

# T'Change

Médéric Hurier

Quentin Burtschell

Florent Henry

April 2, 2012



2011-2012

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# 1 Presentation of the subject

The subject asks to elaborate a human-machine interface in the form of a website. This website's aim is to allow the users to barter their goods. The interface was designed with the following constraints:

- To respect the standards required by the web
- To allow an immediate handling
- To give information where necessary
- To make interactions intuitive

# 2 Methodology of conception

Each following item matches a different step in the interface's conception.

## 2.1 Definitions

We first defined the website's use. The following rules allow us to set up definite interfaces and processes. With these transparent rules, we wanted to avoid the user to feel lost. Simplicity is the main idea.

### 2.1.1 The item

A swap can only be done with goods. Services can not be swapped (for now).

### 2.1.2 The swap

The swap is on a one to one basis. It is therefore only possible to swap a good for another good. Barter cancels an item's financial value ; checking that the swap is fair is the users' responsibility.

### 2.1.3 Communication

The swap process concerns the item. The communication between the supplier and the seeker is reduced to the item.

## 2.2 Users' profiles

On a barter website, there are two main uses, therefore two types of user: the one who supplies something to swap, and the one who is looking for something to swap. Here are non-exhaustive lists of possible motivations, for the two different profiles.

### 2.2.1 The supplier

The supplier can have different reasons to put an item at disposal:

- No or no more use of the item (ex: toddler's clothes)
- No or no more space (ex: moving away, cumbersome gift)
- No or no more time (ex: video game, exercise bicycle)
- Old-fashioned (ex: furniture, decorations) Used (ex: book, video game)
- Recycling (ex: will to give an old TV a second life)
- Savings (ex: to put a rare item at disposal in order to swap it for another useful item)
- Sentimentality (ex: not wanting an item to be destroyed)

### 2.2.2 The seeker

We identified here a list of possible reasons for someone to look for an item:

- Free (complementary to “no more use”)
- Newness (ex: liking to change the content of a wardrobe often)
- Seeking a good deal or an added value (ex: professionals)
- Impulsivity (ex: to consume)
- To complete a collection (ex: stamps, dishes, spoons)
  - To find an item unavailable anywhere else (ex: 1602 waffle iron)

## 2.3 The user's expectancies

The concern here is to be aware of which items make the users stay or leave. Here is a list of rules to follow:

- To use legible and harmonious colours and writings
- To respect a colour-code: one type of action = one colour (ex: adding an item)
- To supply an effective search
- To display pages quickly (less than 1 second)
- To gather data of a same type
- To define a sober graphic charter

## 2.4 Informations to display

### 2.4.1 Forms

The forms gather different interactions with the user, where he must type informations. Here is a list of the website's forms and the informations to give

Connexion

- E-mail address
- Password

Inscription

- Name
- Forename
- E-mail address
- Password
- Confirmation of the password

Adding an item

- Name
- Class
- Subclass
- Description
- Tags
- Picture

### 2.4.2 Profile

The profile displays all known data (given or calculated) about a user. The user must be able to edit his information. His profile must allow him to see all information concerning his swaps (swaps history, swaps in process, ...)

### 2.4.3 Catalogue

The catalogue is a list of items, matching a search (search with keywords or class) or not. Each item in the list contents the name of the item and a picture allowing the user to have a visual glimpse. When the user passes over an item, a window with more information appears. When the user is logged in, this window also displays a button to ask for this item's swap, or to contact the displayer about the item.

The catalogue must also allow the user to know exactly what he is looking at. The top of the page displays a breadcrumb trail. The user can know which class and subclass he is looking at. When the pointer passes on the text “class”, on the breadcrumb trail, a rolling menu appears where the user can change the class to display. He can also pass by a class to find the subclasses he might want to look at.

#### **2.4.4 Item**

An item is depicted by his name and picture. The photography is highly recommended when the user adds an item. As for the description, the more informations there are about an item, the more easily it will be swapped, because the other user can picture this item easily and precisely.

#### **2.4.5 Swap**

A swap concerns two items. Its process has three steps:

- First step, A makes a swap request for the book “Lord of the Rings” (belonging to B)
- Second step, B chooses the items from A he would like to swap for his book “Lord of the rings”
- Third step, A chooses which of this swaps he prefers. B receives a notification to be prepared to swap the item.

### **2.5 Processes’ modelisation**

#### **2.5.1 Research**

The research bar must be accessible from every one of the website’s page. It searches in the description, tags, name of the item, picture, classes and subclasses. The research must be easy and quick. Everything the user types must be used in order to give him the most precise result possible. The research field can be validated with a magnifying glass-shaped button (which is embedded in the research field) or by pressing the entry key.

#### **2.5.2 Registration**

There are several ways to join the registration process. Directly, by clicking on a registration link, or indirectly, for example when trying to swap an item without having an account (the user is invited to create one). The registration contents one step: filling the form and validating.

**Inscrivez vous !** [X]

Nom \*

Prénom \*

Login

Adresse email \*

Mot de passe \*

Confirmation \*

Les champs avec une \* sont obligatoires.

**S'inscrire**

Figure 1: Registration

### 2.5.3 Adding an item

Adding an item is also one step: filling the form.

**Besoin d'aide ?**  
Sélectionnez  
[Home] [List] [Add]

**T'CHANGE**

**Bonjour Mederic**  
(Membre privé)  
[Accéder à mon espace](#)  
[Voir mes biens](#)  
[Déconnexion](#)

**Ajouter un bien**  
Les champs avec une \* sont obligatoires.

Nom \*

Catégorie

Sous-Catégorie

Description \*

Mot-clés

Photo  No file chosen

**Enregistrer**

1 Sélectionner 2 Proposer 3 Finaliser

Figure 2: Add an item

#### 2.5.4 Swapping an item

Swapping an item requires three steps, and two persons participate:

1. Ask for an item (person A)
2. Answer to this request and proposing other items for the swap (person B)
3. Choosing the item (person A) for the swap. In the meantime, the person B is told about the person A's choice.

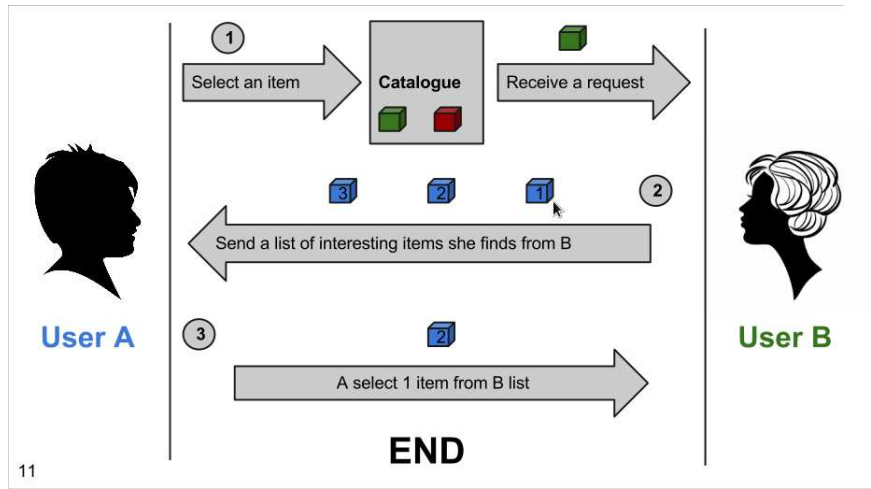


Figure 3: Swap process

#### 2.5.5 Communication

The only communication allowed between two persons on the website goes by the questions. A question requires two steps and involves two persons.

1. a person A asks a question about an item O (belonging to a person B)
2. the person B answers the questions. In the meantime, the person A is told about the answer.

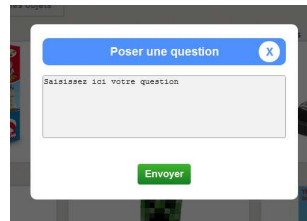


Figure 4: Ask a question



### 3 III. Interface's models' creation

#### 3.1 List of pages

In order for the user not to feel lost, we chose a simple website map, easy to browse. The different pages are:

- Home
- Catalogue
- Contact
- Profile
- Submitted
- Items

##### 3.1.1 Home

This pages shows the user three choices: to browse the catalogue, to log in (or to register if the user does not have an account yet), to submit an item to swap. Those three choices appear as three big pictured buttons (respectively an open book, a user profile, a plus sign). When passing each button, a contextual help text appears.

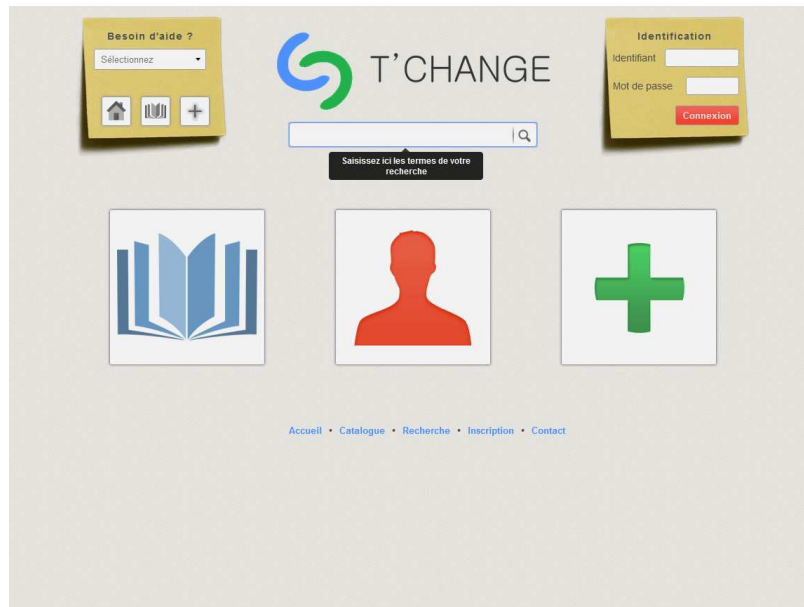


Figure 5: Home page

### 3.1.2 Catalogue

It is possible to choose how many items are displayed. If there are more results than it is possible to display, a paging toolbar appears and allows the user to browse the results. The page displays the item's main information, and more appears when the item is passed on. There are 4 parts on the page:

- The title “Catalogue”
- A breadcrumb trail / menu toolbar allowing to browse through the classes
- The items list
- The pagination zone

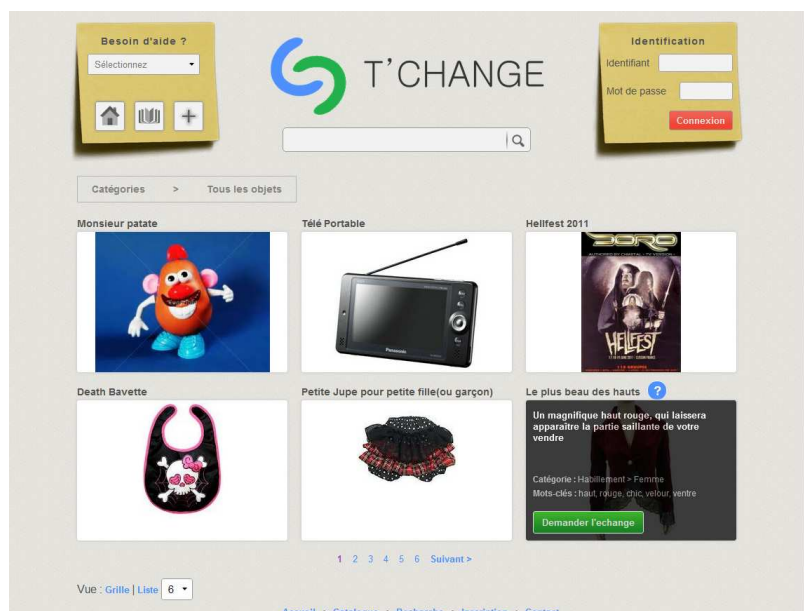


Figure 6: Catalogue page (icons mode)

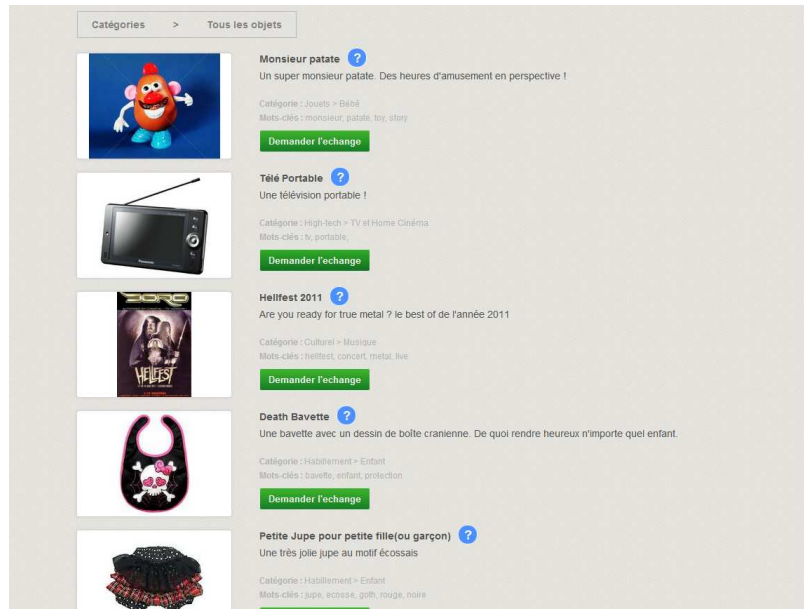


Figure 7: Catalogue page (details mode)

### 3.1.3 Contact

This pages allows the user to contact the website. It is a web's standard.



Figure 8: Contact page

#### **3.1.4 Profile**

The aim here is to display the information modification form, as well as links leading to other information (swapping historic, messages, submitted items)

#### **3.1.5 Submitted items**

It is a catalogue-like view of each item the user submitted and did not swap yet.

### **3.2 Header**

The header needs to gather the website's redundant information. There are three parts: left, center, right.

On the left, a help/browsing post-it allows the user to display the homepage, the catalogue or to add an item. The help field allows the user to choose an action he would like to do, in order to be guided on the page.

On the center, the website's logo, linking to the homepage when clicked. Under the logo is the search bar.

On the right, the user area. It displays the connexion fields (email and password) and a connexion button. There is also a link to register.

### **3.3 Footer**

The footer is a textual website's map. It gathers the website's important actions. There are only 5 elements so that the user does not have to read too many links in order to find what he wants. The elements are linking to:

- Homepage
- Catalog
- Search toolbar
- Registering form
- Contact page

### **3.4 The processes toolbar**

It follows the user during his browsing. On the left are the swapping process's 3 steps. To click on a step opens a menu, displaying all swaps at that step.

For example, clicking on the third step will display all swaps needing a final validation. The right part of the toolbar contents the swap historic.

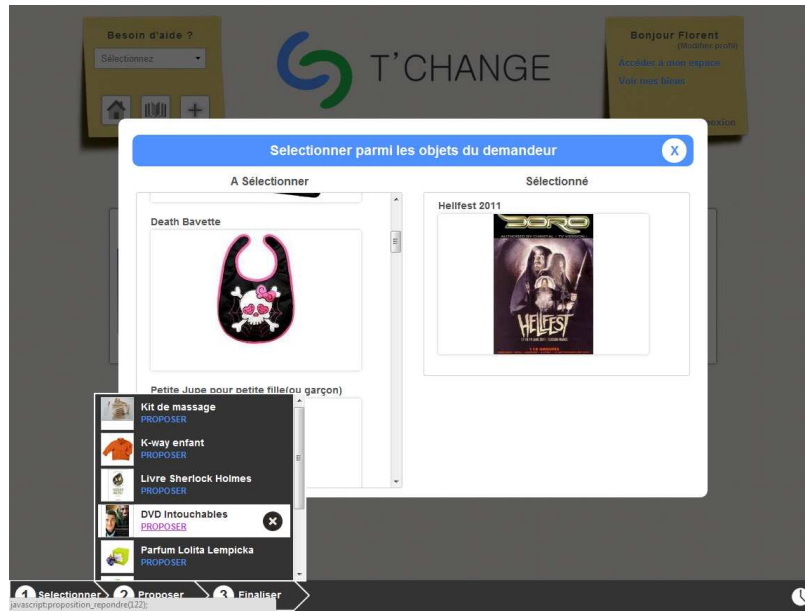


Figure 9: Propose to swap items

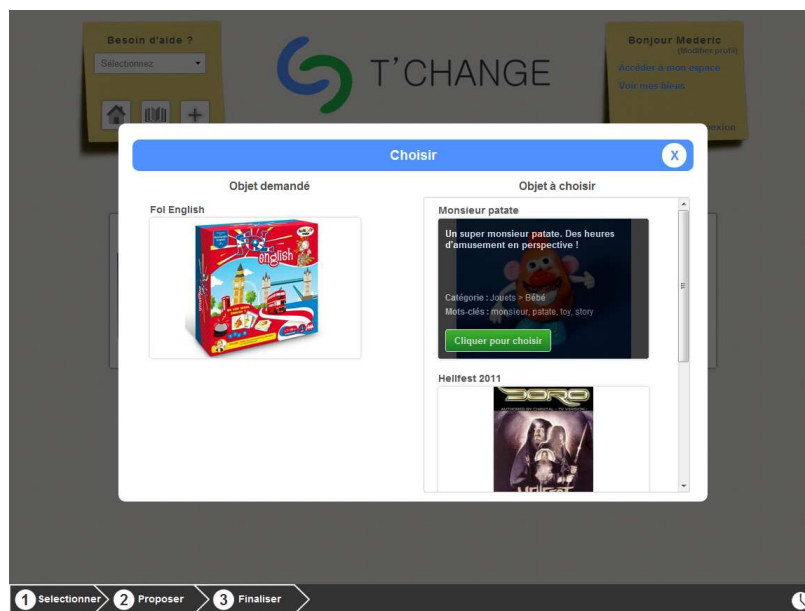


Figure 10: Choose an item