Stage en entreprise

3ème Bachelier en Informatique

Annexes

Développement d'un outil de gestion de ressources (côté client)

Realdolmen
Avenue Victor Maistriau, 30
7000 Mons

Étudiant :
Alexandre Ducobu

Responsable du stage :
Gianni Tricarico

Maitre de stage :
Gino Sprio

Campus technique

Année académique 2017 - 2018

HAUTE ECOLE EN HAINAUT

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Table des annexes

UML de la base de données

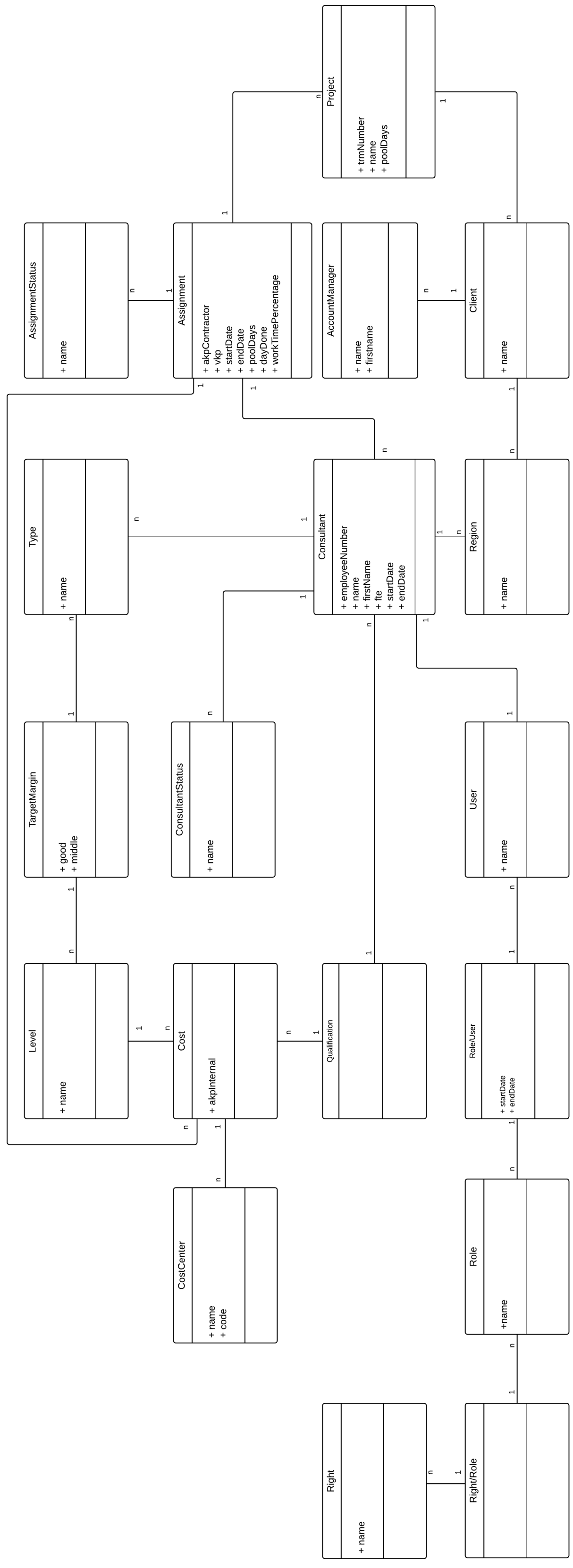

Figure 1 – Première version du schéma conceptuel de la base de données

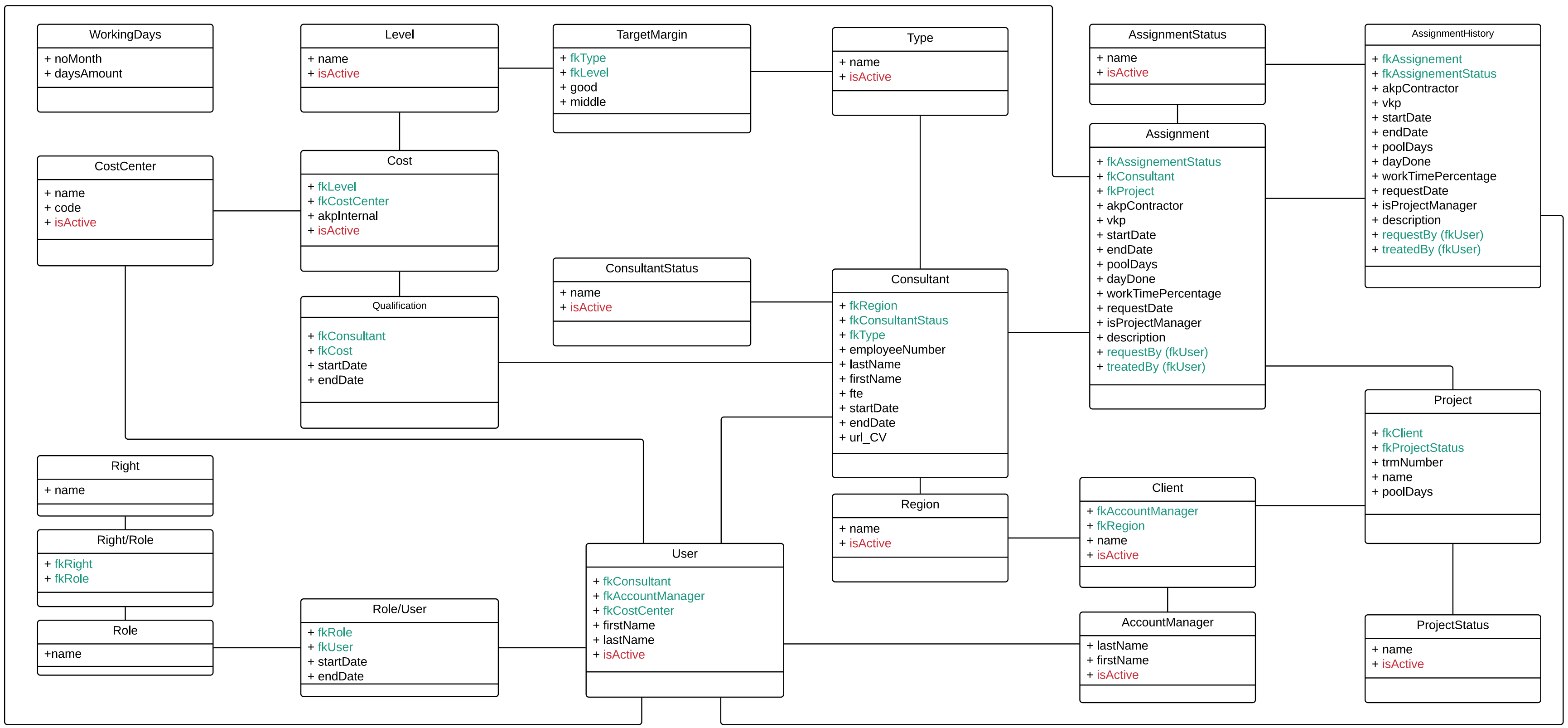

FIGURE 2 – Schéma conceptuel final de la base de données

Évolution du storyboard

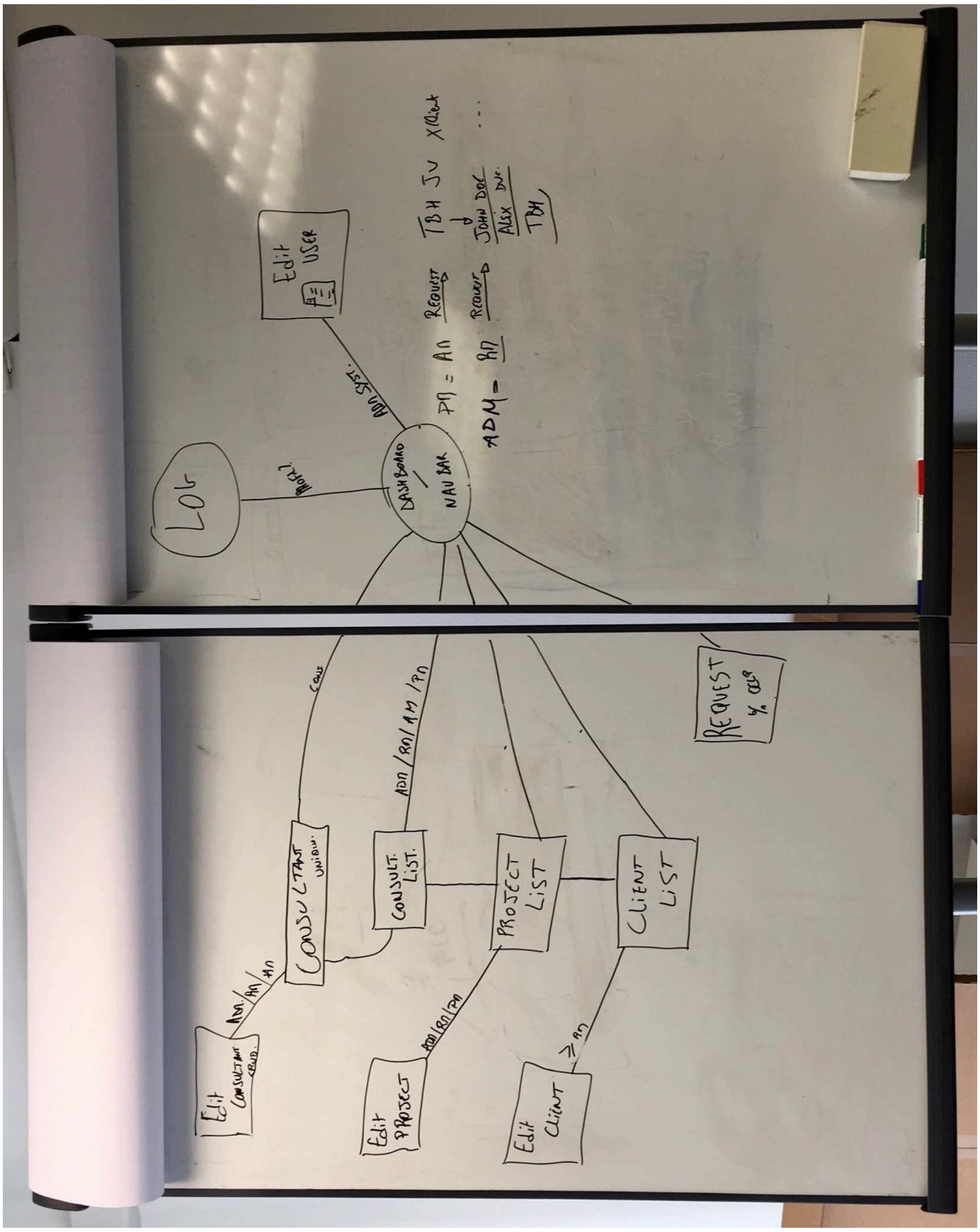

Figure 3 – Première version du storyboard sur tableau

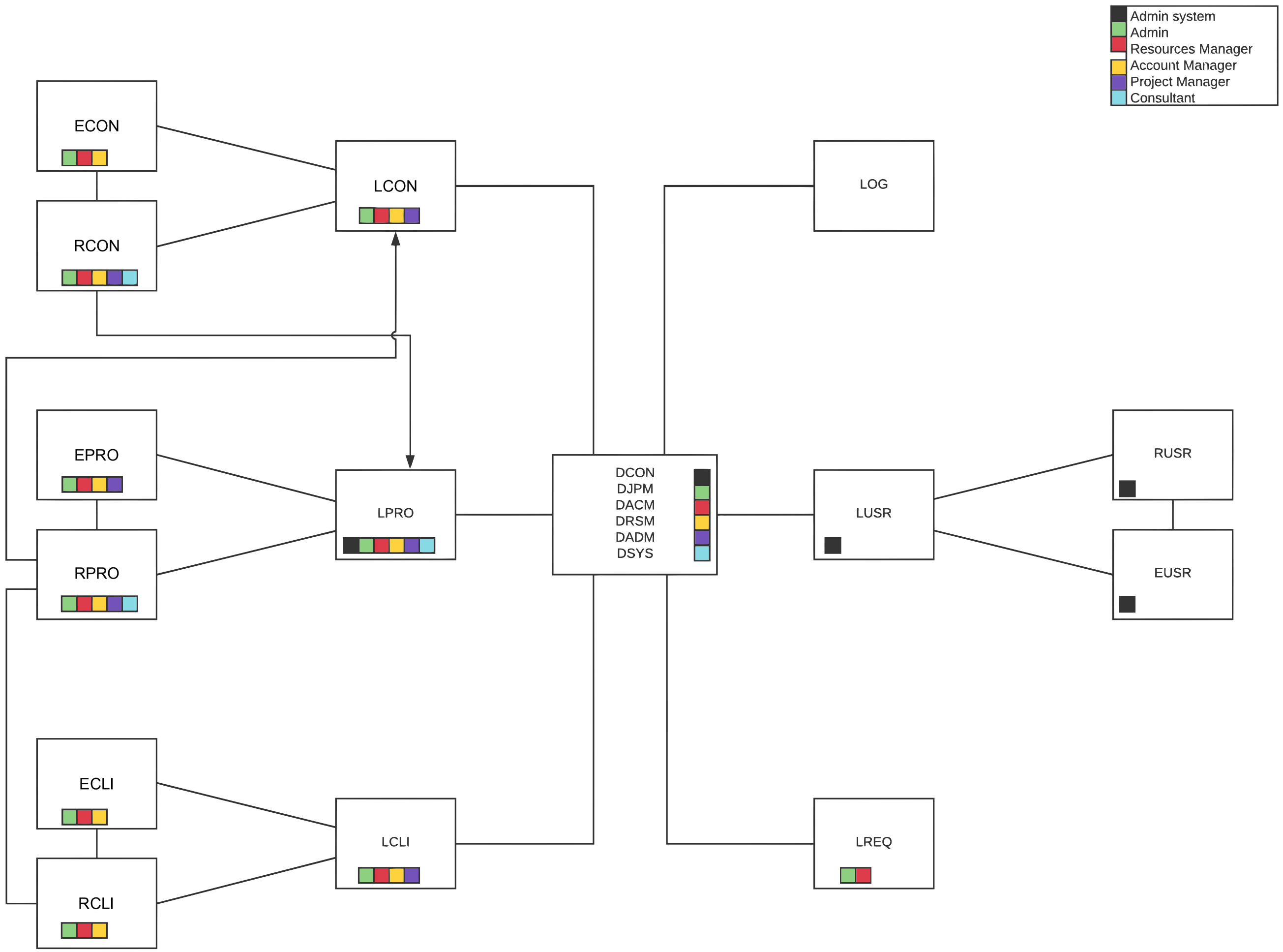

FIGURE 4 – Seconde version du storyboard

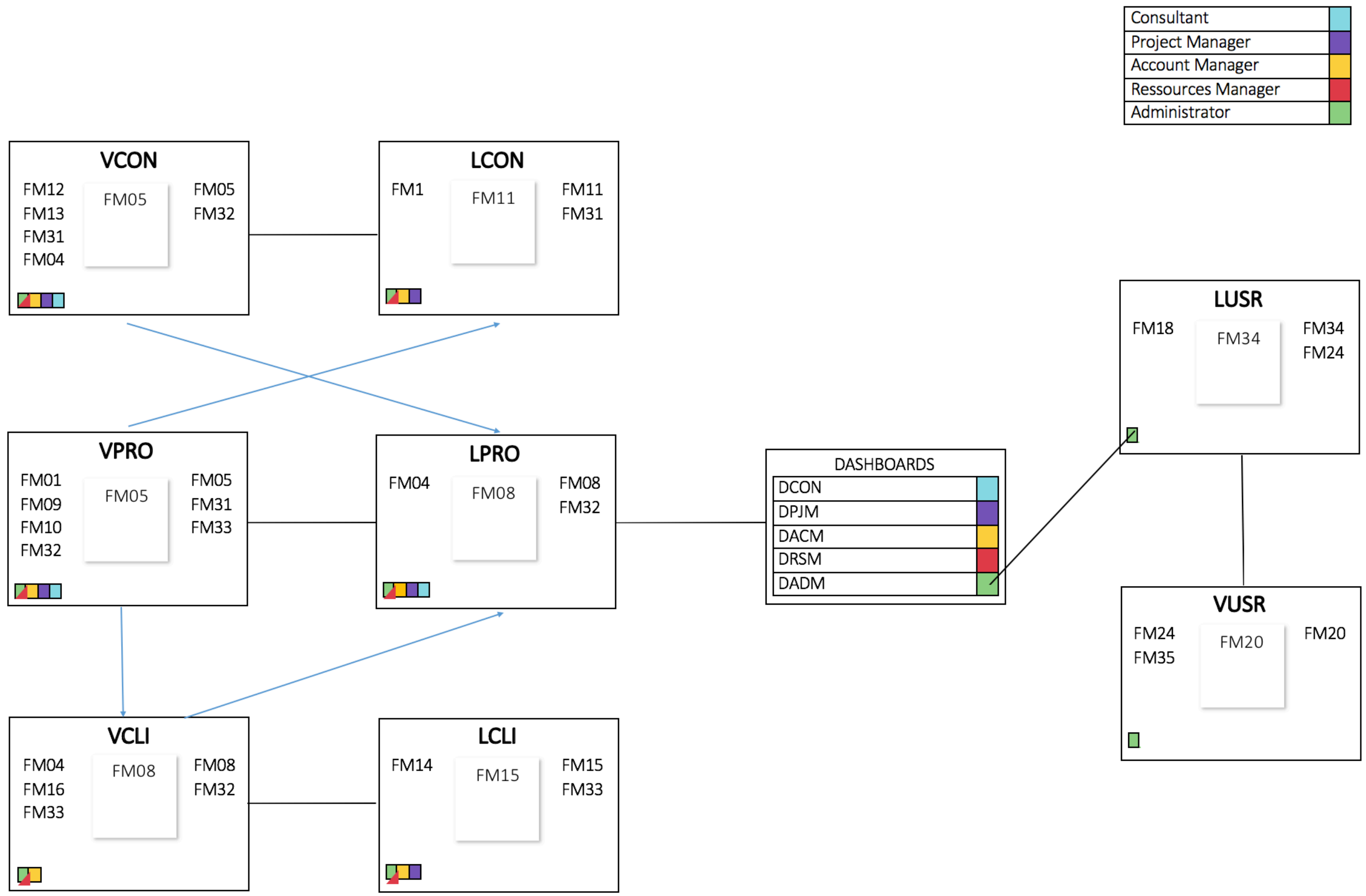

Figure 5 – Version finale du storyboard

Évolution de la vue d'un consultant

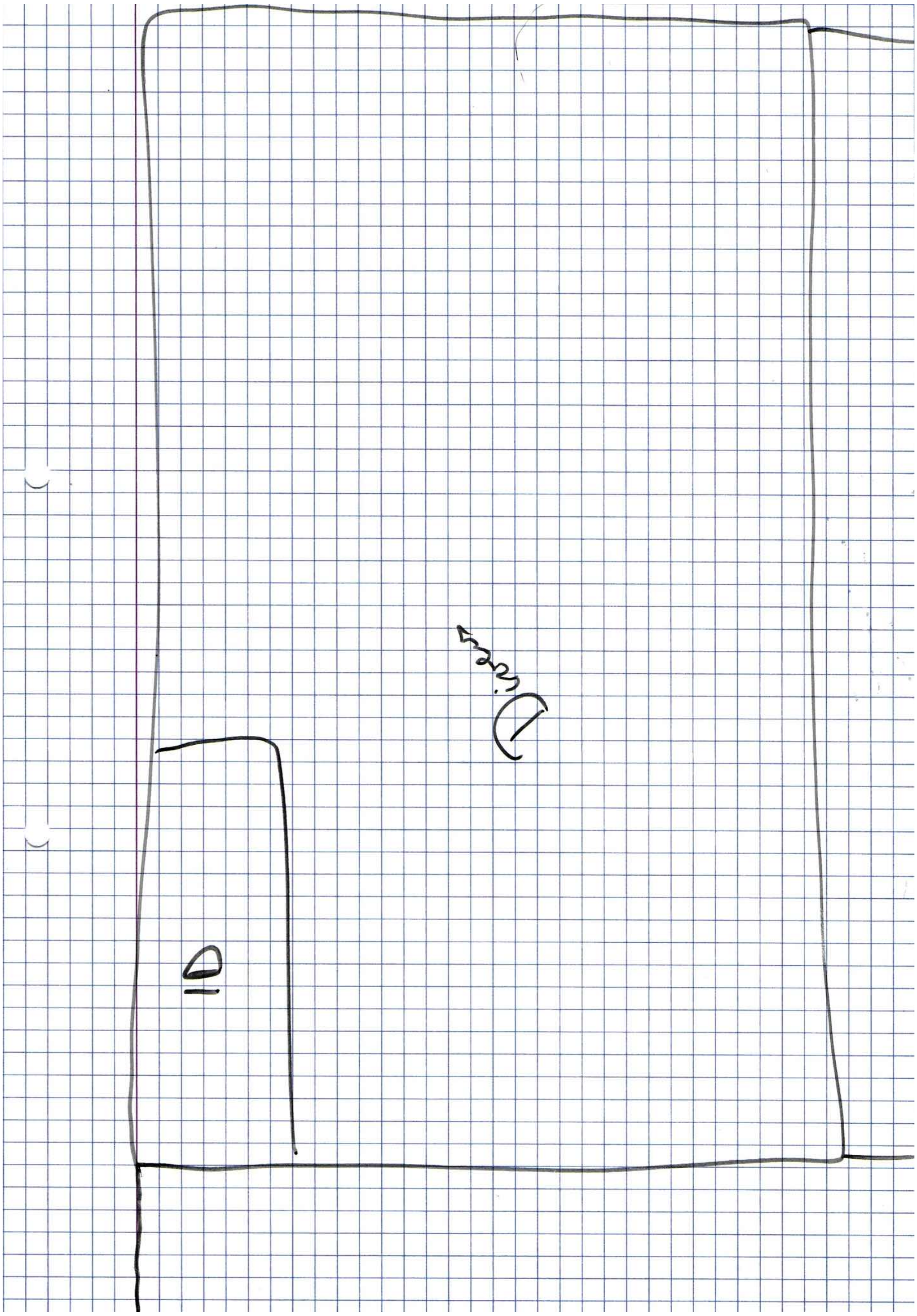

Figure 6 – Première maquette, divisée en blocs

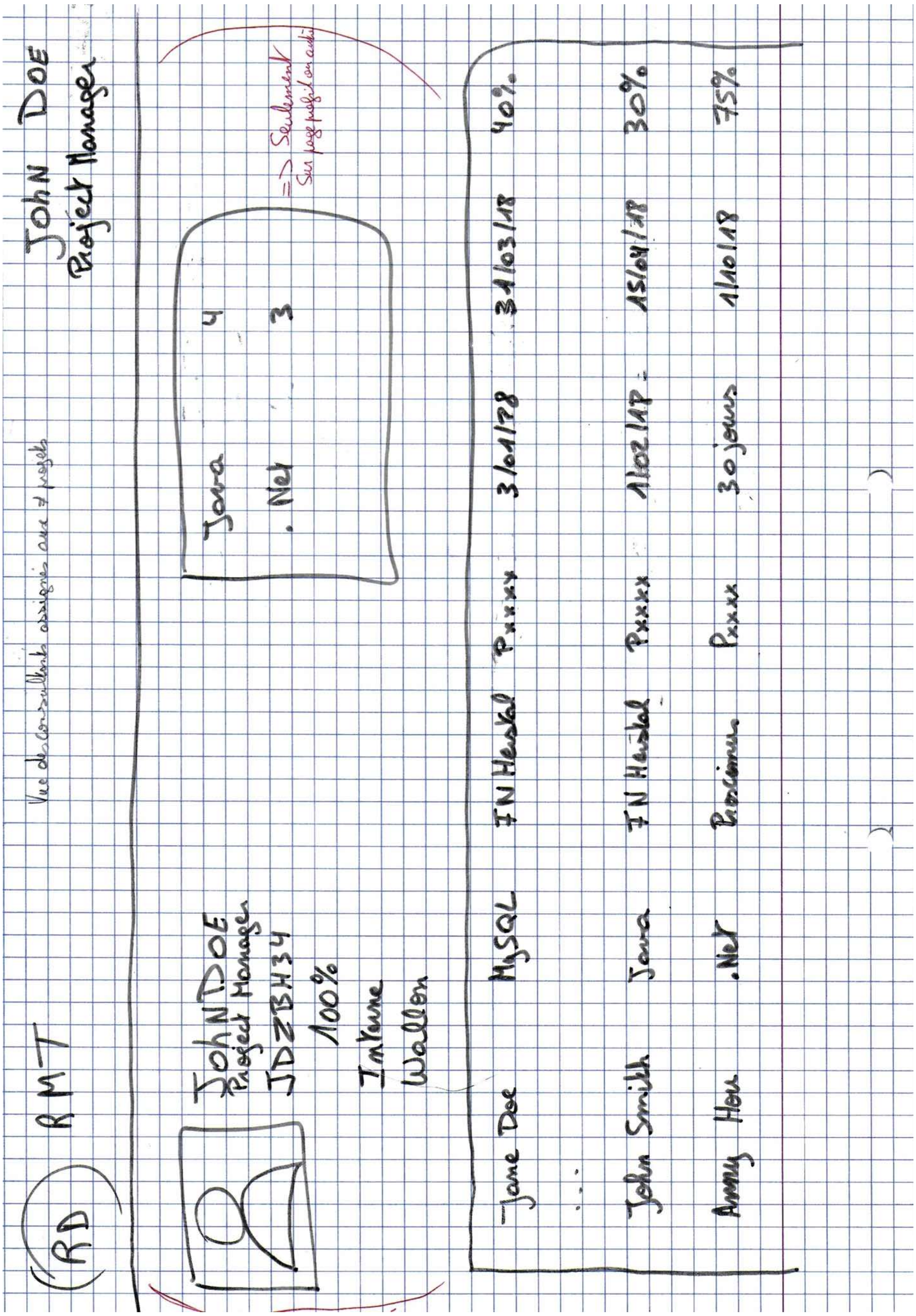

Figure 7 – Seconde maquette avec plus d'informations

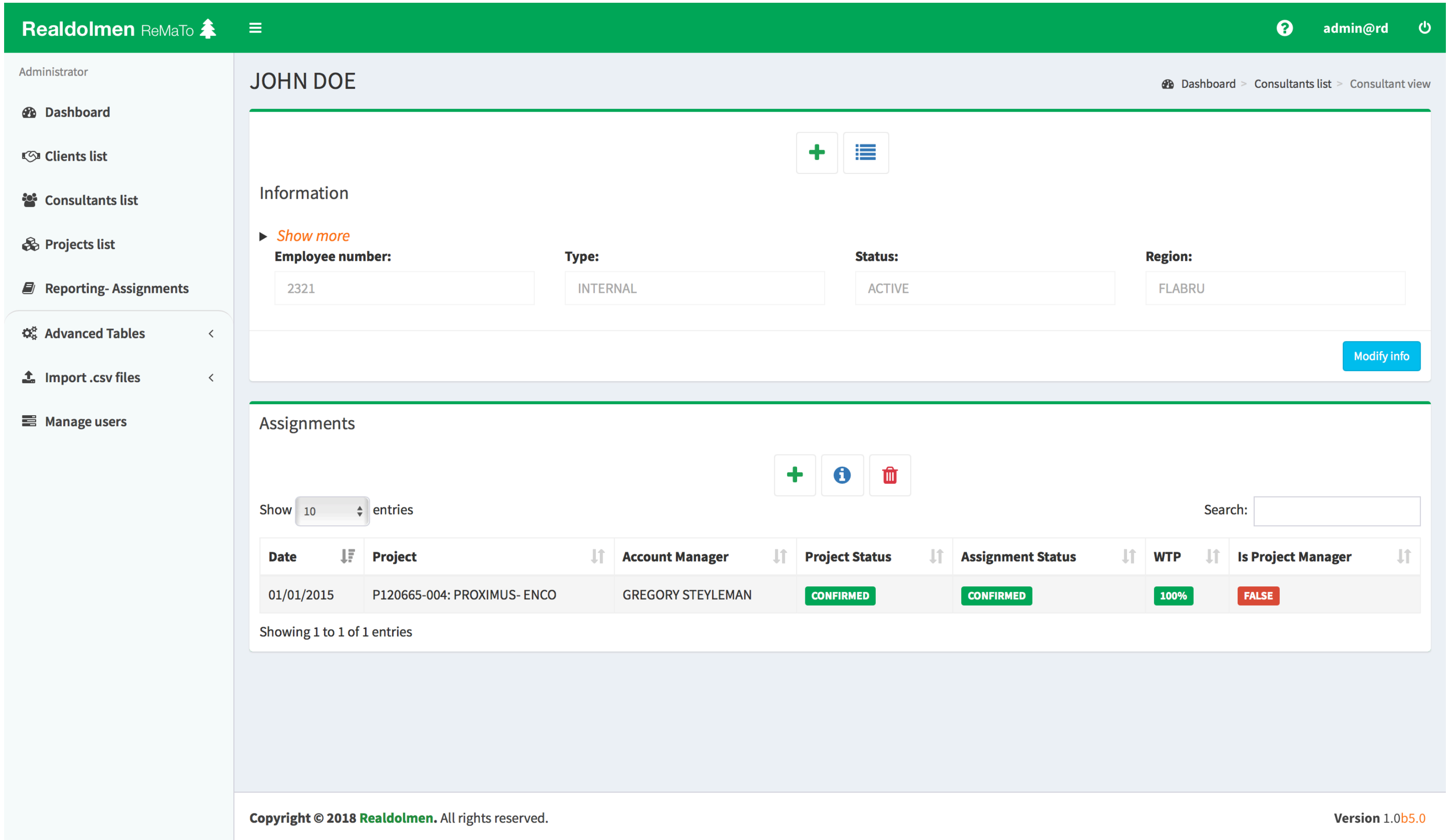

Figure 8 – Vue finale d'un consultant

Code

Calcul de la marge

Voici, ci-dessous, le code utilisé pour calculer la marge effectuée sur le prix de vente lorsque l'utilisateur le rentre à la main.
De plus, on peut y voir la documentation du code.

```javascript
/**
 * This function is used to calculate the margin according
 * to the given VKP.
 *
 * @param vkpValue
 *       The current value of the VKP.
 * @param akpValue
 *       The current value of the AKP.
 */
function calculateMarginEnterVkp(vkpValue, akpValue) {
    newVkp = vkpValue;
    newAkp = akpValue;
    if (newVkp != 0 && newAkp != 0) {
        calculatedVkpMargin = ((((newVkp - newAkp) / newVkp).toFixed(2)
            ) * 100).toFixed(2);
    } else { calculatedVkpMargin = 0; }
    $("#vkpMargin").html(`(Margin: ${ calculatedVkpMargin }%)`);
}
```

Listing 1 – Code du calcul de la marge

Document de la postulation

Voici mon CV `(page 14)` tel qu'il était lorsque j'ai postulé pour le stage en septembre 2017.
À la `page 15`, vous retrouverez ma lettre de motivation.
C'est par LinkedIn et par mail que j'avais postulé.

Alexandre**Ducobu** (23 ans)

Étudiant en Sciences Informatiques *(Développeur)*

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Rue Jules Cornet, 28
7000 Mons

Permis

Détention du permis B
Voiture disponible

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@Harchytekt

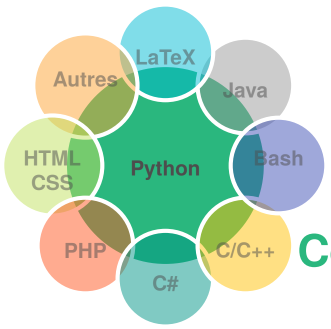
Web et Liens

alexandre-ducobu
.com
Harchytekt
Harchytekt

Langues

Anglais ●●●●○
Français ●●●●●
Néerlandais ●●●○○

Langages



Formation

2015 - 2018 **Bachelier en Informatique & systèmes** Haute École en Hainaut
Formation à l'administration de réseaux informatiques, à la programmation et au développement web.

2013 - 2015 **Bachelier en Sciences Informatiques** UMons
Apprentissage de différents langages *(Python, Java,...)* et mise en pratique lors de travaux pratiques et projets.

Certifications

Nov. 2016 **CCNA1 Routage et commutation** Cisco Networking Academy
CCNA Routage et commutation : Initiation aux réseaux

Juin 2013 **CESS** Athénée Royal Marguerite Bervoets
Certificat d'Enseignement Secondaire Supérieur

Projets récents

Décembre 2017 **Projet microcontrôleur**
Il nous a été demandé de réaliser la programmation d'un automate en Ladder à l'aide de ProcesSim.

Nov.-Déc. 2017 **Projet Android**
Supervision et commande à distance sur deux processus industriels commandés par des automates.

Oct.-Déc. 2017 **DogCare**
Création d'un site de prise de rendez-vous vétérinaires pour chiens à l'aide de la méthode Agile, et de deux frameworks : Angular et Spring.

Atouts

- Autonome
- Bon esprit d'équipe
- Curieux et motivé
- Méthodique et ordonné

Centres d'intérêt

- Jeux vidéo et nouvelles technologies
- Lecture *(passionné de science-fiction, de fantasy et de romans policiers)*
- Tennis

Ducobu Alexandre
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7000 Mons
0492 85 91 73
alexandre.ducobu@yahoo.be
CV: https://alexandre-ducobu.com

Objet: Candidature pour le poste JAVA acADDemICTs

Madame, Monsieur,

Je me permets de vous contacter suite à la parution de l'offre d'emploi pour les Java acADDemICTs Sud 2018 avec, comme finalité, un emploi en tant que consultant Java. Celle-ci m'intéresse particulièrement, car mon profil correspond à la description du profil recherché.

En effet, j'ai de bonnes connaissances théoriques en Java et git. Je les ai acquises au cours de mes études et je les ai mises en pratique lors de différents projets scolaires ainsi que pendant mon stage de fin d'études chez Realdolmen Sud. Lors de ce stage, le projet était une application web. Le backend a été développé à l'aide de Spring, Hibernate et une API REST. Le frontend a été développé avec du HTML, du CSS et du JavaScript. Concernant AngularJS, l'un des projets de cette année était une application basée sur Angular 2+, version plus récente d'AngularJS.

Je possède un bon esprit d'équipe : j'ai déjà travaillé en binôme et en groupe dans le cadre de travaux scolaires, de projets, mais également lors de mon stage. De fait, mon cursus scolaire a toujours mis le travail d'équipe en avant que ce soit par deux, trois, quatre ou même avec toute la classe.
Je trouve cela enrichissant dans la mesure où, en travaillant ensemble, on trouve des solutions innovantes et plus rapidement que lorsque l'on travaille seul.

Je possède également un excellent sens critique ce qui me permettra d'effectuer une analyse minutieuse des différents aspects de l'ensemble des projets tant au niveau de la répartition des charges de travail, que de la définition précise des méthodologies de travail à mettre en place pour assurer une collaboration efficace entre les différents développeurs.

J'aime apprendre de nouvelles choses et je trouve important de continuer de se former, surtout en informatique où les nouveautés sont légion et en perpétuelle évolution. Par exemple, pendant mes vacances, j'ai découvert et appris le langage Julia, proche du Python, ainsi que Sass. Ces découvertes, effectuées au fil de lectures personnelles, ont piqué ma curiosité et m'ont permis d'apprendre à me servir de nouvelles technologies.

Je possède de bonnes bases en anglais que j'ai acquises lors de mes études secondaires. Je les ai entretenues et développées suite aux nombreuses lectures et recherches effectuées dans la mesure où la plupart des ouvrages informatiques sont écrits en anglais. De plus, j'ai toujours écrit, dans la mesure du possible, mes documentations et projets en anglais pour une accessibilité optimale.
Je visionne de nombreux films en version originale, mais j'ai rarement eu l'occasion de parler anglais depuis mes secondaires. Ce serait donc une superbe opportunité pour moi que de pouvoir parler anglais avec des collègues dont la langue maternelle n'est pas la mienne.

Pour terminer, j'aimerais ajouter que j'apprécie l'ambiance qu'il y a chez Realdolmen Sud que ce soit pendant le stage ou pendant les présentations en soirée auxquelles j'ai pu assister. J'apprécie particulièrement le fait que les maitres de stage discutent avec nous comme si nous étions déjà des employés. J'ai alors l'impression de faire partie de l'équipe, ce qui me donne envie de poursuivre l'aventure avec Realdolmen.

J'espère que vous porterez une attention particulière à ma candidature et je reste à votre entière disposition pour toute information complémentaire.

Dans l'espoir d'une réponse positive de votre part, je vous prie d'agréer, madame, monsieur, l'expression de mes sentiments distingués.

Ducobu Alexandre

Guide utilisateur

Vous trouverez, à partir de la page suivante, le guide utilisateur que j'ai rédigé, en anglais.
Celui-ci est disponible au sein de l'application en passant par un raccourci clavier (`ctrl` + `enter`) ou par un bouton d'aide représenté par un point d'interrogation.

Il est à remarquer que les numéros de pages sont ceux du guide et non ceux des annexes.

User guide

Resource Management Tool- ReMaTo

Written by Alexandre Ducobu with Arnaud Urbain, Kevin Chyzy and Pierre Duvivier.

Realdolmen 2018 Version 1.0

Table of Contents

Roles

Rights

There are three roles in the app:

1. Administrator: this user has all rights on the app.
2. Resources Manager: the user has the same rights as the administrator but only on specific units.
3. Account Manager: the user has read only rights on the app.

Privileges

Administrator

The administrator has access to all pages.

He can also edit data in the advanced tables, import data from a *.csv* file and manage users.

Resources Manager

The resources manager has access to almost the same pages as the administrator but sorted by its units.

There are some pages not available like the advanced tables, the import a *.csv* file and the manage users page.

Account Manager

The account manager has only access to the clients, projects and consultant list and information pages.

He can't modify any information and doesn't have access to the reporting view.

How to connect to the app?

1. Go to the app at this address: http://10.15.8.81:8081 (maybe http://esddev426:8081/).
   You should be on the Realdolmen network or use the VPN.
2. On the login page enter your Realdolmen credentials (email address and password) and click on the sign in button.
3. You are connected to the application and redirected to the dashboard view.

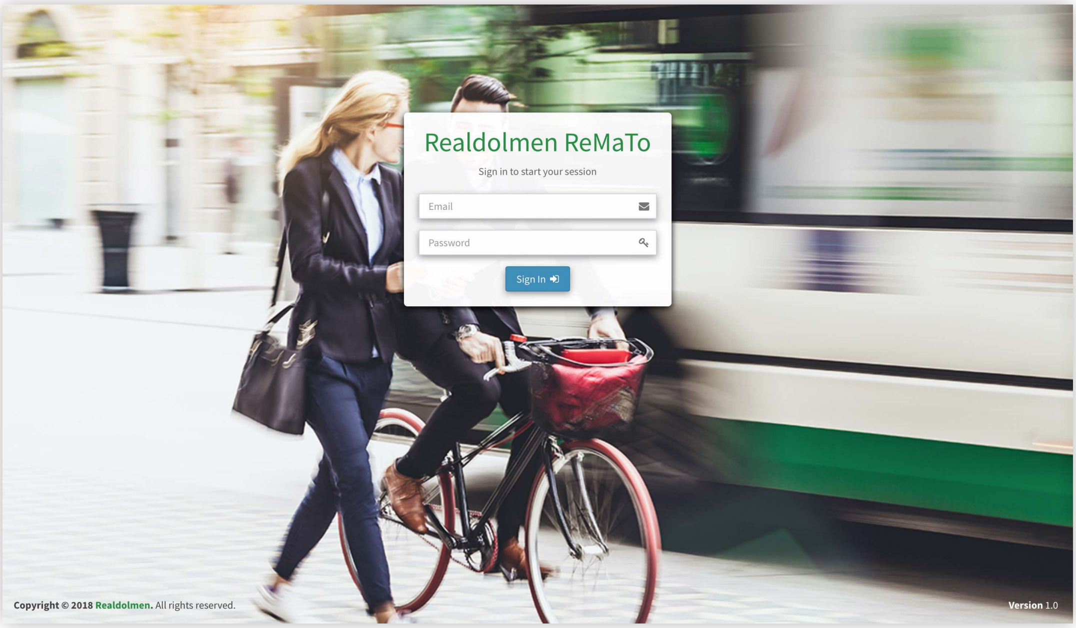

Figure 1- Login page

How to logout from the app?

1. Click on the *standby control* button placed in the upper right-hand corner in any page.
2. You are logged out and redirected to the login page.

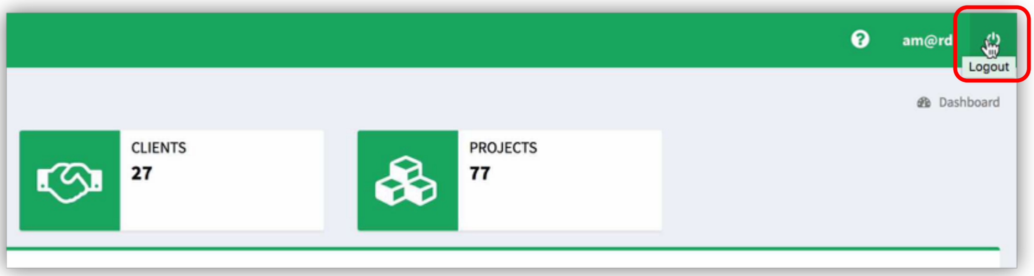

Figure 2- Logout button

How to list the clients/consultants/projects?

From the dashboard

You simply have to click on the info box of your choice.

Figure 3- Choice in the info box

Remark: a click on the '***ACTIVE CONSULTANTS***' box will show you the consultants list filtered on the active consultants.

From any page

You simply have to click on the link of your choice.

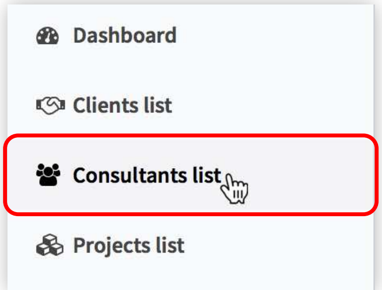

Figure 4- Choice in the sidebar

How to move inside the table?

There are two ways:

1. Using the mouse;
2. Using the keyboard.

Using the mouse

You can switch table page using the paging menu located in the lower right-hand corner.
You may change the number of displayed item by table page using the page length menu located at the upper left of the table.

Using the keyboard

1. Select an item in the table.
2. Use the arrow keys (up and down) to move, even between table pages.

How to add an item to the table?

1. Click on the green **+** button of the action bar above the table.
2. Fill the form in. Only fields marked with an asterisk are required.
   To know the required format of the different field, place your cursor hover the field.
   If the format used is wrong, the input is bordered with red.
3. When the form is filled in, the 'Save changes' button should be clickable.
   If not, verify the format of the entries of the different fields.
   Then save the changes, the new item is now in the table.

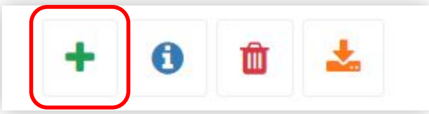

Figure 5- Action bar (Add an item)

How to remove an item from the table?

1. Select an item in the table, the remove button is now clickable.
2. Click on the red trash button to remove the item.
3. A confirmation modal pop-up. Accept and the item is removed.

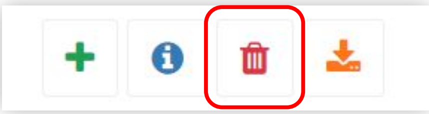

Figure 6- Action bar (Remove an item)

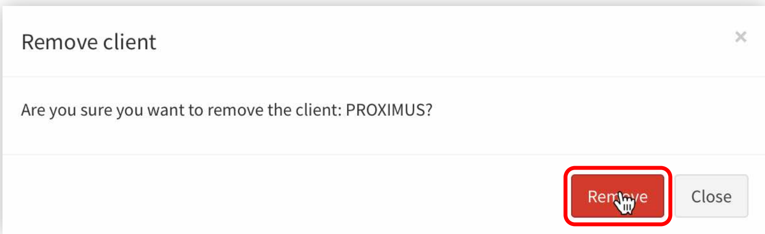

Figure 7- Confirmation modal

How to see the information of the selected item?

There are three ways to do this:

1. Using the action bar;
2. Using a double click;
3. Using the keyboard.

Using the action bar

1. Select the wanted item.
2. Click on the blue info button of the action bar.
3. The app redirects you to the information page of the item.

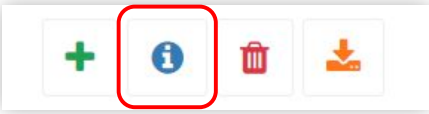

Figure 8- Action bar (More info)

Using a double click

1. Double click on the wanted item.
2. The app redirects you to the information page of the item.

Using the keyboard

1. Select a row (using the mouse or the keyboard).
2. Once the wanted item selected, press enter.
3. The app redirects you to the information page of the item.

How to edit information from the information page?

1. Click on the '***Modify info***' button from the lower right-hand corner of the '***Information***' box.
2. Add and edit information through the form.
3. Click on the '***Save***' button.
4. Your changes are saved.

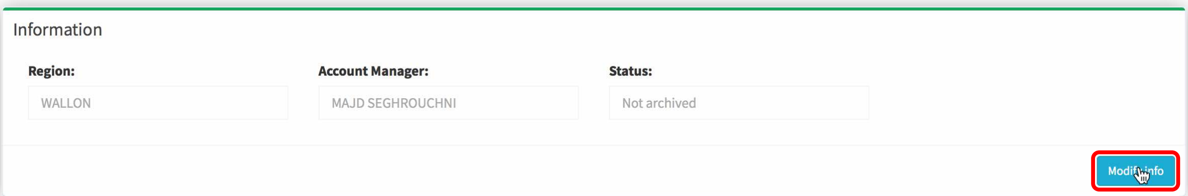

Figure 9- Edit information

How to add a qualification to a consultant?

There are three ways:

1. At the creation of a consultant;
2. From the consultant information view;
3. From the qualification view.

At the creation of a consultant

At the creation of a consultant, you'll have to select a unit.
The created qualification will have a level equal to 0.

From the consultant information view

1. Go to the consultant information page.
2. In the '***Information***' box, at the top, click on the green **+** button of the action bar.
3. Fill the form in.
4. Save the changes.

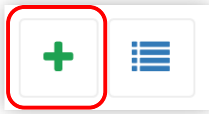

Figure 10- Add a new qualification

From the qualification view

1. Go to the consultant information page.
2. In the '***Information***' box, at the top, click on the blue **list** button of the action bar.
3. You are now in the qualifications list view.
4. Click on the green **+** button from the action bar.
5. Fill the form in.
6. Save the changes, the new qualification is in the table.

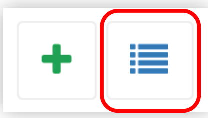

Figure 11- List qualifications

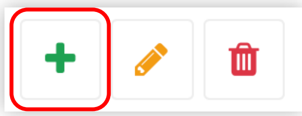

Figure 12- Add a new qualification

How to edit a qualification?

1. Go to the qualifications list view.
2. Select the qualification to edit.
3. Click on the light orange pencil icon from the action bar.
4. Make your modifications through the form.
5. Save the changes.

Figure 13- Edit a qualification

How to remove a qualification?

To remove a qualification, go to the qualifications list view, and remove it like in any other table.

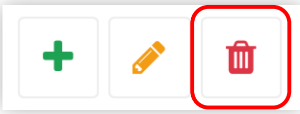

Figure 14- Remove a qualification

How to sort the columns of the table?

To sort a column, you only have to click on the cells in the header of the table.

In the example below, the user clicks in the '***Name'*** cell to sort the column alphabetically.
Another click on the cell and the sort will be antialphabetic.

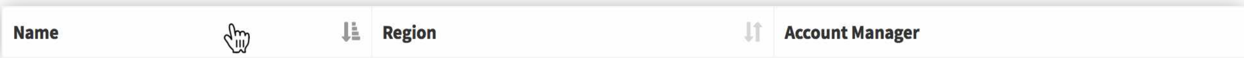

Figure 15- Sort table

How to filter the data of the tables?

There are one or more filters above the majority of the tables – even the advanced tables for the administrator.
The filters provide various options according to the database.
To reset the filters, the '***Reset all filters***' button is located at the right.
<u>Remarks:</u>

1. In the advanced tables and for the account and resources managers, the tables are prefiltered.
2. The filters are saved during the session.
3. The filters can be hidden/shown and there's a tip showing the active filters.
   Moreover an active filter as an orange border.

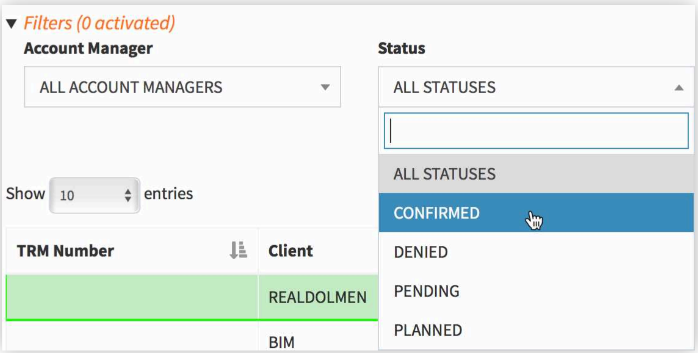

Figure 16- Filter table

What is the meaning of these statuses?

There are five statuses:

1. Active: the selected item – a consultant – works for now. It isn't sick or in vacation.
2. Archived: the selected item is not in use for now, but it's not deleted.
3. Confirmed: the selected item – e.g. a project – has been confirmed.
4. Denied: the selected item – e.g. a project – has been denied for some reason and won't be developed.
5. Inactive: the selected item – a consultant – doesn't work for now. It may be sick or in vacation.
6. Pending: we don't know yet if the selected item – e.g. a project – has been denied or confirmed.
7. Planned: the selected item – e.g. a project – has been planned but not yet started.
8. To be hired: the selected item – a consultant – has not yet been hired.

How to hide/show columns of the tables?

There are two tables where the user may hide/show columns:

1. The consultant list.
2. The reporting view.

The consultant list

The last filter – '***Number of Months***' – only shows the current month and the next three.

If the user chooses one of the provided options, more months will be shown.

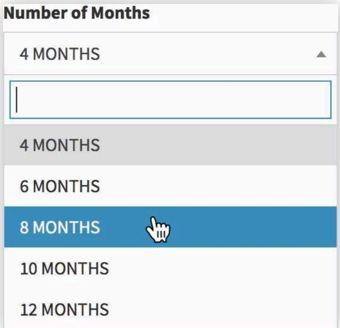

Figure 17- Show more months

The reporting view

The last filter – '***Hide Columns***' – permits the user to select the column he wants to hide.

To select multiple columns at the same time, the user has the possibility to use the control key when selecting the column names.

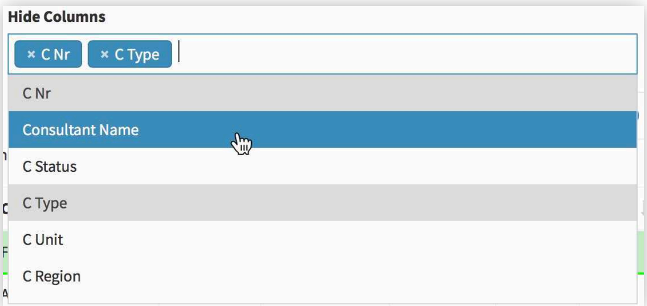

Figure 18- Select the column to hide

<u>Remarks:</u>

1. The '***Reset all filters***' button also resets these filters.
2. These filters are also saved during the session.

How to export data from the tables?

1. Choose a page like the consultant list.
2. If you want, you can use the available filters and/or hide columns.
3. Once it's done, click on the orange download button from the action bar.
4. Your Excel file is downloaded with the selected data.

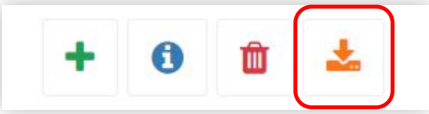

Figure 19- Export data from the table

How to know if my entries are correct?

If an entry is invalid, the field will be bordered with red and some info about the error will be display in the bottom.

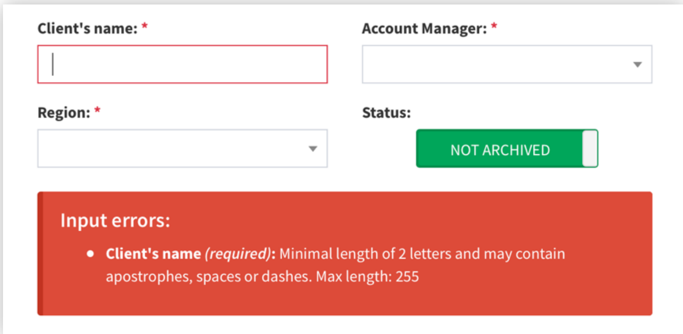

Figure 20- Invalid entry

How to get help?

There are two ways to get help through this user guide. You may:

1. Use the keyboard shortcut: **ctrl + enter**.
2. Use the question mark button next to your email address.

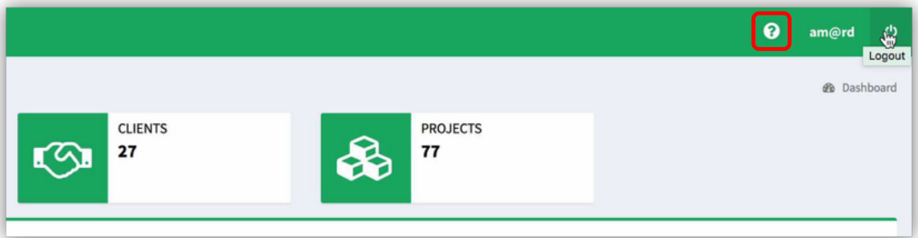

Figure 21- Get help from the button

Administrator reserved pages

The advanced tables are slightly different from the other tables.
They allow you to add, edit, change the status and remove the selected item.
Remark: the '***Manage users***' table is also an advanced table.

How to add data to an advanced table?

This task is pretty the same that in other tables:

1. Click on the green **+** button of the action bar above the table.
2. Fill the form in. Only fields marked with an asterisk are required.
   To know the required format of the different field, place your cursor hover the field.
   If the format used is wrong, the input is bordered with red.
3. When the form is filled in, the 'Save changes' button should be clickable.
   If not, verify the format of the entries of the different fields.
   Then save the changes, the new item is now in the table.

Figure 22- Add an item

How to edit data from an advanced table?

1. Select the item to edit.
2. Click on the light orange pencil icon from the action bar.
3. Make your modifications through the form.
4. Save the changes.

Figure 23- Edit an item

How to change the status of an item from an advanced table?

1. Select the item whose status is to be changed.
2. Click on the light blue toggle icon from the action bar.
3. The status is changed.

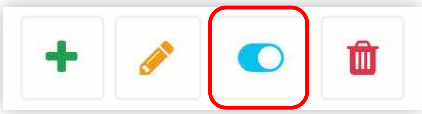

Figure 24- Change the status of an item

How to remove data from an advanced table?

This task is pretty the same that in other tables:

1. Select an item in the table, the remove button is now clickable.
2. Click on the red trash button to remove the item.
3. A confirmation modal pop-up. Accept and the item is removed.

Figure 25- Remove an item

Remark: the status of an item may be *Archived* or *Not Archived*. For this first version of the app, these statuses don't have any impact on the functioning of the app.

How to manage users?

This table is an advanced table, so it functions like one of them:

How to add a new user?

1. Click on the green **+** button of the action bar above the table.
2. Fill the form in.
   Remark: a resources manager may control several units.
3. When the form is filled in, save the changes and the new item is now in the table.

How to edit a user?

1. Select the user to edit.
2. Click on the light orange pencil icon from the action bar.
3. Make your modifications through the form.
4. Save the changes.

How to change the status of a user?

1. Select the user whose status is to be changed.
2. Click on the light blue toggle icon from the action bar.
3. The status is changed.

How to remove a user?

1. Select a user in the table, the remove button is now clickable.
2. Click on the red trash button to remove the item.
3. A confirmation modal pop-up. Accept and the user is removed.

Remark: The current user isn't listed in the manage users table to avoid errors on his account.

How to import data with a *.csv* file?

Prepare for the export of the *.xlsx* file to a *.csv* file *(Windows)*

1. Go to the ‘Control Panel’.
2. Select the ‘Clock, Language, and Region’ option.
3. Click on ‘Region’ and on ‘Additional settings’.
4. Now replace the default list separator – a comma – by a semicolon.

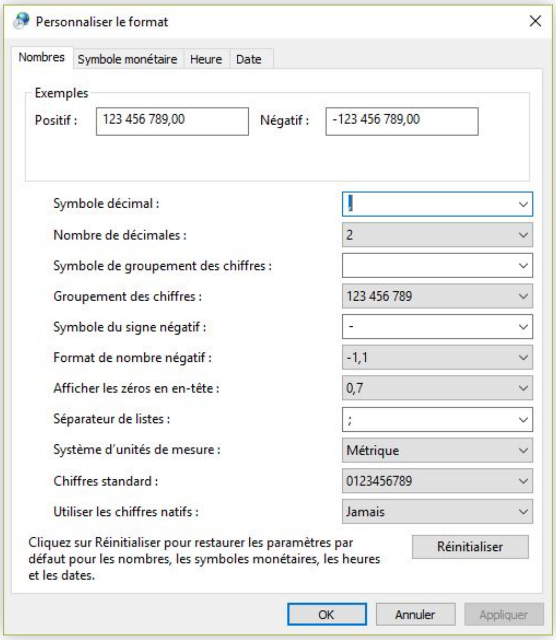

Figure 26- Replace the default list separator on Windows

Export the *.xlsx* file into a *.csv* file

1. Open the *.xlsx* file into Excel.
2. Go to the ‘Export’ menu, select ‘Change File Type’.
3. Now select the format: ‘CSV (Comma delimited)’ and save the file.

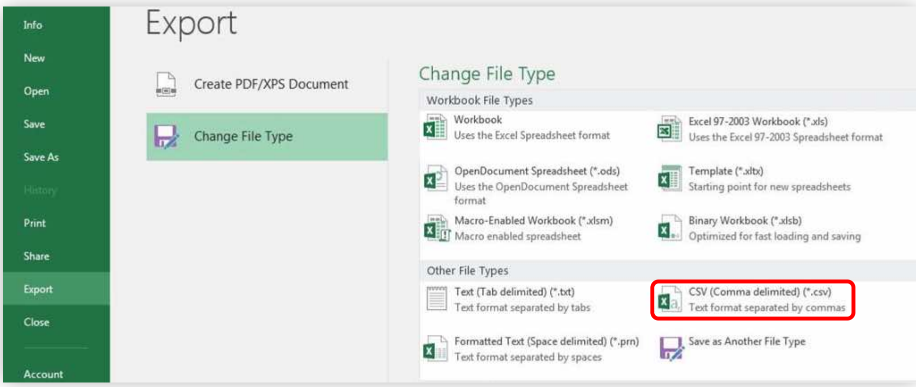

Figure 27- Export the .xlsx file into .csv

Import the *.csv* file to the app

1. Once logged in to the app, go to the 'Import .csv file' page.
2. Choose the *.csv* file and click on the 'Import the file' button.
3. Once the file imported, you'll see the potential errors.

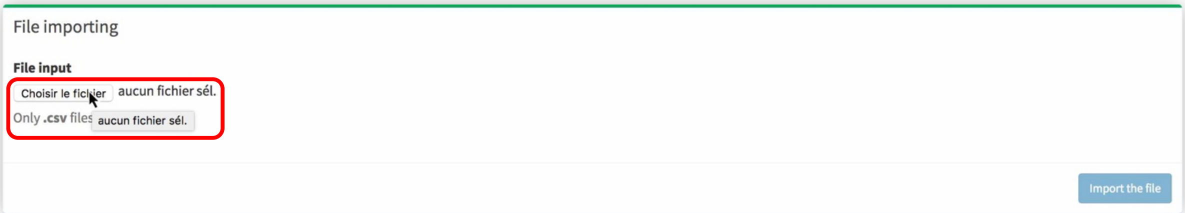

Figure 28- Import a .csv file