

Points to review (concerning the VMB current version)

1. Connexion

1. Find a more attractive appearance for login page.
2. Change the order of the menu as: Files|Search|Ontologies|Objects
3. The VMB somehow separated and another visual.

2. Files

- Rename «Files» as «Resources»
- (The question is general:) Is it possible to suppress the name of the player (JW Player)?
- Add a window (that may be reconfigurable) below the player where, once a resource is selected, displays the text that corresponds to it (picked up from the ontology/description).
- Think to a different presentation of the list of resources. Perhaps, as archives (list of). The user clicks on the hierarchy of the archives in order to access to the resources of a topic.
- In the case where the list of theses archives becomes long, to dispose up/down cursor.
- Resources may be: videos (2D and 3D), images, texts and sounds. They have to be clearly separated as such in an archive.
- Authorized users (as professors and administrators) may add complementary resources to an archive. In this case, they have to index it (at least, in a minimal manner: a description by a text and a list of keywords). Thus, in this window (dealing with the files), a button offers such a possibility («Import a new resource»). If the user is not authorized (typically, a student), the system suggests her/him to address her/his demand through an authorized person (typically, a professor).
- Add more functionalities to this part. Noticeably:
 - ADD (a new resource not yet existing in the data base, in an specified archive; eventually, be able to create a new archive (and arbitrary) sub-archives) for new resources or for reclassifications of the already existing resources).
 - RENAME (files and archives)
 - SUPPRESS (let us discuss about this functionality, that may be dangerous, of course!)
 - And a SEARCH functionality (as in the Main menu).

3. Main

- Perhaps, «Main» should be renamed as «Home».
- To be possible to come back to «Main» at any moment (not to be forced to logout for that).
- Perhaps, offer the possibility of the language (French, English) here. Which will affect the whole menu in the sequel (that has to appear in FR or in EN).

4. Objects

- Rename «Objects» as «MatrixGenerator»
- The first list containing the already existing presentations has to be adapted for a big number of presentations (with a vertical cursor, like in the files). The window has to specify that this list is the already existing presentations (as, for instance: «Already existing presentations»).
- Think, perhaps, for a better presentation of the first page with the already existing presentations (windows and background).
- This list should be represented as the files list (i.e. with archives and files) in the case

where we have many presentations of the same domain (i.e. Villa Savoye).

- Each presentation may also accept a small text of presentation (to be written in the next window, when we construct a new presentation, and give it a name in order to save it). Thus, in this first window, we can visualize this text (with a mouse over, for instance) and even to show it in a dedicated window at the right of the list of presentations.
- In this same window (with the list of presentations), one can visualize a presentation (VIEW button) or delete it (DELETE button). The NEW button has to be renamed as «Create a new presentation» and be placed by the list or below.
- Perhaps, change the dimensions of the active window, in order to fit it to the screen dimensions (as the rest of the windows).
- When we press on a presentation and we arrive to the next window, put some space at the left of the matrix (currently, it starts from the left beginning of the window).
- Every new matrix (i.e. an object that appears as an array of PoV/Levels) has a 5X3 form (five PoV and 3 levels) by default (currently, there is only a 1X1 array).
- Reduce the width of the list of resources (same as the width of the player), so that one can define more levels (currently, when the number of levels is high, it goes behind the player area).
- With a mouse over (on the videos of the list), show the text that describes the video.
- Is it possible to reduce the size of the thumbnails of the videos, so that they correspond to the actual size of the cells of the matrix, when it becomes more and more big? Another solution would be to have horizontal and vertical cursors. Another, to block the number of levels (until they are correctly displayed) (but there are no limits for the number of PoV).
- Add drag and drop facilities in the matrix (allowing to change the position of a video thumbnail without suppressing it and selecting it a second time from the list of resources).
- Add multiple selection facilities for the thumbnails (in order to suppress them all at once).
- Rename «Edit» as «Edit PoVs and Levels».
- Rename «Remove» as «Remove selected videos». Place the «Remove» button somewhere else. Or, make it possible to suppress a selected video from the matrix by dragging it out of the matrix area or by double click or something like this.
- Add a button allowing to write a small description text of the presentation.
- When we change the name of a presentation, conserve the ancient one. Allow, in this way, to create presentations on the basis of existing such.
- When we change the name of a presentation and go back to the previous page (where we find the list of already existing presentations), we do not find our presentation (we have to refresh the navigator page or logout/login to see it). Please, correct it.

5. Ontologies

- Rename «Ontologies» as «Concept Hierarchy»
- Separate (at the level of the main menu) «Concept Hierarchy» (that would be for creating an ontology i.e. that corresponds to the current «Edit Ontology») and «Indexation» (that would correspond to the current «Index video»). In other words, introduce a new tab called «Indexation».
- In the «Edit Ontology» (that has to be renamed as «Edit Concept Hierarchy») add a button «New Concept Hierarchy» (for the creation of such a hierarchy from scratch).
- Implement a visual way of constructing concept hierarchies (perhaps without deleting

the ancient way that already exists, that may remain as option). For instance, like here: <http://jaredly.github.io/treed>.

- For indexing, the better would be something that allows to work directly on the tree structure. We start from the name and the PoV, then, by clicking to a PoV, a zoom allows to see the structure contained to the corresponding node, etc. (i.e. like in the www.prezi.com presentations).
- Again, for all windows containing video files, we follow the same presentation as previously (i.e. in a window, we find archives and files of the videos).
- Find a more attractive way to present all these (new) windows (exploiting all the height of the screen and with a more dark color (than white)).
- All resources can be indexed (even texts, images and sounds). For texts, images and sounds, a short description and a list of keywords will be sufficient (this is also the minimal requirement in indexing process for every resource). Thus, we have to change our ontologies in order to contain these complementary pieces of information (we already have the description, but not the list of keywords).

6. Search

1. We have to find a more intuitive way in representing multicriteria search (perhaps, use the current representation but complemented by a tree-based one, as previously with the collapsible tree).
2. When a multicriteria search is launched, we arrive to the «Files» that are restricted to the relevant videos. But when we come back to the search we loose our selection and we have to start from the beginning. Make it possible to come back to the latest form of the user research.
3. We have also to find an ergonomic way to allow search by keywords (one or more, free or through an already existing list).
4. Modify the ergonomics of the whole window. For instance, something like the following:

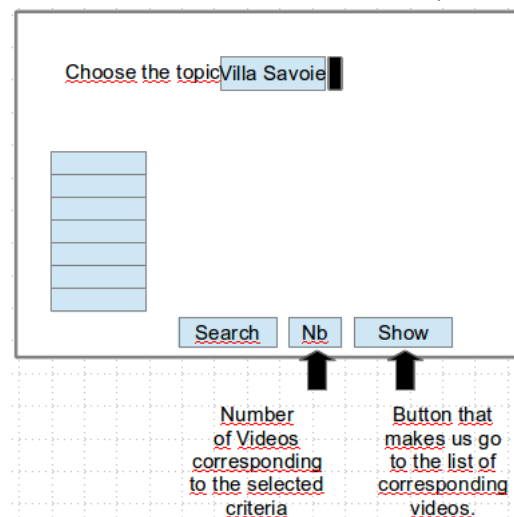


Figure 1: Research panel

7.VMB (version 2)

1. The first page (when someone is logged in) be something like this (attention: we do not figure the permanent menu buttons in the figures below; see Figure 12 for these buttons):

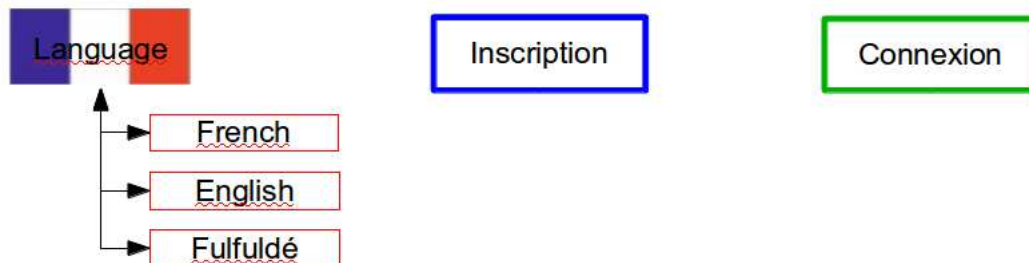


Figure 2: First connexion

Figure 2bis displays two web forms side-by-side. The left form, titled 'Création d'un compte', contains fields for 'Nom' (filled with 'Perso'), 'Prénom' (filled with 'Moi'), 'Courriel' (filled with 'moi.perso@arisal.org'), 'Mot de passe' (masked with dots), and 'Confirmation'. It includes 'Reset' and 'Créer mon compte' buttons. The right form, titled 'Connexion', has fields for 'Email' and 'Mot de passe', with a 'oublie ?' link next to the password field. A 'CONNEXION' button is located below the fields.

Figure 2bis: A classical protocol deals with the inscription and the connection to the service. There is no possibility to access the service without account.

Professors, curators, etc. (i.e., persons with major activity, the creation and the management of presentations), have special rights given by the administrator (who maintains the list of such rights). In particular, one has to be registered by the administrator as user with complementary rights (as a professor, a curator, etc.).

- **User1:** we typically think of a student, a museum visitor... Generally, someone desiring to learn by receiving presentations and even making some classwork.
 - **User2:** typically, we think of a professor, a curator... In other words, someone who conceives presentations for some public and, perhaps, evaluates presentations of others.
2. User1 is either an individual that belongs to a class (and, thus, is connected in the framework of a classwork) or an individual alone (that is connected for personal reasons). Students of a class have the same code (given by the professor) for accessing to a presentation (already made up). They all can access the service, but each of them may operate with it individually. The student views the recommended presentation. Once connected, the student arrives at something like (general case (visualization)):

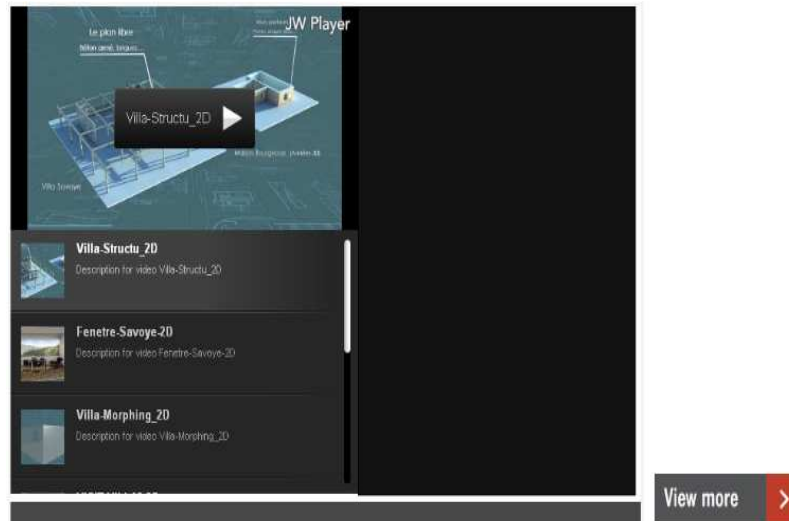


Figure 3: The user sees here the presentation proposed by a professor. She/he can skip it (by pressing the button «View More») at any moment, arriving directly to somehow like in the Figure 4.

Description of basic functionalities.

- When «User1» is selected on this page, we suppose that we are in the case of a student, aiming at viewing a presentation and, eventually, create one, and share it with her/his community.
- Generally, each student has to be identified as student of a class (by her/his professor through the administrating facilities of the system); she/he then has access to all presentations of all professors and all topics (the resources are structured under classical file hierarchies (categories); presentations are separated from resources).
- Moreover, she/he can find there some complementary presentations that have been defined upstream as «default presentations» (and that are included in these archives) as well as presentations done by other professors (using the same resources of the official resources base).
- There, she/he can consult the existing presentations by topic.
- She/he can also have the benefit of a recommendation system (that allows to refine and/or extend the presentations she/he views).
- She/he can even create a presentation and share it in a dedicated space with other students (working space of the community). Sharing means that she/he drop the presentation in the common space (so that can be viewed by all).
- She/he can, moreover, import a new resource (not already existing in the system) for her/his presentation. But the indexation of such a new resource is not mandatory (i.e. such resources may not be indexed; and thus, they cannot belong to the official base of resources).
- There are two working spaces: Professor's space and student's space. Each space contains the resources and the presentations.

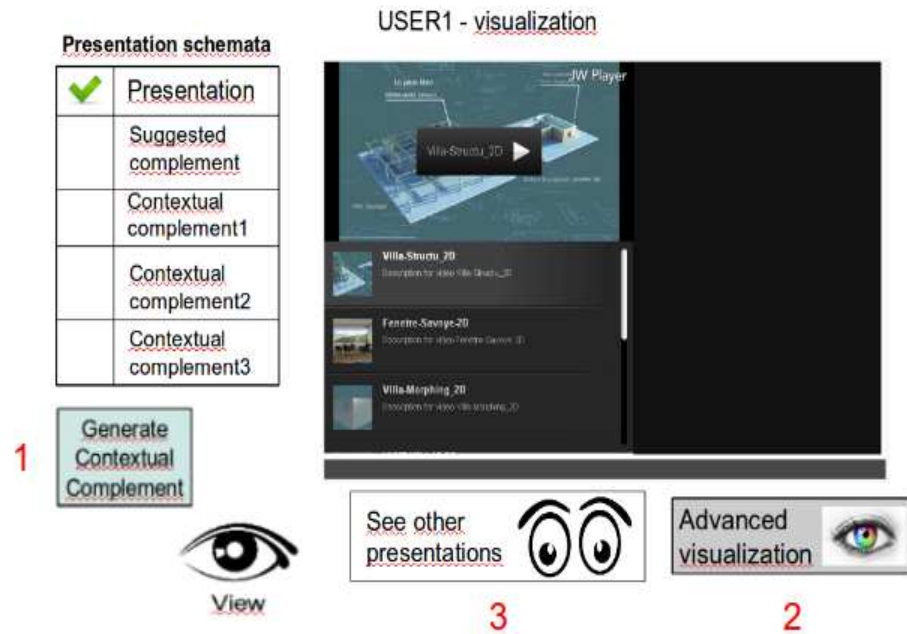


Figure 4: Visualization of complementary pedagogical material, creation and sharing possibilities.

- When the first presentation is finished or if the user skipped it, by pressing the «View More» button, we arrive to an interface like in the Figure 4. On the left panel, the user may choose the presentation (and its complements) she/he desires to view. The contextual complements are generated (button 1 «Generate Contextual Complement») on the basis of what the user has already viewed, incrementally (first press => first complement, second press => second complement, etc.). With «View», one sees the selected presentations (or parts of presentation).
- Here enters in application the «completion algorithm» of the recommendation system (see section 5 below).
- When «Advanced visualization» is selected (button 2), the user1 can be also a «limited creator» (in the sense that she/he can create a new presentation, on the basis of the presentation of the professor; but, for the moment, she/he cannot change neither the matrix nor the resources it contains). Firstly, she/he arrives at something like the following:

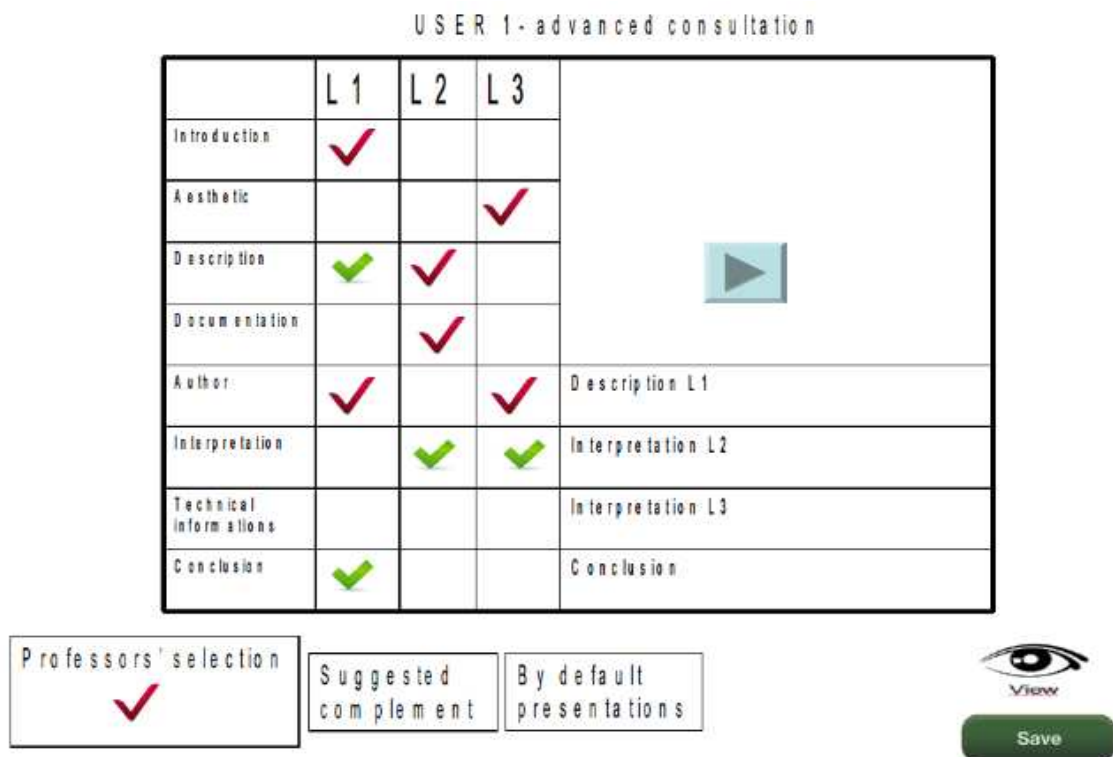


Figure 5: During the advanced visualization, the user1 just creates new presentations on the basis of a given matrix and resources (from where the presentation of the professor comes).

- By clicking on the buttons «Professor's selection», «Suggested complement» and «By default presentations», she/he can see on the matrix the corresponding presentations; but NOT the list giving the order of presentation of the video clips, below the player. She/he can select any of these buttons and even more of them at the same time; videos selected are presented only once (even if they are present in many selections). (Perhaps, we can also specify (with different colors) if a clip is taken once, twice or even three times.) She/he can then build her/his presentation by selecting or de-selecting the displayed resources. Only her/his selection is displayed below the player, in the usual manner. If she/he press the button «View», she/he comes back to something like in Figure 3 (displaying her/his own presentation). And she/he can follow with the protocol of Figure 4.
- Moreover, here, the user1 can save the selection she/he made. Clearly, in this case, as the user1 is a student, the presentation created is saved only in students' space.

The «See other presentations» button (number (3) on the Figure 4).

- This button concerns all the presentations inside the topic in which the student is engaged (for instance, only Geology, only Villa Savoye, etc.). NOT all the presentations at disposal in the system (on other subjects).
- «Other presentations» covers three categories : i) by default presentations on the subject, ii) presentations made by other

professors (or other presentations of the same professor of the same subject) and iii) presentations of other students always on the subject. The user1 arrives to an interface like the following:

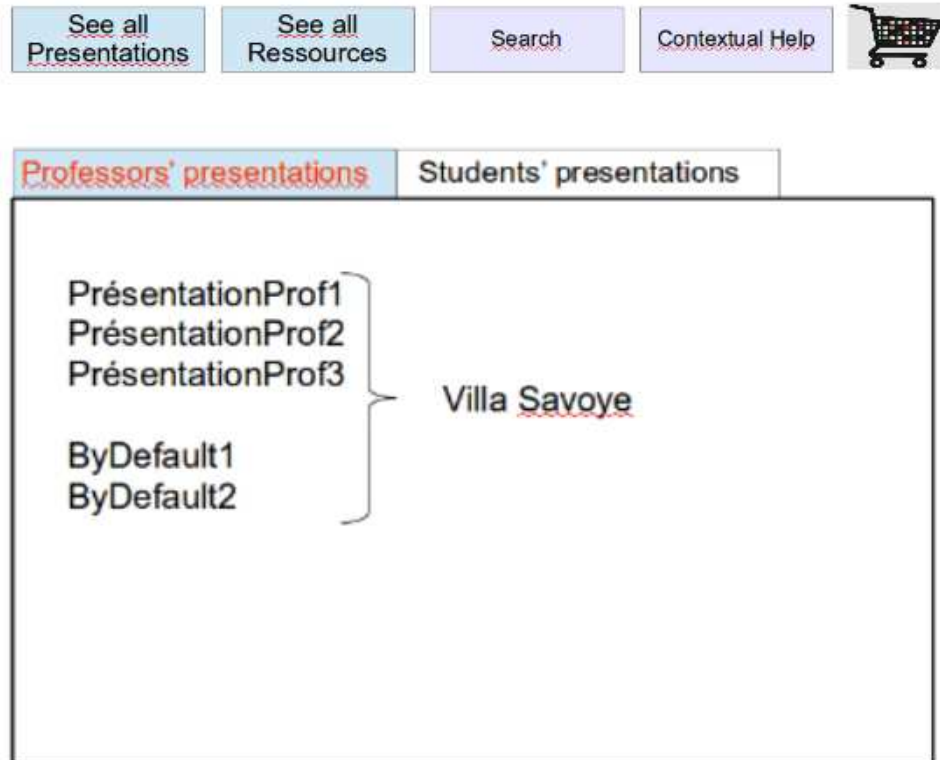


Figure 6: The «See Other Presentations» functionality. The list of presentation of the concerned topic (here, Villa Savoye) is split into two: the list of presentations of other professors and by default presentations. When the user1 click on any of them, she/he arrives to the Figure 3 and starts the same procedure.

- Pressing the button «Students' presentations» we arrive to a similar interface (with the presentations made up by students). But here one has not the list of ByDefault presentations.
- The «See all presentations» and «See all resources» buttons (as well as the buttons «Contextual Help» and «Search») will be present to all all pages since the interface given by Figure 4. They are somehow a standard menu on the right above.
- Pressing the button «See all presentations» we arrive to something like the following:

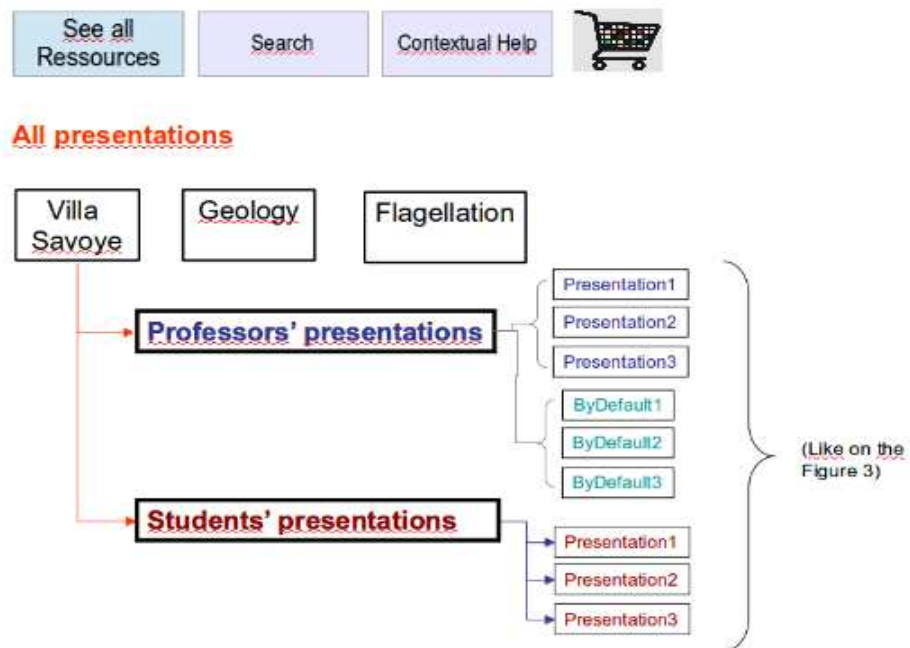


Figure 7: The «See all presentations» function. When a presentation of any of these lists is selected, we jump to the Figure 3 interface.

- Pressing the button «See all resources» we arrive to something like the following:

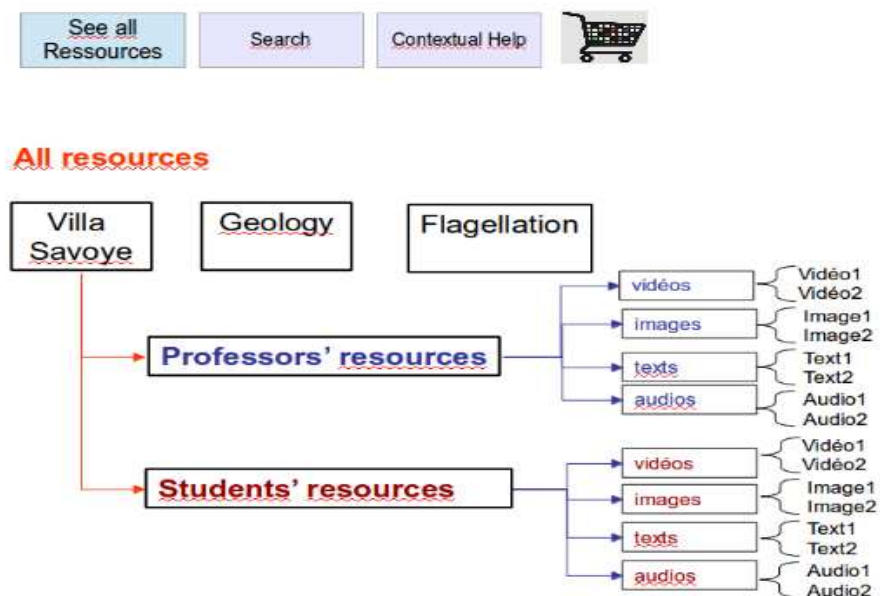


Figure 8: The «See all resources» function. When a resource of any of these lists is selected, we can view it and, if we want, place it in our caddy.

- The «Contextual Help» will give information about how the current page is structured and functions (what we obtain in pressing the buttons in the current page). It will be present to all pages, of course.
- The «Search» button is the search engine for finding resources (but NOT presentations: one cannot search a particular presentation).
- The «Caddy» button makes us arrive to a space where are conserved resources and/or presentations for further use. The «Caddy» button is always visible (generic menu). It is equally split into a resource and a presentation part, as the professor and student spaces.

Create and/or share a presentation.

Here the case is this of a user who wants to create a presentation on a particular topic. This creation is broad: she/he can of course use the points of view and the levels of an already existing presentation, but she/he can also define them from scratch. In other terms, here the student operates as a professor; the only difference is that she/he is not forced to index the complementary resources she/he imports for this presentations that remain, together with the presentation, saved in the students' space.

- In order to create a presentation, she/he has to be identified as such (student).
- By a mouse-over on the button «Create and/or share a presentation» (see Figures 11 and 13), she/he chooses firstly, the creation mode (from scratch or based on an already existing presentation).
- When «from scratch» is chosen, she/he jumps to something like the following:

Create a new presentation (from scratch)

Objects (Matrix Generator)

	L1	L2	L3
PoV1			
PoV2			
PoV3			
PoV4			
PoV5			



Valid resources

- VS-Audios 0 élément dossier
- VS-Texts 0 élément dossier
- VS-Videos2D 5 éléments dossier
 - Fenetre-Savoie-2D.mp4 18.4 Mo vidéo MPEG-4
 - Villa-Epoque_2D.mp4 10.3 Mo vidéo MPEG-4
 - Villa-Morphing_2D.mp4 19.9 Mo vidéo MPEG-4
 - Villa-Plan_2D.mp4 77.3 Mo vidéo MPEG-4
 - Villa-Structu_2D.mp4 100.0 Mo vidéo MPEG-4
- VS-Videos3D 4 éléments dossier
 - VISIT-VILLA1-3D5.mp4 52.7 Mo vidéo MPEG-4
 - VISIT-VILLA2-3D5.mp4 102.2 Mo vidéo MPEG-4
 - VISIT-VILLA3-3D5.mp4 338.5 Mo vidéo MPEG-4
 - VISIT-VILLA4-3D5.mp4 119.2 Mo vidéo MPEG-4

Student resources

- OrestisAndTheFuries
- SimiAndThe7Dwarfs
- WhateverYouWish
- AliasPortantPatroule.jpg

Import New Resources

Edit annotations	Add
Ville-Epoque_2D	00:02:15
Villa-Morphing_2D	00:00:54
Villa-Structu_2D	00:02:51
VISIT-VILLA2-2D	00:01:18
VISIT-VILLA1-2D	00:00:41
VISIT-VILLA3-2D	00:04:43
Fenetre-Savoie-2D	00:00:32
VISIT-VILLA4-2D	00:01:32
Villa-Plan_2D	00:03:24

Total duration of:

00:18:10

Figure 9: Creating a presentation from scratch (student case). Clearly, the page is complemented by usual permanent menu buttons (up) and evident one (SAVE, SHARE, etc.). On the other hand, the list of videos (right down) has to be understood as a list containing two parts (main and suggested list of videos). The professor can choose the space where the presentation will appear. The student necessarily saves in the student space.

- She/he has first to create the matrix (by defining the points of view and the levels she/he needs for her/his presentation). Then, she/he imports the resources to the cells of this matrix, from the official (validated resources) or the unofficial (student resources) space.
- A particular point: the user1 has to complete all the matrix in order to make the recommendation system work. User1 has also to specify


her/his presentation. That means: the order of the videos, eventual complementary list of videos (suggested complement), annotations, etc.

- What we describe above is the general functionalities. She/he can, of course, save, edit, etc. facilities (as already implemented for Matrix Generator (previously, Objects)).
- Moreover, she/he has the possibility to import resources from her/his computer.
- Once the presentation is built up, she/he can save it (in the student's space) and even invite friends to visualize it (as a professor can do it).
- When, by mouse over, the option «creating a presentation on the basis of an already existing such» is selected, she/he arrives to something like the following:

Create a presentation (based on another one)

Objects (Matrix Generator)

	L1	L2
Introduction	✓	
Contexte		✓
Construction	✓	
Esthétique		✓
Fonctionnalités	✓	✓



Valid presentations	Student presentations	Valid resources	Student resources
SimiPresentation1 OrestisPresentation ObamaPresentation SimiPresentation2	ShrekPresentation13	Gonos C44b C44c C44d C44e C44f C44g C44h C44i C44j C44k C44l C44m C44n C44o C44p C44q C44r C44s C44t C44u C44v C44w C44x C44y C44z C45a C45b C45c C45d C45e C45f C45g C45h C45i C45j C45k C45l C45m C45n C45o C45p C45q C45r C45s C45t C45u C45v C45w C45x C45y C45z C46a C46b C46c C46d C46e C46f C46g C46h C46i C46j C46k C46l C46m C46n C46o C46p C46q C46r C46s C46t C46u C46v C46w C46x C46y C46z C47a C47b C47c C47d C47e C47f C47g C47h C47i C47j C47k C47l C47m C47n C47o C47p C47q C47r C47s C47t C47u C47v C47w C47x C47y C47z C48a C48b C48c C48d C48e C48f C48g C48h C48i C48j C48k C48l C48m C48n C48o C48p C48q C48r C48s C48t C48u C48v C48w C48x C48y C48z C49a C49b C49c C49d C49e C49f C49g C49h C49i C49j C49k C49l C49m C49n C49o C49p C49q C49r C49s C49t C49u C49v C49w C49x C49y C49z C50a C50b C50c C50d C50e C50f C50g C50h C50i C50j C50k C50l C50m C50n C50o C50p C50q C50r C50s C50t C50u C50v C50w C50x C50y C50z C51a C51b C51c C51d C51e C51f C51g C51h C51i C51j C51k C51l C51m C51n C51o C51p C51q C51r C51s C51t C51u C51v C51w C51x C51y C51z C52a C52b C52c C52d C52e C52f C52g C52h C52i C52j C52k C52l C52m C52n C52o C52p C52q C52r C52s C52t C52u C52v C52w C52x C52y C52z C53a C53b C53c C53d C53e C53f C53g C53h C53i C53j C53k C53l C53m C53n C53o C53p C53q C53r C53s C53t C53u C53v C53w C53x C53y C53z C54a C54b C54c C54d C54e C54f C54g C54h C54i C54j C54k C54l C54m C54n C54o C54p C54q C54r C54s C54t C54u C54v C54w C54x C54y C54z C55a C55b C55c C55d C55e C55f C55g C55h C55i C55j C55k C55l C55m C55n C55o C55p C55q C55r C55s C55t C55u C55v C55w C55x C55y C55z C56a C56b C56c C56d C56e C56f C56g C56h C56i C56j C56k C56l C56m C56n C56o C56p C56q C56r C56s C56t C56u C56v C56w C56x C56y C56z C57a C57b C57c C57d C57e C57f C57g C57h C57i C57j C57k C57l C57m C57n C57o C57p C57q C57r C57s C57t C57u C57v C57w C57x C57y C57z C58a C58b C58c C58d C58e C58f C58g C58h C58i C58j C58k C58l C58m C58n C58o C58p C58q C58r C58s C58t C58u C58v C58w C58x C58y C58z C59a C59b C59c C59d C59e C59f C59g C59h C59i C59j C59k C59l C59m C59n C59o C59p C59q C59r C59s C59t C59u C59v C59w C59x C59y C59z C60a C60b C60c C60d C60e C60f C60g C60h C60i C60j C60k C60l C60m C60n C60o C60p C60q C60r C60s C60t C60u C60v C60w C60x C60y C60z C61a C61b C61c C61d C61e C61f C61g C61h C61i C61j C61k C61l C61m C61n C61o C61p C61q C61r C61s C61t C61u C61v C61w C61x C61y C61z C62a C62b C62c C62d C62e C62f C62g C62h C62i C62j C62k C62l C62m C62n C62o C62p C62q C62r C62s C62t C62u C62v C62w C62x C62y C62z C63a C63b C63c C63d C63e C63f C63g C63h C63i C63j C63k C63l C63m C63n C63o C63p C63q C63r C63s C63t C63u C63v C63w C63x C63y C63z C64a C64b C64c C64d C64e C64f C64g C64h C64i C64j C64k C64l C64m C64n C64o C64p C64q C64r C64s C64t C64u C64v C64w C64x C64y C64z C65a C65b C65c C65d C65e C65f C65g C65h C65i C65j C65k C65l C65m C65n C65o C65p C65q C65r C65s C65t C65u C65v C65w C65x C65y C65z C66a C66b C66c C66d C66e C66f C66g C66h C66i C66j C66k C66l C66m C66n C66o C66p C66q C66r C66s C66t C66u C66v C66w C66x C66y C66z C67a C67b C67c C67d C67e C67f C67g C67h C67i C67j C67k C67l C67m C67n C67o C67p C67q C67r C67s C67t C67u C67v C67w C67x C67y C67z C68a C68b C68c C68d C68e C68f C68g C68h C68i C68j C68k C68l C68m C68n C68o C68p C68q C68r C68s C68t C68u C68v C68w C68x C68y C68z C69a C69b C69c C69d C69e C69f C69g C69h C69i C69j C69k C69l C69m C69n C69o C69p C69q C69r C69s C69t C69u C69v C69w C69x C69y C69z C70a C70b C70c C70d C70e C70f C70g C70h C70i C70j C70k C70l C70m C70n C70o C70p C70q C70r C70s C70t C70u C70v C70w C70x C70y C70z C71a C71b C71c C71d C71e C71f C71g C71h C71i C71j C71k C71l C71m C71n C71o C71p C71q C71r C71s C71t C71u C71v C71w C71x C71y C71z C72a C72b C72c C72d C72e C72f C72g C72h C72i C72j C72k C72l C72m C72n C72o C72p C72q C72r C72s C72t C72u C72v C72w C72x C72y C72z C73a C73b C73c C73d C73e C73f C73g C73h C73i C73j C73k C73l C73m C73n C73o C73p C73q C73r C73s C73t C73u C73v C73w C73x C73y C73z C74a C74b C74c C74d C74e C74f C74g C74h C74i C74j C74k C74l C74m C74n C74o C74p C74q C74r C74s C74t C74u C74v C74w C74x C74y C74z C75a C75b C75c C75d C75e C75f C75g C75h C75i C75j C75k C75l C75m C75n C75o C75p C75q C75r C75s C75t C75u C75v C75w C75x C75y C75z C76a C76b C76c C76d C76e C76f C76g C76h C76i C76j C76k C76l C76m C76n C76o C76p C76q C76r C76s C76t C76u C76v C76w C76x C76y C76z C77a C77b C77c C77d C77e C77f C77g C77h C77i C77j C77k C77l C77m C77n C77o C77p C77q C77r C77s C77t C77u C77v C77w C77x C77y C77z C78a C78b C78c C78d C78e C78f C78g C78h C78i C78j C78k C78l C78m C78n C78o C78p C78q C78r C78s C78t C78u C78v C78w C78x C78y C78z C79a C79b C79c C79d C79e C79f C79g C79h C79i C79j C79k C79l C79m C79n C79o C79p C79q C79r C79s C79t C79u C79v C79w C79x C79y C79z C80a C80b C80c C80d C80e C80f C80g C80h C80i C80j C80k C80l C80m C80n C80o C80p C80q C80r C80s C80t C80u C80v C80w C80x C80y C80z C81a C81b C81c C81d C81e C81f C81g C81h C81i C81j C81k C81l C81m C81n C81o C81p C81q C81r C81s C81t C81u C81v C81w C81x C81y C81z C82a C82b C82c C82d C82e C82f C82g C82h C82i C82j C82k C82l C82m C82n C82o C82p C82q C82r C82s C82t C82u C82v C82w C82x C82y C82z C83a C83b C83c C83d C83e C83f C83g C83h C83i C83j C83k C83l C83m C83n C83o C83p C83q C83r C83s C83t C83u C83v C83w C83x C83y C83z C84a C84b C84c C84d C84e C84f C84g C84h C84i C84j C84k C84l C84m C84n C84o C84p C84q C84r C84s C84t C84u C84v C84w C84x C84y C84z C85a C85b C85c C85d C85e C85f C85g C85h C85i C85j C85k C85l C85m C85n C85o C85p C85q C85r C85s C85t C85u C85v C85w C85x C85y C85z C86a C86b C86c C86d C86e C86f C86g C86h C86i C86j C86k C86l C86m C86n C86o C86p C86q C86r C86s C86t C86u C86v C86w C86x C86y C86z C87a C87b C87c C87d C87e C87f C87g C87h C87i C87j C87k C87l C87m C87n C87o C87p C87q C87r C87s C87t C87u C87v C87w C87x C87y C87z C88a C88b C88c C88d C88e C88f C88g C88h C88i C88j C88k C88l C88m C88n C88o C88p C88q C88r C88s C88t C88u C88v C88w C88x C88y C88z C89a C89b C89c C89d C89e C89f C89g C89h C89i C89j C89k C89l C89m C89n C89o C89p C89q C89r C89s C89t C89u C89v C89w C89x C89y C89z C90a C90b C90c C90d C90e C90f C90g C90h C90i C90j C90k C90l C90m C90n C90o C90p C90q C90r C90s C90t C90u C90v C90w C90x C90y C90z C91a C91b C91c C91d C91e C91f C91g C91h C91i C91j C91k C91l C91m C91n C91o C91p C91q C91r C91s C91t C91u C91v C91w C91x C91y C91z C92a C92b C92c C92d C92e C92f C92g C92h C92i C92j C92k C92l C92m C92n C92o C92p C92q C92r C92s C92t C92u C92v C92w C92x C92y C92z C93a C93b C93c C93d C93e C93f C93g C93h C93i C93j C93k C93l C93m C93n C93o C93p C93q C93r C93s C93t C93u C93v C93w C93x C93y C93z C94a C94b C94c C94d C94e C94f C94g C94h C94i C94j C94k C94l C94m C94n C94o C94p C94q C94r C94s C94t C94u C94v C94w C94x C94y C94z C95a C95b C95c C95d C95e C95f C95g C95h C95i C95j C95k C95l C95m C95n C95o C95p C95q C95r C95s C95t C95u C95v C95w C95x C95y C95z C96a C96b C96c C96d C96e C96f C96g C96h C96i C96j C96k C96l C96m C96n C96o C96p C96q C96r C96s C96t C96u C96v C96w C96x C96y C96z C97a C97b C97c C97d C97e C97f C97g C97h C97i C97j C97k C97l C97m C97n C97o C97p C97q C97r C97s C97t C97u C97v C97w C97x C97y C97z C98a C98b C98c C98d C98e C98f C98g C98h C98i C98j C98k C98l C98m C98n C98o C98p C98q C98r C98s C98t C98u C98v C98w C98x C98y C98z C99a C99b C99c C99d C99e C99f C99g C99h C99i C99j C99k C99l C99m C99n C99o C99p C99q C99r C99s C99t C99u C99v C99w C99x C99y C99z C100a C100b C100c C100d C100e C100f C100g C100h C100i C100j C100k C100l C100m C100n C100o C100p C100q C100r C100s C100t C100u C100v C100w C100x C100y C100z 	

Edit annotations		Auto
Vila-Epoque_2D	00:22:15	0
Vila-Morphing_2D	00:20:54	0
Vila-Structu_2D	00:22:51	0
VIST-VILLAS-3D	00:21:18	0
VIST-VILLAS-3D	00:20:41	0
VIST-VILLAS-3D	00:24:43	0
Fenetre-Savoye-3D	00:20:32	0
VIST-VILLAS-3D	00:21:32	0
Vila-Plan_2D	00:23:24	0
Total duration of:		00:18:10

Figure 10: Creating a new presentation on the basis of an already existing one. The user1 selects a presentation whose matrix appears up-left instantaneously. Then the usual editing operations are at disposal. Thus, user1 may modify the selected presentation. And even import new resources to complement it. Here, again, we have SAVE, SHARE, etc. buttons; and the list of videos is double-fold (main and suggested list).

- The Matrix (with the Points of View and the Levels) appears already fulfilled, and the selected presentation specified (videos selected, order, complementary list of videos, annotations, etc.). She/he can change instantaneously presentations (and thus the corresponding matrices and lists of videos).
- Clearly, one can also change, in this case, the names of the Points of View and the Levels. And even suppress from or add resources to the presentation (and even import her/his own resources). But she/he cannot suppress a resource or change the name of a resource of the base in the server.

Permanent menu

- Figures 8 and 9 give the essential elements of the interface (not all the details and all the buttons as, «Search», «Contextual Help», «Caddy», etc. buttons).
- We repeat that in the caddy the user can put resources and presentations that she/he choose for further use. Whenever a presentation is viewed or whenever a resource is visualized, there will be always the possibility to «add to my caddy (i.e. my selection)».

User2 (with high rate rights)

1. When «User2» is connected (Figure 2) we are typically in the case of a professor that aims at creating and sharing a presentation with her/his class.
 - Once connected she/he receives specific professor's administration rights. She/he arrives to a page where she/he can view the resources and the existing presentations (of all topics).
 - She/he views an interface like the following:

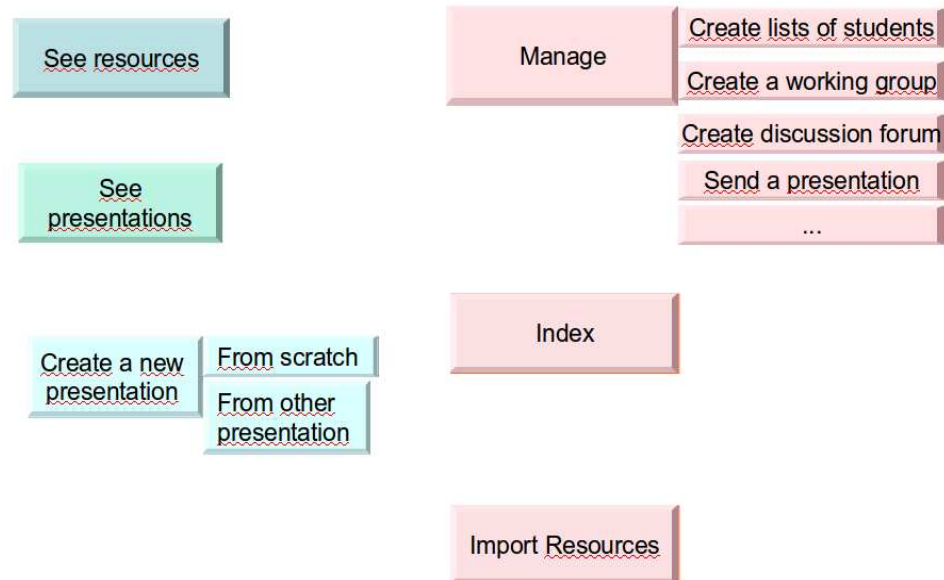


Figure 11: The professor can see resources and presentations (all, professors' or students'), index resources, create presentations, import resources, suppress resources of the students of her/his class, create the list of her/students (as a class group), create and edit working groups, etc.

- When she/he creates a presentation and wishes to save it, the systems ask her/him to index the non indexed resources used for the presentation she/he built up (at least, minimally: a short description and a list of keywords). If she/he indexes it, the resource is saved into the files of official resources; if not, she/he can always achieve her/his presentation, but it will be saved only in the working space of the students. At any time, of course, she/he can return to her/his presentation and transform it to an official such (by indexing the non indexed resources she/he used in building her/his presentation).
- The presentation she/he creates generates an access code (that the professor may communicate to her/his students).

- She/he can split her/his presentation into a mandatory part and an suggested (optional) part.
- When User2 presses «See presentations» she/he arrives to something like the Figure 7. When User2 presses «See resources», she/he arrives to something like the Figure 8. It is, of course, possible not to reserve a special treatment for these two functions and consider them in the basic menu of the page, as in the Figure 6.
- When user presses «Create a presentation», she/he can select by a responsive manner either «From Scratch», «From Other Presentation». She/he then arrives to Figures 9 and Figure 10 respectively.
- Pressing «Import resources» is like in Figures 9 and 10 again. To import a resource, it has to be elementarily indexed (text plus keywords). Otherwise the resource is copied into her/his personal space only (not visible from other users). On the other hand, once a resource is imported and indexed, is automatically placed in the official space (and thus seen by all).
- Pressing «Index», we arrive to the indexing page (previously «Ontologies»). There, we have to implement a complementary module asking the User2 to write a short text and to give some keywords (taken from the ontology) for the resource. This is mandatory for indexing (the minimum but necessary one has to do in indexing).
- Pressing «Manage», User2 can edit the list of students, create a working groups (containing two or more students of the class), send a presentation to an individual, a group or all the class, create a discussion forum, etc. We have to find solutions for all these functions.

The recommendation system.

- It is always operational if one visualizes a presentation (whether this last has a suggested (optional) material, built up by the professor, or not). If there is no suggested list of videos, the recommendation system replaces it in an automatic and somehow intelligent manner.
- The recommendation system completes an already viewed presentation applying always the same algorithm:
- Apply as order of exposition the order of the main presentation (first made by the professor).
- If a point of view does not appear in the presentation (i.e., if there is no video belonging to this point of view), consider the video that has the lowest level in this point of view.
- If a video (of a point of view) appears in the presentation, select the video with the lowest level (of the same point of view) not appearing in the list of the presentation (main and suggested).
- If there is not a video with lowest level than the selected videos, then select the first video (always of the same point of view) that has a level higher than the highest used level of the videos.
- Thus the recommendation system may be called many times, until the

completion of the matrix (i.e., until all videos of the matrix are viewed).

The fundamental menu (i.e. the menu that will appear to almost all the pages).

1. It has to be responsive (activated with mouse over).
2. It has a look like the following:

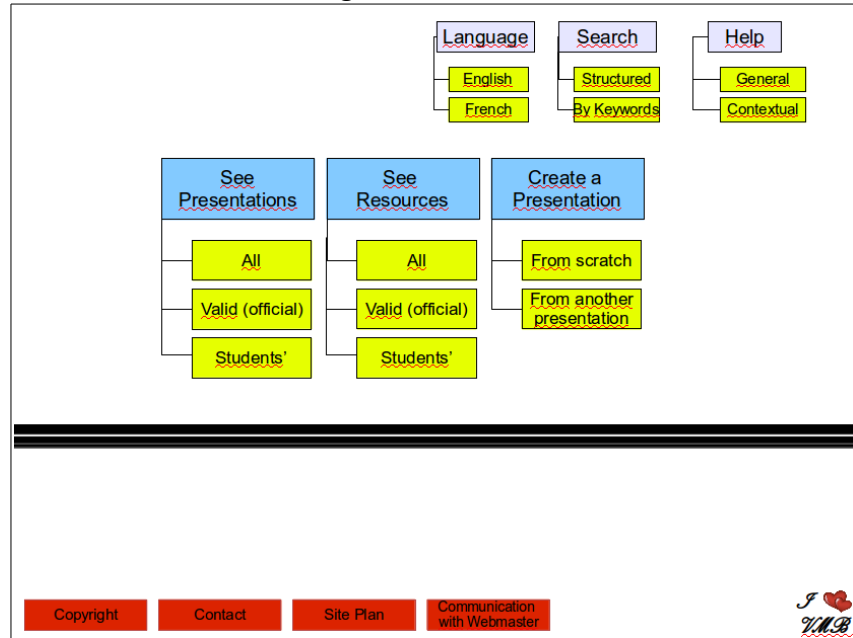


Figure 12: Basic information panels to be seen to many (almost all) pages.

Initial pages

- **Site page:** we have to design this page with a more attractive manner (not only buttons).
- **Connection page:** The usual functions of a connexion procedure.
- One can visit the site either as professor or as student (or as general public/visitor). User1 can thus be connected either as in the Figure 3 (when she/he uses a code in order to view a presentation) or as an already identified visitor (student of a class). In the case where she/he is connected as an already identified user, she/he arrives to something like the following (similar page as Figure 11, by with restricted possibilities):

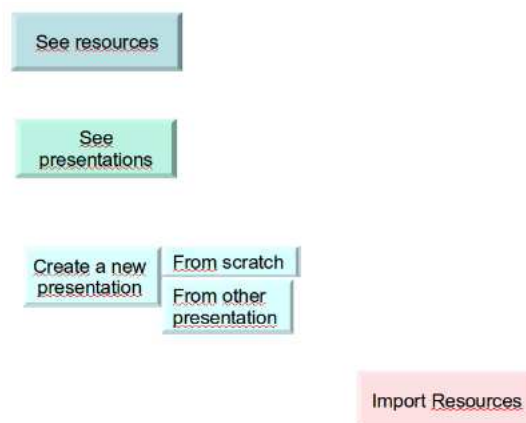


Figure 13: Connection as user with simple rights. Figures 11 and 13 may be merged with the permanent menu (Figure 12) so that the ergonomics be the same.

- Connecting as User2, she/he arrives to the Figure 11.
- In all cases, it will be possible to have usual connection options (change your password, forget the password, etc.).

Last case: when «Administrator» is selected

For the moment, it is the current page of «admin». But administrator, in this new version, is someone who has the whole responsibility of the system. Such profile has to be specified in detail. Generally:

1. Administrator may perform everything that can be done by User1 and User2.
2. She/he distributes rights to new users.
3. Creates classes, groups, etc.
4. Suppresses resources and blocks users.
5. Generally, operates changes to the system.
6. ...

Exemples d'interface

7. Menus

1. <http://www.developgo.com/component/css3-multi-level-menu/preview/9440.html>
2. http://www.developgo.com/component/magic-multipurpose-site-template/preview_live/9558.html
- 3.

8. Navigation

9. Présentation

1. <http://www.developgo.com/component/html5-gallery-banner-with-thumbs.html>
2. http://www.developgo.com/component/photo-video-html5-template/preview_live/9639.html
3. http://www.developgo.com/component/ft_all_files_pack.html
4. (for texts and images) http://www.developgo.com/component/responsive-slideshow-photo-gallery-grid/preview_live/9411.html

10. Divers