Mapping of relations to SQLalchemy datatypes

**Domains and Constraints:**

**Categories:**

* CategoryType (Primry key, not null) Int
* *recipeID* (foreign key, primary key, not null) BigInt

**Recipes:**

* Recipe id: not null, unique (bigInt?) – put bigInt in assumption that the recipe website will have a large number of recipes
* Cook time: integer? Float?, not null (integer in minutes?)
* Name: varchar, not null (String)
* Description: varchar, not null (Text) – some users are known to write really long descriptions
* Servings: integer(?), not null (Integer) –
* Difficulty:( “easy”, “easy-medium”, “medium”, “medium-hard”, “hard”) default value: “medium”, not null ENUM
* Steps: integer – how many steps a recipe has

**Ingredients:**

* IngredientID: not null, unique (integer) (PRIMARY KEY)
* Name: (varchar) not null (String)
* Aisle: varchar, not null (String)

**User:**

* UserID: not null, unique (BigInt) – used BigInt in assumption we will have a large number of users (PRIMARY KEY)
* Username: not null, unique (String) -
* Creation Date: date format, not null (Time) -
* Password: not null, unique (String)
* Last Access Date: date format, not null (Time)

**userPantry:**

* + PantryItemId – primary key, unique, not null
  + ingredientId – foreign key, not null
  + userID – foreign key, not null
* expirationDate: date format (Time)
* Purchase date: date format, not null (Time)
* Current quantity: (float in terms of weight?) (Float)
* QuantityBought: (float in terms of weight?) (Float)

**Recipe\_Ingredients:**

* Amount: (float in terms of weight?), not null (Float)
* *recipeID* (primary key, foreign key, not null) BigInt
* *IngredientID* (

**cookedBy:**

* *recipeId* unique, not null, foreign key (BigInt) primary key
* *userId* unique, not null, foreign key (BigInt) primary key
* Rating (not null, integer) (Integer)
* Scale (Integer?)
* cookDate date format, not null (Time)

**Steps:**

* *recipeID*  (unique, primary key, foreign key, not null) (BigInteger)
* Stepnr (not null, primary key) (Integers)
* Instructions (Text) – users are known to write long descriptions, not null