SEMANTIC LEARNING ASSISTANT MANUAL FOR CONSTRUCTION OF SIMPLIFIED ONTOLOGY

The Semantic Learning Assistant is a tool developed for research to support the persistence of data in the process of creating the neighborhood present in the semantic groups, it was necessary to develop a Semantic Learning Assistant to create this model. This assistant proposes to generate a set of semantic groups from keywords in the neighborhood that, when faced with an ambiguous word, allows for establishing a target meaning. This tool comprises six screens, each with a specific objective. On the first screen, the user enters the ambiguous word (Figure 1).

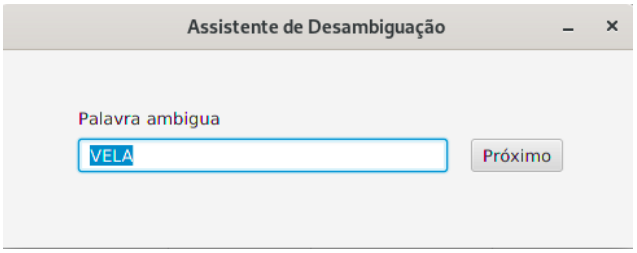

Figure 1. Ambiguous word

On the second screen (Figure 2), the meanings present in the ambiguous word are informed; while on the third screen (Figure 3), the user informs the set of sentences for the target meaning, until all the meanings of the ambiguous word are finished;

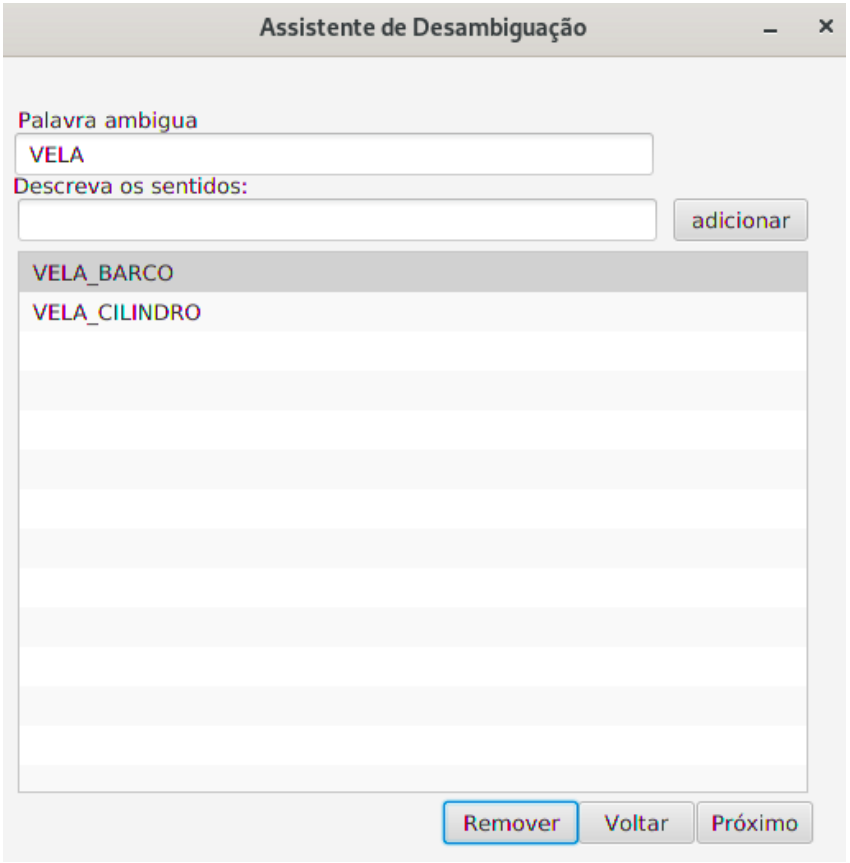

Figure 2. Ambiguous word meanings

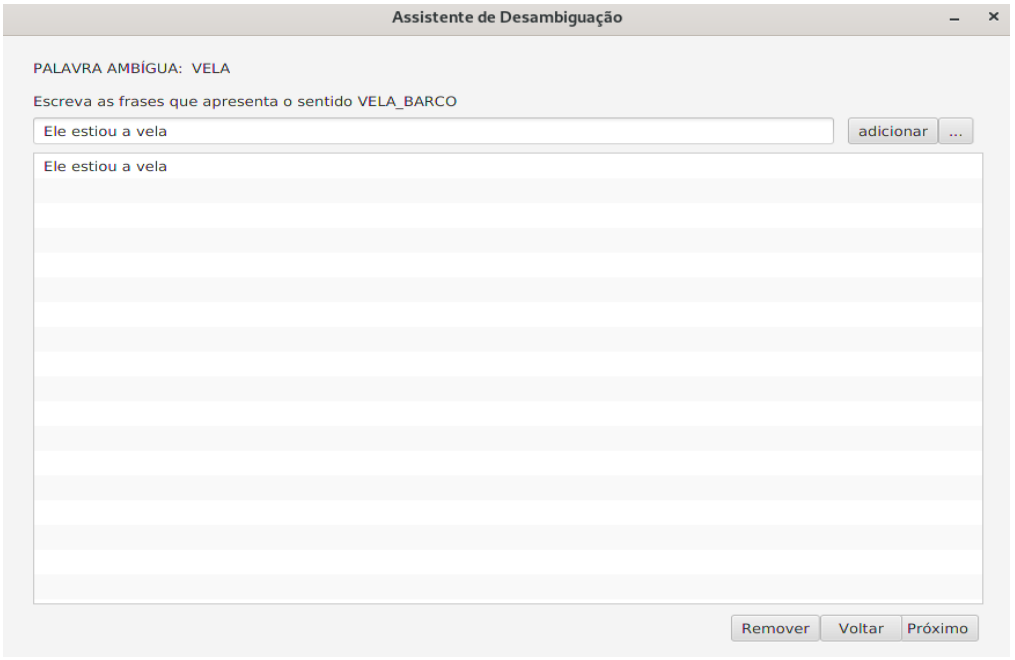

Figure 3. Sentence for meaning

To facilitate the process of registering phrases, the user can choose to insert a set of phrases at once, clicking the "..." button on the phrase register screen, thus, a new screen will be displayed (Figure 4), wherein a TextArea component it is allowed to insert each phrase separated by an enter ('\n') or a text, where equivalently, a sentence will be considered at each line break ('\n').

Figure 4. Set of Sentences

Then, the user informs the sentences of the next meaning, until he finishes all the meanings of this word, as informed in the second screen (Figure 2). On the fourth screen (Figure 5), the user has the option to inform the meaning of each word in the vicinity of the ambiguous word present in the sentences of all meanings. However, in order to facilitate the process of creating the model, the wizard assigns the stem of the word as its default meaning, when dealing with nouns, adjectives, verbs, or adverbs.

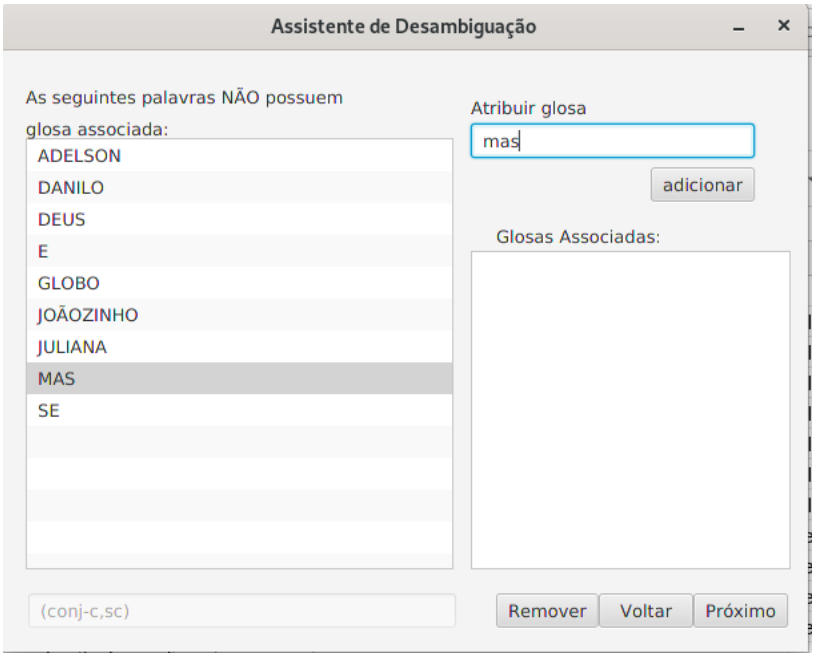

Figure 5. Register of meanings

On the fifth screen (Figure 6), the keywords of the neighborhood that can collaborate with the intended meaning are informed, the user selects the desired words and the words presented refer to the registered phrases, on screen 3 (Figure 3) referring to that meaning.

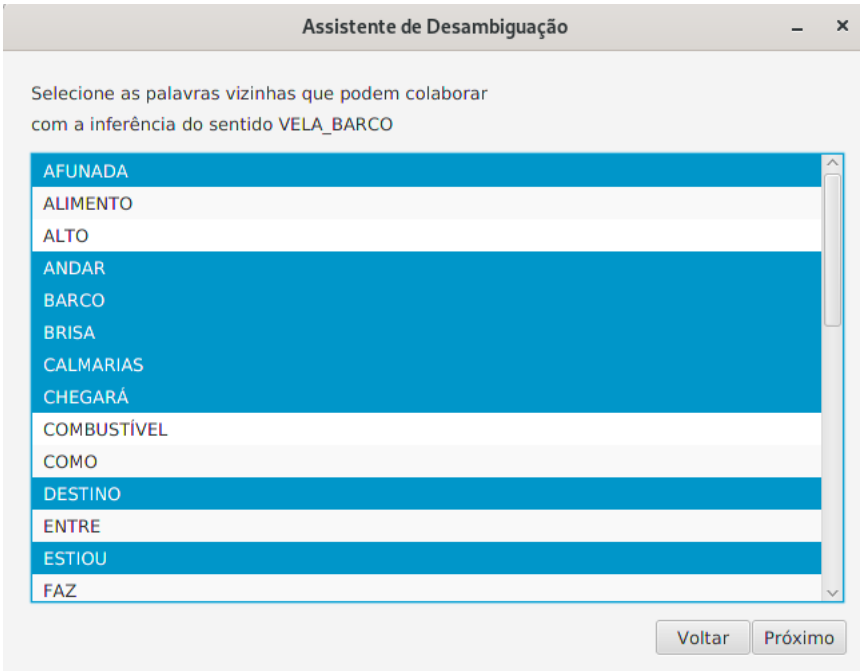

Figure 6. Neighborhood

Next, it is asked to select the neighboring keywords of the next word's meaning. And so, it goes to the next direction until the neighborhood information of each direction is informed on screen 2 (Figure 2).

And finally, on screen 6 (Figure 7), the user creates the semantic groups for each meaning and associates the meanings of the words with these semantics; a semantic group that can belong to several words, as well as a word meaning that can belong to several semantic groups. The wizard also automatically associates the current meaning of the ambiguous word with each semantic group. This step is important for filtering the semantic groups associated with an ambiguous word meaning; that is, an ambiguous word meaning has a set of semantic groups.

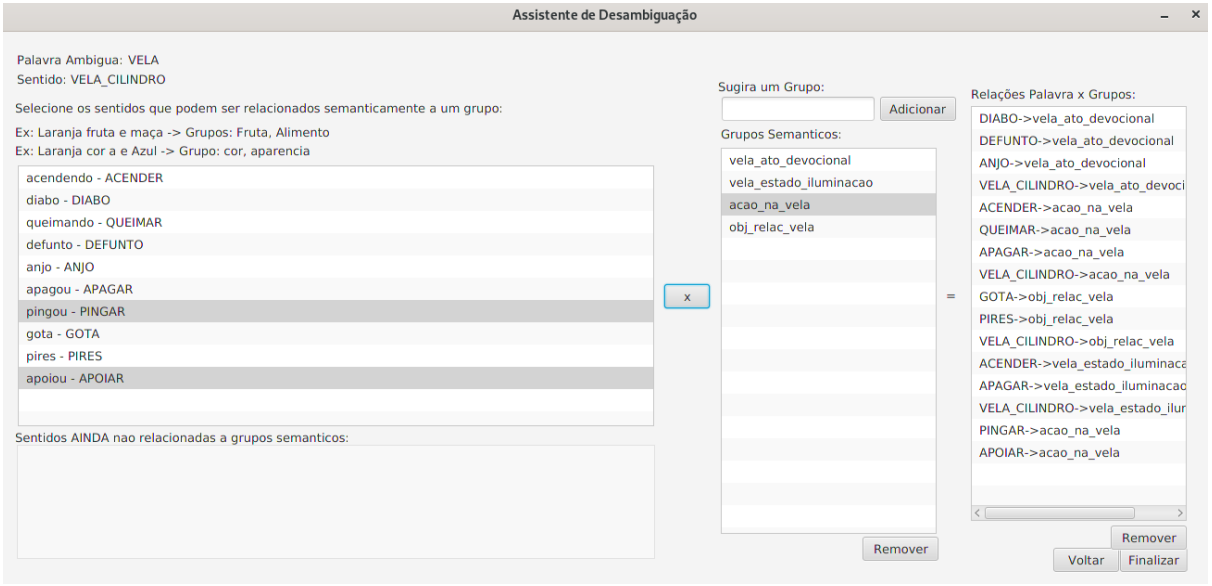

Figure 7. Semantic Groups