

Use Case

Content Recommender

Especially our work life is characterized by information overload. The PoolParty Content Recommender supports knowledge workers to find relevant information within a well-defined and relevant context. The application is implemented in different industries and is used for various use cases where a big variety of choice is available and the closest possible match is needed. For example, an HR department of a big organizations profits from the Content Recommender as it matches skills and competencies of employees with job and project descriptions. A pharma corporation supports their researchers with the content recommender as it combines different data sources in one portal with a semantic recommendation function. All implementations are based on the same technology and principles. We exemplify how the Content Recommender works with the "Cocktail Recommender"

The challenge

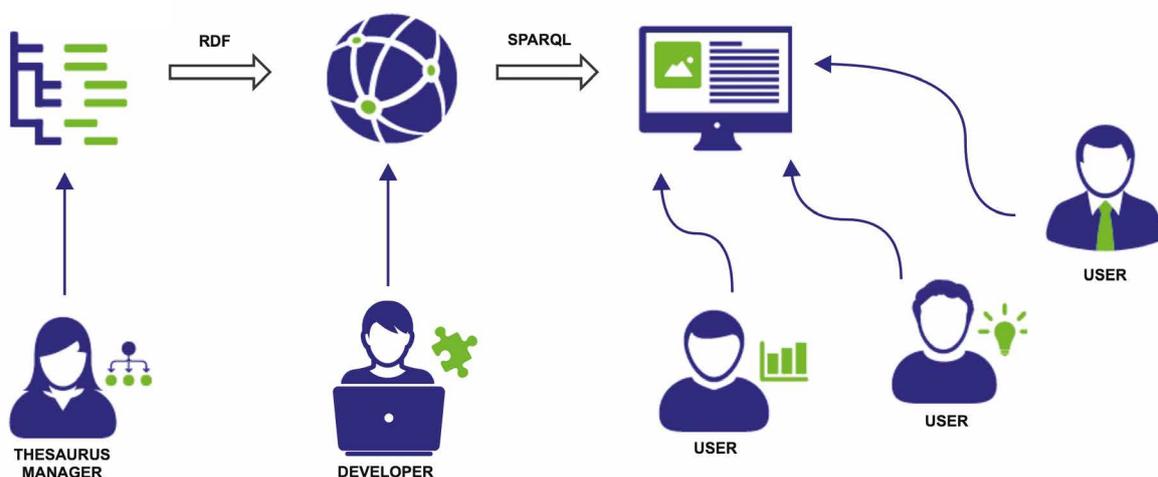
Cocktails are science and magic at the same time. If you deal seriously with this subject, you are confronted with an extensive list of ingredients of all sorts. If you change one ingredient in a cocktail, you create instantly another cocktail. If you vary more ingredients, the results become even more diverse. The application is complex as it must combine ingredients in all possible scenarios and provide the user with answers on what he can do and what he will need for it.

The solution

The application is based on a strong taxonomy which consists of ingredients and cocktails. By building a taxonomy with PoolParty, machine-readable RFD data is automatically created. Queries in the front-end are executed through SPARQL. SPARQL enables asking complex questions of your underlying data.

The results

The web application with an user-friendly interface supports the user through dynamic content recommendations.



Project insights

How to develop semantic intelligence



STEP 1: BUILD A STRONG TAXONOMY

To understand the connection between the ingredients and the cocktails a strong hierarchical taxonomy is build with the following categories:

- ✓ Beverages
- ✓ Cocktails
- ✓ Garnish and other ingredients
- ✓ Glassware
- ✓ Sauces
- ✓ Sweeteners

The taxonomy is created in PoolParty based on SKOS which uses relations like narrower, broader, related.

The taxonomy can be enriched with custom classes, relations and attributes that goes beyond SKOS. For example, it is essential for the application to have a relation which links ingredients to a specific cocktail (Ingredient is part of Cocktail). As images of cocktails and the used drinkware are included, it is the custom added data that creates a faceted perspective to the taxonomy.



STEP 2: USE A POWERFUL QUERY LANGUAGE

In the backend of the web application, SPARQL enables the developer to translate data-related questions into queries which refer to the underlying RDF data. Various questions can be defined as for example:

- ✓ What ingredients does a cocktail have?
- ✓ What cocktails can I make with the selected ingredients?
- ✓ What if I vary only one ingredient from those selected - what cocktails do I get then?
- ✓ What if I don't want to be too specific with my ingredient and find variations of cocktails which contain close related ingredients to the one I chose?
- ✓ How many ingredients are missing to make another cocktail?
- ✓ Which other cocktails are similar to the cocktail I have chosen?

TAKE A LOOK

<http://integrator.poolparty.biz/sparqlingCocktails/cocktails>



REACH OUT TO THE PROJECT TEAM

Do you want to know more? Contact us!



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