

( Notes taken from Advanced Semantic Technologies class - April 23, 2013 )

last week's (Apr 16) notes page:

[https://docs.google.com/document/d/1ukgGo7q7I-23W1u8oZ\\_3nMN6aRGDhNymMeG16ETyXXo/edit](https://docs.google.com/document/d/1ukgGo7q7I-23W1u8oZ_3nMN6aRGDhNymMeG16ETyXXo/edit)

next week's (Apr 30) notes page:

<https://docs.google.com/document/d/1I2RcDMc5977-FqbHfbFscyvTM0QstesBoumLwiwkm2M/edit>

Attendees:

Patrice

Zach

Deborah

Justin

Katie

Brendan

presumably

Robin

Starting with Zach (meeting with Patrice 2:30 - 3:30 tomorrow)

**For next time:**

- Pull results from multiple ontologies via freebase
- Look at paper templates: <http://iswc2013.semanticweb.org/content/workshops>
- Work on paper writeup, RPI Writing Center
- Flush out introduction in paper

Gazetteer - geographic locations and their relationships

Freebase good for geographic locations, organisms, and chemicals

Brendan (meeting with Patrice 4-5 tomorrow)

**For next time:**

- Email Jeremy with new questions. Send a draft to Patrice/Prof. McGuinness
- Need to process data from NHDH. Load it into GeoSPARQL triplestore endpoint.
- Put an example NHDH data file into the github repo.
- Add overlays to the google maps API for SemantEco. Talk to Evan.

Need to make sure we are clear on next steps - in particular any additional info needed from the darrian fresh water people

Feedback from Jeremy:

Other people had stuff that wasn't hosted where we were looking

Didn't get specific names. Want to contact him and ask him questions

We have presence of various organisms (algae, crustaceans, etc.) in a lake, but we cannot generalize more than it being in the lake. (using z-max, max depth of a lake).

Seems that most of the data used to make conclusions is missing, pH data, etc. Also no units for measurements.

We are looking to do the following with this data:

- 1) Understanding what is in the paper
- 2) Something that might make sense to import into SemantEco (short and long term)
  - Maybe invasive species?
  - We don't have anything for algal species?
- 3) Potentially significantly expands water data.

Things ecologists are worried about: (how do these fit into our infrastructure)

- 1) Salinity
- 2) Algal Bloom
- 3) Invasive Species
- 4) Dead zone

\* It looks like there are Characteristic classes in the SemantEco system for Salinity and Sodium Chloride, and also things like dissolved oxygen? pH is definitely in there (there are like 15 different kinds of pH Characteristics, some of which might be equivalent). There are also some basic algae measurements. Not sure if this would be helpful?

Characteristics .ttl file (let me know if this doesn't work):

<https://github.com/apseyed/SemantEcoHealth/blob/master/data/all-characteristics-output.ttl>

Might not have thresholds for things like pH from EPA. This data might be a way to implement this kind of analysis.

Look at semanteco characteristics to see what we can find (link above)

Pollution tolerant species might indicate pollution events.

Katie (meeting with Patrice ~5:30 - 6:00 tomorrow)

**For Next Time:**

- A paragraph of something you are using this ontology to model. Specific case from an authoritative source. Think its somewhat representative.
- Paragraph about next steps.
- Send most recent versions of use cases to Prof. McGuinness. Add links to the datasources in use case.
- Start working on UI. (maybe not)
- The use cases need to be sent to collaborators. Pass through and make it so people who are not familiar with Canary Database can understand.

Tried to upload ontology to endpoint and there are issues. Trying to get Genna working with command line. Working with the reasoner to fix ontologies. Sanity checking the logic to get the equivalences that we need.

Ontology for all species ever, Encyclopedia of Life (ontology).

Justin -

what is the status of implicit bundles? Patrice said this was a next step

For implicit bundling, I've run through an installation of the enhancement and converted sample data. I've documented each step explicitly. I still need to write up my experience and document my understanding of what exactly implicit bundling does in terms of the organization of the resulting conversion.