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Het BuurtPensioen
Pens(i)onsVoisins
Care4Care

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PROJECT DESCRIPTION

1. Introduction

“Het BuurtPensioen”, “Pens(i)onsVoisins”, or in English “Care4Care” is a membership organization where **members** support other members in their local **community**, and in return build up their own “care pension”. For ease of writing we will abbreviate **the organization**’s name to “BP” in the remainder of this document.

The idea is to provide support for people in need (elderly, handicapped, sick) through a system of exchange: the time a member invests in supporting some other person now, will be returned to him later in life when that member himself is in need.

The time credit gained by helping others is deposited on a kind of savings account. The account owner can save these credits for his or her own old age, or can transfer (part of) it to the account of another member (for example, out of social considerations), or return it to the organization as a gift (so that the organization can distribute it to people in need with insufficient remaining credits).

The concept is designed to tackle the growing demand for support and care at home, in the context of Belgium’s ageing population and a frightening decrease of government funds for care. Professional services are becoming too expensive for many people, and do not provide for what is most demanded: friendship, a helping hand, or a chat around a cup of coffee.

People are generally very willing to help but are sometimes too shy to offer help. And people in need are shy to ask for help. This project wants to link and match demand and offer. It also wants to make people aware of the big need for such informal care, and wants to reward, value and support the volunteers who take the step to get involved.

A pilot of this project has been running since November 2013 in the city of Neder-over-Heembeek and has been a success so far. In view of expanding the member community in Neder-over-Heembeek, as well as a possible start-up of other branches in or around Brussels, we are currently in need of better tool support for BP’s operational activities. Due to this expansion, we will also face more complex security issues than the current approach can handle. Moreover, the increasing volume of transactions will also demand more automation of actions that are now still performed manually.

2. The project procedure

Every new member first needs to create a login and profile.

There is a *quick procedure* that gives you the status of “member” allowing you to do one-off jobs. In this quick procedure the new member only needs to provide basic information before he can start helping others, or receive help. In the process of creating a login, the new member needs to accept an Agreement. By accepting the Agreement, he signs a contract with the organization that he will respect its charter and rules.

Going through the *full procedure* instead makes you a “verified member”. A verified member needs to:

- Complete a face-to-face interview with a “branch officer” (see 3.3);
- Provide 2 reference letters (to confirm the member’s reliability and competences);
- Provide a copy of his criminal record;
- Be granted by the branch officer – through the tool – the status of “verified member”.

Members can choose to receive from or give help to any member, verified member, favorite member, or members of their personal network only.

Favorite members: when a member was happy with a job done well by some other member, he can add that member to his list of “favorite members”. Vice versa a member can indicate the favorite members he likes to work for. This feature is important for the creation of a distribution list that members send and receive messages from.

Personal network: a member can choose to create his personal network. This network can include both members and non-members. Non-members can be: doctors, home care contacts, nurses, therapists, or family members. The advantage of creating such a network is, that personal network members gain access to the name and contact details of the other members in that personal network, so that they can easily send and share information about the member to organize the care he or she needs. This feature is especially useful for people who need daily care provided by many different people. People in the personal network can then see the BP agenda of the member, and add themselves appointments to it that can be viewed by all of the other personal network members.

On the Home page of the BP application there is a constant feed of the most recent offers and demands. Anyone can scroll through it and double click to see more details on those announcements. These details are only shown for as far as the member who published these offers or demands allows this. He can enter and edit his preferences regarding visibility of his offers and demands in his personal profile on his ‘My Care4Care page’ (see 9.1). He can also do a search for certain offers or demands based on his chosen criteria (see 7.1).

After having completed a task, the time invested by a member is added to his personal savings account, after confirmation by the member who received this help. Alternatively, the branch officer can also confirm this, for example if the member who received help has no Internet access. The time credited to the account of the member who offered help, is at the same time debited from the account of the member who received help. It is possible to have an account balance in debt. Members can earn maximum 14 credit hours per week.[1]

Each job is rewarded by time credits only, and is not weighed by its complexity or by any other criterion. For example, an hour of cleaning is, in time credits, equal to an hour of chatting with the neighbor.

Members perform small tasks for other members in need: paying a visit, doing some shopping, accompanying someone somewhere by foot, public transportation, or by car, performing small handyman jobs, gardening, administrative tasks. None of these jobs require professional qualification.

Besides providing help to other members, members can also earn credits by becoming a **volunteer** for the BP organization itself, so that even the organization's internal working is based on this credit system.

A member can use the earned time credits in 3 ways:

1) Save it for himself for later;

2) Transfer it to the account of another member as a gift. A member may do that, for example, when a loved one lives too far away for him to take care of. In that way he can take care of that person indirectly through a member of the branch (see 3.3) his loved one is connected to. Transfers can also happen within one branch community, however. A mother may transfer her time credit to her handicapped son, for example. That way she rests assured that someone can take care of him when she is no longer around.

3) Return the time credits to the branch or BP organization out of charity: BP will then credit this time to accounts that are in debt: i.e., members who were not able to save enough credits to "pay" (in credits) for the care they need. We also consider it an *obligation* for every member to transfer a certain number of time credits to the organization, as a yearly member fee. This should compensate the credits earned by the volunteers who support the BP operations in jobs like: working with the BP tool, editing newsletters, matching demand & offers[2], administrative tasks, etc.

At all times, members can consult their account balance, see an overview of the jobs they have performed, and check their agenda of jobs to be performed. They can also see the job demands and offers for the branches they selected, or for the kinds of jobs they are interested in based on the selection criteria they have set in their profile. Instead of searching the database for a match himself, a member can also ask the system to send a message whenever a job or person is available that corresponds to his criteria.

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[1] This rule was suggested by the members of the pilot in Neder-over-Heembeek, to protect themselves and other members from working too many hours for others, thereby neglecting their own needs.

[2] Currently this matchmaking is still being handled manually by the volunteers but should obviously become automated in the tool to be implemented.

The **branch officer** has viewing and editing rights on all transactions for his branch community, and can draw statistics and reports based on his chosen criteria. He can also view which documents are lacking for some members[3], or which items need attention or action. For each member he can enter an action with a due date. He can also keep track of the contact history, and keep notes in a separate section of what has been done, discussed, or agreed. This separate section is only visible to the branch officer and the BP administrator.

At the BP organization level, the **BP administrator** has unlimited access and editing rights to all data and can draw statistics and reports for several branches at a time.

As we have many elderly among our members, we expect that many will not use the system themselves, but will ask a branch officer to introduce the demand or offer, find a match, and do the job administration for them. Branch officers should thus be able to log into the system as if they were that person.

The interface of the tool should be trilingual FR/NL/ENG. A translation of terminology is attached (see 11.4).

3. The stakeholders

In this section we list the different stakeholders that will interact with the system.

3.1. Members

The “members” are those users of the system who will offer or receive help.

Every member has a unique ID created by the system. Upon creating a new login, the system will check if the member already exists. If the user is < 16 years old, he cannot create an account and is suggested to contact the branch officer.

Some members need help for some tasks, but are able to offer help for other tasks. This demand and offer of a member can vary and change over time, for example when a member had a medical operation, and only needs temporary help for some tasks. As a consequence, in the design of the system, care should be taken *not* to consider the people in need and the people providing help as a different category of user. Often they are the same user but assuming a different role depending on whether they are helping or being helped. It would not be a good idea to create two separate logins for every user for offering or asking for help.

3.2. Non-members

“Non-members” are users of the system who can create a login and profile just like actual members, but who are not supposed to earn any credits (e.g., professional care helpers) or perhaps do not want to (e.g., family members). They are part of the personal network of a member. They have access and editing rights to the agenda and message board of the member.

[3] For example, a missing criminal record for a member in the procedure of becoming a “verified member”.

This feature of having non-members is interesting for several reasons:

1) A professional care helper can be part of the personal network of several members: he only needs to create a login once to have access to several members' agendas at the same time. He can share and exchange messages with the other members of the personal network.
2) It provides family members a single spot where they can get in touch with both professional and volunteer helpers. They can check the agenda and message board to know what is going on and who has visited their family member.
3) The member in need has peace of mind knowing there is a personal network of helpers surrounding him. He decides who can be part of the personal network.

3.3. Special members: offices and branches

BP has one head office in Brussels and operates from several branches. A branch is a physical center which operates in a defined district. In Neder-Over-Heembeek this is the Local Services Center ADO Icarus, for example.

Both BP's head office and each BP branch are a special kind of members, since people can transfer credits to them as a gift (cfr. supra). Both also need help in tasks like administration and communication. When members work for the head office or for a branch, they will receive time credit to their account, and the account of the organization or branch is debited.

The person in charge of handling the overall BP organization's account is called a "BP administrator": he has unlimited editing access to all data in the system. The person handling a BP branch account is called a "Branch officer": he has editing access to all data of the branch he is working for.

So, the main difference with a regular member is the access and editing rights to the system's data. The member data that can only be seen by the office or branch (for example, important confidential data on a particular member), are marked in a different color, or with some other obvious visual clue, so that it is clear that this data is supposed to be treated in a confidential way.

In the system, the 'special members' (head office and branches) will also be visualized in a special way, for example by marking the name with a different color, or by adding a special symbol to the name.

Note that normal members or verified members can be part of several branches at the same time. They might want to do that when those branches cover two neighboring districts, for example. Or a member could be connected to one branch close to his work place, and another one nearby his home. In his personal savings account, the credits and debits of both these branches will then be added up. The unique ID connected to his membership should avoid multiple account balances.

3.4. Status of members

All users (members) have and can edit their status:

1) Active status: after completing the quick procedure the status of the member is “active”: he can start offering or receiving help and he has his own personal “My Care4Care page”. The status will not change until he himself or the branch officer changes it manually to “Inactive”.

2) Inactive status including an end date (might be ‘eternal’) and a reason:

   a) Holiday: members can switch to this temporarily inactive status when they are away on holiday or simply want to take a break from BP work. Members on holiday do not receive any demand & offer messages in their inbox, no matter the message preferences and criteria they introduced in their profile: an inactive holiday status overrules this. When returning from holiday (cf. end date), their initial preferences switch back on, and their status switches back automatically to “active”.

   b) Unsubscribed from BP: these members are no longer visible to other users. As from the date of changing to the status “unsubscribed”, the account is set to zero, whether the account was in debit or credit. The user receives a warning message before he can proceed, as this deletes not only his profile but also his credits without possibility to recover them. However, the system will keep: the user’s ID, first name, second name, birth date, location, and the time credit data. This is necessary to be able to draw and keep correct statistics over time for a certain branch or the whole BP organization, for example: the number of hours worked in a certain year, the evolution of the number of members, and the like.

      When unsubscribing, the member (or branch officer acting on behalf of the member) is obliged to choose a reason:
      - Moved
      - Passed away
      - Not interested anymore
      - Other: …

3.5. Member qualifications and tags

A member’s ‘qualification’ defines in which distribution lists he will be included, or what he is allowed to see, view, or do.

Member: this is the standard qualification after completing the “quick procedure”. Every time after completing a job, the system will send a message to this member, inviting him to become a “verified” member, explaining the advantages.

Verified member: qualification after completing the “full procedure”. Only the BP organization or Branch officer can grant this qualification to a member.

Members can themselves grant the following tags to other members:

1) Favorite: these are members you know and like to work with. In the message preferences, a member can choose to only receive and send demands and offers to “favorites”.

2) Ignored: these are members you prefer not to work with, whatever the reason may be. You will not see their demand/offers and they will not see yours.

3) Personal network: a member can add other members to his personal network. By doing this, they allow these other members to view and edit their agenda, and write messages on the member’s message board that will be visible to all members of the personal network. If the member does not yet exist, he needs to create a login first.

4. Success factors

To become a real success, the tool should:

1) Have a simple and intuitive user interface and be easy to use, especially at the member level;

2) Secure information correctly;

3) Feature excellent reporting functionalities at the BP organization and branch level;

4) Have an efficient search engine;

5) Be easy to add more text fields and to adapt to other functionalities;

6) Be easy to extend with additional applications – for example a phone app, exchange of data by phone, geolocalisation, ...;

7) Have an attractive look that is inviting for new users, and encouraging for existing users. For example: easy menu linking to news, newsletters, news feed, FAQ, pictures, quotes;

8) Be well documented, both for end-users and for future developers willing to improve, adapt or extend the system;

9) Be sufficiently robust and well tested.

5. Wireframes

4 wireframes are given as a visual aid of how we envision the application (see 11.3). The developers are given the liberty to creatively improve these wireframes if desired.

5.1. Home Page

See Appendix 12.3. Comments matching the numbers on the wireframe:

1) When clicking these titles, the application will switch to a page, which contains an explanation (text).

2) When clicking or selecting a branch, the application will show the contact information of the branch, and its number of members. It also shows the map, highlighting the selected branch.

3) Map of the different branch locations: when clicking on a branch or a position nearby a branch, you can see its contact details. The map highlights the selected branch.

4) See scenario 8.2.

5) See scenario 8.3.

6) This section shows the current demands and offers of all branches (when he is not logged in), or of the branches the user is interested in (when he is logged in), the most recent ones on top. When double clicking the user can see as much detail as the member is allowed to see.

7) Brings the user to the login screen where he needs to enter user name and password; after logging in, he arrives at his personal My Care4Care page.

8) See scenario 8.1.

9) This banner can show some fixed or moving pictures or any other stuff that makes the page look attractive and inviting.

5.2. My Care4Care page

See Appendix 12.3. Comments corresponding to the numbers on the wireframe:

1) Brings the user to his profile page where he can view and edit his preferences. The list of information is listed in sections 6.1 and 6.2 “Data required for a (verified) member”.

2) Lists the names of the favorite members and invites to add more members to the favorite list. The user can add or remove other members to or from his list of “favorite” or “ignored” users.

3) Brings you to the message board and the list of people who are included in the personal network. From this page a member can add more members and non-members to the personal network. All members of the personal network can post messages to this message board. Each post has a date and the writer’s name. A member, who has not added any members to his personal network, can write on this message board as a notepad for reminders to himself.

4) This brings the member to a form to register the jobs completed: date, job category, time invested, number of kilometers by car (if applicable), name of the member that he helped. Upon saving, the member who received help, receives a request to accept the “job completed”. He can select all jobs and accept them all at once. A branch officer can also do this.

5) Brings you to a page that shows all information regarding the “bank” account:

6) Account balance

7) List of all jobs ever completed by the member

8) List of jobs scheduled (yet to be completed)

9) Possibility to transfer time credit to another member

10) List of credits transferred to or received from other members

11) This is the personal Inbox of the member. A symbol in front signals what type of message it is: a question, information, or required action.

12) See scenario’s 8.2 and 8.3.

13) The agenda contains the scheduled and completed jobs in a calendar format, both for jobs received or offered. Offers and demands will be shown in separate views/tables to make it easy for the member to see the differences.

14) The link brings the user to the corresponding chapter in the text “how does it work”? (See (1) on the Home Page wireframe.)

5.3. Account Page

(This section remains to be completed by the customer.)

5.4. Seeking Help

(This section remains to be completed by the customer.)

6. Stored information

For each information or set of information, the member can choose if the data is visible to a) public b) members c) verified members d) favorites only (including personal network). By default, personal information is available to verified members, and demand/offers are available to the public. But users can override these standard settings in their profile if they desire to do so.

6.1. Required data for a member (cf. Quick procedure)

Data entered by the user:

- Login name and password;
- Name, first name, birth date, telephone;
- Branch to which the member wants to connect (to be selected from a list of proposed options);
- Mail address. If the member has no mail address, the default address is chosen, which is the mail address of the Branch which he selected;
- A check box to “accept the BP Agreement”.
- Questionnaire: “I learned about BP through …” (checkboxes)
    - ❑ The Internet
    - ❑ A presentation, brochure, flyer, …
    - ❑ The local branch
    - ❑ Another member
    - ❑ Friends or family
    - ❑ Other: …

Data created by the system:

- Start date of membership (= date of login creation)
- Status: set to active upon completion of the quick procedure

All of the above are required data. Users can optionally add additional data mentioned under 6.2.

6.2. Required data for a verified member (cf. Full procedure)

The data required for a verified member is the same as for a member (see 6.1) plus in addition:

Data entered by the user:

- Address including a link to the location on a map;
- Fixed and/or mobile telephone number;
- A facebook link;
- Kinds of jobs demanded and offered: (check boxes)

I ask:	I offer:
❑ Visits at home ❑ Accompany someone by foot or by public transport ❑ Transport by car ❑ Shopping (by foot) ❑ Household ❑ Small handyman jobs ❑ Small gardening tasks	❑ Visits at home ❑ Accompany someone by foot or by public transport ❑ Transport by car ❑ Shopping (by foot) ❑ Household ❑ Small handyman jobs ❑ Small gardening tasks

❑ Pets care (specify which) ❑ Personal care ❑ Administration ❑ Other (specify which)	❑ Pets (specify which) ❑ Personal care ❑ Administration ❑ Other (specify which)

- Comments to the job demand and offer (textbox). Comments can be for example: specify which pets someone wants to take care of (like: I love cats but am afraid of dogs), or I like to trim the roses but will not mown a garden because I have back pains, I do administration but not on a computer, etc. Or for a demand: the person who does my shopping should be a handsome and decent man (this example was taken from reality!)
- Time availability: fill out a standard week schedule, indicating availability;
- Preferences: (checkboxes)
  - What kinds of job do you prefer:
    - Regular jobs for a same person
    - One-off jobs
  - Would you prefer to work with: any member / verified members / favorites / personal network
- Mail preferences:
  - How do you prefer to stay informed:
    - Forward all messages to your mail address
    - Keep all messages in the tool's inbox
  - From who do you want to receive offer and demand notifications:
    - **Automatically**, from:
      - All members
      - Verified members
      - Favorites, including personal network
    - I prefer look for good matches **manually**
- I have a car yes/no + my car can hold a wheelchair yes/no + type of driver's license
- Language knowledge (check box) : NL – FR – EN - other: ..
- Hobbies
- Name, first name, telephone, location of the person to be contacted in case of an emergency
- Status : active – inactive (holiday) – inactive (unsubscribed)
- Additional information: text box to enter any other information

<u>Data entered by the Branch officer:</u>

- Check box: Intake interview OK
- Check box: Reference letter 1 received
- Check box: Reference letter 2 received
- Check box: Criminal record received
- Check box: Badge with picture provided
- Check box: Permission to do voluntary work received

- Check box: Qualification of ‘verified member’ granted
- Secret section: date and text related to the member that is only visible to the BP organization and concerned branch.

Other data stored:

- Account information: data about the completed jobs: date, job category (see below), total time, other member’s name, number of kilometers by car (if applicable)
- Job categories:
  - Visits at home
  - Accompany someone by foot or by public transport
  - Transport by car
  - Shopping (by foot)
  - Household
  - Small handyman jobs
  - Small gardening tasks
  - Pets care
  - Personal care
  - Administration
  - Other (specify which)
  - Special: volunteer work for the BP organization or a branch
- Account balance: number of hours in credit or debit
- Number of credits transferred or received from other members
- Message board text
- Messages received and sent
- Agenda

6.3. Data linked to the BP organization and branches

Data entered by the Branch officer:

- Login name and password giving access to all branch data
- Branch name
- Branch address, telephone number, mail, website, Facebook page
- Name of the branch officer
- Additional information (text box)
- Mail preferences (same as other members)
- Status (same as other members)

Other organization and branch data stored:

- Messages received and sent
- Agenda

6.4. Data required by the non-members:

The data required for a normal member (see 6.1) and in addition (optional):

- Organization’s name
- Function
- Address including a link to a map
- Telephone
- Mail
- Relation to the member (family, professional helper, ...)

7. Functional requirements

The list below mentions the main functionalities to be implemented by the system. Only the most important functionalities are listed here; other functionalities mentioned elsewhere in the text might be missing from the summary here. The developers of the system to be developed are asked to implement the core functionalities first before implementing other functionalities and extensions.

7.1. Functions initiated by the members

- Create a login and profile (see section 6 for the information a member should provide); if a member does not intend to use the system himself, the account can be administered by the branch officer; in that case he selects “default address” when asked for a mail address. The default address is the mail address of the branch officer, who will receive all notifications and actions for that particular member.
- Secure his information by indicating for each (set of) information to whom the information is available or visible. Standard setting: see 9.1.
- Transfer time credits to another member’s account as a gift (this can also be the branch, as it is also a special kind of member).
- Connect (or disconnect) his profile to several branches at once (while keeping only 1 account that adds up his time credits).
- Enter a demand for or offer to help, indicating to whom this will be made visible or sent (all members, verified members, favorites, personal network). When entering a specific demand or offer, the member needs to indicate if it is a one-off job (a specific job that will occur only once for a specific date or during a specific time frame) or a recurring job (for example: I would like someone to take me for a walk from time to time); see the scenarios in section 8 for more detail.
- A demand for help can be created from the calendar or from the button “I need help”.
- Mark a member as “favorite” or “ignored”; the member has the possibility to send his requests and messages to favorites only and will share no demands or offers with the “ignored” member.
- Create a personal network: adding members and non-members to the personal network of a member will allow them to write on that member’s message board and edit his agenda.
- Add, modify, delete items from a personal agenda.

- Enter a list of jobs completed, thereby indicating: date, job category, duration, number of kilometers by car (if applicable) and the name of the member he worked for: this will generate a request in the inbox of the other member to confirm the job done.
- Confirm a job done for someone else when such a request for confirmation arrives in the member's inbox.
- Execute a search on help offered and demanded based on the member's selected criteria: branch, job category, type of member (all/verified/favorite/personal network), time frame (daytime, evening, weekday, weekend).
- Switch one's status from active to inactive (holiday – end date required) or inactive (unsubscribe – reason required).

7.2. Functions initiated by the BP organization and BP branch

- Edit data in the member's profile without needing his login details.
- Add completed jobs to a series of member accounts (including the credit and debit of those members' accounts).
- Send messages to all members or a selection of members; the messages may include an attachment.
- Make an event and invite selected members to it; members can accept or decline.
- Draw a report based on selected criteria, for example (the ones mentioned here can be report templates[4]):
    - list of members' names and addresses, active/inactive status, membership start date
    - number of completed jobs and number of hours performed during a selected period of time, for 1 particular branch or for a selection of branches
    - number of completed jobs and number of kilometers for a given period of time and per branch (necessary for the insurance company who calculates the fee based on this information)

  Ideally the report data can be exported to Excel so that advanced editing can be done, e.g., charts, sorting, making totals, …

7.3. Functions generated by the system

- Generates an overview of notifications and actions to be taken by each Branch officer; this includes:
    - Birthday of a member (5 days in advance)
    - Notification of a new profile created
    - Notification of a member who moved to or away from the branch
    - Notification of incomplete profiles (including missing documents)
    - Open one-off demands (= no match has been found yet)

[4] Templates are reports that a user might want to draw often. A template avoids that he needs to select the criteria each time he wants to create an updated report.

  - Requests to accept jobs completed (for the members who use the default mail address – see 7.1.)
- Each type of notification is preceded by a specific symbol; the branch officer can sort the notifications per symbol.
- When a demand or offer is created, the system will search and match demand and offer, based on the member's preferences regarding the job and timing, but also taking into account the preferences regarding who he wants to work with (all members, verified members, favorites, personal network). It will then send a message to the members who accepted to be notified by mail.
- Generate a new password when a user lost/forgot his – sent to the user's mail address; after entering the password generated by the system, he can change it to one of his own choice.

8. Scenario's

Here are some usage scenarios that may clarify the functionalities listed in section 7:

8.1. Creating an account

- A candidate member clicks on "Create an account" on the Home page.
- He fills out the required data listed in section 6.1.
- Next to the check box "I accept the Care4Care agreement", he can click on a link that opens the Agreement to read and accept it in a new window.
- Clicks the button "confirm":
  - Upon hitting the button, the system verifies:
    - Whether the account already exists by checking the candidate's name and birth date: if yes, then a pop-up informs him that he already created an account, and suggesting "if you forgot your password, click here; if you are sure you have not created an account before, please contact the branch".
    - If he clicks on "forgot password", the system sends a username and password to the mail address provided.
    - If the birthdate shows a person under 16 years old, the user is invited to await his 16th birthday before being able to create an account.
  - If the verification was OK, the screen shows the following information:
    - Confirms creation of the account for the chosen user name.
    - Welcomes the new member.
    - Asks what he wants to do next :
      - I want to become a "Verified Member" – please contact me for an appointment: if he clicks this, a message is sent to the Branch officer, inviting him to contact the new member; the message includes the name and contact details entered by the new member when creating the account.

  - I need help: link to the page where you can create a demand (see scenario 8.2)
  - I want to help: link to the page to offer (see scenario 8.3)
  - Return to my profile: links to the profile editing page.
- Finally, a message is sent to the mail address the member provided, welcoming the member and repeating the user name and password.
- A notification message about the new member is sent to the Branch officer.

8.2. Seeking help

- A member clicks “I need help” on either the Home Page or his personal page.
- If the member is not logged in yet, he will be invited to log in OR to create an account if he is not yet registered as a member.
- After logging in, he completes a small form with the following fields:
  - Check box: one-off job or regular help.
  - Title: he can type a short descriptive title for the job (example given).
  - Job category: drop down list of categories (see list under section 6.2).
  - Description: he can type a more elaborate description of the help he seeks.
  - When: he can choose by checking one or more of the following boxes:
    a. to be discussed
    b. days of the week (all 7 are mentioned)
    c. during the day, in the evening
    d. specific day and time
- He clicks “continue” and answers the question “Who do you want to see your request?” and checks one or more of the following boxes:
  - All members
  - Verified members
  - My favorites
  - My personal network
  - Apply my default preferences[5]
- He clicks “Post my request”
- Clicking this button results in :
  - The request appears in the list of demands on the Home Page (see section 5.1).
  - The members who can offer help that corresponds to the criteria of the demand AND to their message preferences, receive a notification of the request.[6]

[5] When the user clicks this, his profile preferences will apply; if he has not filled out a profile yet, he is invited to complete the preferences in his personal profile page first. Only after completing this, he will be able to post his request.

[6] The notification message shows the user name and demand details and the invitation to accept or decline the demand. If the member declines, the message is deleted from his inbox and is removed from all other inboxes. If he accepts the job, there are 2 options: if the member who seeks help accepted to reveal his contact details, the

- When a member accepted, the job will appear in his “Pending actions”. The job disappears from the list of demands on the Home page.[7]
- After completing the job, the member goes to his “pending actions”, clicks on the action in order to edit the time he spent to do the job, and then clicks “job completed”.
- When he clicks “job completed”, a message is sent to the user who asked for help: he will see the job details and will be invited to click the button “I confirm the job is completed”. When clicking this button, the time is credited to the account of the member who helped, and debited from the account of the person who asked for help.
- If 2 members agree jobs by phone or face-to-face (this will often be the case when people help each other regularly), they can introduce all the jobs at once in the system, without needing to go through the above procedure of creating a request, and sending out messages to members. Either the member who received help, or the branch officer can accept the completed jobs all at once.

8.3. Offering help

- A member clicks “I want to help” on the Home page or his personal page.
- Invitation to log in or create an account
- He can choose between:
    1. Show me all requests.
    2. Show me requests that correspond to my criteria.
- If he chooses the first choice he will see an overview of all current demands.
- If he chooses the second choice, he can select his criteria: branch, job category, member qualification, timing; and then sees an overview of corresponding demands.
- He can see more demand details when double clicking one of the proposed demands, and is offered the possibility to accept that demand, or to move to and view the next demand.
- If he accepts, he follows the same steps as in 8.2.

8.4. Transferring time credits

- Logs in to his account.
- On My Care4Care page, clicks on “My Account”.
- Clicks on “Time Gifts”.
- A form opens where he enters the following information: other member’s name (can do a search), number of days, hours, minutes to transfer.
- Clicks “transfer”.

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member offering help will see the contact details. If the member hides his contact details, the member will be invited to contact the branch officer.

[7] Note that this implies that there is no final agreement or confirmation from the member originally requesting from help. This was a deliberate choice, since this extra step may make the procedure too long. Instead, if a member wants to indicate that he doesn’t want any help from a particular other member, he can always add that member to his “ignored” list.

- The system verifies whether the member has sufficient time credit on his account to do this gift. If yes, the time is deduced from his account and credited to the other member's account.
- The transfer is listed in the "jobs completed" list with: date of transfer, job category "time gift", the member to whom you transfer, the time.
- The person receiving the gift finds a notification message in his inbox.

9. Non-functional requirements

9.1. Security – data access authorization

Access to certain kinds of information should be restricted to certain kinds of members only:

a. BP organization: read & write access to all data

b. BP branch: read & write access to all of the branch's data

c. Member and non-members: read & write access to their own account.

   Users included in a member's personal network, can post on the member's message board and modify his agenda.

   For each information provided in his profile, amember can choose if the data is visible to: a) public b) members c) verified members d) favorites only (including their personal network). As a standard setting, personal information (name and contact details) is available to members, and information on demand/offers is available to the public.

To avoid data loss due to wrong manipulation by the user, users log in in "view mode" and need to change to "editing mode" to change or remove any data. Another option is that the system verifies with a pop-up "Are you sure…" before removing something. Or else, the user needs to hit the "save" button before the action is executed. Or, alternatively, an undo function could be implemented.

9.2. Help function

With the help function, additional information on how to use the tool can be made available to the user for certain terminology and action steps, like:

- verified member
- favorite member
- personal network
- invisible contact details (if this was the member's choice': "why cannot I see this?"- link to window that explains why and what to do
- job categories
- request to accept a job completed : "why do I receive this request?"

- at the bottom of each message in a member's inbox : "you don't want to receive these messages? Click here to modify your settings" – links to personal profile where you can edit what kind of messages you accept to receive.

10. Possible extensions

10.1. Social Media

- A member can login with his Facebook or Google account.
- Demands can be posted to the Care4Care Facebook page (or Google+), liked, and shared
- By clicking on a demand on the Facebook page, it can be redirected to and then handled on the BP page.

10.2. Google Agenda

- Possibility to synchronize the tool's agenda with the user's Google agenda and/or vice versa
- Possibility to subscribe to other member's BP agenda's via Google agenda

10.3. Stimulating users

This extension is about stimulating users to use the system, which could be achieved by:

- Improving the ease of use of the system (advanced help features, frequently asked questions, online tutorials or wizards to help the user, personalisation of the interface to particular users, ...)
- Attractive look and feel
- Providing more, or more relevant information to stimulate the users (for example, mails to inactive users, mailings with weekly summaries, reports, newsletters, news feeds, pictures, quotes, tools to help admins detect less active users, gamification, ...)

10.4. Security

This extension is about making the application more robust and secure by providing more advanced security checks and user verifications.

10.5. Advanced search

- more efficient search engine
- more search features (e.g. other search criteria)
- create, combine and save advanced search queries
- improved presentation and browsing of the search results
- intelligent recommendations based on prior searches and user preferences

10.6. Reporting and statistics

- Improve the reporting and statistics features of the system, at the level of the organization, the branches or individual members;
- Provide support for report templates;
- Advanced reporting à la Excel.

10.7. Smart app

Making a smart app or web interface for the system that is dedicated to mobile phones.

10.8. Other

Feel free to propose or suggest your own extension (confirmation by the teacher or client required).

11. Appendices

11.1. Logo (to be provided)

11.2. Pictures (to be provided)

11.3. Wireframes (available as separate files)

11.4. Translation of terminology (to be completed)

ENG	NL	FR
Branch	Antenne	Branche
Member	Lid	Membre
Job categories: • Visits at home • Accompany someone by foot or by public transport • Transport by car • Shopping • Household • Handyman • Gardening • Pets • Personal care • Administration • Other (specify which) • Special: volunteer work for the Care4Care organization	Taken: • Bezoekjes aan huis • Begeleiding aan de arm of met openbaar vervoer • Vervoer met de wagen • Boodschappen doen • Huishoudelijke taken • Klusjes • Tuin & planten • Verzorging huisdieren • Persoonlijke verzorging • Administratie • Andere (specifieer) Taken ten dienste van de organisatie Het BuurtPensioen	Catégories de tâches: • Visites à domicile • Accompagner qq'un à pied ou en transport commun • Transport en voiture • Faire les courses • Tâches ménageres • Bricolage • Jardinage • Soigner les animaux • Soins personnels • Administration • Autre (à spécifier) • Volontariat pour l'organisation Pens(i)onsVoisins

11.5. Texts: (to be completed)

- About us
- What is Care4Care?
- How does it work?
- Agreement (members need to accept this when creating an account)

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