

UML Use Cases

1 Actors

1. Researcher

2 Parsing

2.1 Participating Actor

1. Researcher

2.2 Entry Conditions

1. The researcher has given the novel as an input to the program in a format that is supported by the program
2. The researcher has provided a search radius in which she wishes to find descriptors of locations

2.3 Exit Condition

1. Retrieve all the locations with their appropriate descriptors

2.4 Flow of events

1. Parse the novel to get the locations.
2. \forall locations found, use the radius provided as input to search for meaningful words that describe said location

3 Display map

3.1 Participating Actor

1. Researcher

3.2 Entry Conditions

1. Parsing exit condition has been satisfied

3.3 Exit Conditions

1. Display a map containing all of the locations that the parsing has yield

3.4 Flow of Events

1. \forall locations apply a reverse geolocation algorithm to compute the coordinates of said location
2. Use these coordinates to create labels on a map.

4 Display wordcloud

4.1 Participating Actor

1. Researcher

4.2 Entry Conditions

1. Display map exit condition has been satisfied
2. The user clicked on a label representing a location

4.3 Exit Conditions

1. Display a wordcloud depending on the label the user clicked

4.4 Flow of Events

1. Retrieve the list of descriptors from the parsing process
2. Generate a wordcloud from the descriptors
3. Create a bubble where the label is
4. Display the wordcloud in the bubble