Project – Integrating Various Sub-Projects of DANA

Introduction

This is a document that outlines the proposed project to integrate various sub-projects of DANA. Namely, it will link the narrative generation program with the narrative visualization, and also with a search facility for the templates. At a later stage, this system will also be linked with the editing/feedback facility for generated narratives.

Storyboard

1. The entry into the system is via the search facility. Users can search for templates (workflows). The search parameters could be the names, or some parts of the metadata used to describe the templates.

DANA: DAta NArratives

Search

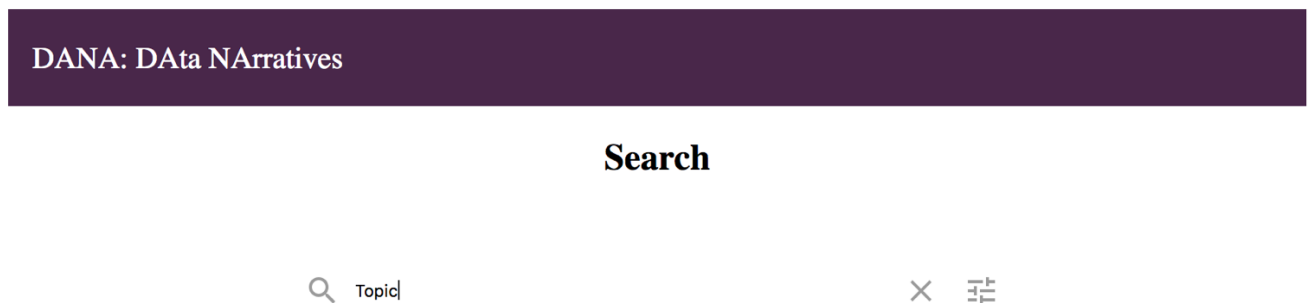🔍 Topic   ✕ ⇄

Fig. 1 – Search facility

The system returns one or more results that match the search parameters.

2. Users can then browse through the results. The results also display some relevant information about the templates, to make them easily identifiable. Additionally, all the execution results associated with the template should be displayed (a single template can have different executions, with different parameters). Users then select a particular execution result for which the narratives need to be generated. This is done by clicking on the arrow button next to it.
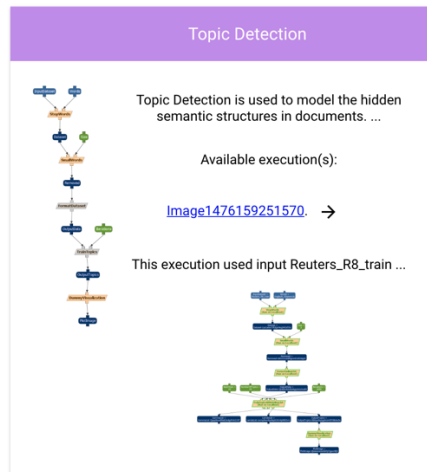
Fig. 2 – Workflow template returned as result

3. Clicking on the button to generate narratives loads a page where all the different narrative types are generated and displayed. The narratives are also linked to the graphical visualization (a previously implemented sub-project). Clicking on parts of the narratives highlights the related parts of the graph and vice versa.
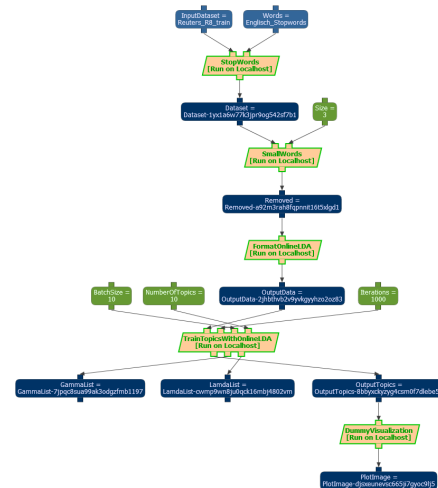

Fig. 3 – Narratives linked to visualization

4. As an extension to the above integration, the facility for providing feedback to the generated narratives (a previously implemented sub-project) will also be added to the system
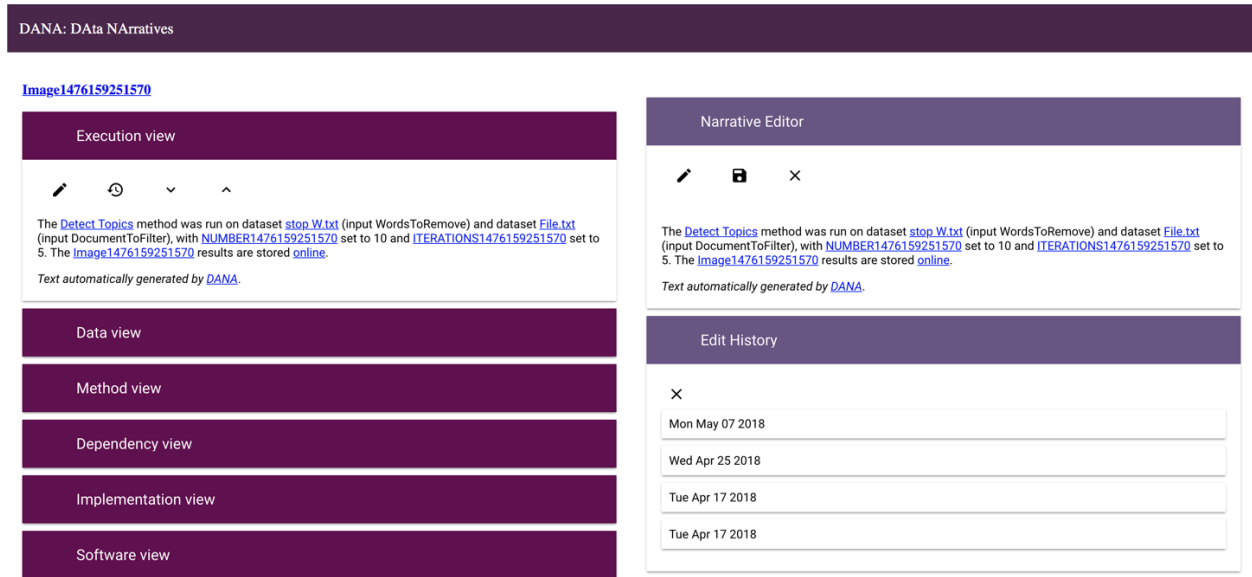

DANA: DAta NArratives

Image1476159251570

Execution view

The Detect Topics method was run on dataset stop W.txt (input WordsToRemove) and dataset File.txt (input DocumentToFilter), with NUMBER1476159251570 set to 10 and ITERATIONS1476159251570 set to 5. The Image1476159251570 results are stored online.

Text automatically generated by DANA.

Data view

Method view

Dependency view

Implementation view

Software view

Narrative Editor

The Detect Topics method was run on dataset stop W.txt (input WordsToRemove) and dataset File.txt (input DocumentToFilter), with NUMBER1476159251570 set to 10 and ITERATIONS1476159251570 set to 5. The Image1476159251570 results are stored online.

Text automatically generated by DANA.

Edit History

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Mon May 07 2018

Wed Apr 25 2018

Tue Apr 17 2018

Tue Apr 17 2018

Fig. 4 – Feedback facility

Technical Details

The project will be implemented in the Polymer framework, primarily to create modules as reusable components that can be integrated with other projects. Existing non-Polymer elements will be rewritten using the Polymer framework or be contained in a Polymer wrapper.

Other features related to implementation include –
1. Ability to download the knowledge graph.
2. Adding schema.org descriptions to the web pages.
3. Coupling with other sources of information, such as OntoSoft.

Research

1. Tightly coupling knowledge graph to the text using RDFa.
2. Exploring other types of narratives that can be generated.