Chart Advisor

Efficient Algorithm for Recommendation of Data Visualization Tools

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Overview

Chart Advisor is a standalone software that process an Input RDF Dataset and produce as result a ranked list of recommended visualization tools (charts) such as Pie, Column or Line charts (and others). The software's core algorithm is intended to be used by solutions like Linked Data Projects.

How to Use

1. **Download** the software from the project Website, access our VM (Virtual Machine) remotely or get and run the VM on your PC.
2. **Start** the program running the .JAR file named “CharAdvisor.jar” located on the Desktop of the VM. The GUI will be shown.
3. **Load** the input RDF file clicking on the text field labeled “Load RDF Dataset”.
4. **Select** the properties of the dataset to be analyzed. All properties are selected by default.
5. **Choose** the Output file format. (.rdf, .xml or .txt)
6. **Generate** the ranked list of recommended charts. The output file will be created on User specified directory.

Explore the project

Virtual Machine:

- **Name:** Ubnutu14ChartRecommender
- **OS:** Ubuntu 14.04 (64 bits)
- **Base memory:** 1024 MB
- **Processors:** 2
- **Ubuntu Login:** chartadvisor

Remote Control:

- **Partner ID:** 188200817
- **Password:** chartadvisor

GitHub Repository:

- The following link leads to the root of the repository, check the information on README file to explore the project: . www.github.com/CristoLeiva/ChartAdvisor

Documentation:

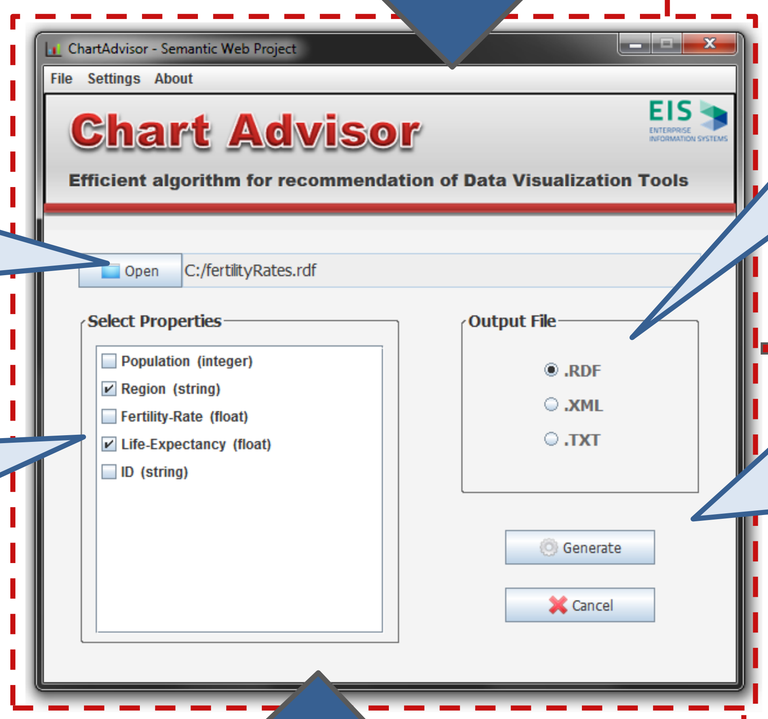
- Link to Wiki documentation, with tutorials and information for end users and developers: www.github.com/CristoLeiva/ChartAdvisor/wiki

Project Website:

www.github.com/CristoLeiva/ChartAdvisor/WebSite

Input: After clicking on the text field an OS directory selector will be shown, there you will select and load the Input RDF file.

Selection: This list will show the properties of the loaded dataset, here you will select the properties to use on the recommendation.



Format: This is the Output file format section. You can only select one this options.

Output: Click on “Generate” to process the data and generate the list. The list will have 4 recommended charts ordered by ranking.

Output List

Google Charts

RANKED

- ✓ Bar Charts
- ✓ Column Chart
- ✓ Geochart
- ✓ Line Chart
- ✓ Area Chart
- ✓ Pie Chart
- ✓ Bubble Chart
- ✓ Donut Chart

Note: The output ranked list will not give specifications about the implementation of the recommended Google charts. For more information about Google Charts go to: https://developers.google.com/chart/

For Developers

API: Go to Chart Advisor’s Git repository and explore the Wiki documentation, there you will find useful information about the methods used on the software and tips to incorporate its functionality to your Linked Data project.

We need more Charts: The core algorithm of the software is developed in a way that could be extended to work with more charts, please refer to the project documentation to explore this possibility and implement your own solution.

Technical Specs

Compatible OS:

- Windows / Linux / OSX

Required Software:

- Java SE 8

Required Libraries:

- Apache Jena Framework
  - RDF API
  - Interface / Store API

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