In regards to DATA210 for the week of 3/23 to 3/27, this should serve as a reminder that we are not meeting for class as I am in the Netherlands. This document provides necessary guidance and submission instructions for the work that you are to accomplish. Read it in its entirety, the homework submission instructions are at the bottom.

Last week in class we discussed chapters 4, 5 and 9 in our text "Beginning Database Design Solutions" by Rod Stephens. This week will build upon these ideas, calling upon you to apply them. To that end chapters 5 and 9 are most applicable to the task at hand.

To begin, you should re-read chapters 5 and 9.

You should also install the MySQL Workbench on your computer. You can download MySQL Workbench from the following site: http://dev.mysql.com/downloads/workbench/. If you want to work together in getting MySQL Workbench installed and understanding its capabilities and use, that is fine. The actual creation of your EER diagram needs to be an individual effort.

Chapter 16 in our book is about using MySQL. The relevant content begins on pg 330, where ones finds a section titled "Using MySQL Workbench." If you are looking for more detailed documentation, especially regarding the creation of Entity-Relation diagrams, see:
http://dev.mysql.com/doc/workbench/en/wb-eer-diagram-editor.html

Next you should consider the structure of the XML recipe file that was used in the last homework assignment. You already know a good bit about this file given that you required this knowledge to create XPath queries. Ultimately, you will use this knowledge to create an EER diagram, to hold recipes in a relational structure, in MySQL Workbench. Note, that there will be different interpretations of what this model will look like – remember "all models are wrong, but some are useful." (George E. P. Box)

Below are a few links to give you easy access to the recipe XML files…

http://52.10.30.22:8080/exist/rest/db/receipes/recipes_one.xml

http://52.10.30.22:8080/exist/rest/db/receipes/recipes_two.xml

This should be a relatively straight-forward exercise. The one issue for you to resolve is how to model ingredients that contain sub-ingredients along with associated preparation steps. For example, if you look at the recipe whose title is `Linguine Pescadoro` in the recipes_two.xml file, you will discover that the sauce ingredient not only contains other ingredients but preparation instructions as well. You might consider that it might be easier to model this not so much from the perspective of a sub-ingredient, but perhaps from the perspective of a sub-recipe. The recipe for sauce is embedded within the Linguine Pescadoro recipe. Other examples of this type of relationship exists as well, for example in `Ricotta Pie` one finds that both filling and dough are essentially embedded recipes. At any rate you should review the Reflexive Association section in Chapter 9.

You should save your EER diagram with the name recipe.mwb and attach it to an email sent to me at buhlerp@cofc.edu by 11:59 pm on Sunday, 3/29/2015. BTW, I have tested the ability to receive .mwb files and it seems that they pass through the email filter OK.