Mapping of relations to SQLalchemy datatypes

SQLalchemy datatypes are in parentheses at the end

**Domains and Constraints:**

**categories:**

* category\_type (Primary key, not null) (Int)
* *recipe\_id* (foreign key, primary key, not null) (BigInt)

**recipes:**

* recipe\_id: not null, unique – put bigInt in assumption that the recipe website will have a large number of recipes (BigInt) PRIMARY KEY
* cook time: integer, not null (Int)
* name: varchar(30), not null (String)
* description: varchar(30), not null (Text)
* 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), not null (Integer)

**ingredients:**

* ingredient\_id: not null, unique (PRIMARY KEY) (Integer)
* name: (varchar(30)) not null (String)
* aisle: varchar(30), not null (String)

**users:**

* user\_id: not null, unique PRIMARY KEY (BigInt)
* username: not null, unique (String)
* creation Date: date format, not null (Time)
* password: varchar(20) not null (String)
* last Access Date: date format, not null (Time)

**user\_pantry:**

* + pantryItem\_id – primary key, unique, not null (Int)
  + ingredient\_id – primary key, not null (Integer)
  + user\_id – primary key, foreign key, not null (BigInt)
* expiration\_date: date format (Time)
* purchase\_date: date format, not null (Time)
* current\_quantity: float not null, Default = -1 (Float)
* quantity\_bought: float not null, Default = -1 (Float)

**recipe\_ingredients:**

* amount: float, not null (Float)
* *recipe\_id* primary key, foreign key, not null (BigInt)
* *ingredient\_id* primary key, foreign key, not null (Integer)

**cookedBy:**

* *recipe\_id* not null, foreign key, primary key (BigInt)
* *user\_Id* not null, foreign key, primary key (BigInt)
* rating not null, integer (Integer)
* scale not null default = 1 (Float)

cook\_date date format, not null (Time)

**steps:**

* *recipe\_id* primary key, foreign key, not null (BigInteger)
* Stepnr not null, primary key (Integer)
* Instructions not null (Text)