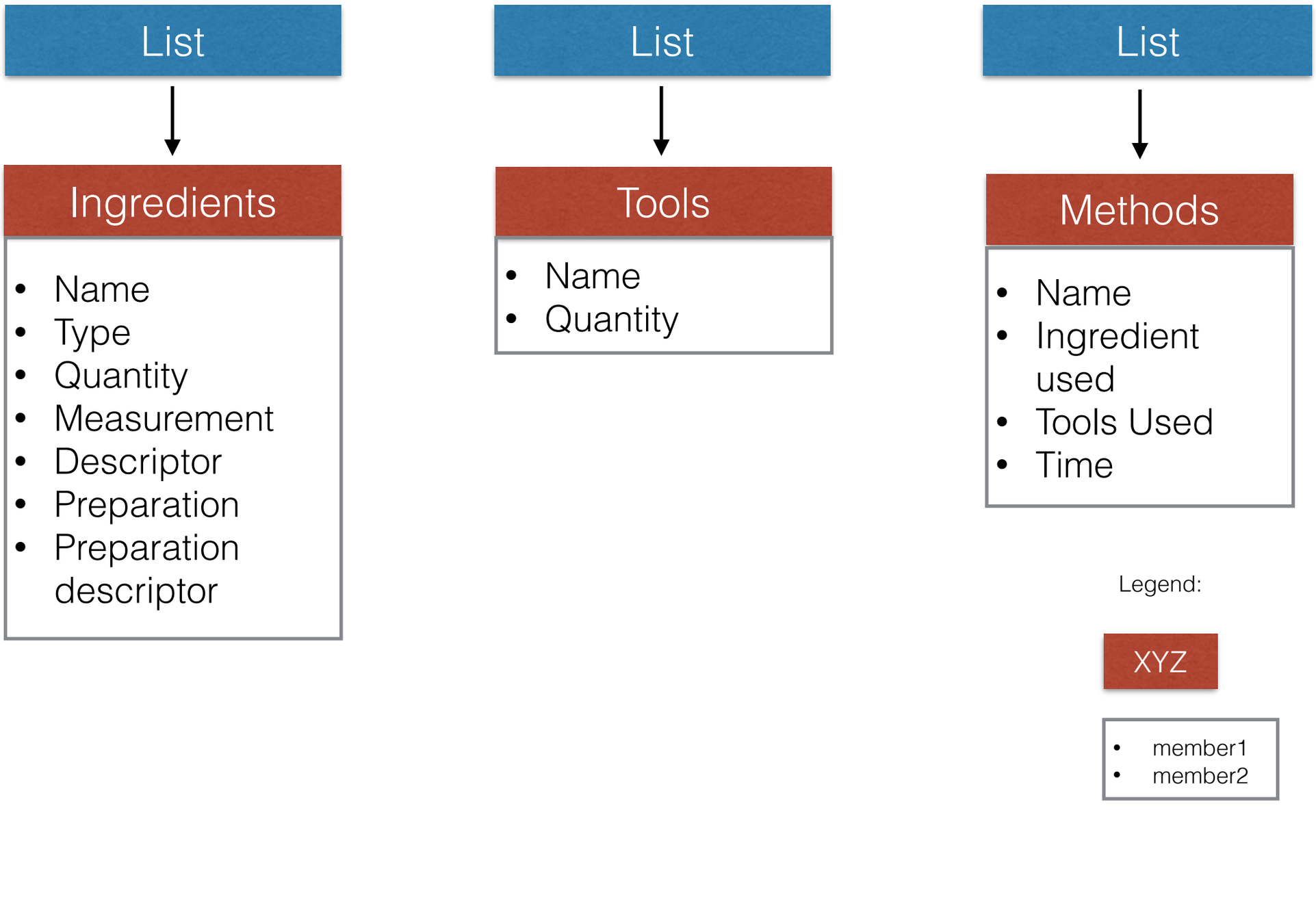
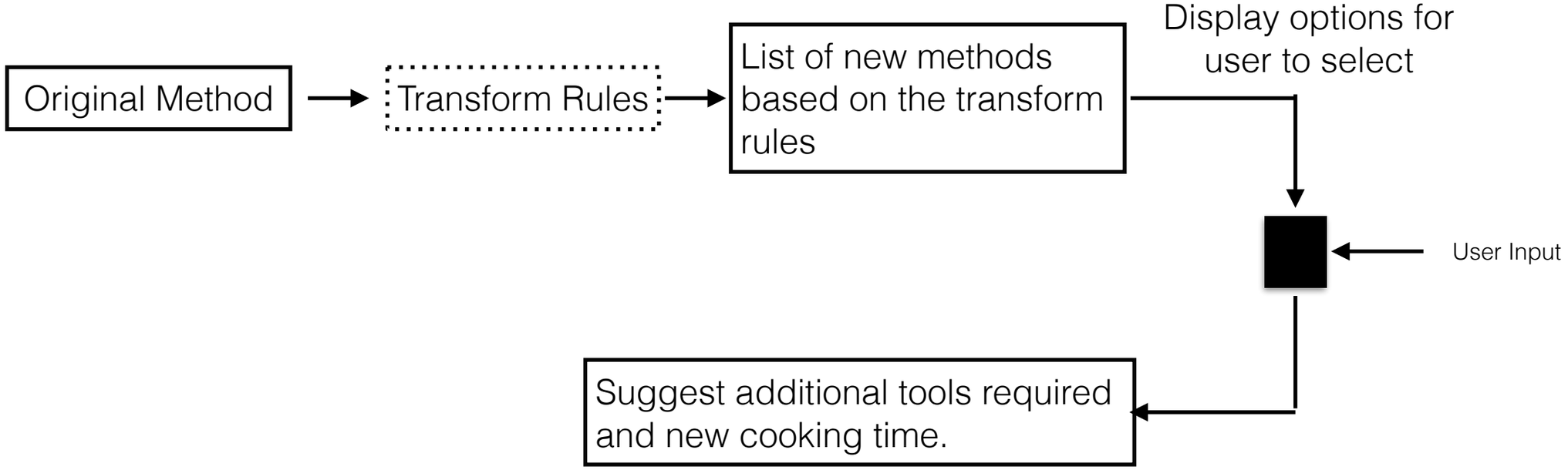
Recipe Representation

A recipe's information is stored over three classes. These are classes Ingredients, Tools and Methods. For each recipe, we maintain a list of objects of the three classes.



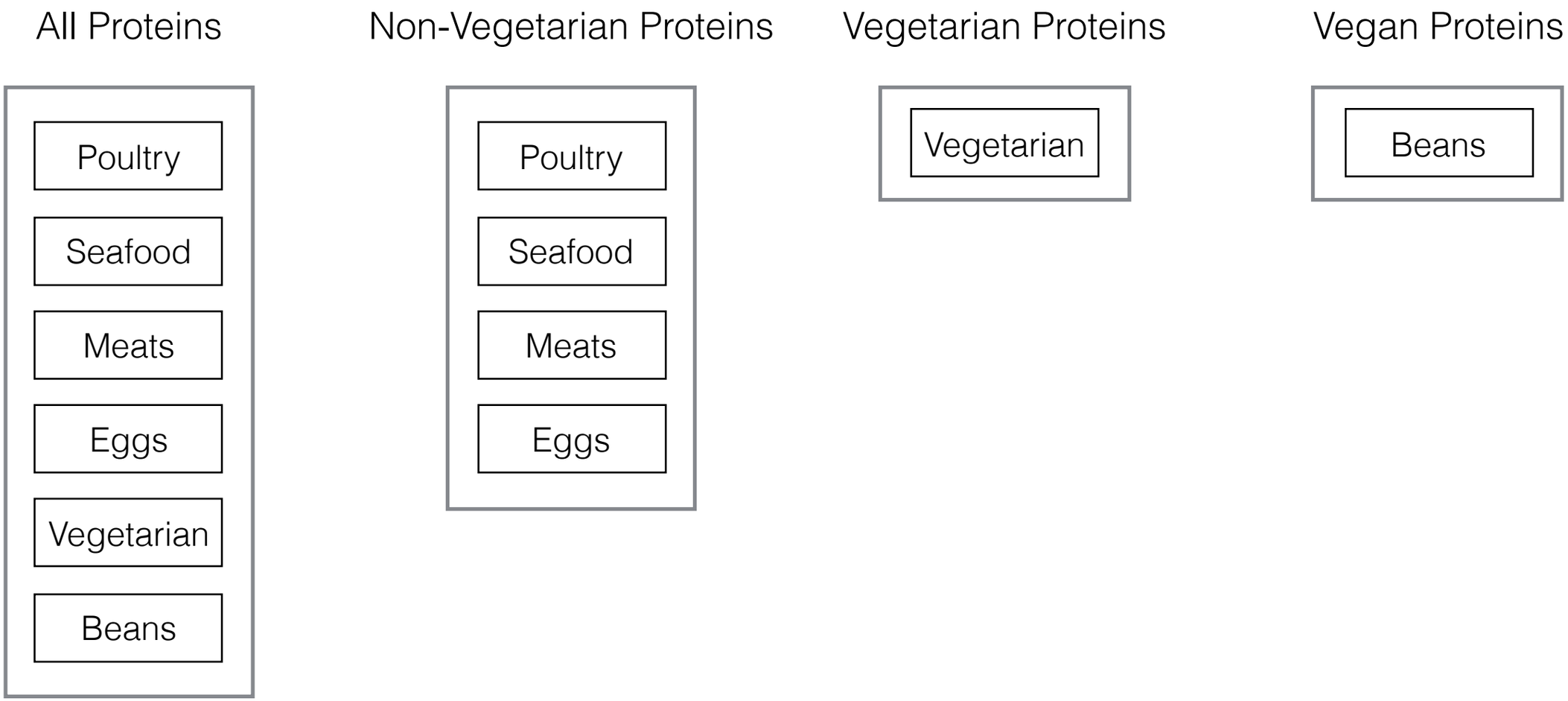
Cooking Method Transformation

The cooking method transformation is governed by a set of rules. For example, if a recipe is about grilling chicken, the only transformations allowed are stew, roast, bake, broil and barbecue. We cannot suggest a transformation like boiling, because it will change the recipe tremendously. This is purely based on an assumption. The user is offered the transformation choices from which he/she picks one. Based on the method selected, the program returns a set of cooking tools that are required for the new method, and the time consumed by this method



Vegetarian/Non-Vegetarian/Vegan Transformation

In this transformation we replace the protein based on the transformation requested. Proteins are divided into 6 categories as shown below. To transform from non-vegetarian to vegetarian, we randomly select a vegetarian protein like tofu. To transform from non-vegetarian/vegetarian to vegan, we randomly pick one of the beans



Cuisine Transformation

We have implemented five cuisine transformations: Indian, Mexican, Italian, East Asian and French. Cuisine transformation is strictly dependent on the ingredient types. For each cuisine, we alter only a specific set of ingredient types. These are depicted below.