



Beer Advisor

A Beer Ontology

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Project Overview

WHO: Average Beer Consumer/Bars/Beer Distributor

WHAT: Can recommend beer based off their preferences and others similar searches, because

WHY:

- There are a multitude of different styles of beer
- Within styles there can be a wide variety of flavors
- It can be difficult to choose what to do drink, you want to make sure you're making the right choice

HOW: They can use our ontology and application, Beer Advisor!



This Weeks Changes...

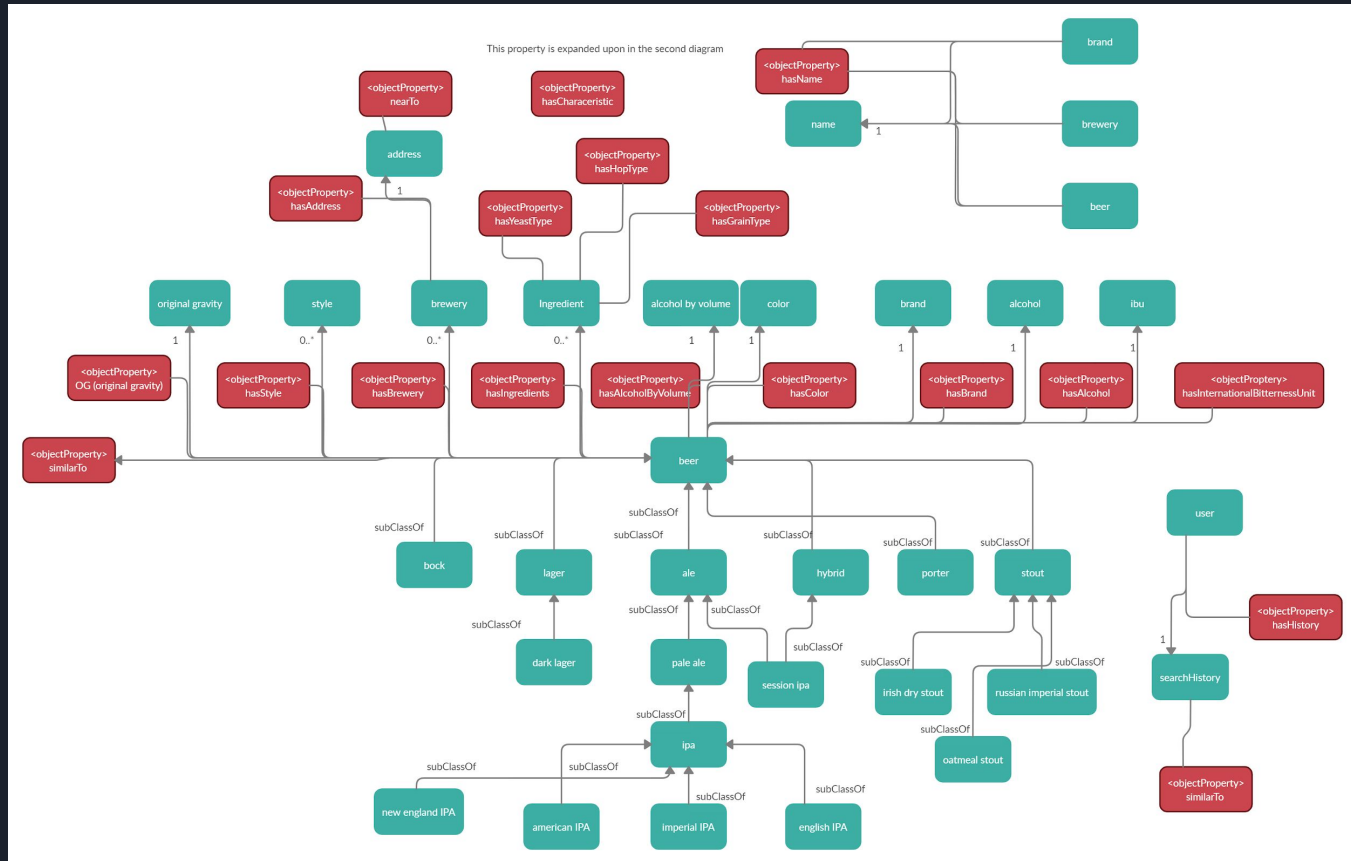
Use Case:

- Clarified the use of the of our ontology within our competency questions.

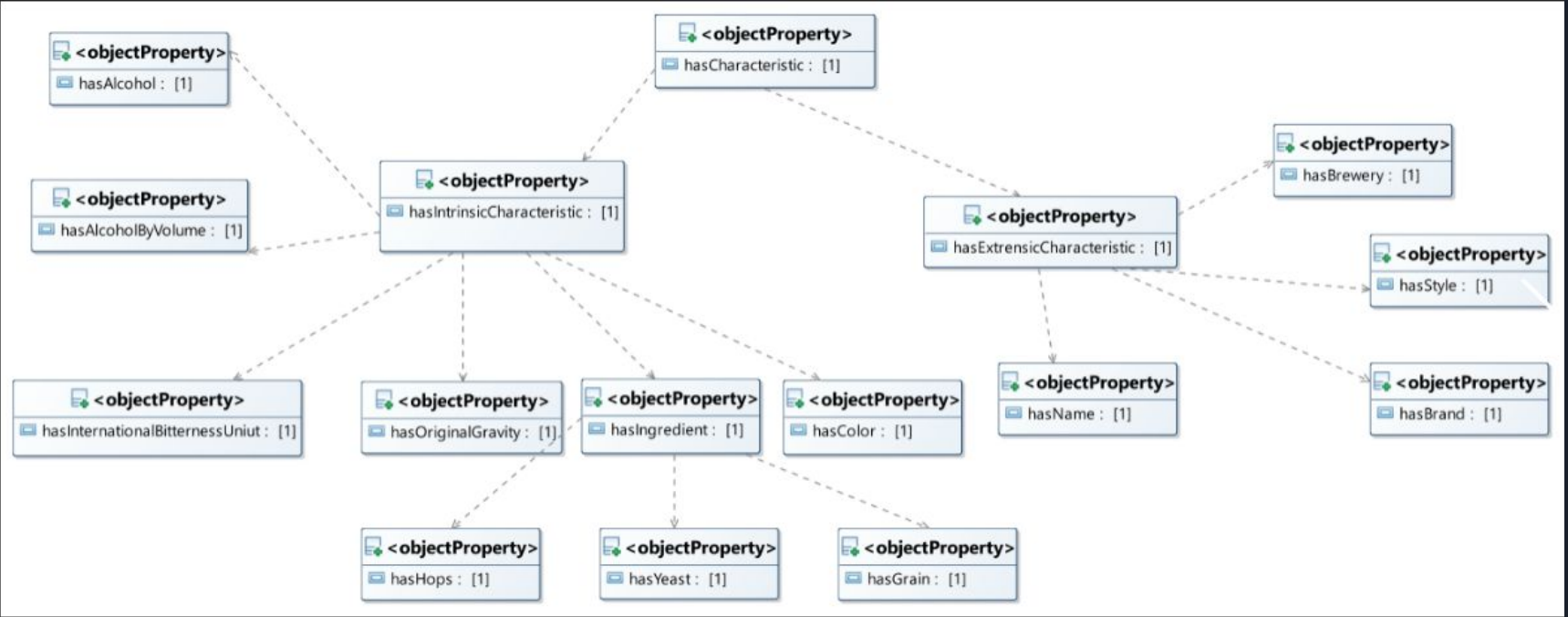
Term List:

- Added a new group of terms
- Corrected the format of some of our previous terms/definitions

Conceptual Model Pt 1



Conceptual Model Pt 2





Competency Question #1

- **Question:** What is a winter beer that is under 8% alcohol content?
- **Answer:** Stouts, porters and a few russian imperial stouts.
- **Reasoning:**
 - Characteristics of winter beers..
 - Average ABV of stouts and porters is 8%.
 - Many Russian imperial stouts are above 9% ABV.
- **How:**
 - The ontology should be able to retrieve the list of beers, separate them by seasons and limit their alcohol content.
 - The ontology should be also able to limit the region of the beer, because many beers may not be available to the costumer.



Competency Question #2

- **Question:** What is a brewery in Pennsylvania that makes IPA's under 8%?
- **Answer:** Helltown Brewery in Mt Pleasant, PA.
- **Reasoning:**
 - IPA's are between 5.5-7%, well under 8%
 - User is local to PA, wants a specific PA brewery
- **How:**
 - Ontology obtain beers, sort by style, abv
 - In this scenario, will limit search to specifically PA beers



Competency Question #3

- **Question:** What is an IPA that is 5% or below?
- **Answer:** There are no IPAs with ABV below 5%. Maybe a Pale Ale or a Session IPA would be a better fit.
- **Reasoning:**
 - ABV for an IPA is around 5.5-7%.
 - Similar styles are: "hopped" Pale Ales and Session IPA.
- **How:**
 - The ontology needs to be able to check the list of beers and assess the information about the range of ABV in IPA style.
 - The ontology will then use relations to infer similar styles.



Competency Question #4

- **Question:** I really like New Belgium's IPA's, what other beers have people searched for from New Belgium?
- **Answer:** Fat Tire Amber Ale, a very light beer that is easy to drink.
- **Reasoning:**
 - Another type of ale from New Belgium
- **How:**
 - Leverages the ontologies ability to relate user searches
 - System asks the user if they wish to see other results.
 - If yes, the system will go through it's stored searches to find similar
 - Returns a list of new searches to the user



Competency Question #5

- **Question:** Is there a stout made by a local brewery in Idyllwild, California?
- **Answer:** It may not be in season, but Stone Brewing, another CA brewery, does make a stout
- **Reasoning:**
 - Idyllwild is small town with brewpub
 - Make not make stout due to season
- **How:**
 - Ontology will store beers and breweries by their location
 - Will utilize nearTo relationship to find beer



Questions?