Recipe Transformer Assignment Sheet

For your second project, you'll be creating a recipe transformer. Your recipe transformer must complete the following tasks:

1. Accept the URL of a recipe from AllRecipes.com, and programmatically fetch the page.
2. Parse it into the recipe data representation your group designs. At the bottom of this assignment sheet is an example representation. Yours does not need to look like this, but feel free to use the same schema if you would like. Your parser should be able to recognize:
    - Ingredients
        - Ingredient name
        - Quantity
        - Measurement (cup, teaspoon, pinch, etc.)
        - (optional) Descriptor (e.g. fresh, extra-virgin)
        - (optional) Preparation (e.g. finely chopped)
    - Tools – pans, graters, whisks, etc.
    - Methods
        - Primary cooking method (e.g. sauté, broil, boil, poach, etc.)
        - (optional) Other cooking methods used (e.g. chop, grate, stir, shake, mince, crush, squeeze, etc.)
    - Steps – parse the directions into a series of steps that each consist of ingredients, tools, methods, and times
3. Ask the user what kind of transformation they want to do. At least three of the following options should be available:
    - To and from vegetarian and/or vegan
    - Style of cuisine
    - To and from healthy (or perhaps even different types of healthy)
    - DIY to easy
    - Cooking method (from bake to stir fry, for example)
    Feel free to design your own (non-trivial) transformation
4. Transform the recipe along the requested dimension, using your system's internal representation for ingredients, cooking methods, etc.
5. Display the transformed recipe in a human-friendly format.

As with the previous project, your system can run from the command line and/or from within the Python interpretive environment, if that is what you are using. Note that some of the things listed above are designated as optional. A group that does a truly fantastic job on all of the steps listed above, but omits the optional items, will probably be in the running for an A- or B+. Optional items will bolster your grade, although doing all of the optional items and a lousy job on the core items is not recommended.

Due Date: TBD
We will schedule demos as we did for the first project

Example Representation (sans directions)

```
{
            "ingredients":    [{
                                    "name":     "salt",
                                    "quantity":     1,
                                    "measurement":
 "pinch",
                                    "descriptor":
 "table",
                                    "preparation":     "none"

                            },
                            {
                                    "name":     "olive
 oil",
                                    "quantity":     0.75,
                                    "measurement":
 "teaspoon",
                                    "descriptor":
 "extra--virgin",
                                    "preparation":     "none"

                            },
                            {
                                    "name":     "parsley",
                                    "quantity":     1,
                                    "measurement":     "cup",

                                    "descriptor":
 "fresh",
                                    "preparation":
 "finely   chopped"
                            }
                    ],
                    "cooking    method":    "primary    cooking
 method    here",
                    "cooking    tools":    ["knife",    "grater",
 "dutch    oven"],
}
```