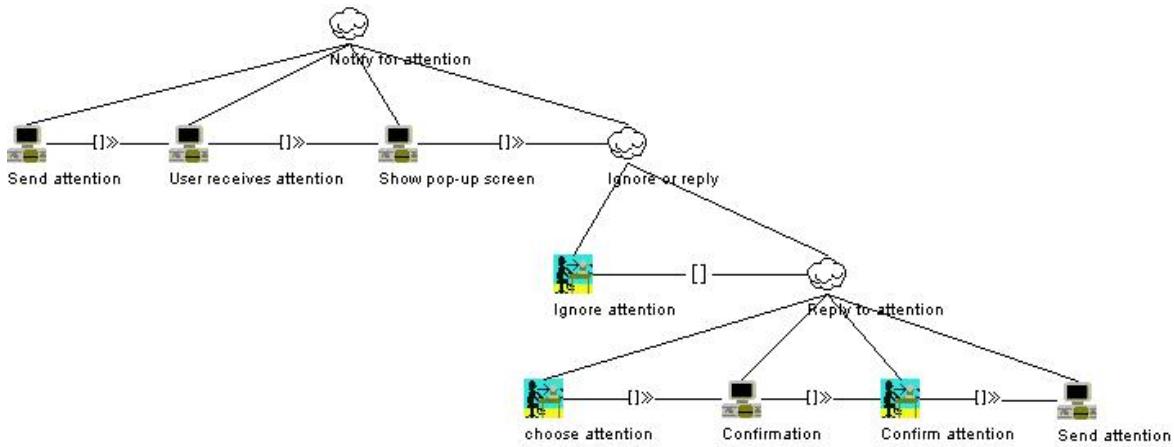


Figure 3.19: CTT to notify when an attention has been sent to the user.

Requirement: “The users should be able to message with randomly selected users, based on the selected gender and age.”

Task: Send message to any user, based on gender and age.

After searching for age and gender, a matched result list is displayed from where the user can select people to message with. So the user fills in the age and gender, the system displays a list based on the age and gender. The user selects a person and a chatbox is opened.

Decomposition:

- Search for age and gender.
- Display the result list.
- Select the desired person.
- Send message to person.

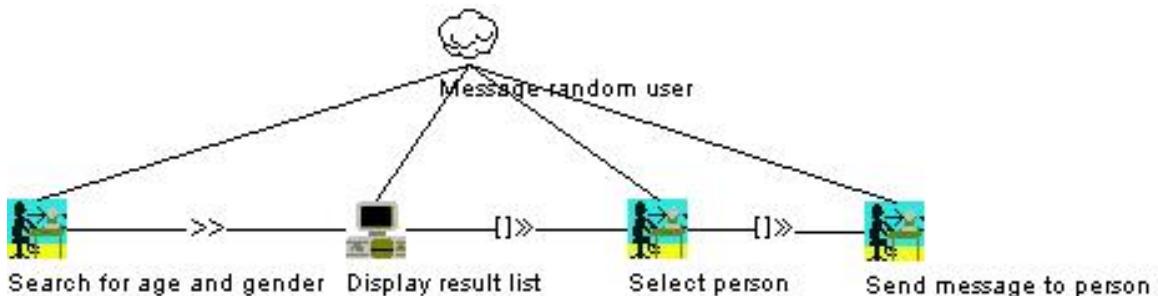


Figure 3.20: CTT to send a message to a user basd on age and gender.

Requirement: “The users should be able to block and report other users.”

Task: Block and report a user. (EN SEND MESSAGE TO ADMINISTRATOR?????) TBD...

Decomposition:

- Block user.
- Report user.

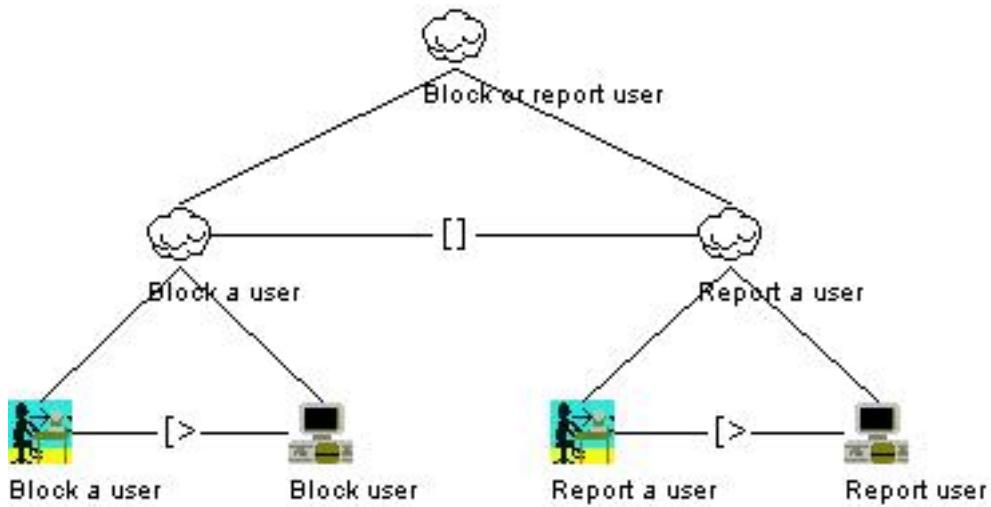


Figure 3.21: CTT to block or report a user.

Requirement: “The users should be able to log off.”

Task: Log off.

The user is logged off and is redirected to the home page.

Decomposition:

- Log off.
- Redirect to the home page.

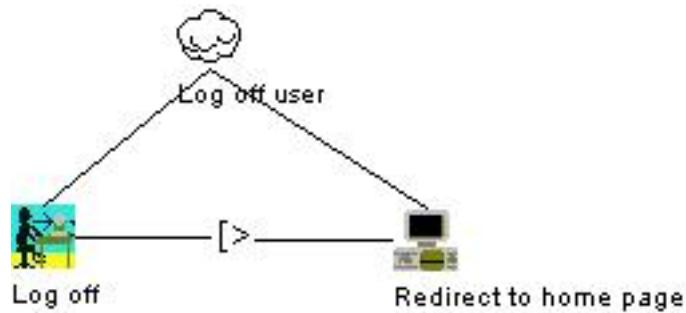


Figure 3.22: CTT to log off a user.

Requirement: “The users should be able to terminate their account.”

Task: Terminate account.

- Terminate account.
- Redirect to the home page.

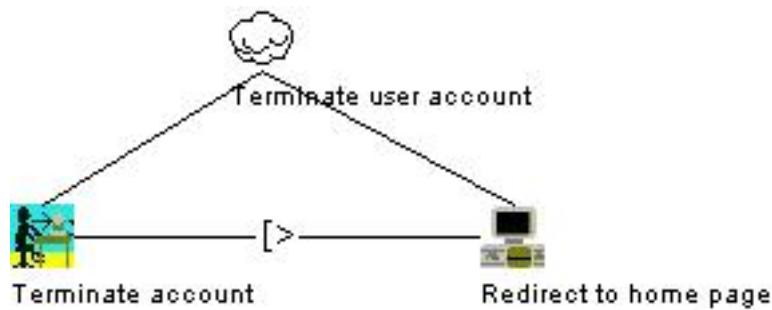


Figure 3.23: CTT to terminate a user account.

Requirement: “Detailed personal information.”

Task: Provide detailed personal information on the user profile

When a user navigates to its user profile, allow to give detailed personal information consisting of their username / nickname, age, gender, location and picture.

Decomposition:

- Navigate to user profile.
- Display nickname.
- Display age.
- Display location.
- Display gender.
- Display picture.

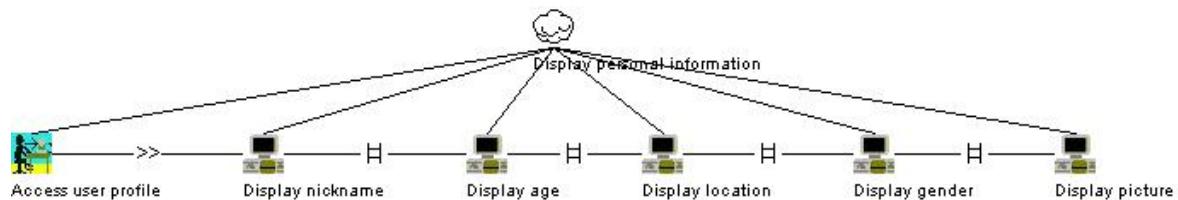


Figure 3.24: CTT to display the detailed personal information of a user.

Requirement: “Detailed information about other users’ profiles.”

Task: Provide detailed information about the profile of other users.

When a user navigates to the user profile of any registered user, allow to give detailed personal information consisting of their username / nickname, age, gender, location and picture.

Decomposition:

- Navigate to foreign user profile.
- Display nickname.
- Display age.
- Display location.
- Display gender.
- Display picture.

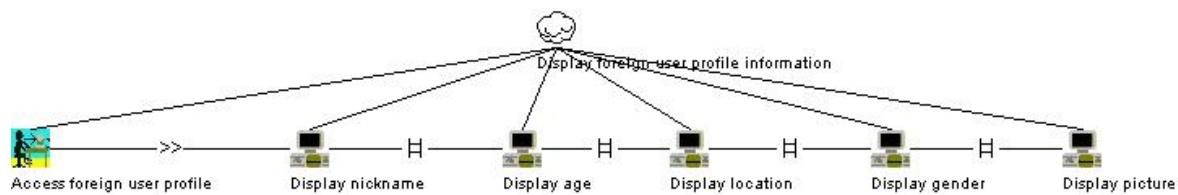


Figure 3.25: CTT to display the detailed personal information of a foreign user.

3.1.3 Audience class Administrators

Requirement: “The administrators should be able to browse through all user profiles.”

Task: Browse through all user profiles.

Decomposition:

- Access browsing function.
- List profiles.
- Browse profiles.

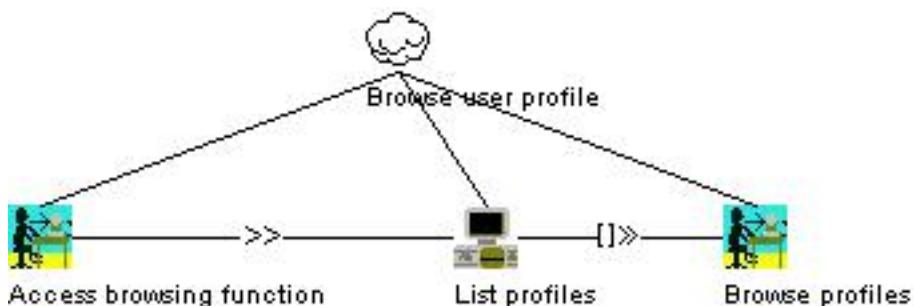


Figure 3.26: CTT to browse any user profile.

Requirement: “The administrator should receive a message when another user blocks or reports a user.”

Task: Receive a message when a user is blocked.

Upon blocking a user, the administrator receives a message. Decomposition:

- User blocks another user.
- Administrator receives message.

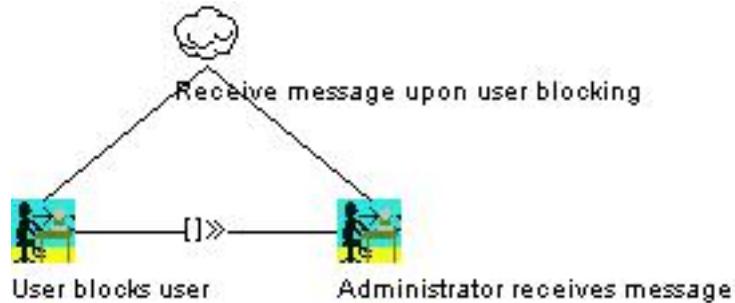


Figure 3.27: CTT to send a message to the administrator when a user blocks another user.

Requirement: “The administrator can send a message to any other user.”

Task: Send message to user.

The administrator searches for the desired user or accesses the browsing function directly to retrieve the list of users. A user is selected, the message is typed and sent. Decomposition:

- Search for the desired user (optional).
- Access the browsing function.
- Display alphabetical list of users.
- Select the desired user.
- Type the message text.
- Send the message.

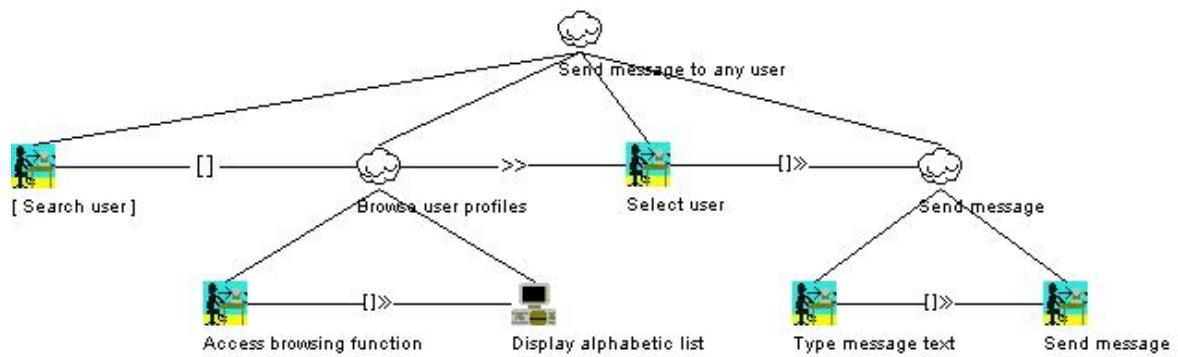


Figure 3.28: CTT to send a message to any user.

Requirement: “The administrator can block, disable or delete any user account.”

Task: Block, disable or delete user account.

The administrator has the choice to block, disable or delete a user account. For each choice, it is possible to either search a user or browse the user profiles. Then the desired user has to be selected and respectively blocked, disabled or deleted.

Decomposition:

- Choose between block, disable or delete a user account.
- In case of blocking a user account:
 - Search for a user account.
 - Or browse the user profile list.
 - Select the desired user.
 - Block the user.
- In case of disabling a user account:
 - Search for a user account.
 - Or browse the user profile list.
 - Select the desired user.
 - Disable the user.
- In case of deleting a user account:
 - Search for a user account.
 - Or browse the user profile list.
 - Select the desired user.
 - Delete the user.

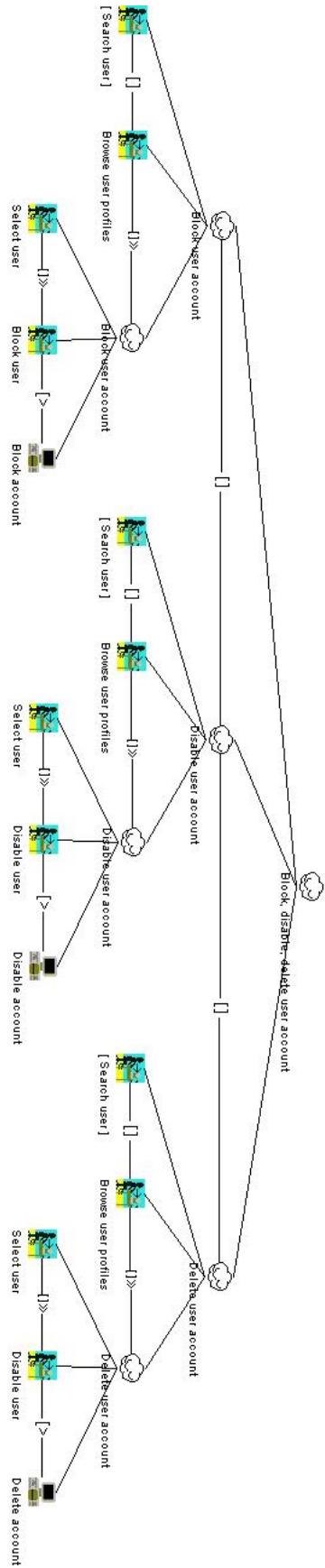


Figure 3.29: CTT to send a message to any user.

3.2 Information modeling

In the information modeling phase, the domain model as UML diagrams is created. This has been done by using the WebRatio tool. The result is depicted in the figure below:

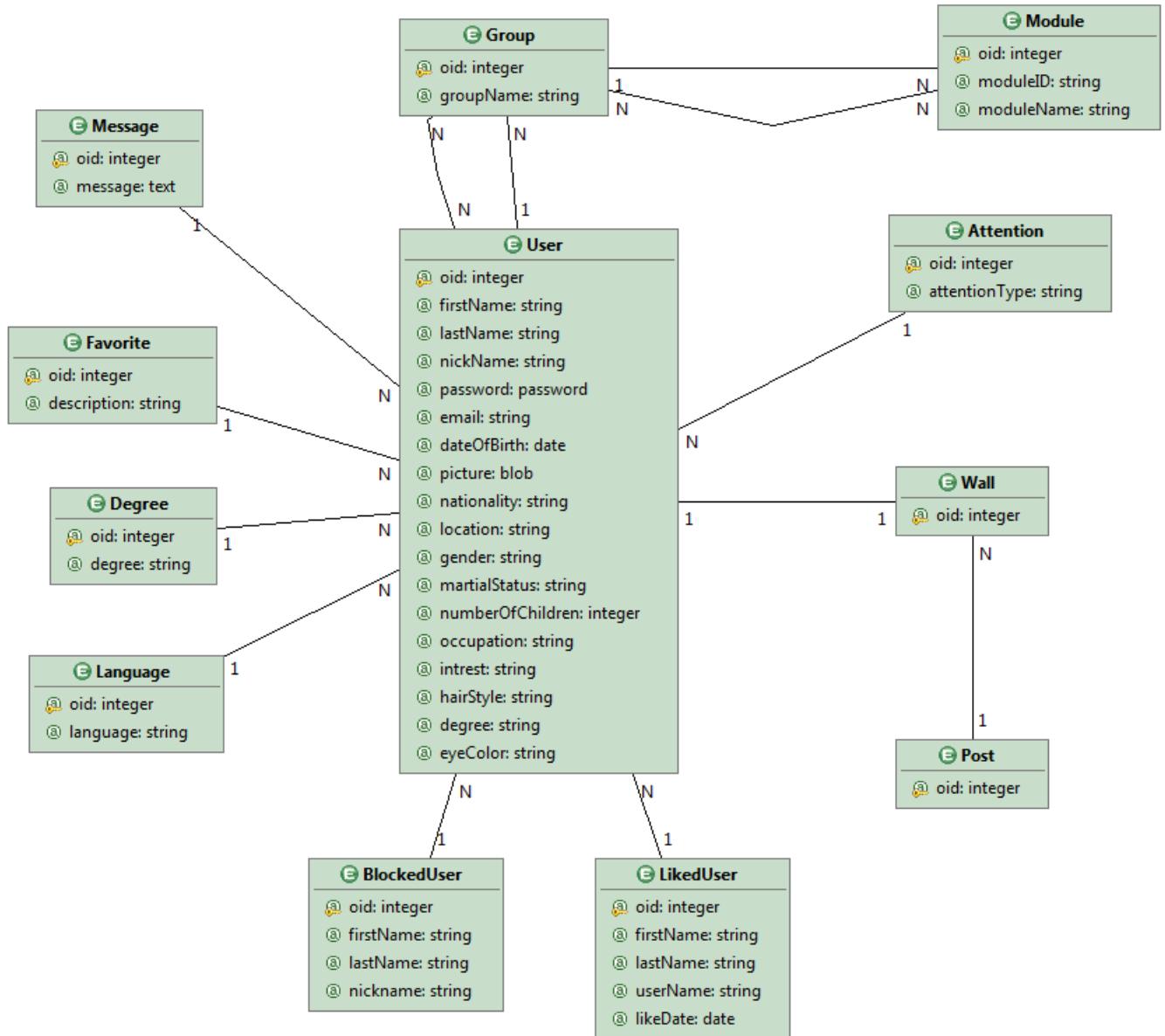


Figure 3.30: Domain model created using WebRatio.

3.3 Navigational modeling

In the navigational modeling phase, the structure of the website is modeled. First, we will start with the conceptual structural model, providing a general overview of the website's navigation structure, called tracks. Then, each individual track is worked out in more detail.

The figures have been created using Microsoft Office Visio 2010. To be more specific, the shapes of the "Data Flow Diagram" type have been used. The graphics are exported as vector images and thus feature an infinite resolution.

3.3.1 Conceptual Structural Model

The figure below illustrates the conceptual structure of the web application. As previously mentioned in section 2.1.1, the visitor audience class is the most general class with the least privileges, followed by the registered users. There exist two types of registered users, each with specific requirements and thus two separate tracks.

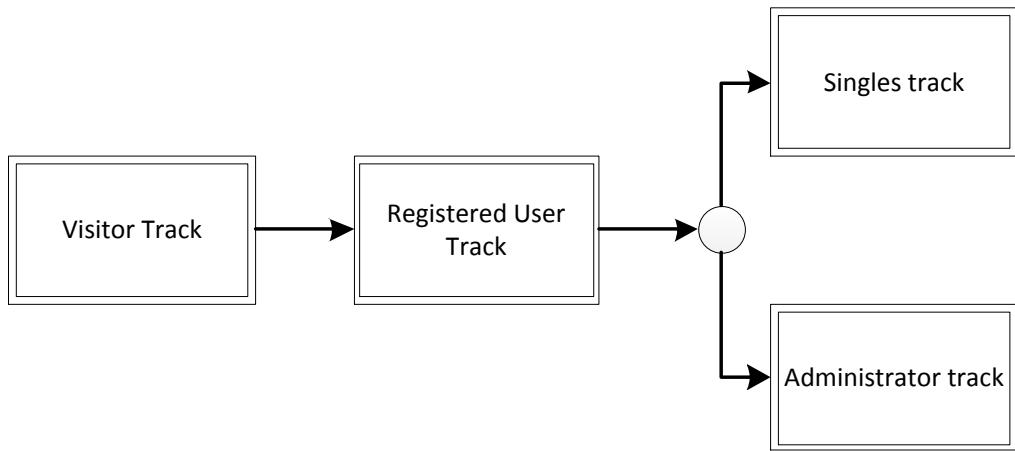


Figure 3.31: Conceptual structural model of the web application.

3.3.2 Visitor navigational track

The visitor track is the most general track. Visitors are able to search for members, that is, the so-called "singles" audience class, to register a new user account and to login. Additionally, information about the 10 last logged in members is shown.

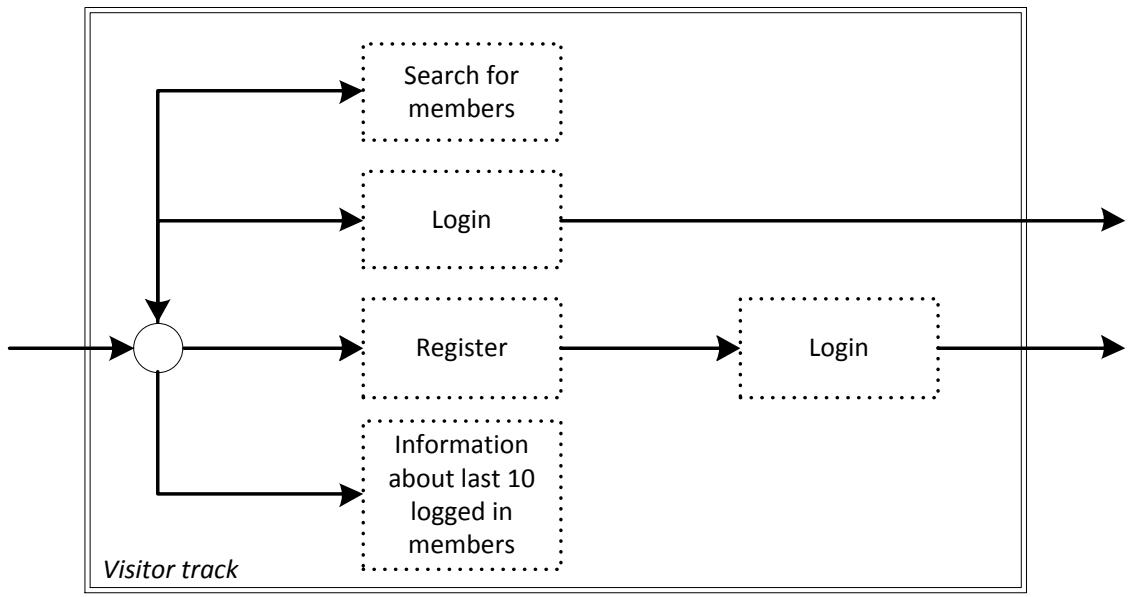


Figure 3.32: Visitor navigational track.

3.3.3 Registered user navigational track

The registered users - both administrators and singles, have more functionality than visitors. For example, they are able to edit their profile, search for users, logout and terminate their account. The complete functionality is depicted in the figure below.

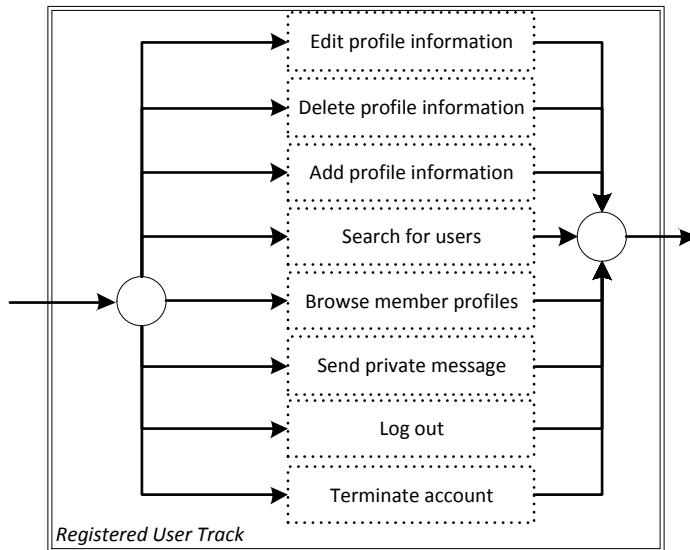


Figure 3.33: Registered User navigational track.

3.3.4 Singles navigational track

As previously mentioned in section 2.1.3, the “singles” audience class is the actual target audience of the web application. They have all the functionality and privileges of the “registered users” audience class and in addition, very much more functionality is available. For example, they can put messages on another user’s wall, delete messages on their own wall, like users, and so on. . . .

For a complete overview of the requirements, the reader is invited to take a look at the figure below, that depicts the singles track; that is, the navigational flow of the “singles” audience class.

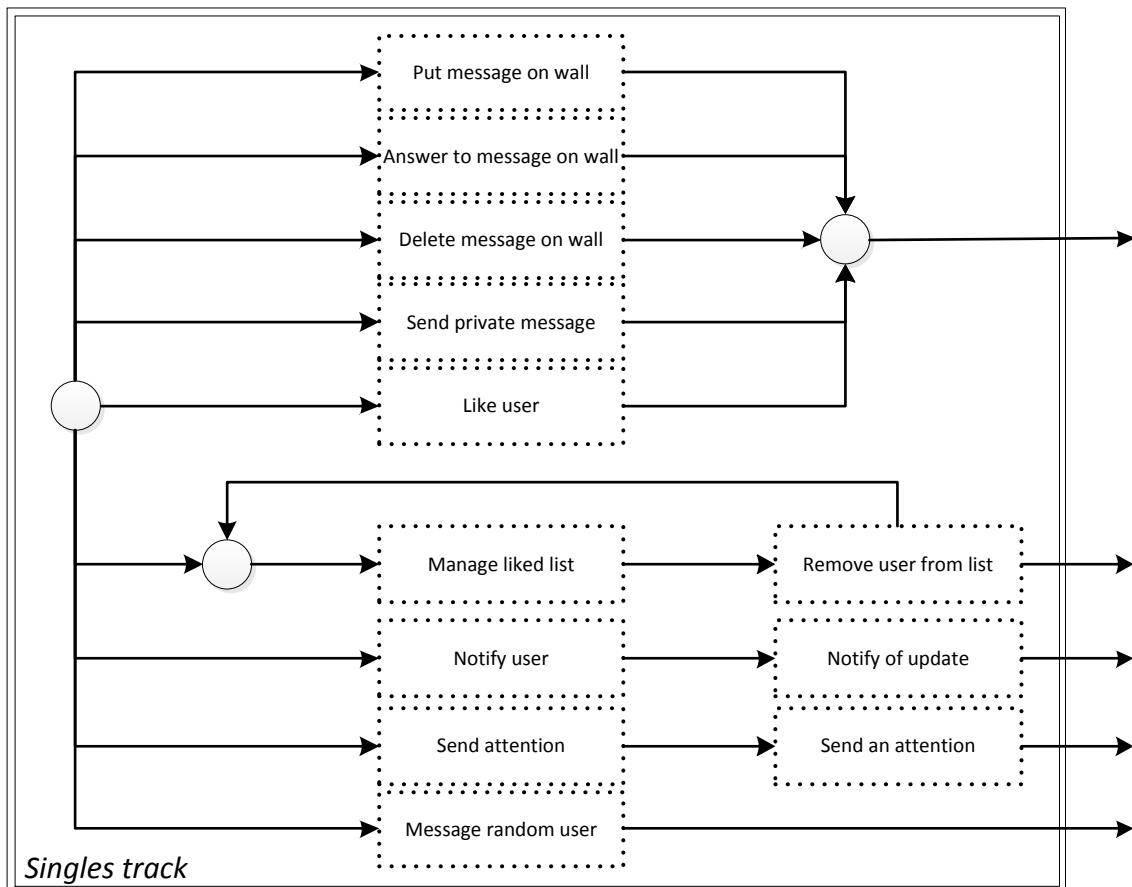


Figure 3.34: Singles navigational track.

3.3.5 Administrator navigational track

The “administrator” audience class is a subclass of the “registered users” class. They have the same privileges as them, but can browse all user profiles, send a message to any user, as well as deleting any user account.

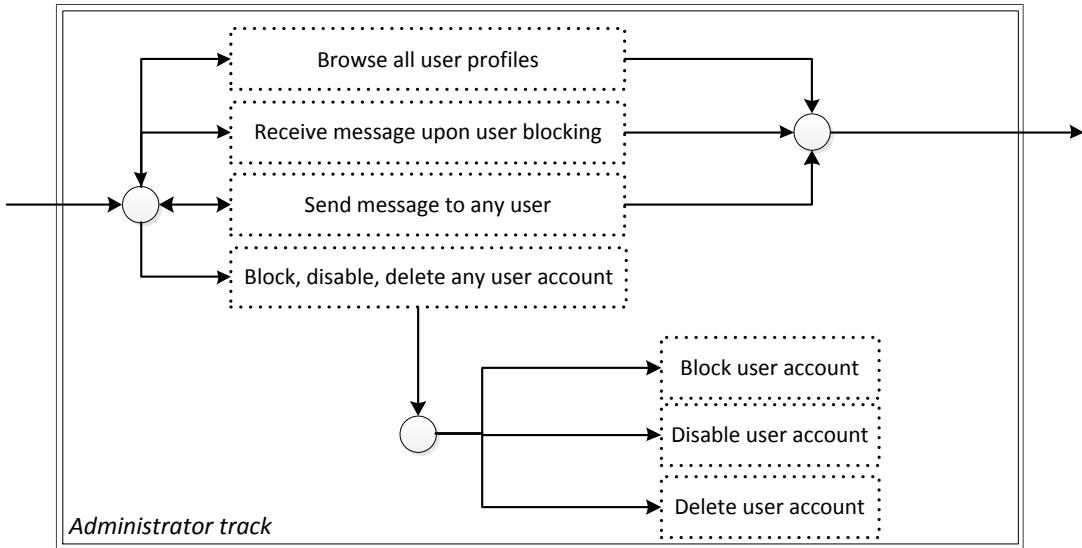


Figure 3.35: Administrator navigational track.

The upcoming sections describe the **fully specified task navigational models**. For each dotted square component in the different tracks, a task navigational model is made. These correspond with the CTT's. They are also made with Visio 2010 and are exported as svg image.

3.3.6 Login

When a visitor wants to login, he or she specifies his or her credentials which contain of a username and a password. The visitor submits the form, is authenticated and redirected.

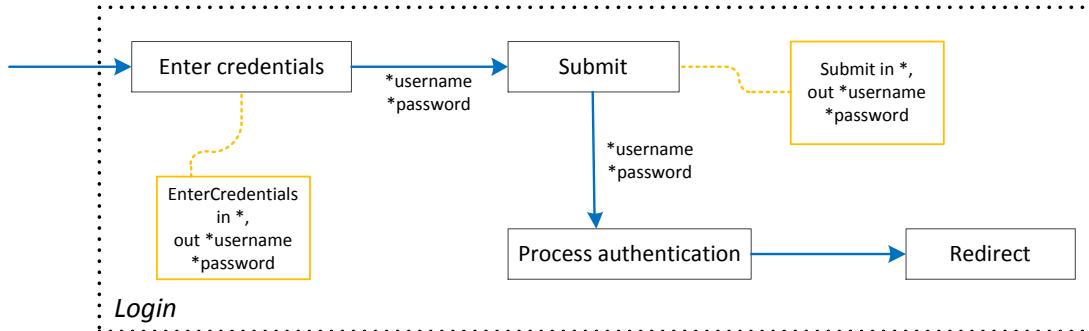


Figure 3.36: Login task navigational model.

3.3.7 Register new user

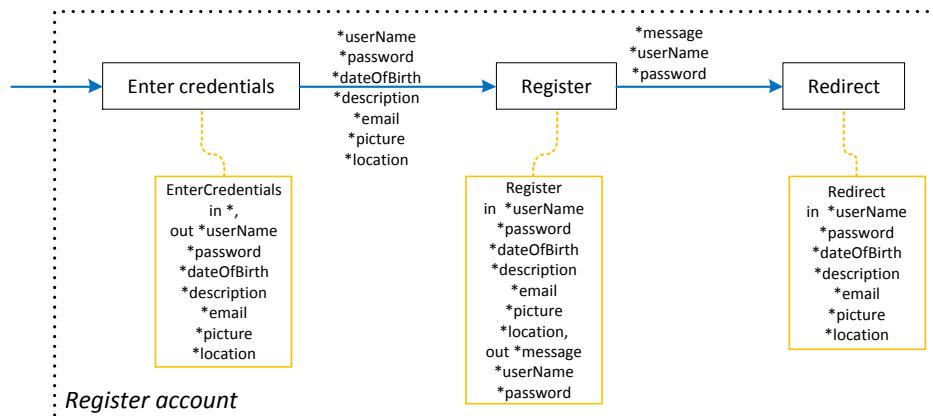


Figure 3.37: Register new user.

3.3.8 Search for members

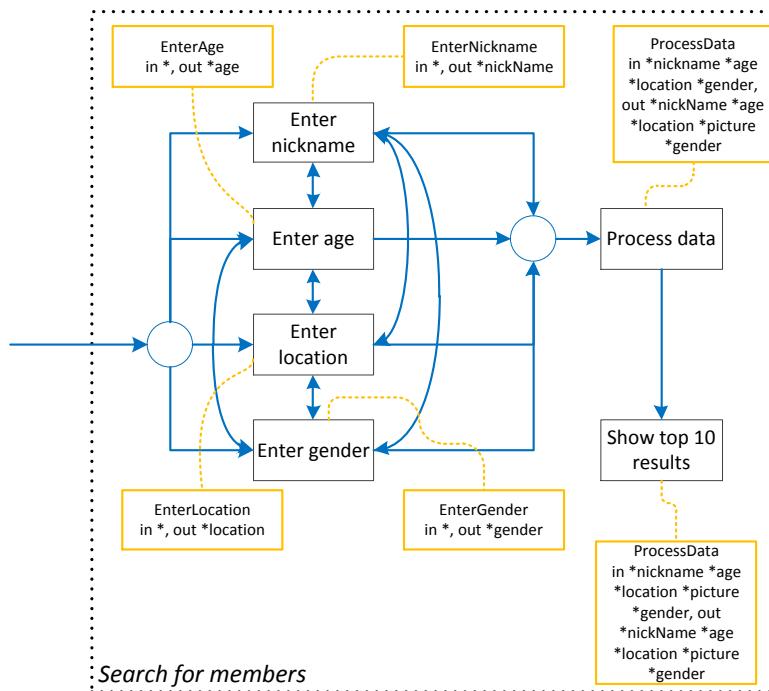


Figure 3.38: Search for members.

3.3.9 Information about the 10 last logged in members

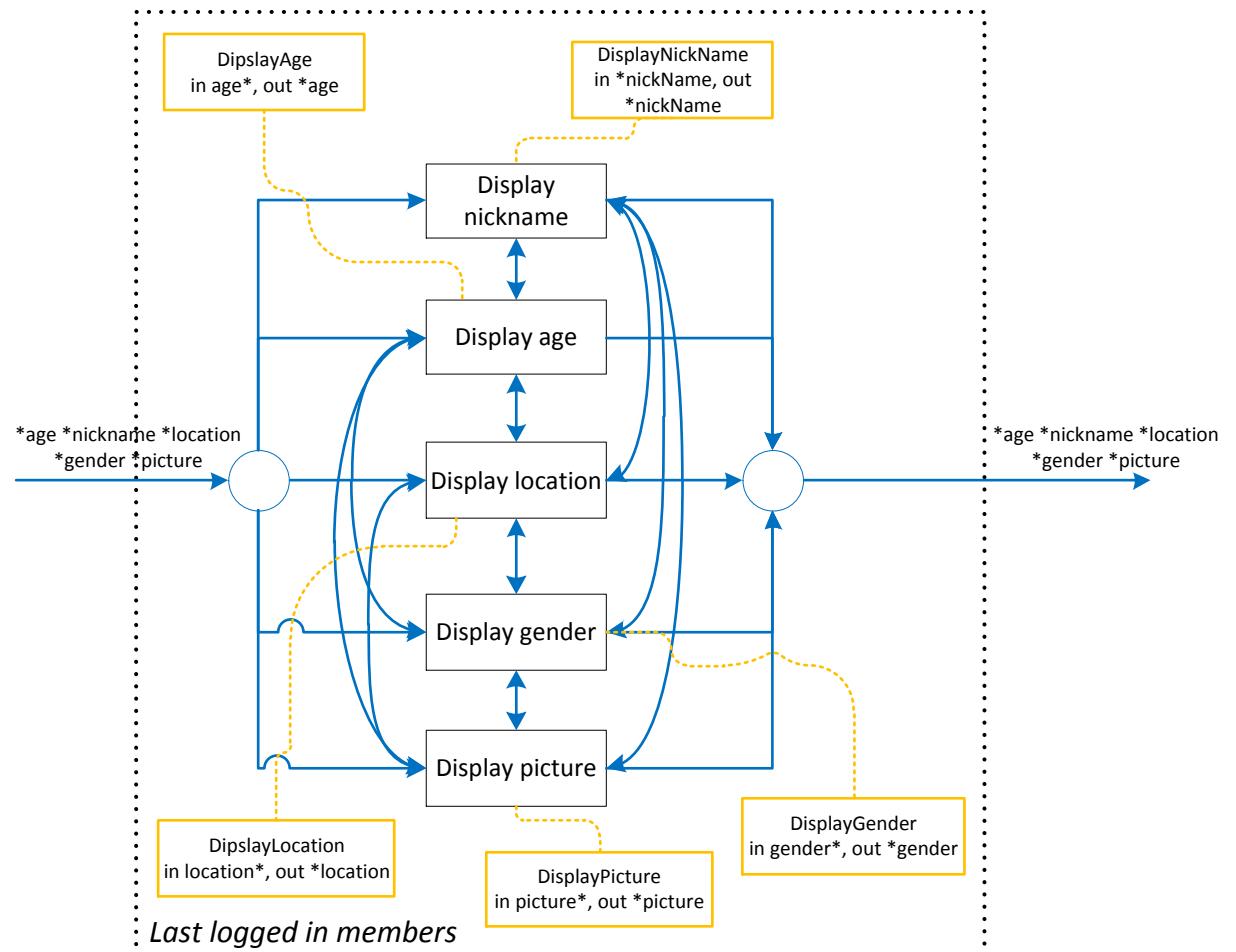


Figure 3.39: The 10 last logged in members.

3.3.10 Change profile information

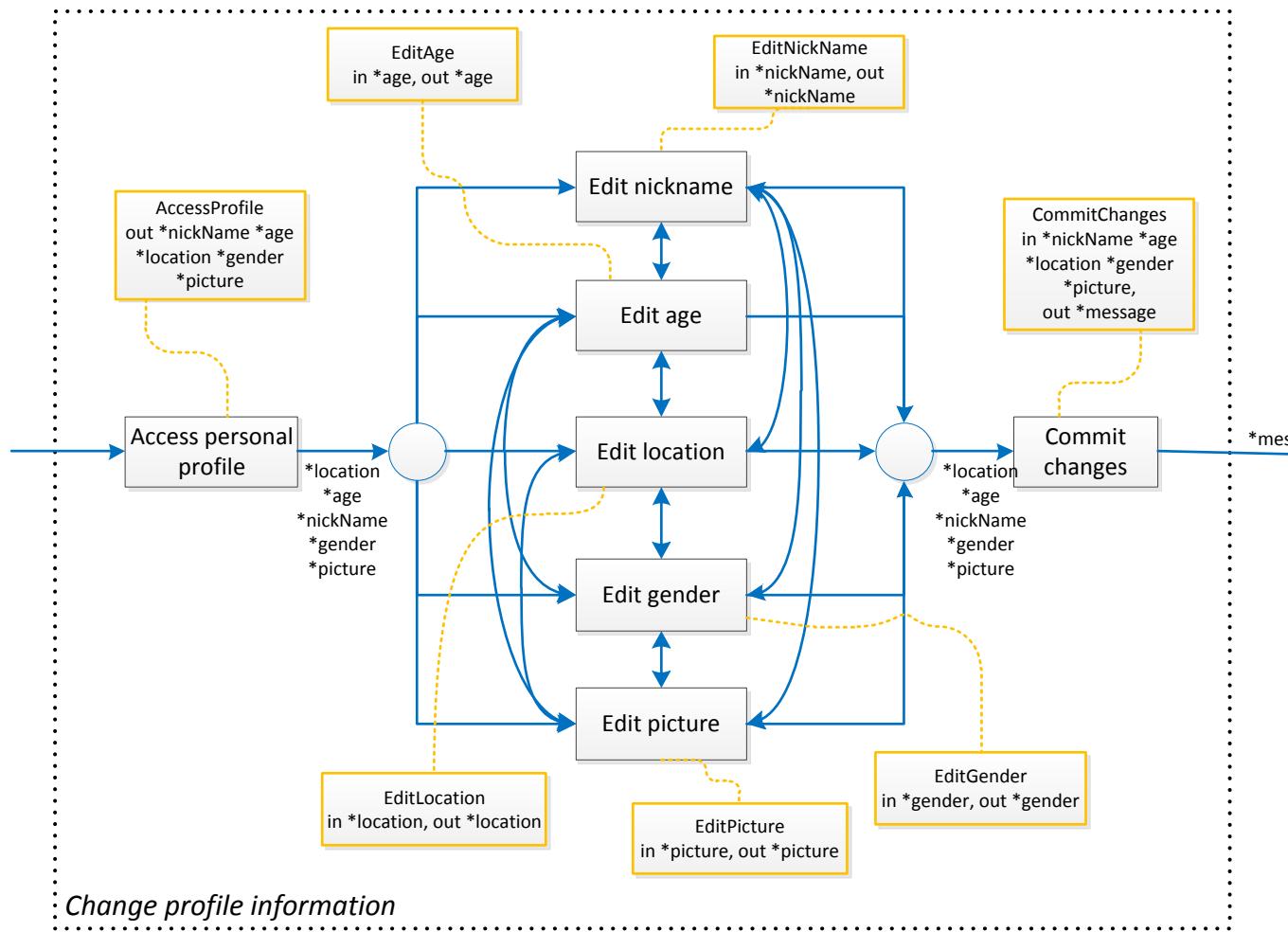


Figure 3.40: Change profile information.

3.3.11 Add profile information

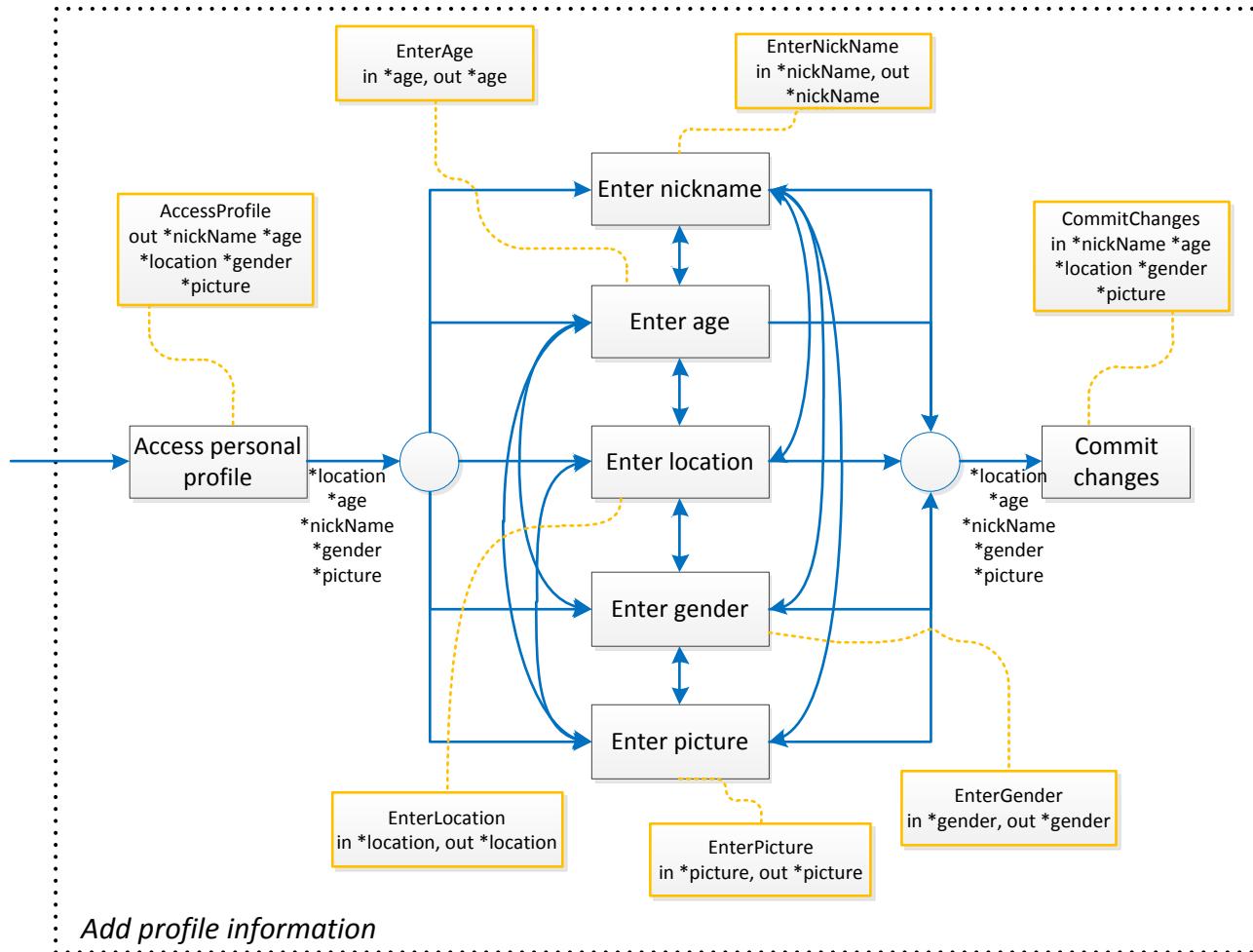


Figure 3.41: Add profile information.

3.3.12 Delete profile information

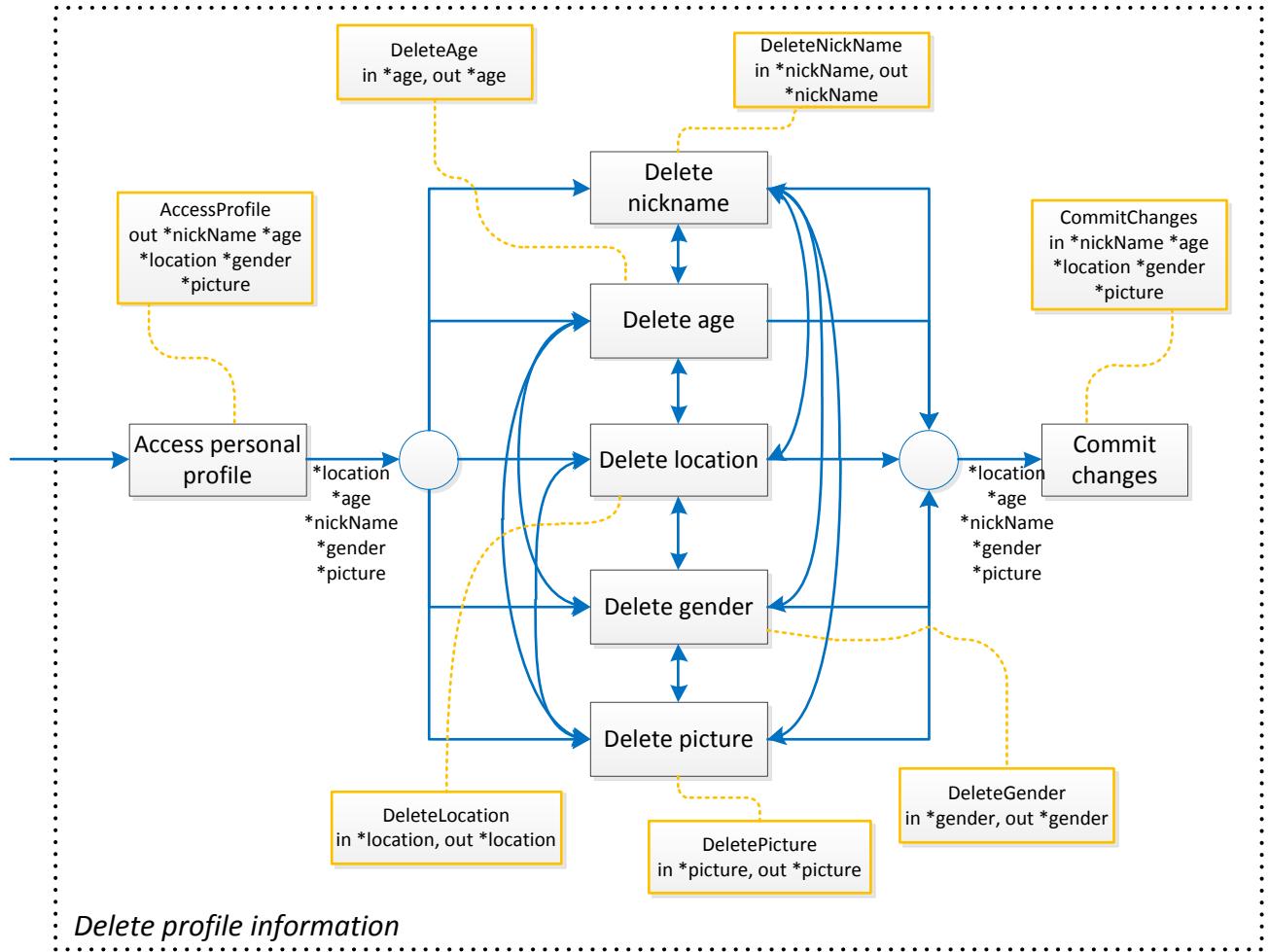


Figure 3.42: Delete profile information.

3.3.13 Search for users

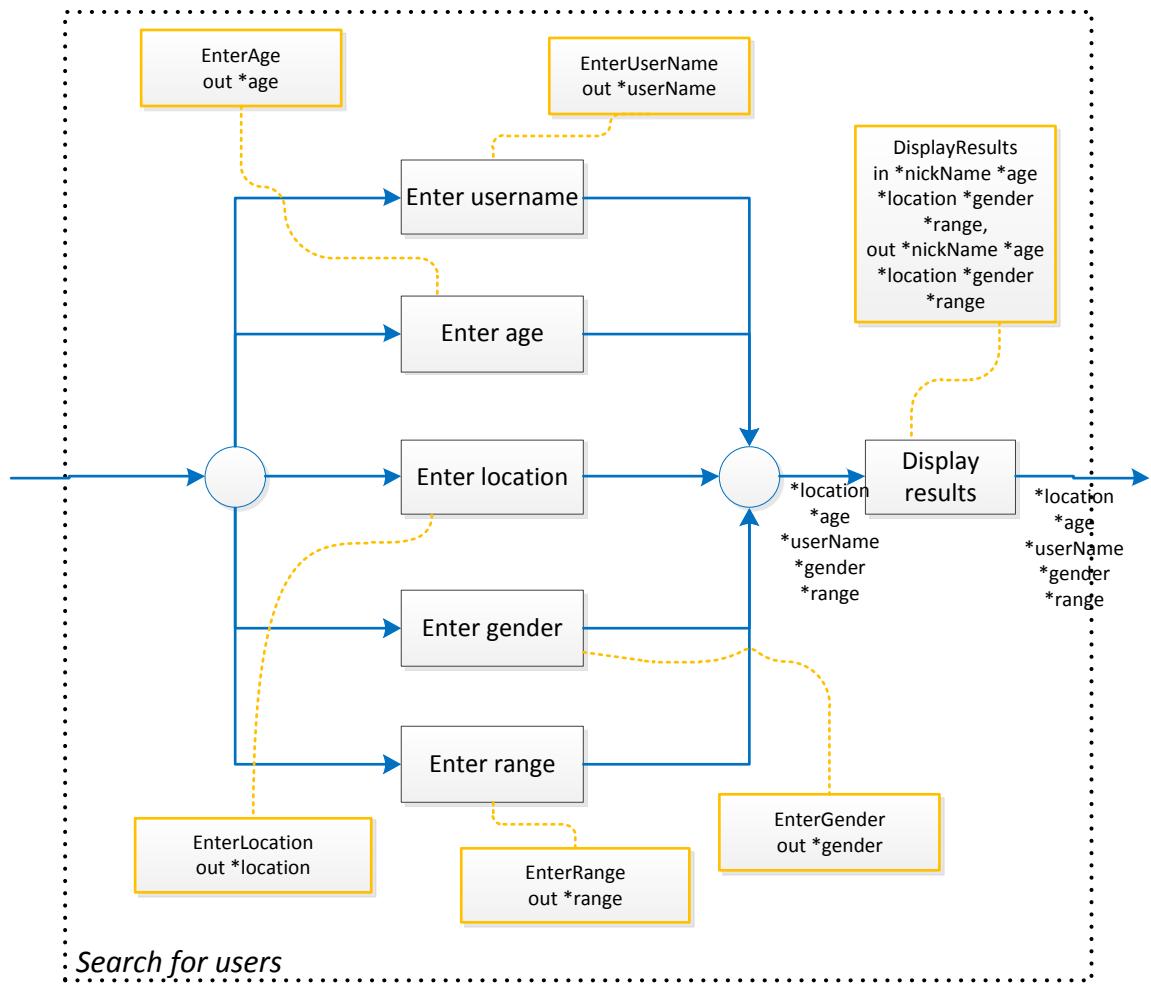


Figure 3.43: Search for users.

3.3.14 Browse user profiles

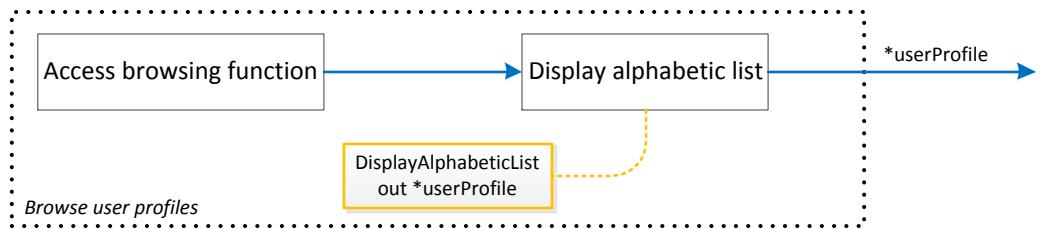


Figure 3.44: Browse user profiles.

3.3.15 Put message on user wall

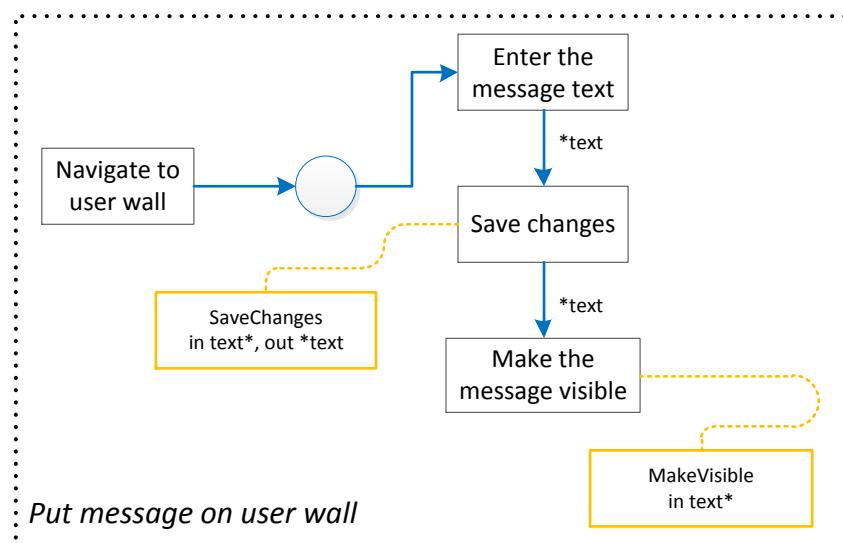


Figure 3.45: Put message on user wall.

3.3.16 Answer to a message on personal wall

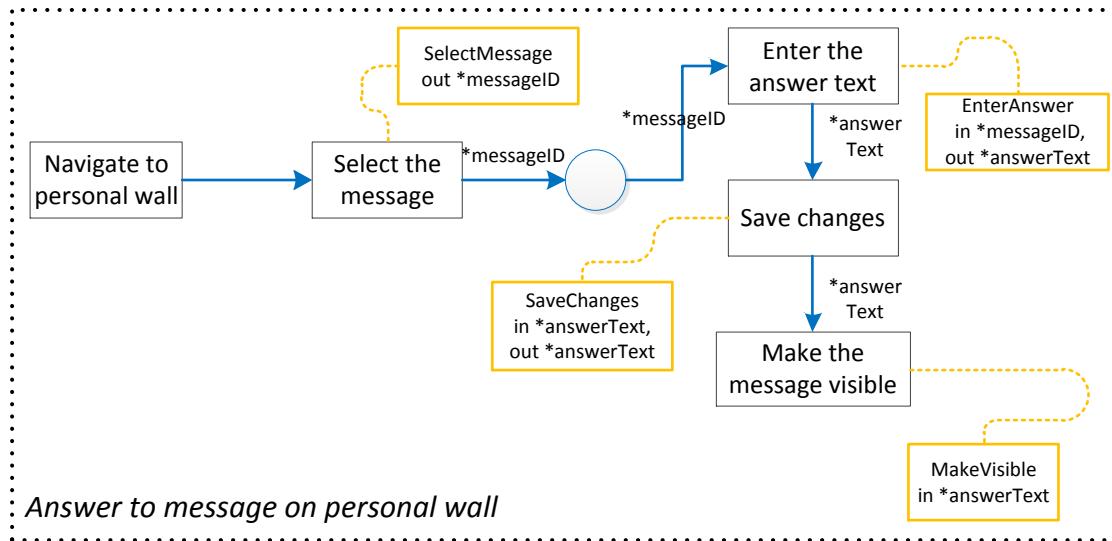


Figure 3.46: Answer message on personal wall.

3.3.17 Delete message on personal wall

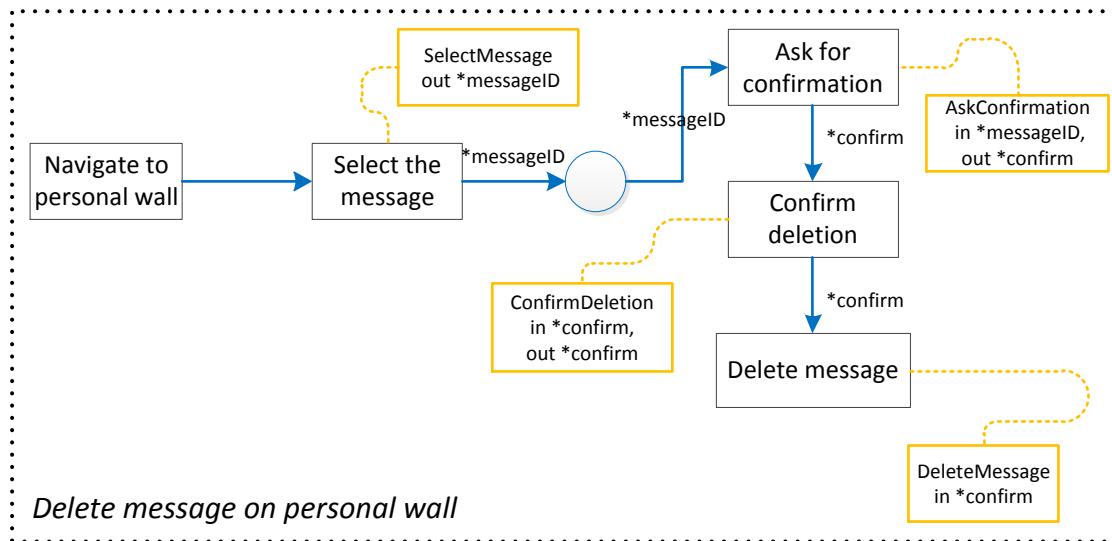


Figure 3.47: Delete message on personal wall.

3.3.18 Send private message

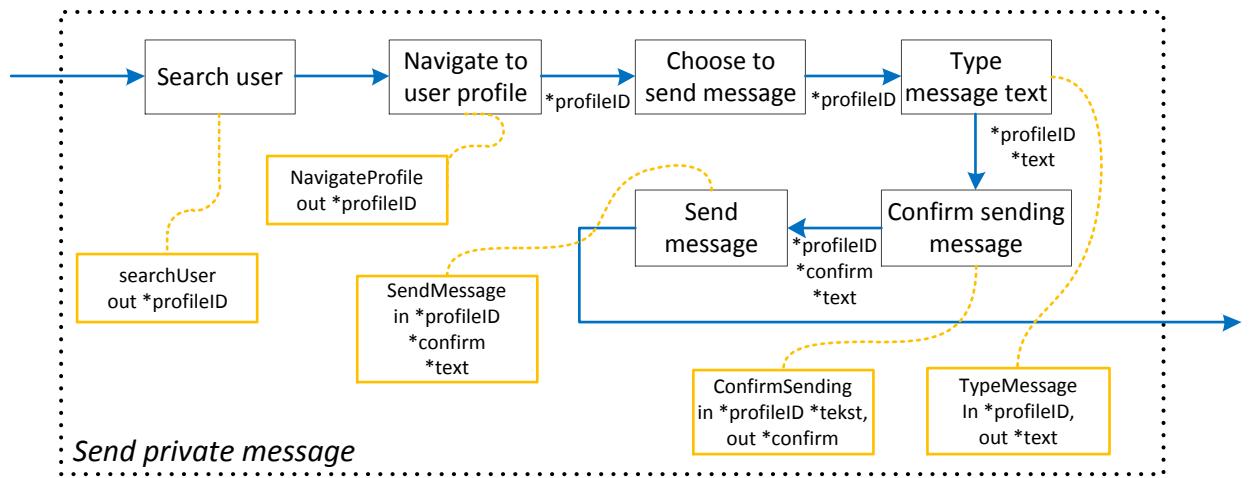


Figure 3.48: Send private message.

3.3.19 Like user

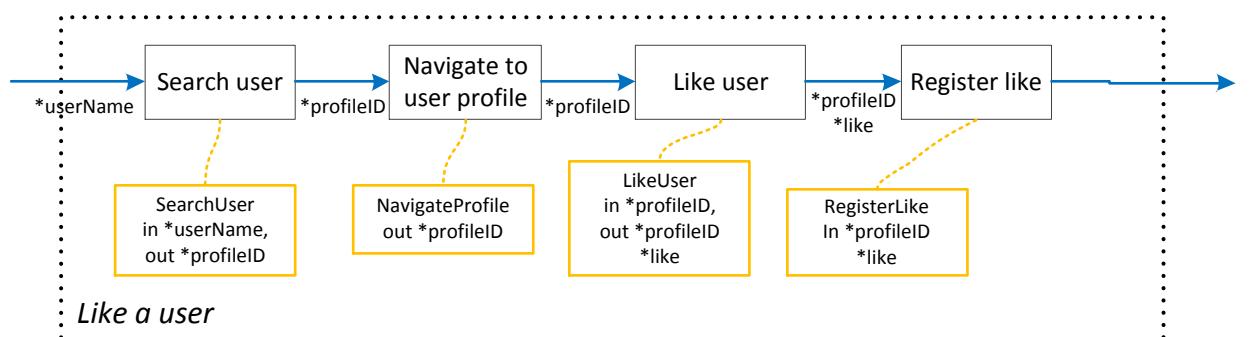


Figure 3.49: Like a user.

3.3.20 Manage liked list

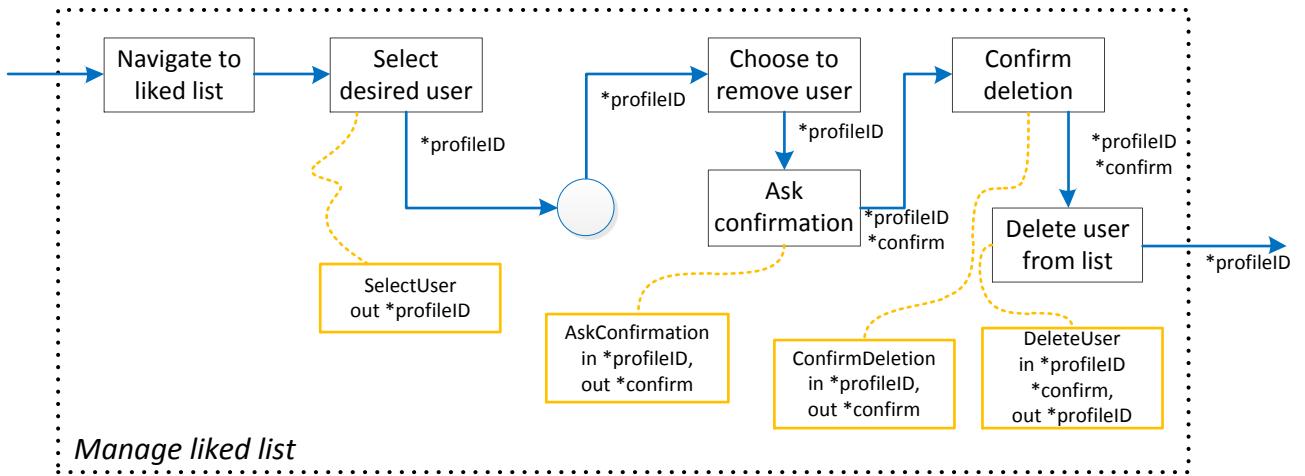


Figure 3.50: Manage liked list.

3.3.21 Notify user in case of profile updates

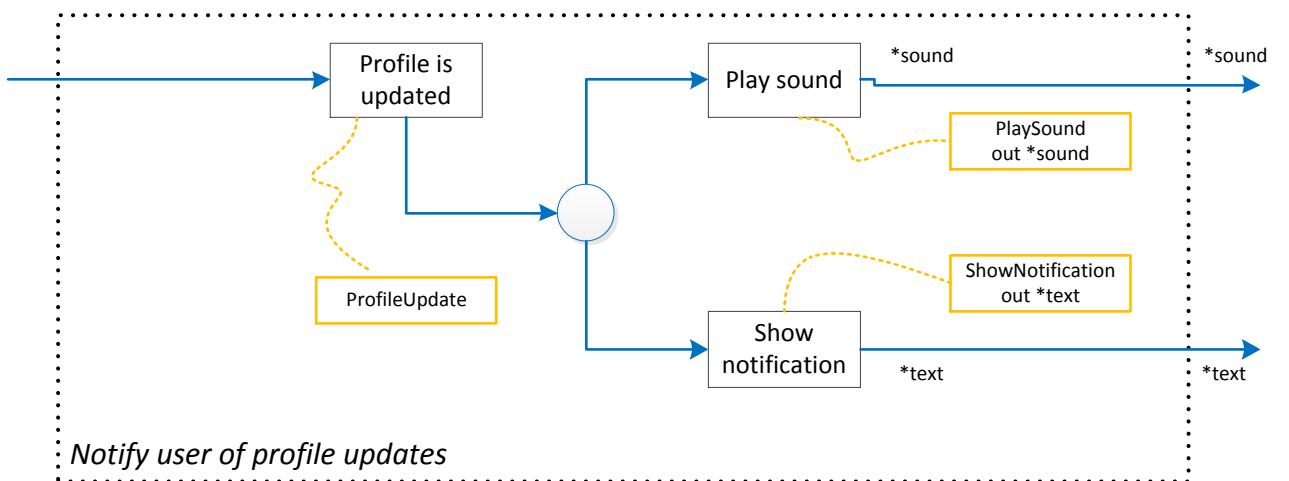


Figure 3.51: Notify user of profile updates.

3.3.22 Send attention to a user

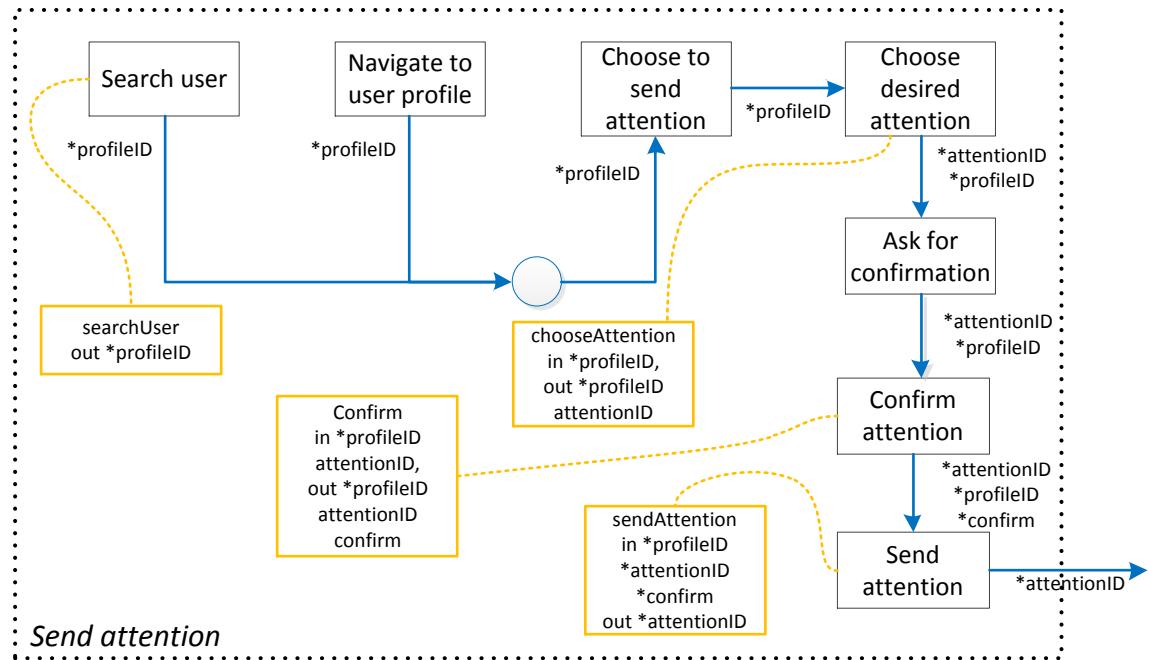


Figure 3.52: Sent an attention to the user.

3.3.23 Send private message to a user

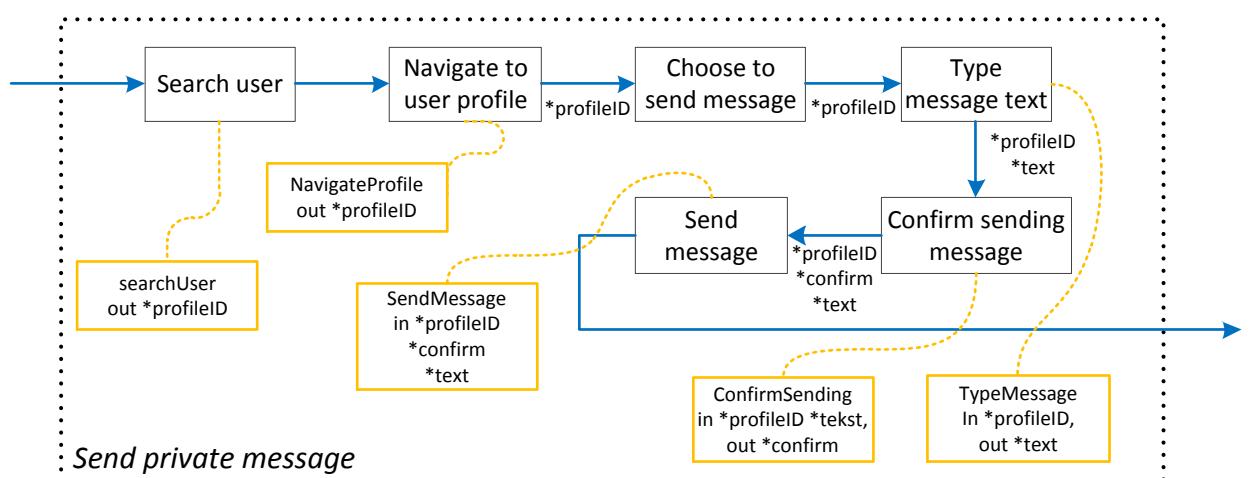


Figure 3.53: Send a private message.

3.3.24 Block or report a user

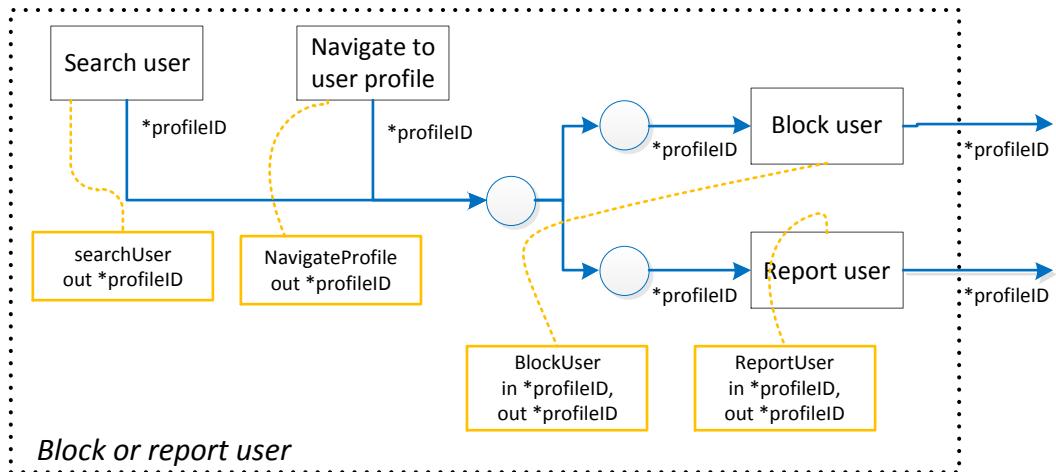


Figure 3.54: Block or report a user.

3.3.25 Log out

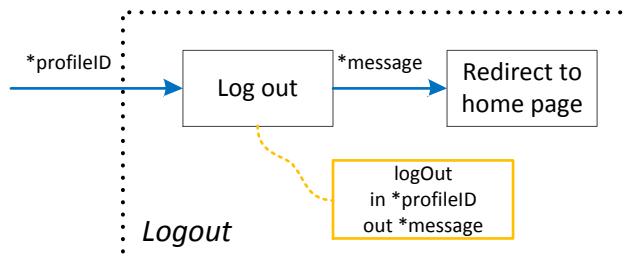


Figure 3.55: Log out of the system.

3.3.26 Terminate account

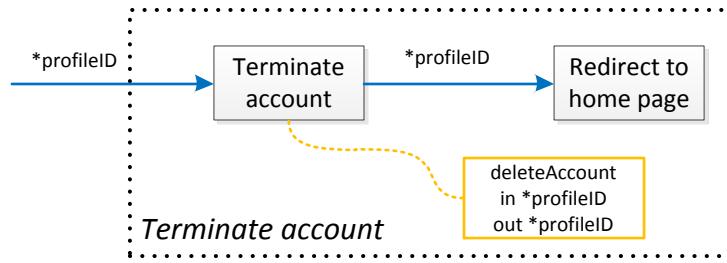


Figure 3.56: Terminate account.

3.3.27 Display personal information

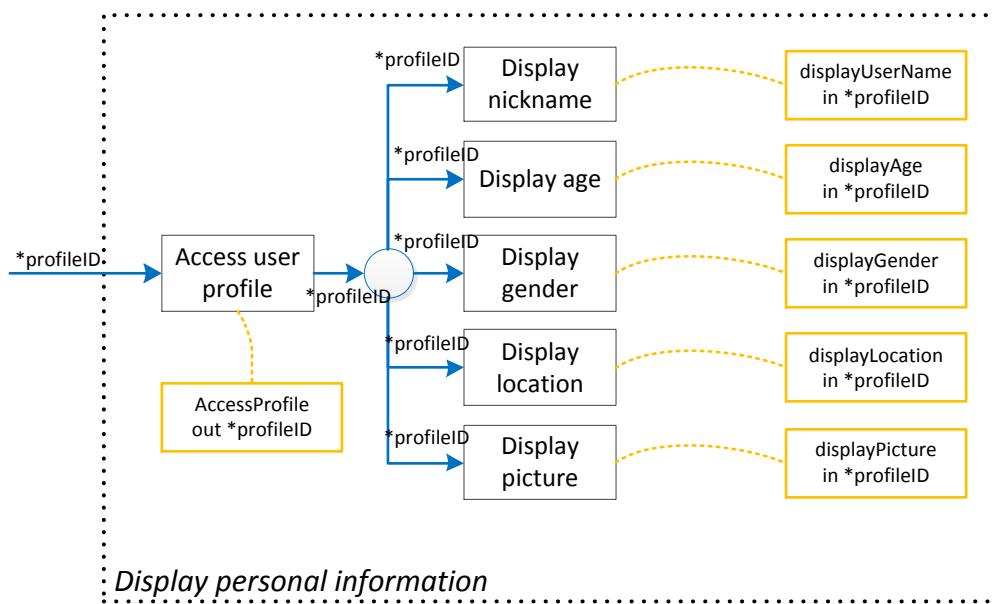


Figure 3.57: Display personal information.

3.3.28 Display foreign information

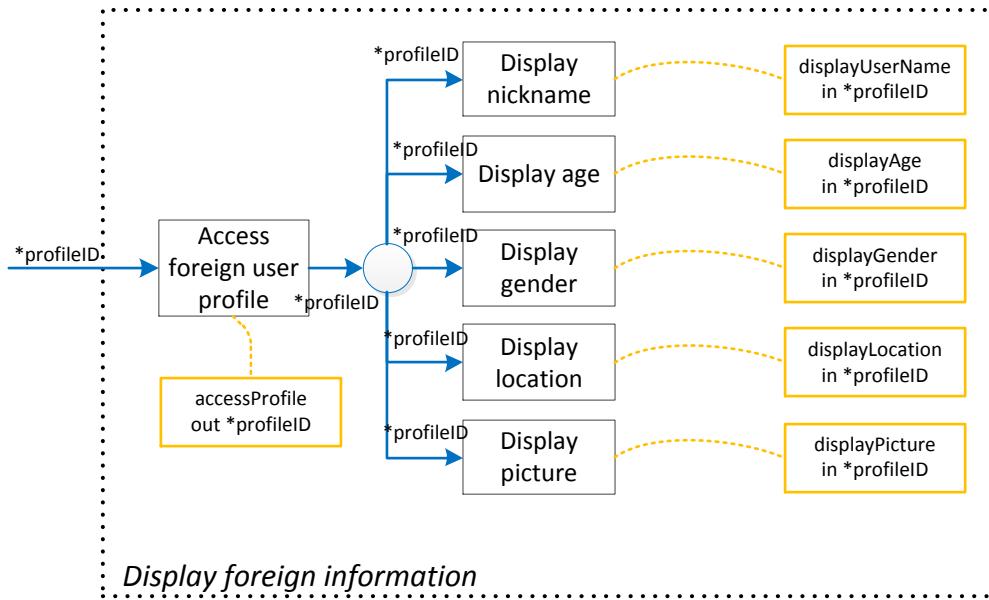


Figure 3.58: Display foreign information.

3.3.29 Browse user profile

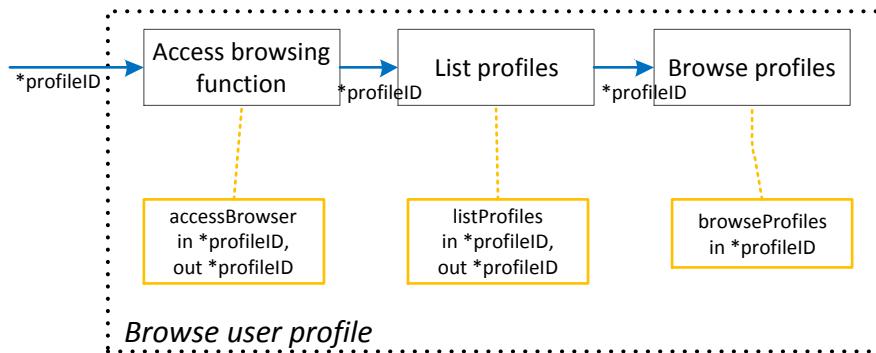


Figure 3.59: Browse user profile.

3.3.30 Send message to any user

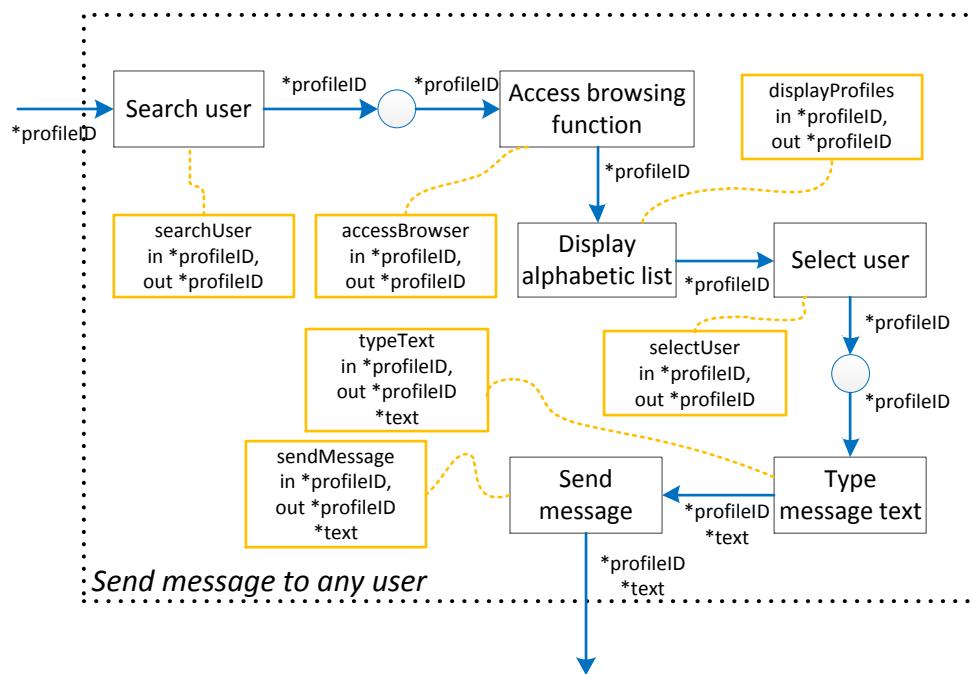


Figure 3.60: Send message to any user.

3.3.31 Block, disable and delete user account

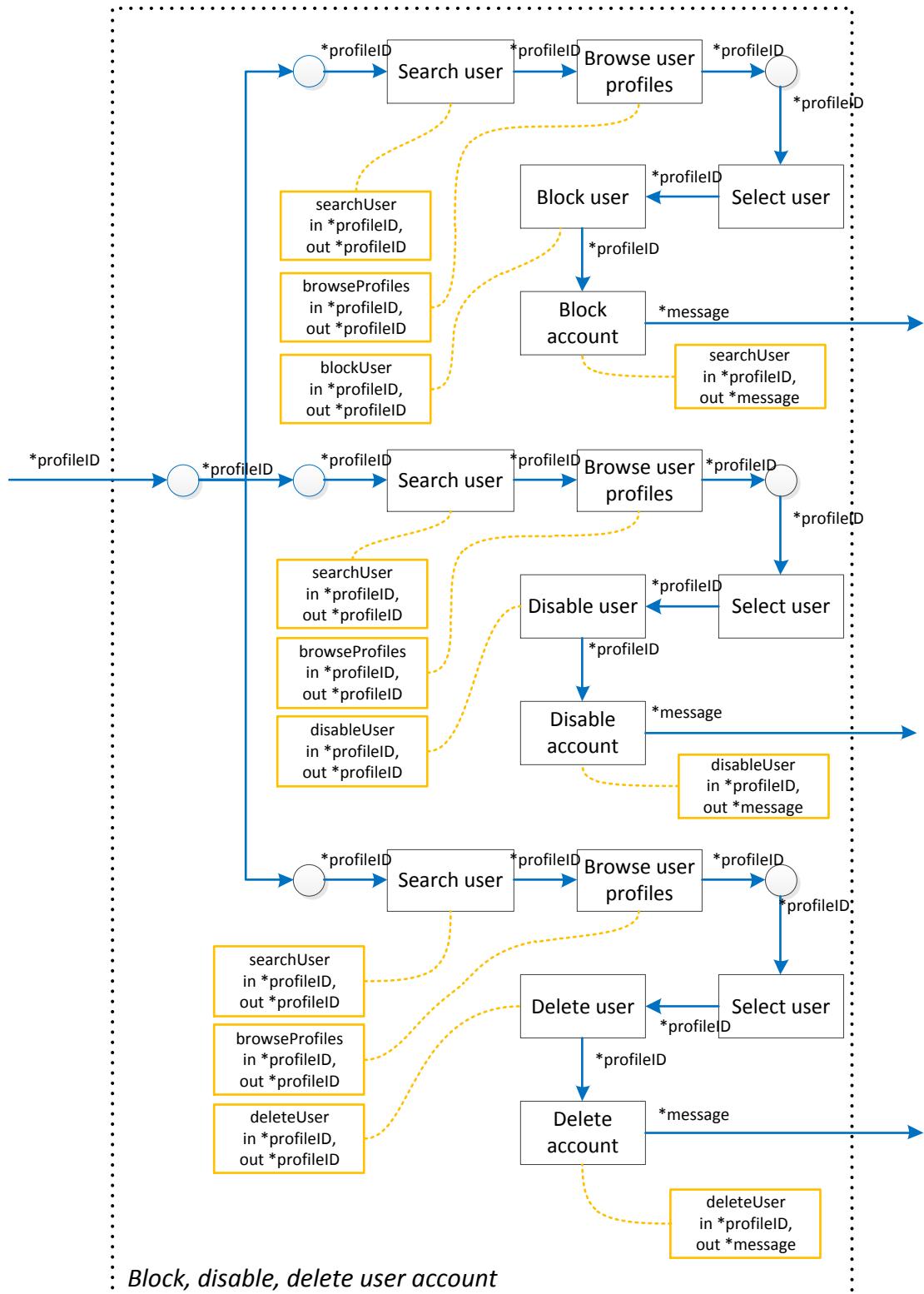


Figure 3.61: Block, disable and delete user account.

3.4 Functional Modeling

3.4.1 Overview of the modules

An overview of the IFML Modules used for the functionality are depicted in the figure below. Note that these modules do not contain all of the functionalities. Therefore, the reader is invited to also take a look at the Site Structure Design, in section 4.1. Each of the modules is explained in detail in the subsections.

3.4.2 Login

The login module receives an `password` and `userName` input parameter that is passed via the input port to the actual login module. The `password` and `userName` input parameters are bind to the login module's parameters. In case the login fails, a `message` as output port parameter is passed to the KO Port.

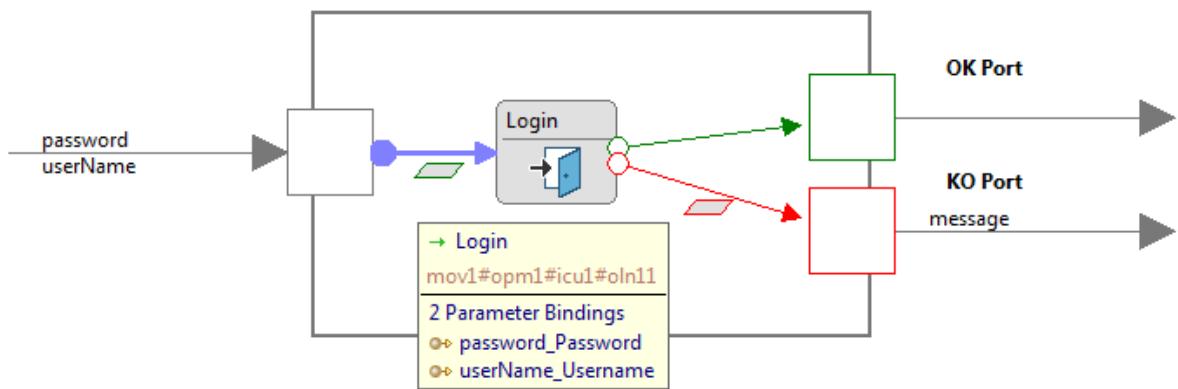


Figure 3.62: Login logic.

3.4.3 Register new user

A visitor that wants to create a user account (i.e., to register), has to supply a `dateOfBirth`, `description`, `email`, `interest`, `location`, `password` and `picture`. These input parameters are bind to the `CreateUser` module that creates a user in the database with the supplied parameter data.

In case of success, the `password` and `userName` paramaters are passed to the `OK Port`. This is because the newly created user is redirected to its profile page.

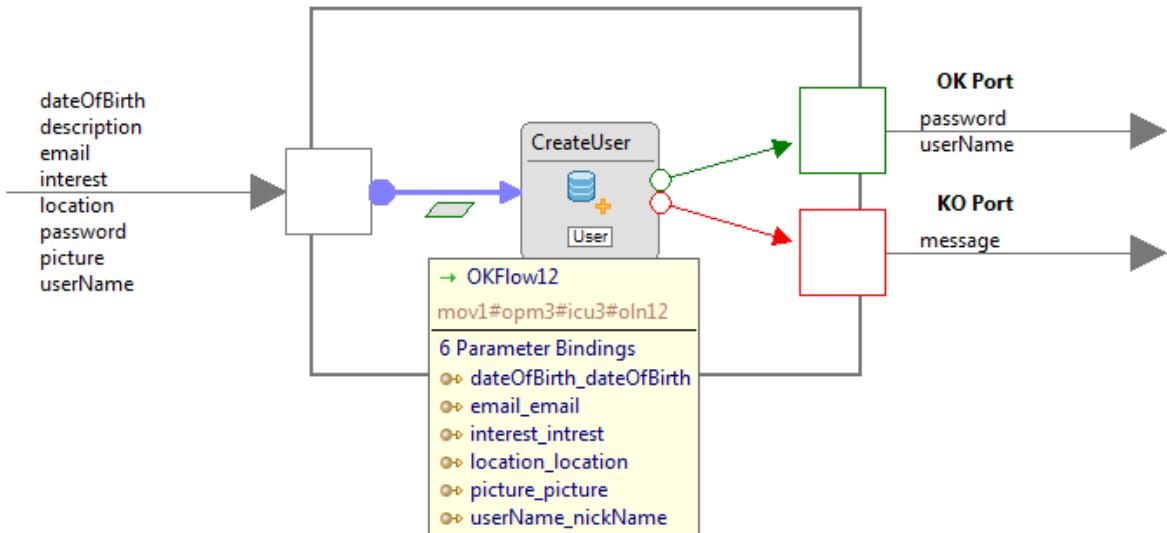


Figure 3.63: Registration logic.

3.4.4 Logout

Any registered user that wants to logout can do so by using this module. However, we have to know what user is currently logged on, so the userOid of the currently logged in user is retrieved and passed to the parameter collector. From there, the oid is passed to the actual Logout operation.

In case of failure, a message is passed to the output port.

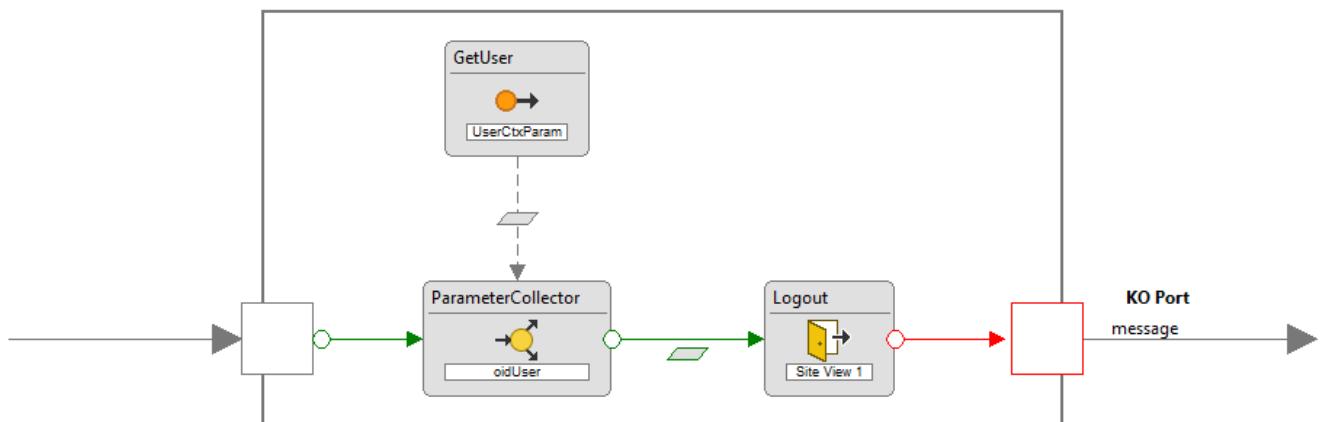


Figure 3.64: Log out logic.

3.4.5 Update user profile

Any registered user can update its profile. Therefore, some profile information has to be supplied: `dateOfBirth`, `gender`, `location`, `picture` and `userName`. In addition, the oid of the user is also supplied, because the user is identified by its `oid` and this value is used to update the user's information in the database.

In case of succes, the user is redirected and in case of failure, a message is passed to the output port.

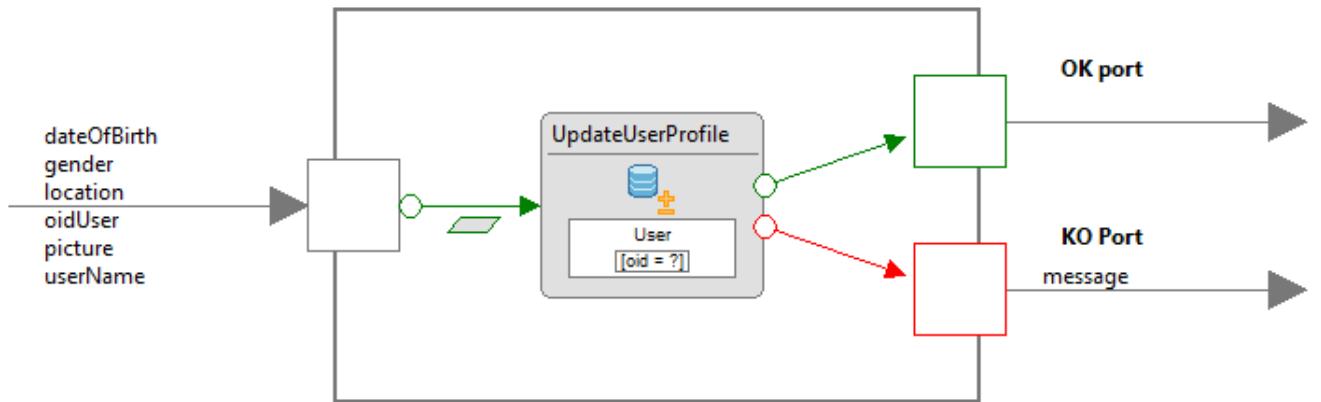


Figure 3.65: Logic to update the user's profile.

3.4.6 Delete account

An administrator is able to delete any user account. The logic is provided by the `DeleteAccount` operation that receives the user's oid from the input port. This is used to identify the user that is to be deleted. In case of succes or failure, a message is passed to the output port to update the status on the webpage.

Because the user oid is passed an input parameter, it is not necessary to retrieve the user oid via a parameter collector.

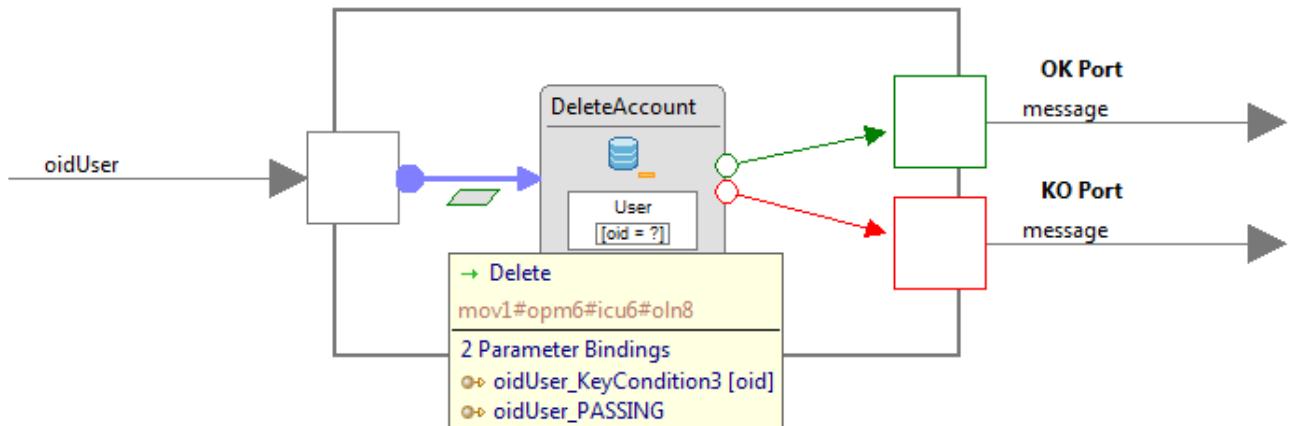


Figure 3.66: Logic to delete a user account.

3.4.7 Terminate account

A single can terminate its own account. However, this time, the user oid is not provided to the input port and has therefore to be retrieved. This is accomplished by the `GetUser` getter that passed the oid of the currently logged in user to the parameter collector. Then, it is passed to the `Terminate account` operation, which deletes an account based on the received user oid. In case of success, the user is redirected and in case of failure a message is displayed.

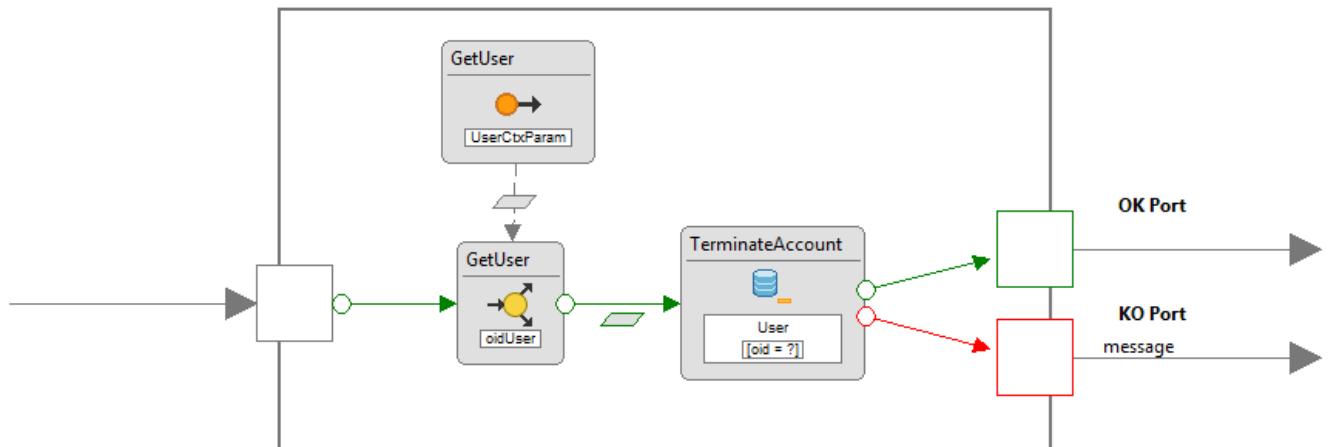


Figure 3.67: Logic to terminate a personal user account.

3.4.8 Send message

The module below depicts the sending of a (private) message. A message belongs to a user, that's why the user oid needs to be passed to the **CreateMessage** operation. In addition, each message has a timestamp, so the current time is passed as well. Of course, the message text is supplied as input port parameter as well.

In case of success and failure, a message is shown (i.e., passed as output port parameter).

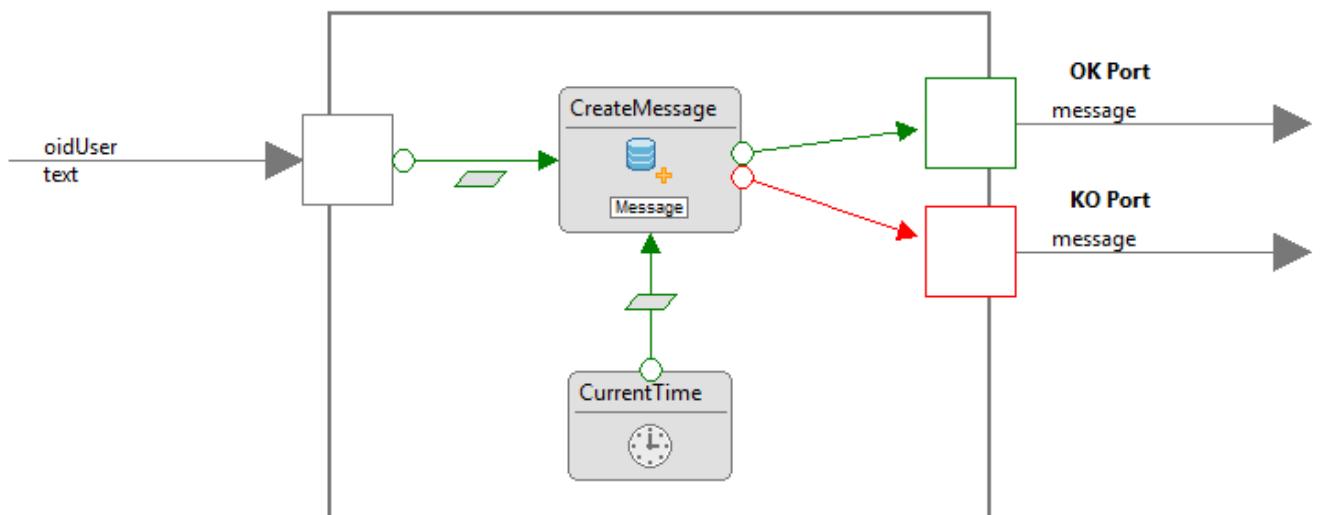


Figure 3.68: Logic to send a (private) message.

4

Implementation design

4.1 Site structure design

5

Presentation design

5.1 Style and template design

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