

CS 246 Exercise Set #4

In this assignment, you will explore different data formats and learn the basics of Infomaster. Your group will present your work on Exercise 10 in class on Thursday, April 29. Please also email your answers to Exercises 11 mkassoff@cs before class that day.

Exercise #10 (100 points)

Download Kiosk from the website. It is a large file, and may take some time to load.

Look at the class structure using frontdoor. Look at the attributes by clicking on the class names in frontdoor or by viewing the metadata in the manager. It should be fairly evident which classes and attributes correspond to your own. In some cases not all of your data will be used, and in other cases you will need to use your data in interesting ways.

Note that some of the classes are already filled in for you, namely gender, sport, foreign_city, continent, country, city, county, state, month, day and college.

Create a new agent and place your dataweb from example 9 in that agent. Then write rules to integrate your dataweb into Kiosk (details on this follow).

The rules: You cannot change the schema of Kiosk in any way, nor may you change the library agent. If there are bugs in Kiosk, then please inform the TA and he will fix them. You may not change your exercise 9 dataweb at all either. Even a simple change like renaming is not allowed. You are allowed to introduce intermediate agents (mediators) as necessary. In fact you are encouraged to do so. You should also add specialty/interest data to the manager as needed.

You will be graded on how well you integrate your dataweb into the system. You will lose points only for missing opportunities to integrate further.

Once you are confident that your integration is working, you may add your agent and specialty/interest information to the system running at <http://persistent.stanford.edu:3000/>. To do this you will need to use Examine and copy/paste into your browser. (You won't be able to Load files directly from your computer.) Once you have added your data to the Persistent system, create a backup by Dumping the system to a filename like:

KioskDDHHMMyourlastname.mcl

Here DD is the current day, HH is the current hour (military time), MM is the current minute, and yourlastname is your last name. This is in case the system crashes at some point.

Exercise #11 (15 points)

Load up the Once example. Use username/password mrg/mrg if you are prompted for it. Notice that the system uses a translator (the SuperTranslator) with a recipient of a Transformer (the Coordinator). Why do you think that this was done? (Hint: What would happen if the library and the superlibrary were combined?) Could we have gotten away with just one mediator instead of two chained ones? Would two translators have worked as well? Or two transformers? What about a transformer with a translator recipient?