INTRODUCTION TO THE USE OF THE CMS MODX

1. INTRODUCTION

This introductory course is intended for all UNIFR webpublishers who wish to familiarize themselves with the MODx CMS management interface and acquire the **basic knowledge** necessary to use the tool. After this course, webpublishers will be able to autonomously modify existing content of a website, publish or replace images and documents.

Participation in the introductory course is **optional** but recommended for webpublishers who have little experience with the use of a CMS or who are taking on this task for the first time.

On the other hand, all UNIFR webpublishers are invited to review the content of this course and exercise the procedures described therein. This is a mandatory prerequisite for participation in the deepening course.

1.1 WHAT IS A CMS

This is the abbreviation for *Content Management System*. In concrete terms, a CMS is a computer program that facilitates the creation and maintenance of a website by offering page templates, a predefined graphic and typographical universe, and different types of content.

The advantage of a CMS is that it allows a **separation of content and form**. Thus webpublishers can focus on content (texts, documents, images) without having to worry aboutform (visual identity, typography, colours). Visual appearance management, which requires in-depth technical knowledge, is entirely centralized with administrators.

UNIFR has chosen the MODx CMS for the management of all its public and institutional websites.

1.2 FEATURES OF UNIFR WEBSITES

The pages of UNIFR sites are all based on the same presentation line and have some invariable fields.

Global navigation

Clicking on QUICK ACCESS opens at the very top of the page, which will be the same for all websites, allowing direct access to the main central services and all faculties.
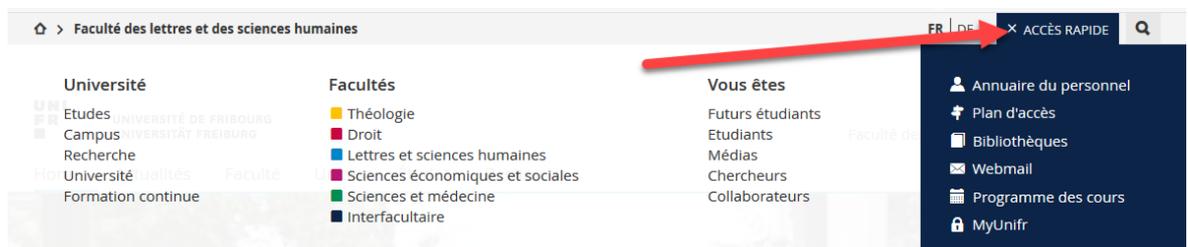
The identity

This area includes the official logo of the University, as well as the name of the department, department or information unit from which the website originates.
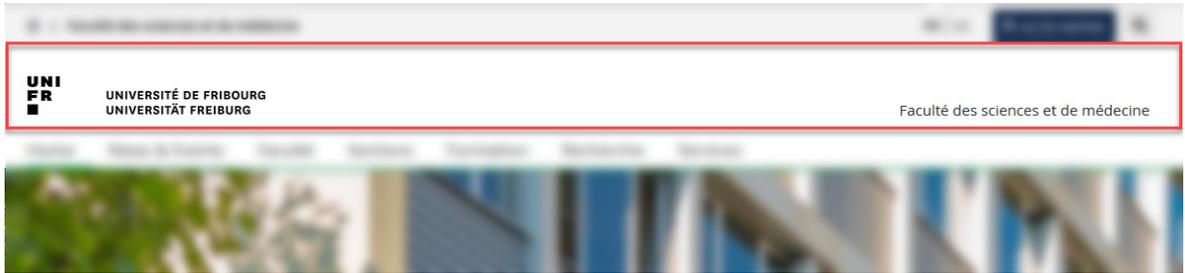
The main navigation

The main navigation is the first level of navigation. It is specific to each website.
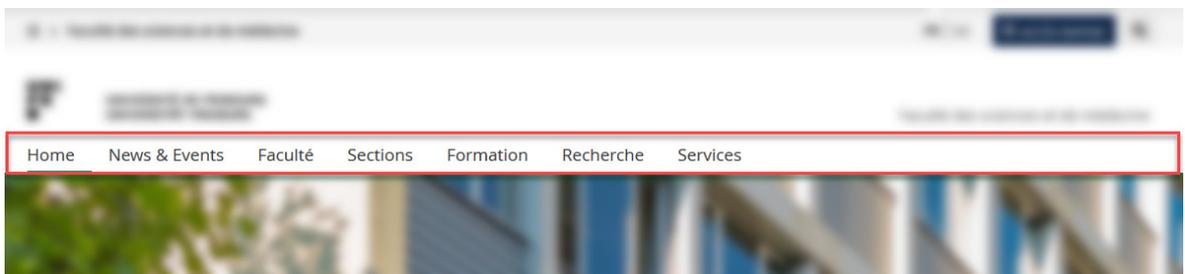
Secondary navigation

Secondary navigation consists of the second and third levels of navigation. It is contextual and varies depending on where you are on the website.

Some landing pages do not require secondary navigation. It is then possible to disable this zone (see below: *page templates*).

The content area

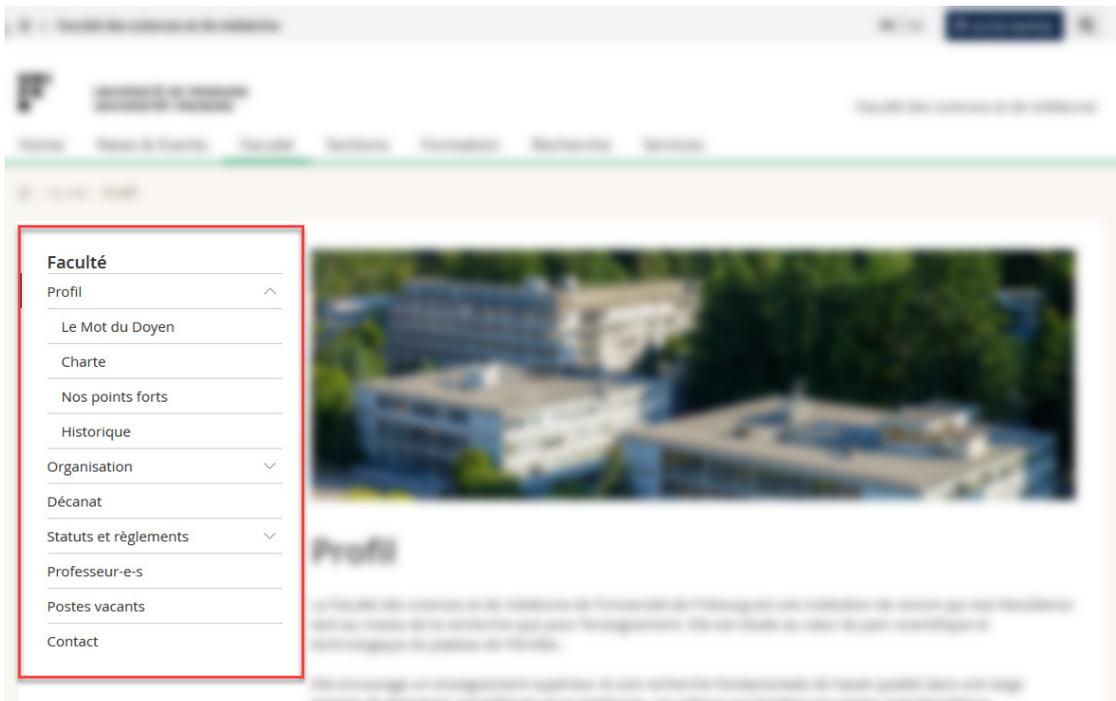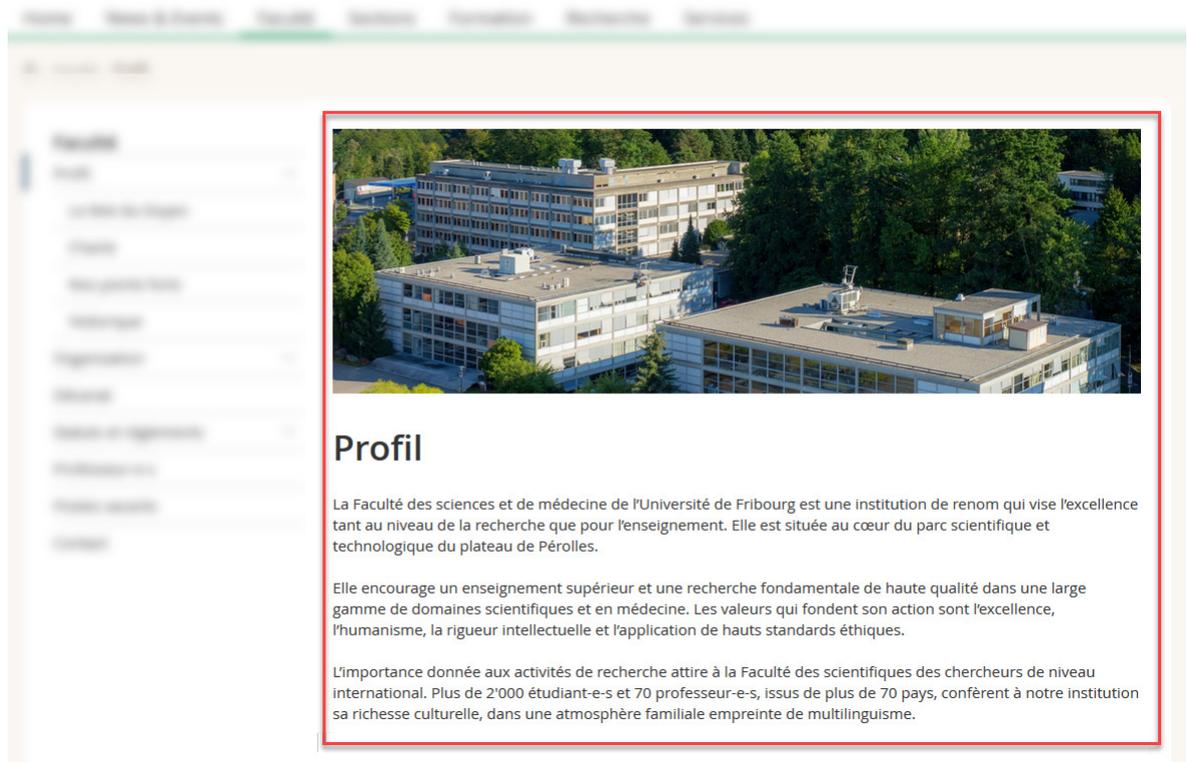It is in this area that the webpublisher's field of intervention is mainly limited. At a minimum, the content area contains a title and text, or even a banner image and other content elements. We will also see that it can be divided into several columns according to needs.

The Footer

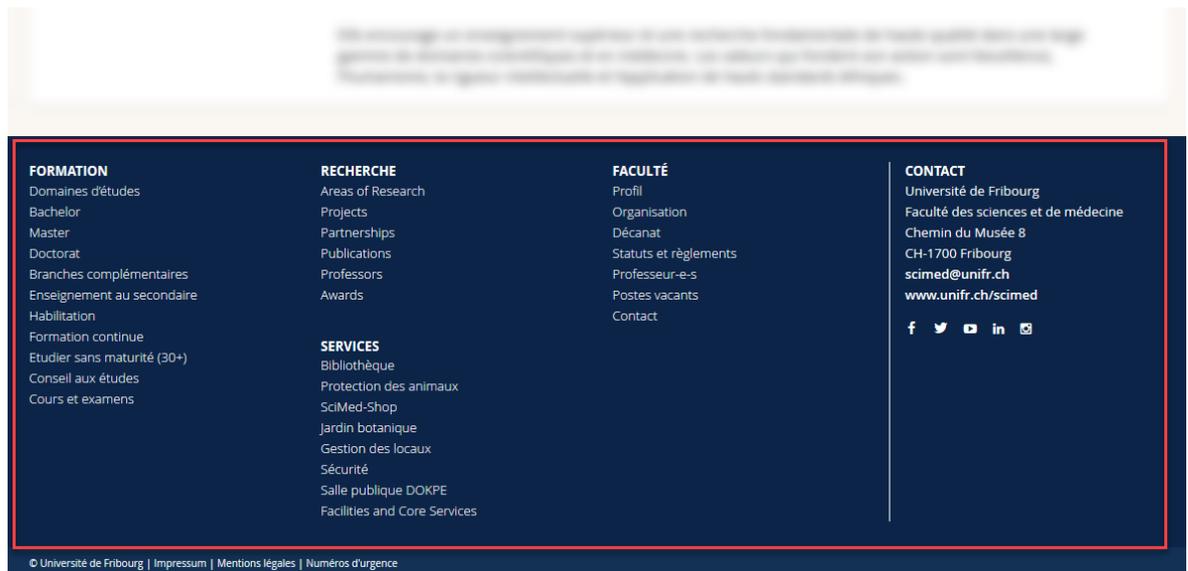The footer (or footer) on a blue background, is specific to each website and allows you to repeat an invariable content on all the pages of a site. In principle it contains a sitemap and the unit's contact data, but other configurations are possible.

The home page

The home page has a special layout with a number of mandatory elements and a content area divided into three columns. This arrangement is subject to a few rules that apply to all UNIFR sites. These rules will be discussed in the in-depth course.

Visual identity and colours

The visual identity (colours, layout, typography) is strictly the same for all UNIFR sites. The only variation that occurs is a color code that differs according to the faculties. This colour code is an aid to user orientation. It is therefore in principle binding for all organizational units. The different faculty colors are as follows:

Faculty of Theology	Faculty of Arts	Faculty of Law
Faculty of Eco Science	Faculties of Science	Interfaculty
Central services		

Responsive Webdesign

UNIFR websites behave in a "responsive" way, i.e. the layout of pages and content automatically adapts to the devices

(traditional computers, tablets, smartphones) on which they are consulted. This technology uses the notion of layouts and boxes that will react according to the width of the screen on which the web page is read.
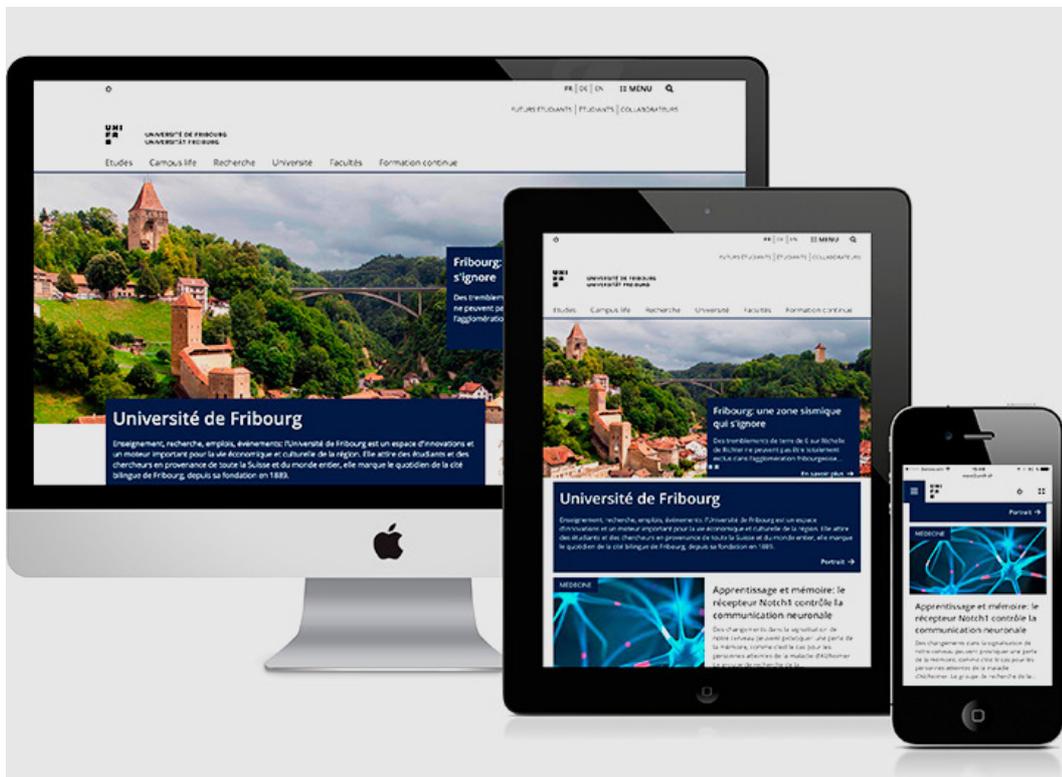
2. ACCESS TO THE MANAGEMENT INTERFACE

2.1 CONNECTION TO THE MODX MANAGER

The connection to the website management interface is done via a browser by completing the website URL with the `termination/manager.`

Example: your website has the URL `www.unifr.ch/uniguest`

Access to the MODx Manager will be via the URL `www.unifr.ch/uniguest/manager`

Then click on **Login eAccount to be** able to identify yourself using your UNIFR user account (SwitchAAI Interface).
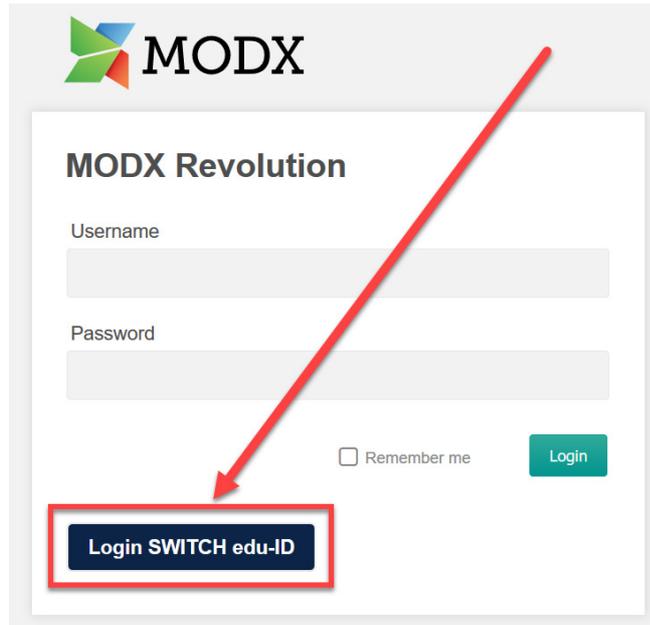
For work in the MODx Manager it is strongly recommended to use the
Chrome browser . The use of any other browser (Firefox, Internet Explorer or Safari) is strongly discouraged. If you do not have Chrome on your personal computer, your IT representative can help you install it.

2.2 GRANTING OF ACCESS RIGHTS

The management of access rights to the MODx Manager is centralized at UNICOM. If you are responsible for modifying the contents of a website but do not have the necessary access, please make an access request to webmaster@unifr.ch.

2.3 PRESENTATION OF THE MANAGEMENT INTERFACE

Site Tree Structure

In the column on the left, choose the **Resources** tab to display the complete tree structure of your website.
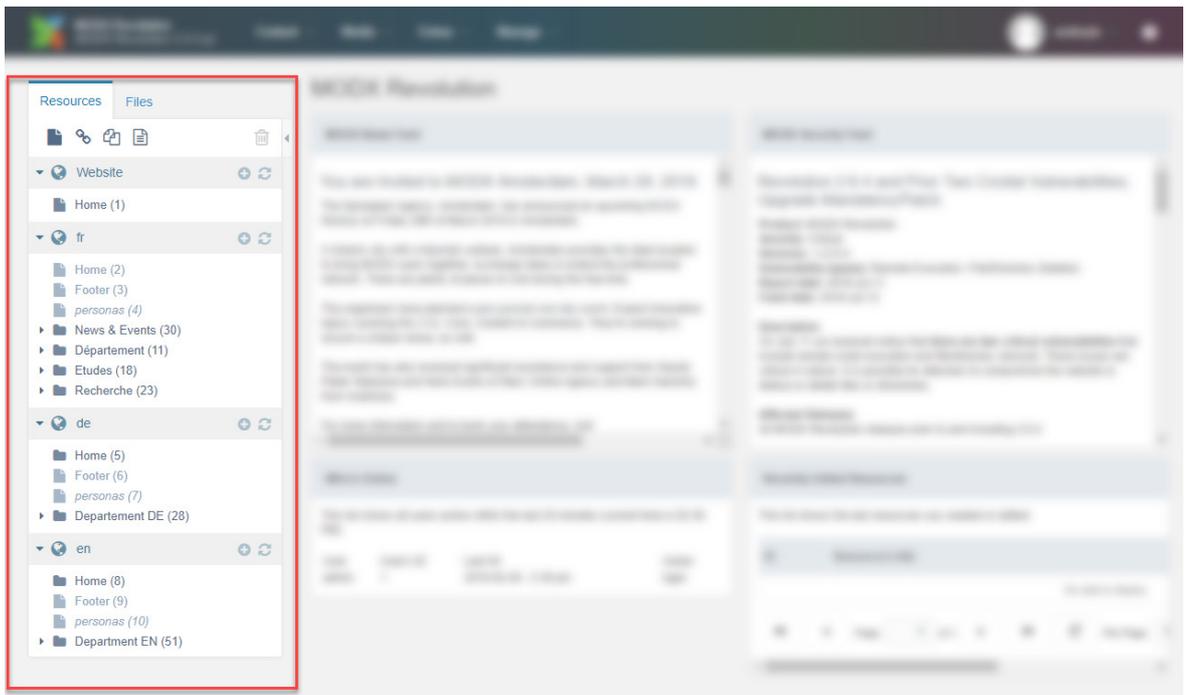
Linguistic contexts

If your site is multilingual, you will see several linguistic contexts appear in the tree structure. If one of the contexts is closed, you can open it and expand its contents by clicking on the icon .

Directory of files

In the column on the left, choose the **Files** tab and then the **Public** folder to display the directory of files stored on your site (images, pdf documents, etc.).
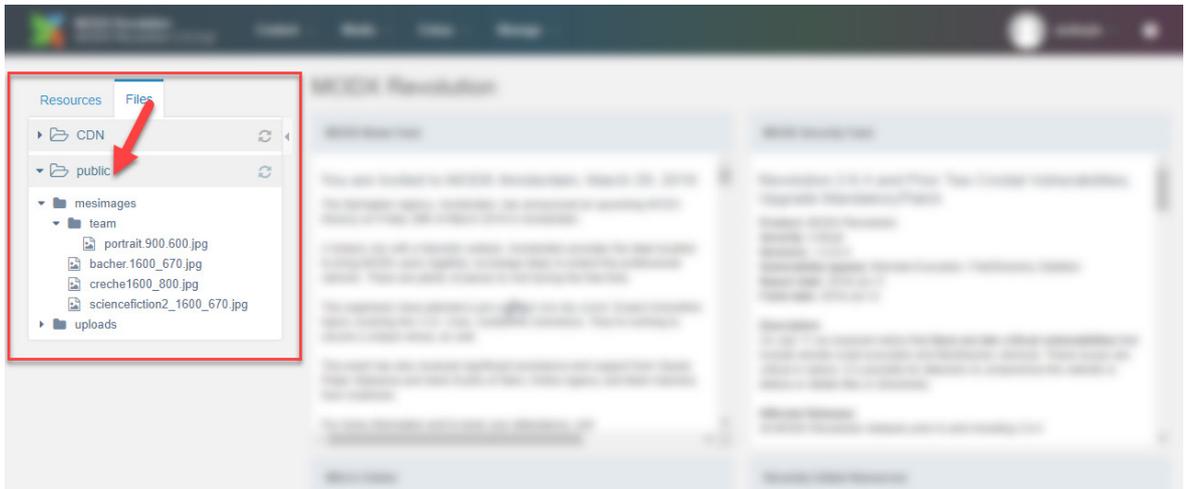
Disconnection

To exit MODx, point with the mouse to the symbol , then click **Logout**.
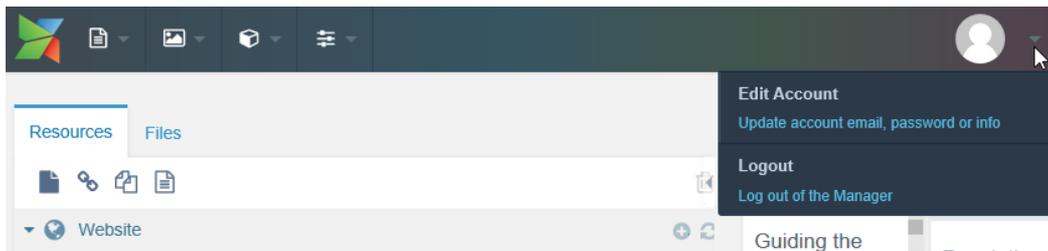
2. EDITING PAGES

2.1 CREATE A NEW WEB PAGE

Place the mouse cursor on the top page in which the new web page is to be created. ***Right-click*** and select **Create Document➜**.
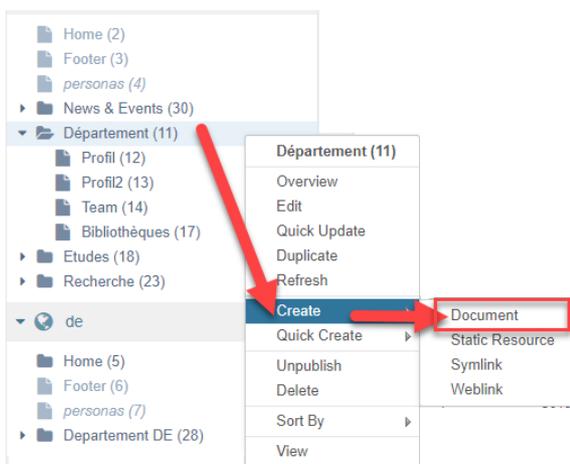
Enter a title in the **Title** field. The latter will be displayed by the browser when viewing the page and used as a criterion by search engines such as Google.

Title*

Présentation du service de mobilité universitaire

Prefer short and bearer securities. Avoid a title such as "about our service" that will not help your page to be referenced. Also avoid abbreviations and acronyms.

The Resource Alias field can be filled in with a text that will be used to form the path to the web page. If no text is entered, the system will generate an alias automatically. It may be modified at a later date.

Resource Alias

presentation

Be careful not to use special characters, accented characters and spaces in the alias name. If the title of your page contains accents and an alias has been generated automatically, it is strongly recommended to modify the alias later in order to delete these accents.

If necessary, enter a shorter alternative title in the **Title Menu** field. This is the title that will be displayed in the website navigation. Recommended if the page title is very long.

Menu Title

Présentation

Select a page template from the **Uses Template** menu, from the *Full*, *Home* or *Sidebar* options (other available templates are not relevant for content pages).

Uses Template

BaseTemplate
Template

BootstrapTemplate - *Bootstrap*

Footer - *Webunifr template*
The footer of your website, now generat...
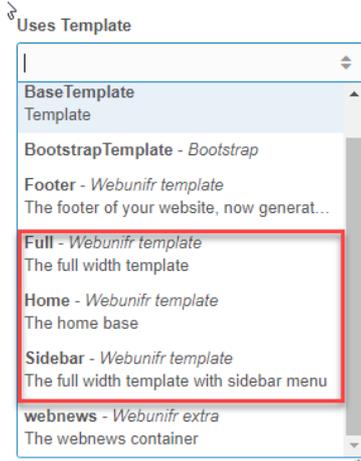
Full - *Webunifr template*
The full width template

Home - *Webunifr template*
The home base

Sidebar - *Webunifr template*
The full width template with sidebar menu

webnews - *Webunifr extra*
The webnews container

The page template will define the basic framework of your new page.

Full house

This model generates a frame that occupies the **full width available** and without secondary navigation.

Sidebar

This template generates a **framework divided into two areas**, with a content area on the right and an area where the secondary navigation menu is displayed on the left.

Home

Reserved for the **home page of** your site.

2.2 PUBLISH, MAKE A PAGE INVISIBLE OR DELETE IT

To publish a page, the **Published** option must be checked. Until the page is published, it will not be accessible to your visitors and will not appear in the navigation, despite the fact that you can view it as an editor.

☐ Hide From Menus

☑ Published

To publish a page while keeping this page invisible in navigation, the **Hide From Menus** option can be checked. In this case, the visitor must have a direct link to the page in order to be able to consult it.

☑ Hide From Menus

☑ Published

To delete a page, *right-click on the* page in question in the tree structure and select **Delete**.
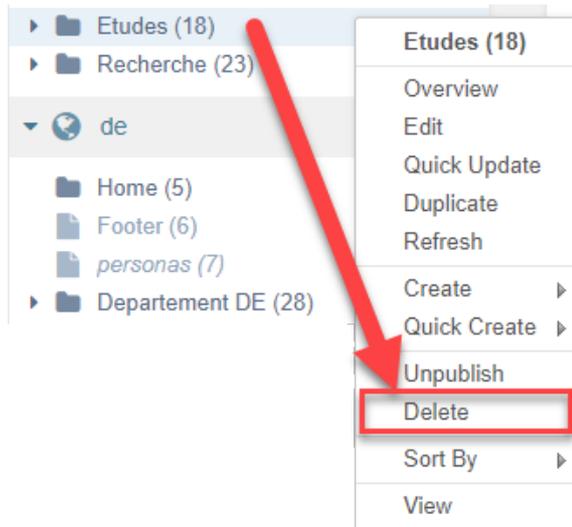
The deletion operation is reversible. It can be cancelled by *right-clicking on the* page in question in the tree structure and selecting **Undelete**.

2.3 MOVE A WEB PAGE

To move a page in the tree structure, simply select the web page, hold down the left mouse button and drag the web page to the destination folder.

2.4 DUPLICATE A PAGE

To duplicate a page, right-click on the page in question in the tree structure and select **Duplicate**. The page is then duplicated with all its content.
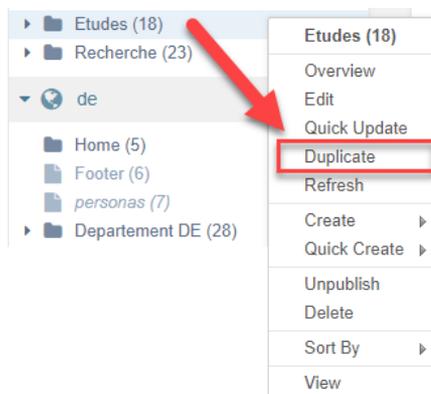
Consider duplicating when preparing several pages with a similar content structure. Indeed, it is much faster to duplicate an existing page and adapt the contents than to create a blank page and add content.

2.5 EMPTY THE MODX CACHE

When changes occur in the navigation structure (creation, moving or deleting pages), these changes may not be directly reflected in the website view. This is due to the *cache* effect (temporary memory) of MODx. In this case, it is recommended to clear the MODx cache.

To do this, select the **Manage** tab in the upper toolbar, then **Clear Cache**.
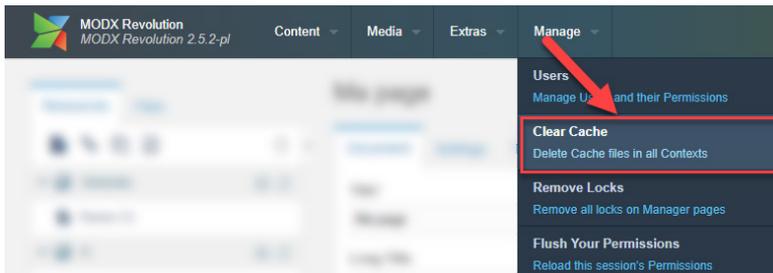
Exercise 1

- *Login to the MODx Manager of the website dedicated to this course (www-test.unifr.ch/demo.../manager)*

- *Create a new page with the title "My first web page" at the bottom of the "Department" page of the linguistic context you have been assigned*

- *Use the "Sidebar" page template for this page*

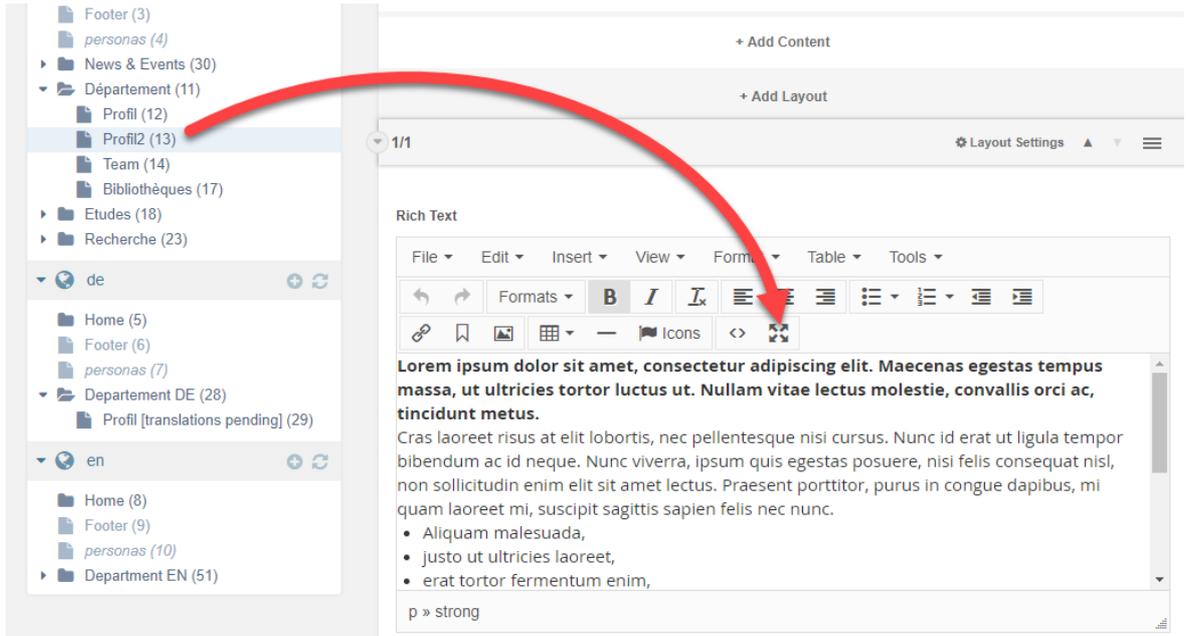- *Use "your first name" as the menu title and publish the page*

3. CONTENT EDITING

3.1 EDITING TEXT WITH THE TEXT EDITOR

To edit the content of a page, left-click on it in the tree structure. Scroll down if necessary until the height of the text editor is reached.

If the surface of the text editor seems too small to you, click on it to ⛶ enlarge the editor to full screen.

The options available to format your text are reduced. Thus, it is not possible to change the font, size or color of a text. This restriction is deliberate and ensures consistency of form on all UNIFR websites.

The predefined styles, available in **Formats**, offer very attractive formatting.

Headers styles are intended to mark a text as a title and define its size.
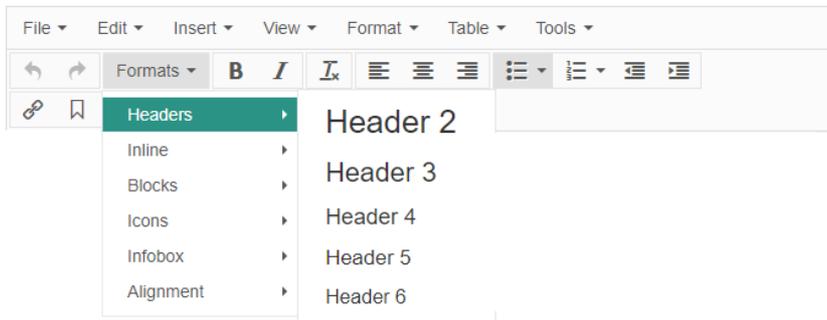

Infobox styles allow you to highlight a particularly important paragraph by adding a background color. Please observe the optional colour code here.
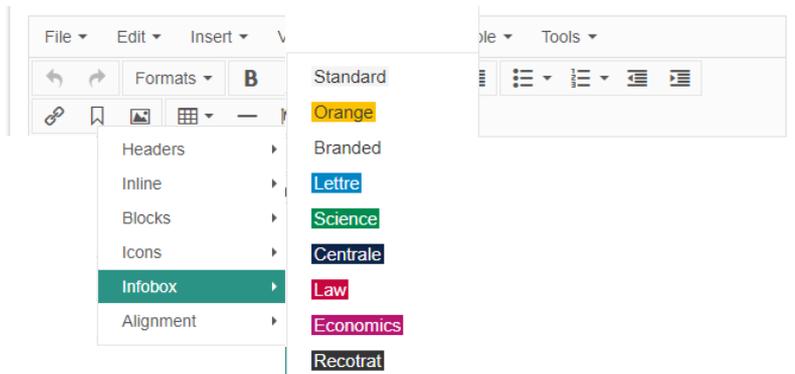
Alignment styles are used to define the alignment of paragraphs. The standard alignment of the texts is on the left. In specific cases, it is possible to center a text or align it on the right. Justified alignment is not possible.

When **importing text from** a Word document by copy/paste, foreign formats can be imported and may cause editing problems or block the editor. It is imperative in this case to **clean up the** intrusive **formatting.** For that we can:

1. Use the **Paste as text** button to paste the text into the editor;
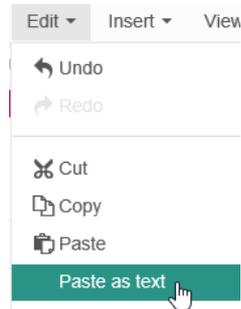
2. Use the **Clear formatting** $\mathcal{I}_x$ command to remove all unnecessary formatting.

For editors who are comfortable with HTML code, the button <> *switches to HTML mode and changes the code.*

3.2 CREATE LINKS WITH THE TEXT EDITOR

To create a hyperlink within a text, first select the text in question in the editor. Then click on the button 🔗 .
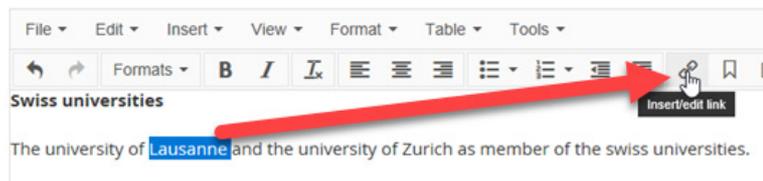
The Url field will allow you to define the target of the link.

- For a *link to another internal page on your site*, search for the name of the page in question in the **Search** field and select the target page
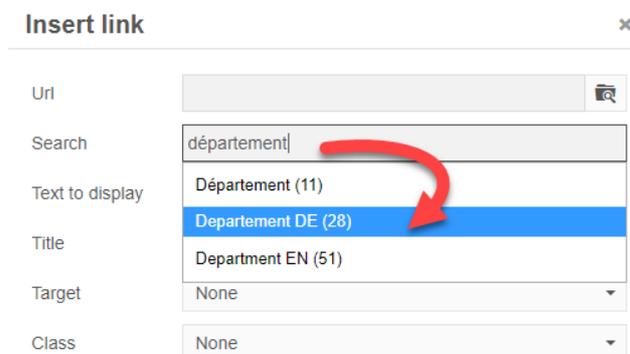
- For a **link to an *external site***, enter the full URL

Url	http://www.berkeley.edu/	
Search		
Text to display	University of Berkeley	

- For a *link to a PDF document*, select the PDF file to display by clicking on ([icon] see below ➔Embedding a document in a page)

Url		[icon]

The Target field will allow you to define the link opening behavior.

- For *all internal links*, leave the option on **None;** the link will open in the same browser window;

Target	None ▾

- For *external links*, change the option to **New Window**, if you want the link to open in a new browser window. This option is not recommended in most cases.

Target	None ▾

The Class field will allow you to define the graphic style of the hyperlink and make it more visible to the user. Among the many classes, only the classes marked in blue are relevant for editors.

- Class **Link** for a *single link without symbol*. The link is automatically positioned on a new line.

  Simple link

- Class **=>Link** for a link to an *internal page of* your site. The link is automatically positioned on a new line. Also suitable for a *list of links*.

  → Link to an internal page

- Class **External link** for a link to a *page external* to your site. The link is automatically positioned on a new line.

  ↗ Link to an external page

- Class **Download** for a link to a *document to download* (PDF or other). The link is automatically positioned on a new line

  ↓ Link to a document

- Class **Inline link** for a *link within a text*

 Lorem ipsum dolor inline link sa dipscing elitr, sed diam nonumy.

- Class **Inline link right after** for a **link to a subpage** inside a box, an invitation to consult additional information.

  Link to a subpage →

3.3 ADDING CONTENT TO A PAGE

To add content to a page, for example in the case of a new blank page, it is necessary to click on **+Add Content**, then select an item from the list of available items.
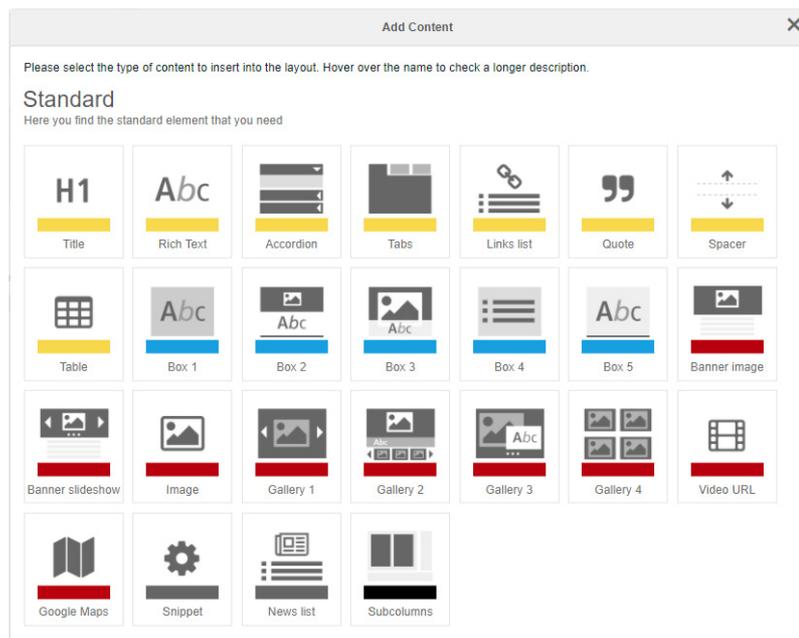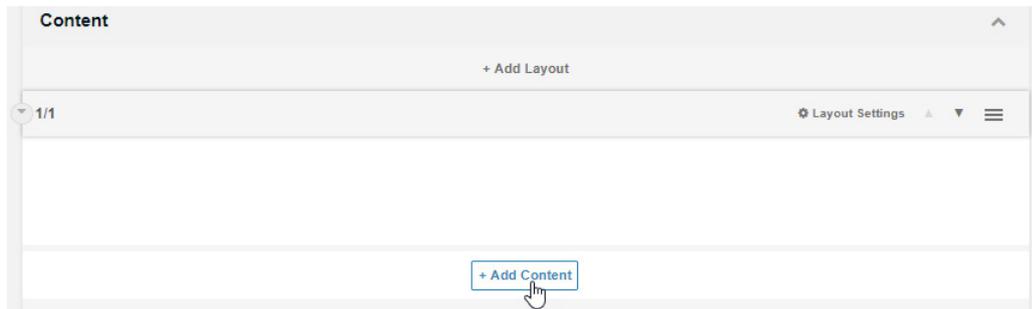
Clicking on **Save** will save the new web page.
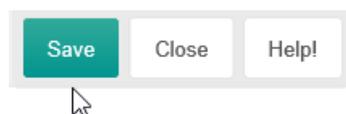
Clicking on **View** will open a preview of the web page in a new browser tab.
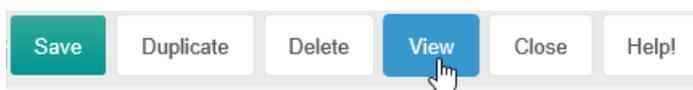
3.4 MAIN CONTENT ELEMENTS

The complete list of content elements available in MODx is described in the **MODx Lexicon** (see online documentation www.unifr.ch/unicom/fr/web/doc/).

We simply describe below the most common content elements and their context of use.

H1 **Element - *Title***

Used to place a title or subtitle in a content page. Not for use on the home page.

A*bc* **Element - *Rich Text***

Used to place text in a content page and format it

⊞ **Element - *Table***

Used only to present data in a table or matrix format.

Not used for text layout. Do not use on the homepage.

A*bc* **Box 1 - *Infobox***

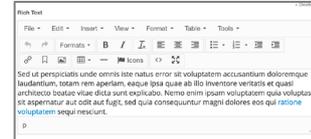Used to **highlight** or make the user aware of **important information** within the page, or in the right-hand context column of a standard page. Cannot be used for long text content (prefer *Richtext* element)

Box 2 - Teaser box

Used to **highlight**, **promote** on the homepage or detail subpages in a landing page. Not used to put the focus in the middle of text content (prefer a *Box 1*), nor to place long texts


Box 3 - Visual teaser box

Used to detail subpages in a **landing page** or to **promote** or highlight in the contextual sidebar. Not used to put the focus in the middle of text content (prefer a *Box 1*), nor to place long texts.

3.5 SETTINGS OF CONTENT ELEMENTS

Most content elements have **specific parameters** that can be modified by calling the *Settings* displayed by a **gearwheel at the** top right of each element.
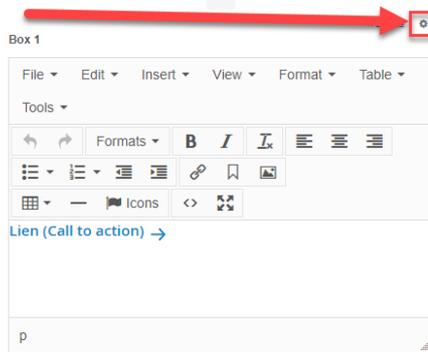
Warning: *Settings* are contextual and may vary depending on the content elements. Depending on the use cases, you can configure it:

- The background color of an element

- The size of an element

- The spacing of an element from the previous or next element

- The target link to which an element should lead

- The scrolling speed of an element.

Exercise 2

- *Insert a title and text in the content of the previously created page. Place a link in the content to the top page "Department". Make sure that this link is marked in blue and preceded by a small arrow.*

4. WORK ON THE LAYOUT

4.1 RESPONSIVE WEB DESIGN AND LAYOUTS

UNIFR websites behave in a "responsive" way, i.e. the layout of pages and content automatically adapts to the devices (traditional computers, tablets, smartphones) on which they are accessed.

This mechanism is based on a **grid** system that structures the layout of each page. In desktop mode, the grid can have the shape of **several columns** arranged next to each other. In tablet or smartphone mode, the columns will adapt to the available screen width and possibly rearrange vertically.

It is important to think about the grid of a web page before placing content on it. To build this grid, MODx provides **Layouts** or *content layouts*. Layouts are containers that define the structure of the page and its responsive behavior, and can then host content elements.

By default, a new web page contains a single layout that occupies the entire available width.

Another frequently used grid is the arrangement on two columns 2/3 + 1/3 which allows for example to distinguish between main and secondary content.
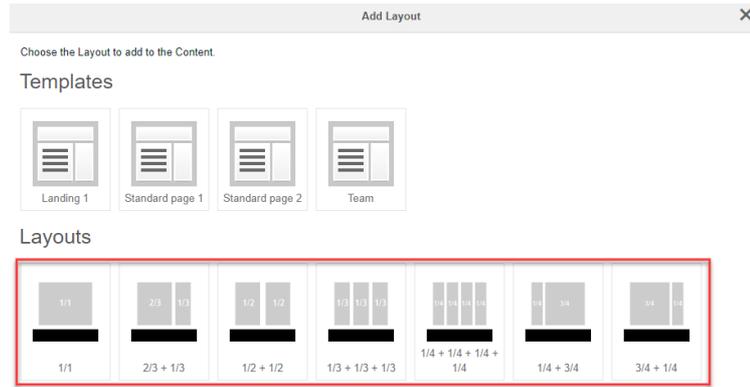

Depending on specific needs, more complex grids can also be built.

4.2 ADD A LAYOUT

In a newly created page, a default layout is automatically added. It occupies the entire available width. Depending on the layout needs, it is possible to add additional layouts.

Click on **+ Add Layout to** do this. The following layouts are available:

Layout 1/1

Only one column in the content area. This is the **default layout** to use in most cases.

Layout 2/3 + 1/3

Typically used to create an arrangement with **a main content column** and a contextual secondary column.

Layout 1/2 + 1/2

Used to order boxes into **two equally wide columns** or to align text with a large image.

Layout 1/3 + 1/3 + 1/3 + 1/3

Used to order boxes into **three columns of equal width**.

Layout 1/4 + 1/4 + 1/4 + 1/4 + 1/4 + 1/4

Used to order boxes into **four columns of equal width**.

Layout 1/4 + 3/4

Use in **rare cases**, for example to **align a small image on the** left with a text on the right.

Layout 3/4 + 1/4

Use in **rare cases**, for example to **align a text** with a small image on the right.

4.3 MOVE THE ELEMENTS OF A PAGE

Within a page, it is possible to move layouts in relation to each other, but also to move content elements from one layout to another.

To **move a layout**, simply use the "Move Up" and "Move Down" arrows visible to the right of "Layout Settings".

To **move a content item**, use drag and drop:

1. position the mouse cursor in the upper part of the element to be moved

2. click on the element, hold down the button, and move the element to its new position

3. do not release the mouse button until the pointer has reached its target.
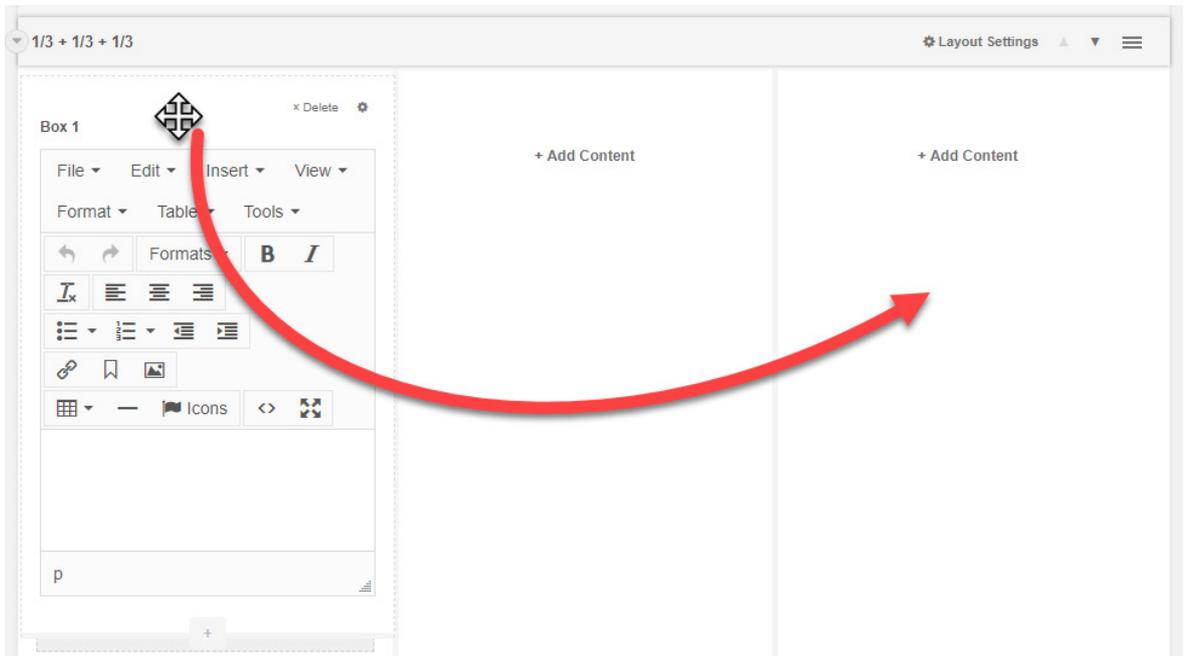
5. IMAGE MANAGEMENT

The MODx Manager provides **two content elements** to publish an image inside a page. They do not have the same use.

Media - Banner Image

Used to place an **image as a banner** in a landing page or content page. The image will automatically be resized and cropped to match the banner format.

Media - *Image*

Used to place an **illustration image** within the text content. The image will automatically be resized according to the available width but not cropped. It is possible to place a link on the image and activate a click enlarge effect.
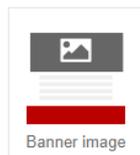
Theoretically, it is also possible to add images via the text editor. However, this solution is absolutely forbidden as it may cause distortion of the image in responsive mode.
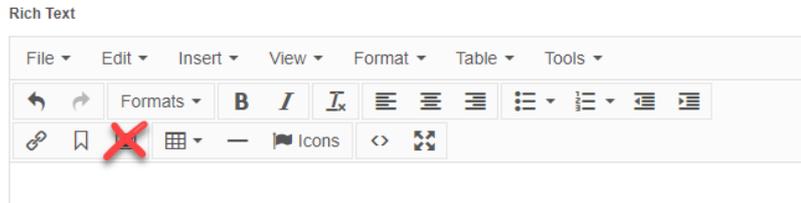
5.1 ADDING A BANNER TO A PAGE

Click on **+ Add Content,** then select the **Banner Image** item.

*A banner is always placed first in your page (before the title and before the text). So choose the **+Add Content** button at the top of the page.*
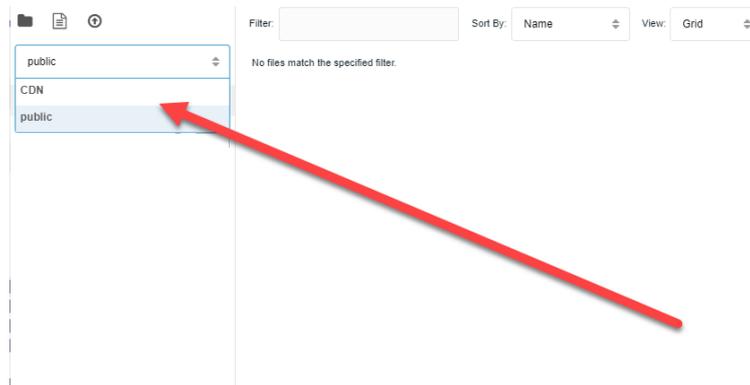
From the Banner Image element, two buttons allow you to insert an image.

Select **Choose** if you wish to insert an image that already exists in one of the physical directories on your website.
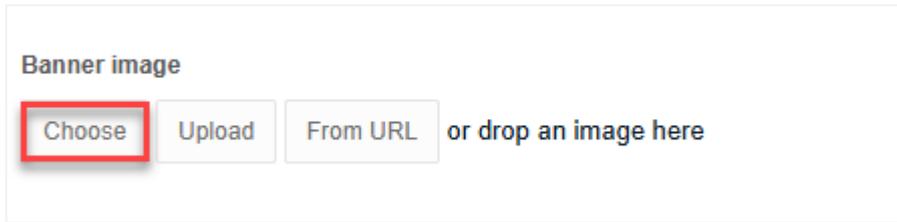
By clicking on **Choose**, you will access your website's Media Browser (file explorer).

In the drop-down menu at the top left, select the **directory** from which the image should be inserted.

.

- The **public** directory contains all files (images, PDFs, etc.) used on your website. You can upload new images to this directory and its subfolders (right-click on the destination folder, then select **Upload Files**)

- The **CDN** directory contains a collection of images made available centrally by UNIFR. You can freely use these images for your web pages. The CDN directory is read-only. You cannot upload new images to it. Its content is managed by the weboffice.

Then browse the directory structure to the location of the image you want to insert and **double-click** on the desired image. The image is then added to the Banner Image element.

Select **Upload** if you want to insert an image from your workspace.
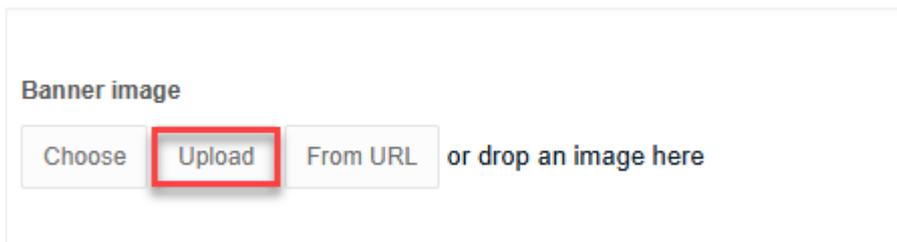
By clicking on **Upload**, you will access your computer's file explorer.

Then browse your explorer to the location where the image to be inserted is located and **double-click** on the desired image. The image is then uploaded and added to the Banner Image element.

5.2 ADDING AN IMAGE TO A PAGE

Click on **+ Add Content,** then select the **Image** item.

An image is never placed first in your page. Use the Image Banner for this.

Proceed as described in the previous chapter to insert an image into the content element.

To place a link on the image, specify the link target in the **Link** field. If the link should lead to another page on your site, enter the name of the page in question in the field.

To activate a **zoom effect** on your image, enable the **Click enlarge** checkbox.
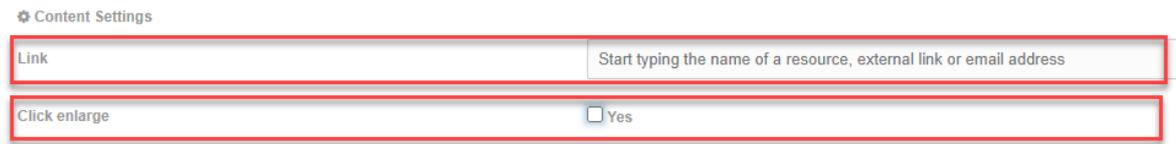
It is also possible to add a **caption** to your image. This caption will be particularly useful for search engines and visually impaired people.

5.3 CROPPING IMAGES IN MODX

Sometimes the images you add to your pages do not match the recommended dimensions. This can cause poor framing, especially for banner images.

In other situations, for aesthetic reasons, it is important that all images on the same page have the same proportions - for example, portraits on a team page.

In these situations, you can crop your images directly in MODX.

After inserting an image into your page, hover over the image with the mouse and click on the **Crop Image** button.
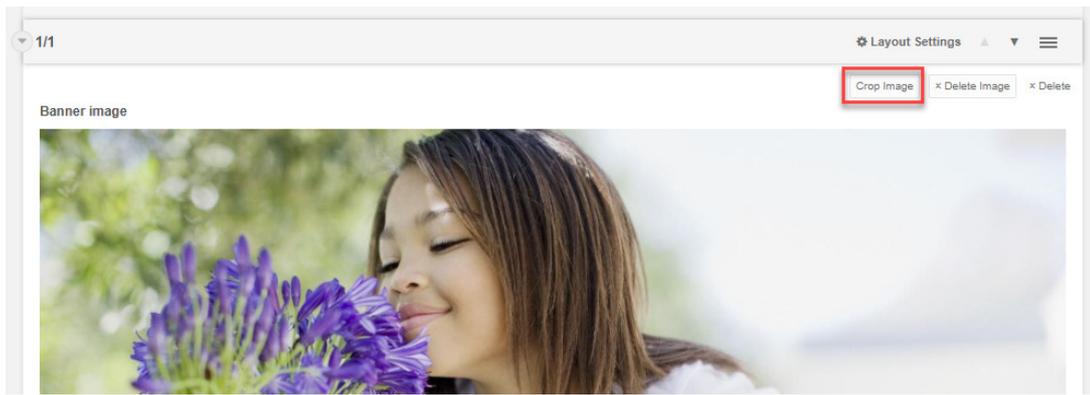
A cropping window will open, in which you can choose from three cropping ratios:
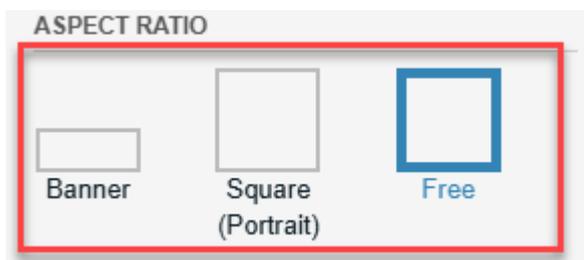
- **Banner** : for optimal cropping of banner images (all images inserted via the Banner Image or Banner Slideshow blocks)
- **Square** : for optimal square cropping of photos of people (for example, on a team page)
- **Free** : for free cropping

You can also enter the recommended cropping dimensions directly in the fields provided, indicating their value in pixels.
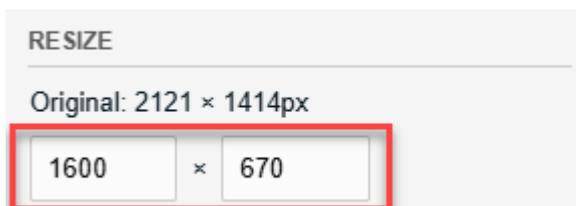
Recommended cropping dimensions :

- Banner images : **1600 x 670 pixels**
- Box images : **800 x 335 pixels**
- Photos of persons : **500 x 500 pixels** (square ratio)

Move the **cropping mask** over your image to select the part of the image you want to keep, then click **Save**.
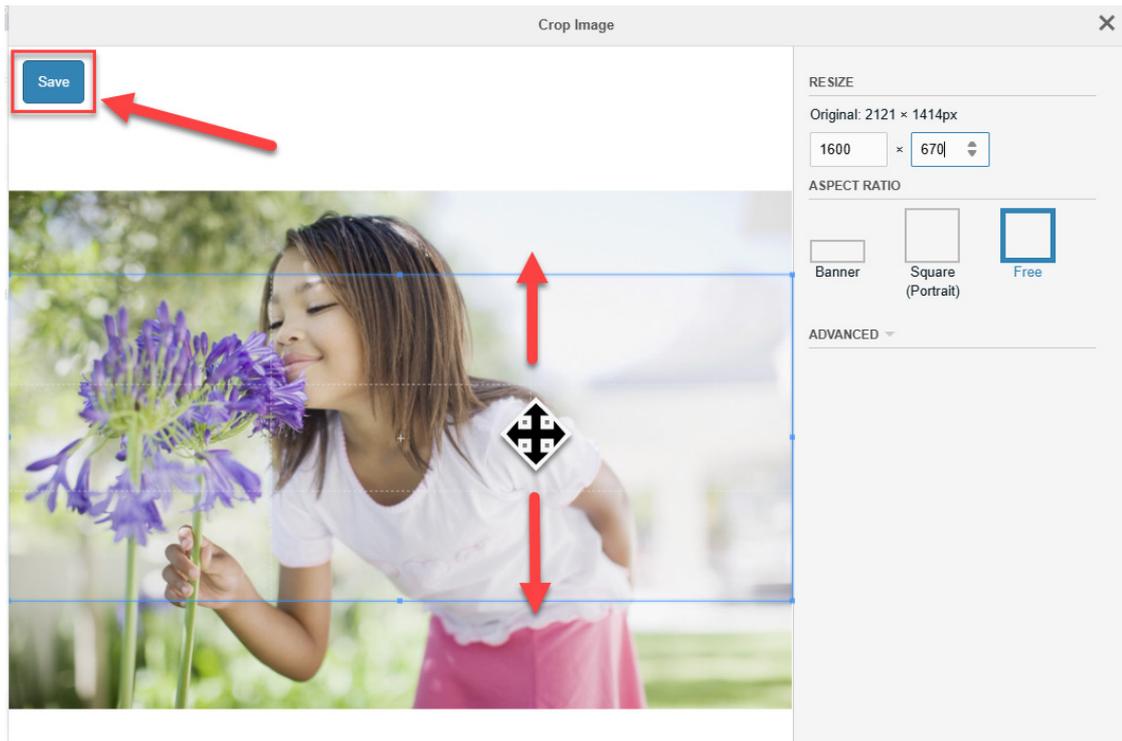
⚠ *CDN images cannot be cropped. They are already ready for use as banner images or box images.*

5.4 USE YOUR OWN IMAGES

It is of course possible to use your own images to illustrate your website. However, some formal specifications and guidelines related to banner images must be respected.

Formal specifications for choosing banner images:

- Focus on **photographs**
- Waive **low quality** images
- Focus on **horizontal** formats and topics
- No **overprinted texts**
- No **graphics**
- No **logos**
- No **white background**
- Clarify the **copyright of** images
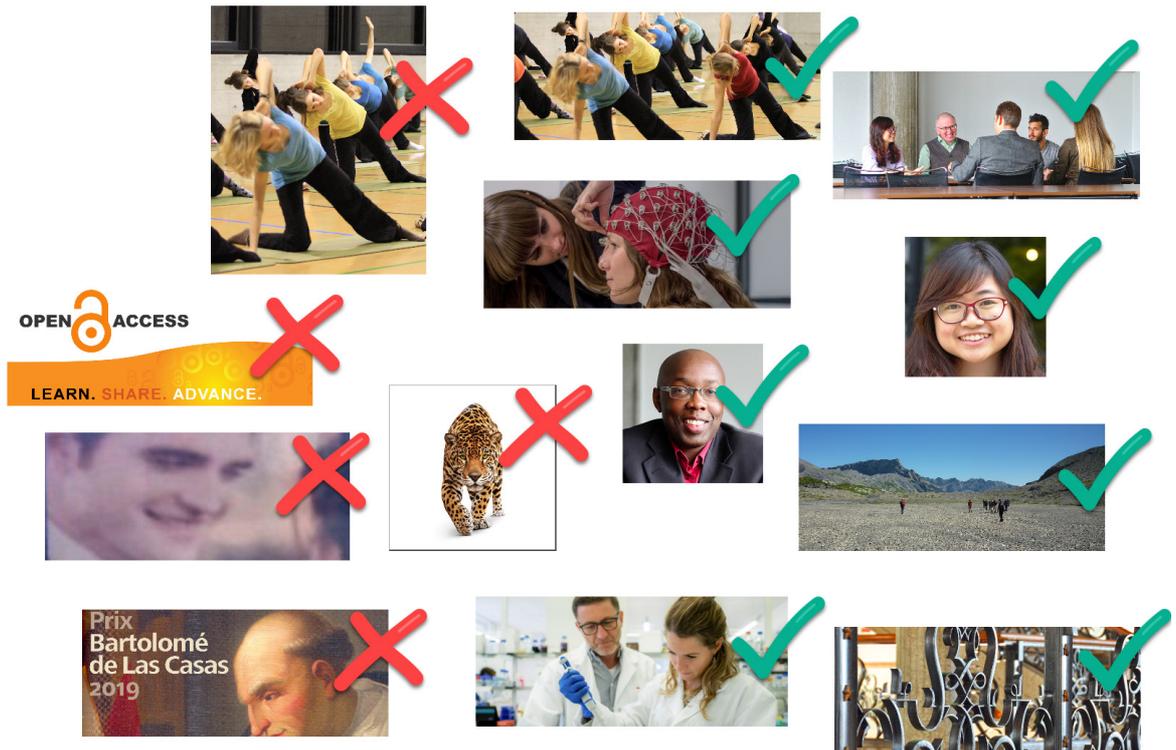
Exercise 3

- *Insert an image as a **banner** in the previously created page. Do this once by selecting an image from the CDN collection, then a second time by uploading an image from your own workspace.*

6. DOCUMENT MANAGEMENT

For a correct publication of documents on your website, it is also important to respect some technical specifications.

Technical specifications for documents:

- Preferred **PDF** format
- **ZIP** format for file packets
- Maximum recommended size **3 MB** per document
- No video files (.mp4, . mov, . mpeg, etc.)
- File name **without special characters, accents or spaces**

## 6.1 UPLOAD A DOCUMENT INTO THE MEDIA BROWSER

If your document meets the criteria listed below, you will need to upload it to your file directory in order to use it on one or more pages.

To do this, select the **Media** tab in the upper toolbar, then select **Media Browser**.
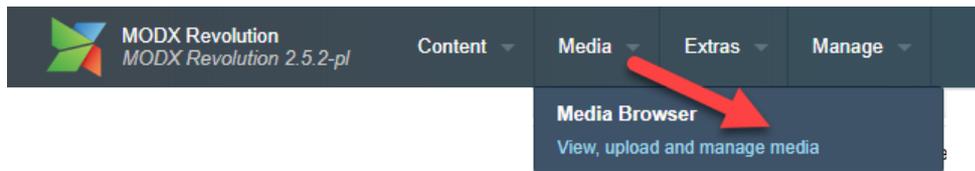
In the public directory, select the sub-folder in which the document will be stored. Or, if necessary, **create a new subfolder**.

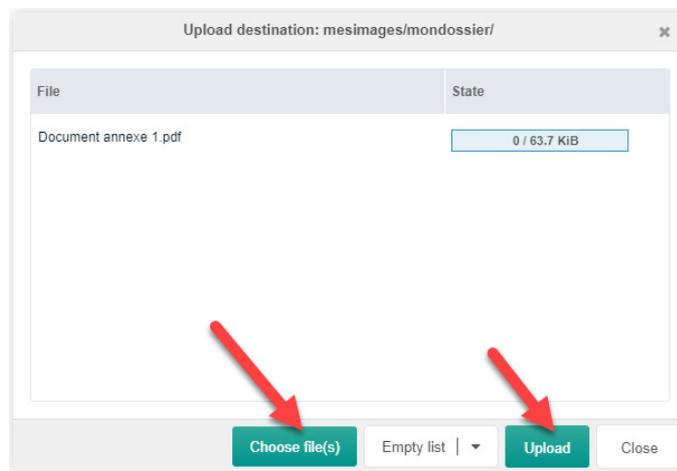Right-click on the sub-folder name and choose **Upload Files**.
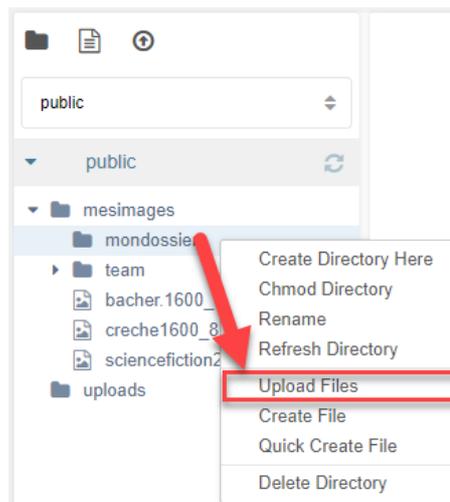
Use the **Choose file(s)** button to pick up the file to download on your workstation.

*Check that the filename does not contain **any special characters, accents or spaces***.

Confirm the download by clicking on **Upload**.

A maximum of 100 documents can be loaded simultaneously.

The file is then downloaded and dropped into the sub-folder that has been specified as the target.

6.2 EMBEDDING A DOCUMENT IN A PAGE

The most common way to publish a document in a page is to create a link to it using the text editor. Care should also be taken to use short and meaningful catchphrase text and to make the link sufficiently visible by applying the appropriate style.

Open the page in which the document is to be integrated. Add a Rich Text element or use a Rich Text element already present on the page.

Enter a significant teaser text, for example "Download the program" and select this text. Then click on the button .
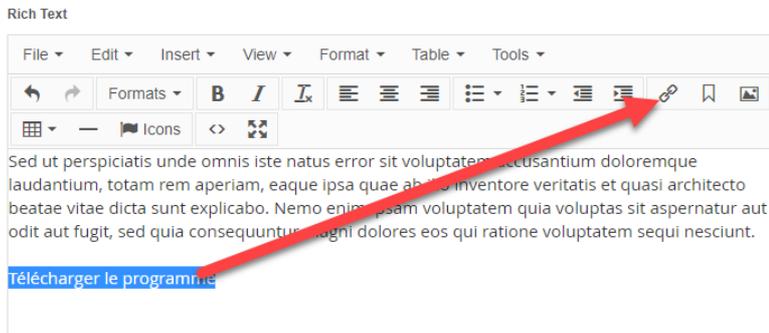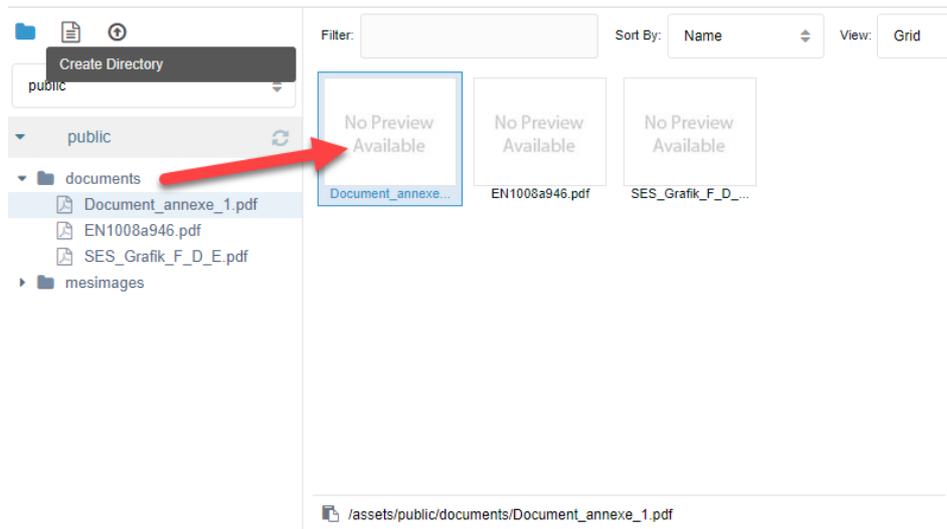
In the Url field select the PDF file to integrate by clicking on

Then browse the **public** directory to the location where the file to be inserted is located.

Double-click on the desired file.

In the **Target** field, change the option on **New Window** if necessary, in order to force the document to open in a new browser window.

In the **Class** field select the **Download** option to apply the appropriate style to the link.

6.3 PROPERLY MANAGE THE FILE DIRECTORY

The file directory is the data center of your website and it is important to respect some rules to ensure a good long-term management of its contents.

1. Structure the file directory into **several sub-folders** (e. g. by document type: publications, flyers, study plan, etc.) or by chronology)

2. Separate folders containing documents from those containing images

3. Avoid **special characters, accents and spaces** in file names and folder names at all costs

4. Never rename or move a folder whose documents are published on the pages (broken link)

5. Never rename a document that is published on a page (broken link)

6. Store only public documents in the directory (all documents will be indexed by Google)

7. Regularly delete documents that are no longer published on your pages

Exercise 4

- *Create a sub-folder named after your first name in the public directory. Submit a PDF document in this folder. Publish this PDF document in the previously created page.*

7. MANAGEMENT OF MULTILINGUAL SITES

If your site is available in several language versions, each language is materialized by a linguistic context in the MODx tree.
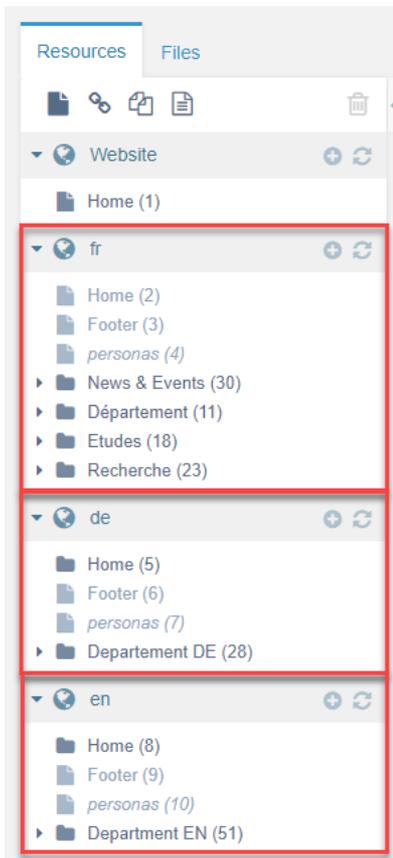
Each page of a language version is logically linked with its counterparts in the other languages. The links can be viewed in the languages tab at the top right. This allows you to move directly from one page to another.
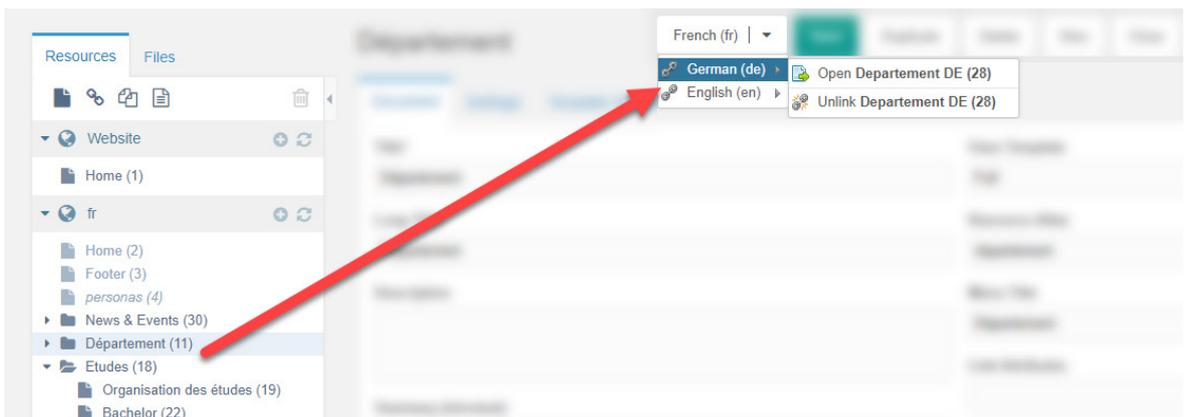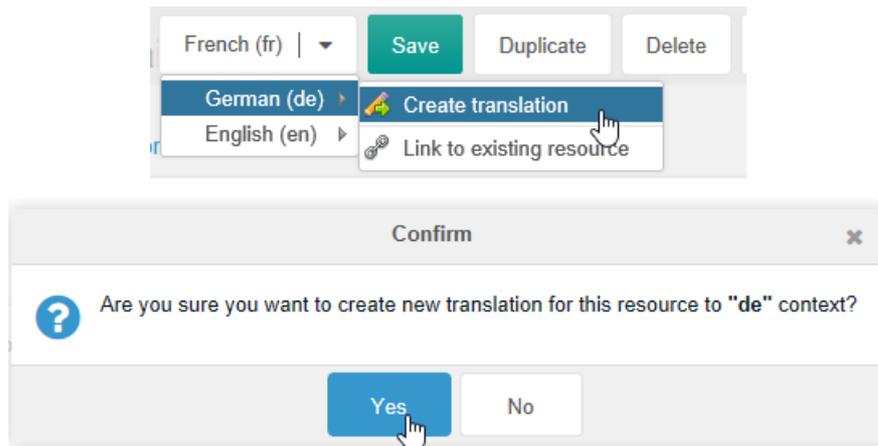

7.1 CREATE A PAGE TRANSLATION

MODx allows you to quickly create page translations by duplicating the entire original page.

From the original page, select the translation language in the languages tab, then **Create Translation**.

The original page is then fully duplicated and placed in the linguistic context of the specified language.

Then simply edit the new page in question and translate the title, menu text and content. The layout does not have to be redone. Don't forget to publish the page once it has been translated.

To use this mechanism effectively, it is necessary to fully finalize a page in the source language, before translating it into the target languages. Indeed, if changes occur later in the original page, they will not be reflected on the target language pages.

7.2 REDO A TRANSLATION

It is not possible to create a second translation of a page that has already been translated. In this case, the **Create Translation** option is not available on the original page.
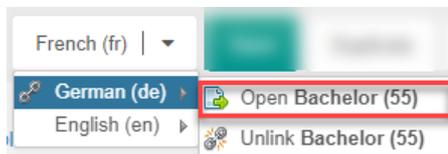
To recreate a translation of the page, for example if substantial changes have been made to the original page, then proceed as follows.

From the original page, select the translation language in the languages tab, then **Unlink**.
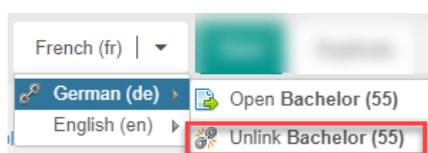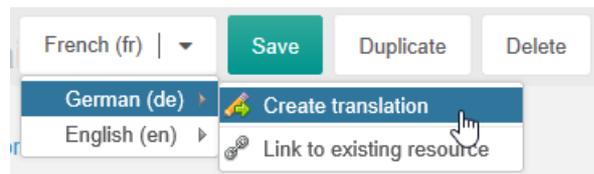
This operation will cancel the logical link between the original page and the translated page.

Then delete the page to be translated in the target language tree.

From the original page, proceed with the new translation by choosing the **Create Translation** option now available.

Exercise 5

- *Translate the page previously created into each of the other language versions available on the site.*

8. ANCILLARY DOCUMENTS

MODx Lexicon: Reference guide for the use of MODx content elements

Campusviews MODx: how to display lists of people and courses

News & agenda modules: how to use the management modules

Writing recommendations for the web: a practical guide for web publishers

Personas WebUnifr: checklist to identify and understand your target audience

To download the documents: www.unifr.ch/unicom/fr/web/doc/