Combining Faceted Search with Data-analytic Visualizations on Top of a SPARQL Endpoint

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● Summary
Introduction
SPARQL-Faceter


- Lightweight client-side solution
- Angular JS as framework
- Search large datasets from SPARQL endpoints
- Person search with certain criteria
- Extendable to data-analytic visualizations
WarSampo – Finnish WW II on the Semantic Web
The casualties page has four different views:

- Table-like result view
- Age distribution
- Personal life paths
- Bar Charts
**Table-like result view**

**Person search by chosen criteria on the left side facetter**
Age Distribution
Bar Charts

Distribution of property values, e.g. place of deaths:
Vanhat Norssit
in Semantic Web
Vanhat Norssit on Semantic Web

The highschool alumni site has three different views:

- Table-like result view
- Pie Charts and Sankey Diagrams
- Column Charts
Sankey Diagram

Links a school with a profession:
Column Charts
Distribution of most common employers:
U.S. Congress Prosopographer
U.S. Congress Prosopographer

The U.S. Congress Prosopographer (https://semanticcomputing.github.io/congress-legislators/) has four different views:

- Grid-like result view for people
- Maps
- Chart
- Graphs
Comparing Democratic vs. Republican:

Grid (Individuals)

Map

Chart

Graph
BiographySampo – Semantic National Biography of Finland
The National Biography of Finland (www.biografiasampo.fi) has several different views:

- Table-like result view for people
- Table-like result view for places
- Maps
- Statistics
- Networks
- Relation Search
- Language Analysis
Comparison of 19th century clergy and generals:
Networks

A link is formed when person A is mentioned in person B’s biographical texts

Networks of Finnish people in ULAN:   Personal network of Eliel Saarinen:
Summary
SPARQL-Faceter

- For searching an individual person
- For defining a group of people with a certain criteria

Visual output:

- A Table or Grid formatted of people
- Various kinds of visualizations
  - Maps, Charts, Networks etc.
  - Using an external library, like Google Charts, Cytoscape etc.
Questions?
Thank You