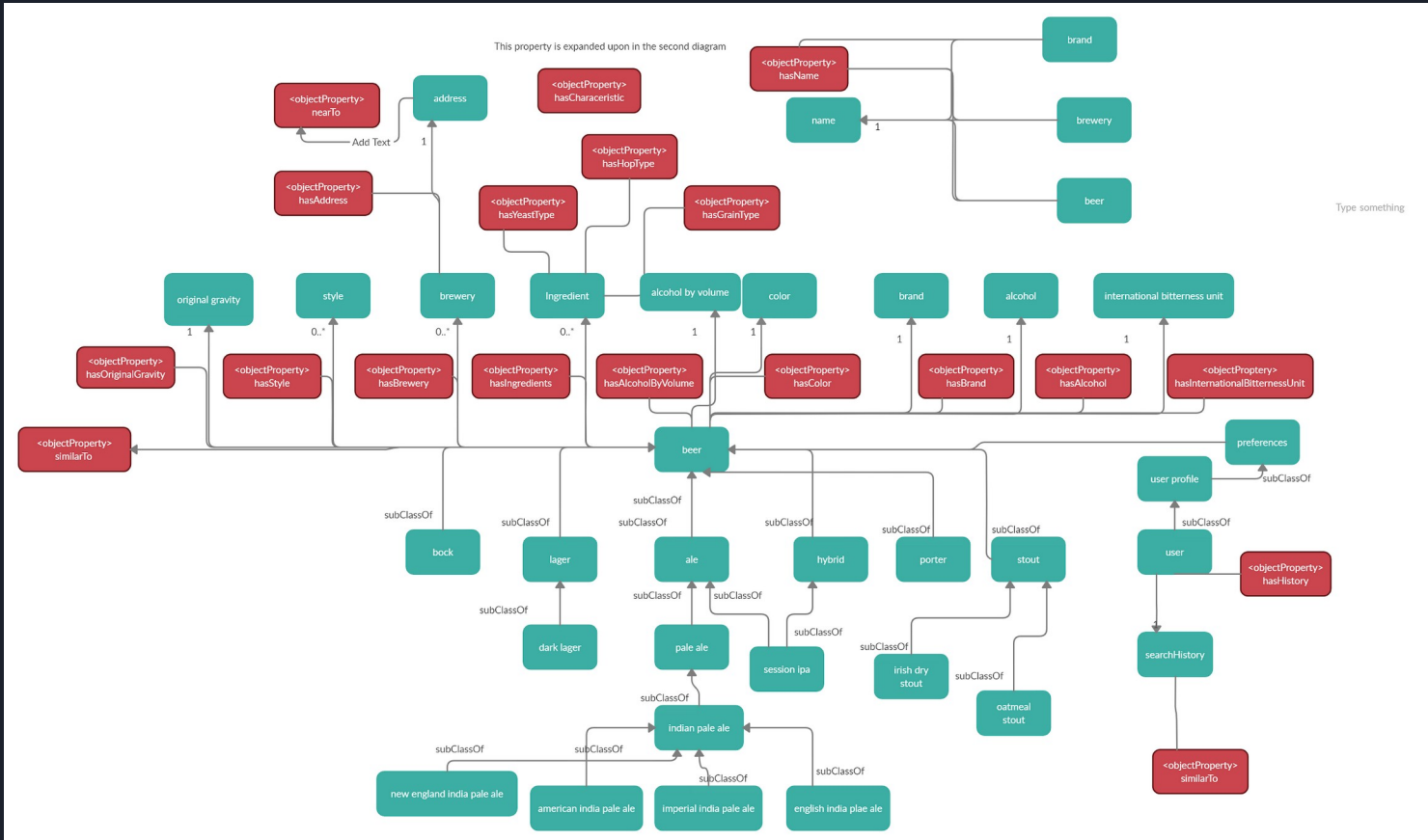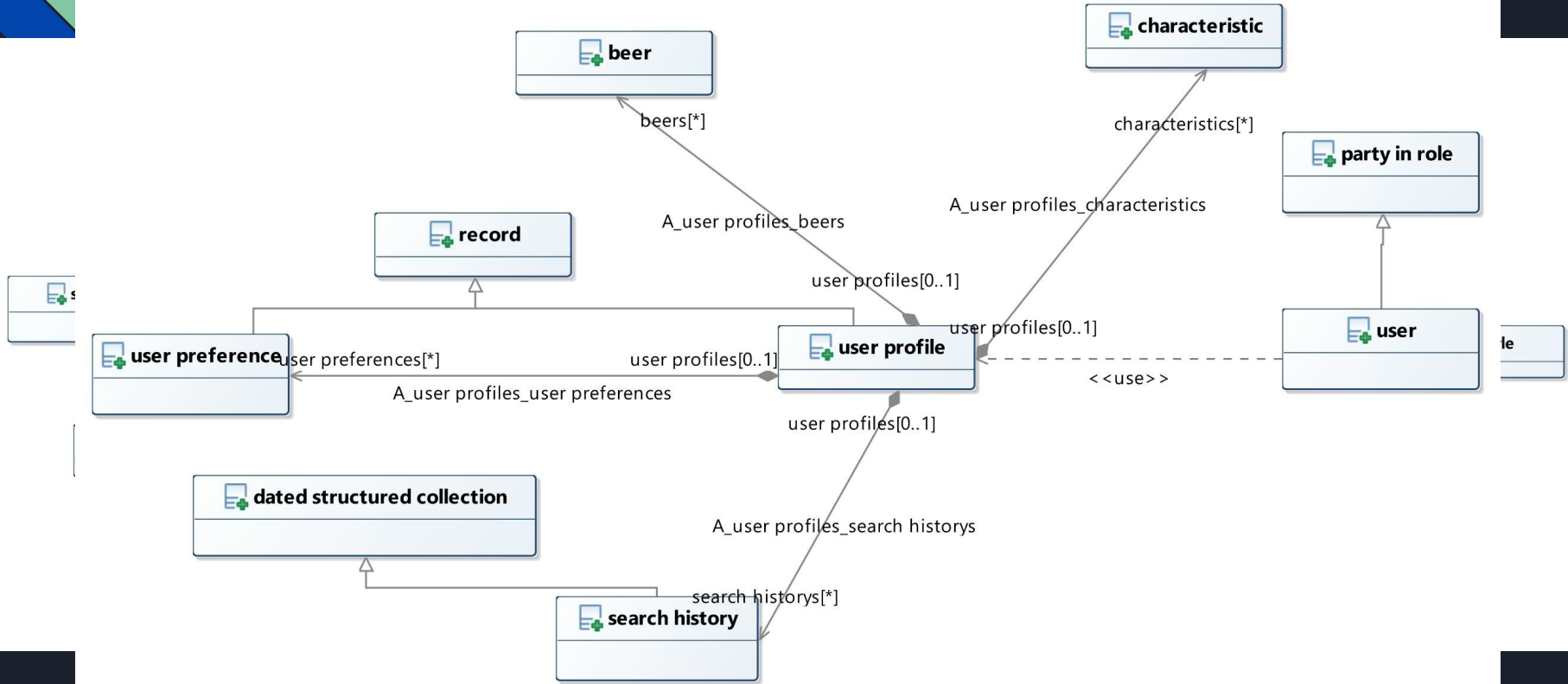# Beer Advisor

A Beer Ontology

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Changes - Diagram pt. 1

Changes - Diagram pt. 2

Changes - Ontology pt. 1

Change: Added quantitative classes

- AlcoholByVolume → AlcoholContent
- InternationalBitternessUnit → BitternessUnit
- OriginalGravity → DegreePlato
- Color → StandardReferenceMethod

Why?

- Allows us to use original characteristics as numerical values

Competency Question - 1

Question: **What is an IPA that is 5% ABV or below?**

Answer: The selected ABV is outside the range for IPA's. Perhaps you would like to search for pale ales or session india pale ales, which are similar to an IPA but have a lower alcohol content.

Terms: india pale ale, pale ale, session india pale ale, hybrid, ale, similarTo (Beer), alcohol by volume, alcohol content, style, ingredient.

How?

- System checks database for request
- Leverages ontology to find similarities in style, ingredients

Changes - Ontology pt. 2

<u>Change</u>: Restructuring the User class

- User is now child class of *Party in Role* (it has identity, some role)
- User is linked to a user profile (which is subclass of *Record*):
    - Profile will comprise a search history (collection of structured data)
    - Profile will comprise some preference (also a record)
- Preference comprises some beer or specific characteristic

<u>Why</u>?

- Allows us to correctly identify the role of the user and to use

Competency Question - 2

Question: I really like New Belgium's IPAs, what other beers have people searched for from New Belgium?

Answer: Fat tire amber ale, a light and easy to drink beer that is also made by New Belgium.

Terms: brewery, india pale ale, user profile, all the different beer types

How?

- Application checks the list of beers produced New Belgium
- Ontology-enabled application leverages search history involving New Belgium's beers and user preference to answer the question

Questions?