

Requirements specification of LeCoOnt

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1 Account Management

Description

The user runs LeCoOnt and is shown a logging dialog to enter their account information (user-name and password). An error message is shown in case of incorrect data. Also, there is the possibility to create new user accounts.

Business Value

Linking the information to a specific user. This also provides data security.

Source

LeCoOnt

Importance

High

2 Creating Concept Map

Description

After correct login of the user, one can create a new concept map where it must have a **name** and a **type**. Furthermore a **namespace** and a **prefix** could be given to the concept map. After that the new empty concept map is **opened**.

Business Value

Grouping together different concept maps. Also provides the possibility of team work on a concept map.

Source

LeCoOnt

Importance

High

3 Opening Concept Map

Description

The user can choose from a list of concept maps to open for editing. When the user opens a concept map, it is added to the **list of currently open concept maps**. Hence the user can open **multiple** concept maps, and choose from the list (list of currently opened concept maps) to view the desired one.

Business Value

The user can work on a concept map previously created, and not start the concept map from the beginning.

Source

LeCoOnt

Importance

High

4 Saving Concept Map

Description

The user can save the work done on a concept map.

Business Value

Data will not be lost. Also allows the user to continue the work later.

Source

LeCoOnt

Importance

High

5 Concept Maps History (Recent Concept maps)

Description

A list is kept of the user's 10 most recently opened concept maps. This list is kept even after the program is closed.

Business Value

This saves time for the user to look in a long list of concept maps.

6 Adding Verticies

Description

Verticies could be added by creating new ones on the current concept map. Each vertex could have a label (which is shown on the map) and details. Also each node has a name (**URI**) to **identify** it. The icon of a node could be changed by changing its type (**stereotype**).

If the label of the created vertex already exists in another concept map on the system, it will be shown in the references list in the vertex creation window to be used if needed.

Business Value

Verticies are the main building blocks to create a concept map. Also referencing verticies from other concept maps gives the possibility of reusing existing data.

Source

LeCoOnt

Importance

High

7 Adding Edges

Description

Nodes could be connected via relations (**edges**) where these could be also be of different types changing the label on the edge. When the user is choosing a relation for the edge, some suggestions are given and could be sorted based on:

- Alphabetically
- Most recently used
- Relevance

If a relation type is not on the suggested list, a new relation could be created by typing its name.

Business Value

This provides a connection between concepts with a relation having a meaning related to the connected verticies.

Source

LeCoOnt

Importance

High

8 Editing the concept map

Description

The user can edit the details of a concept map by adding/removing verticies or edges from it. Existing verticies or edges could be edited by changing their internal data such as labels or descriptions. The user can also change the **meta-data** (name, namespace and prefix) of the concept map itself.

Business Value

Allowing editing to the concept map gives the chance to the user to change previously entered data. This gives flexibility to the use of concept maps.

Source

LeCoOnt

Importance

High

9 Changing Layouts

Description

The positioning of the nodes nodes could be changed manually by dragging the nodes in the map area, where relations stay attached to their nodes. Custom layouts could be designed by the user and saved for later use. Other layouts are possible where the position of nodes is assigned automatically.

Business Value

Changing the positions of nodes makes labels or both nodes and edges clearer. This operation could be done faster using the built-in layouts.

Source

LeCoOnt

Importance

Medium

10 Changing the Look of the Concept Map

Description

The user can change how the verticies and edged look in the concept map in terms of shape, color, and how text appears on these shapes.

Business Value

The facilitates for the user to customize how the concept maps look like other than the default settings.

Source

LeCoOnt

Importance

Low

11 Vertex Viewer

Description

This view shows how a concept is related to different concept maps and information items.

Business Value

This gives to the user an overview of how concepts, information items and concepts maps are connected and related.

Source

LeCoOnt

Importance

High

12 Filtering

Description

The user can filter the concept map to show only nodes based on the filtering query.

Business Value

This provides an ease in the navigation and reading of the concept map.

Source

LeCoOnt

Importance

Middle

13 Information management

Description

The user could attach information to nodes such as files or URIs to indicate a resource related to the concept. This could be added manually by dragging the item to the information items area. When the user adds information items manually, it is possible to choose from different **repositories** (aloe,rico-web) to get the information item from. The user could also choose not to obtain the data from a repository (none). All information regarding a node are placed on the graph. The resources could be directly opened from the graph through the internet browser. Resources attached to a node could be removed or edited according to the needs. The user can reference an information item to many concepts.

Business Value

Adding information to nodes makes concept maps richer in content by adding information to verticies. Furthermore when adding information to a concept, this provides an idea about what this resource is used for.

Source

LeCoOnt

Importance

High

14 Automatic Classification

Description

The user can get all the concepts (verticies) related to the content of the information item via classification. This is done by selecting the information item and opening the classification area where the results will be shown.

Business Value

This provides a fast way of data retrieval and possibly building further concept maps based on the information item.

Source

LeCoOnt

Importance

High

15 Searching

Description

The user can search for any concept (vertex) that contains the queried (searched for) text in any of its labels (label, alternative label,translation). These verticies are from all concept maps on the system and could be added to the current concept map.

Business Value

This makes it faster and easier to build concept maps since existing verticies would be used.

Source

LeCoOnt

Importance

High

16 Using favourites list

Description

The user can have a collection of concepts (verticies) stored in the favourites list. This list could be built up from results of searching/classification or by creating verticies directly in the list. New concept maps could be created from this list selecting the needed verticies and choosing to create a new concept map.

Business Value

This provides a very fast way to create new concept maps.

Source

LeCoOnt

Importance

High

17 Concept Map Quick Search

Description

The user can **select** concepts (verticies) in the concept map by using quick search. The verticies selected are the ones that contain the queried (searched for) text in its **label**.

Business Value

This allows fast selection in the concept map which is useful in editing operations and customizing the layout of the concept map.

Source

LeCoOnt

Importance

Middle

18 Logging User's Actions

Description

As the user is working on the concept map, all actions (adding,editing,removing) are **logged** as the user is performing them.

Business Value

This is useful in keeping track of how the user worked on concept maps.

Source

LeCoOnt

Importance

High