### Project Description, Requirements, Business Rules

### Database Design – 10 points

### ER Diagram & Relational Model

MySQL database tables, views, at least two trigger/procedure/function

Primary and foreign keys

### Website Design, Layout & User manual – 15 points

Including navigation, CSS

Application Functionality & Requirements: - 65 points

Below list at least six features of your website and how to test them. All input must be error checked. Functionality implemented without SQL can be listed for credit; however, you must have at least five SQL queries including at least one insert or update generated from user input and at least two complex queries involving multiple tables.

\*\*Note: I wasn’t certain if the queries had to be resolvable, as the example one looked like a php sql statement, so I just copied my queries from my php into this.

1. Users should be able to log in and out of an existing account, to do this, they can click the login button, and enter their username and password to log in, and the site will retain their session. if the user does not have an existing account, they can look at step 3 to find out how to make one, else they could possibly log in with the following information
   1. Login Info
      1. Username: encrypttest
      2. Password: encrypttest
   2. SQL Example
      1. $query = "select \* from USER where PASSWORD='$password' AND USERNAME='$username'";
   3. Valid Input:
      1. Click on login
      2. Username: encrypttest
      3. Password: encrypttest
      4. Click submit
2. To search, users must specify two things, where and what. A drop down is displayed allowing users to select where, and a text box exists to prompt the user for what.
   1. SQL Example
      1. $query = "select I.Ingredient\_name, R.RECIPE\_NAME from INGREDIENT I, RECIPE R, STEP S where I.INGREDIENT\_ID = S.INGREDIENT\_ID and S.RECIPE\_ID = R.RECIPE\_ID and I.INGREDIENT\_NAME LIKE '%$Searchitem%' LIMIT 0,20";
   2. Valid Input:
      1. Click on search recipe
      2. Select Ingredients from the dropdown
      3. Type ‘water’ to receive recipes containing water
      4. submit
3. Users can create an account, to create said account, they must enter 3 total things, A username, a Password, and an Email. This will be checked against the database to see if the username is unique, if any SQL errors are encountered, it will not submit.
   1. SQL Example
      1. $query = "INSERT INTO USER (username, email, password) VALUES ('$username', '$email', '$password')";
   2. Valid Input
      1. Click on create account
      2. Username is: myuser
      3. Password is: mypass
      4. Email is: [myemail@myaddress.com](mailto:myemail@myaddress.com)
      5. submit
4. Users can enter new ingredients to use in their recipes, these ingredients can have a cost. Both the name and the cost must be entered by the user, after receiving this information, it attempts to insert, if a failure happened, it will report back to the user
   1. SQL Example
      1. $query = "INSERT INTO INGREDIENT (Ingredient\_name, Ingredient\_cost) VALUES ('$IName', $cost)";
   2. Valid input:
      1. Click on add ingredient
      2. enter ‘new ingredient’ for the name
      3. On cost per ounce set cost to 0.10
      4. submit
5. Users can modify an ingredient’s cost using the same menu as the previous, just scroll down and see the update ingredient form, users can select an existing ingredient, and then can put a new price in the field, users will receive an error if what they had entered is invalid, and will be able to return to any other part of the site using the navbar
   1. SQL Example
      1. $query = "update INGREDIENT set Ingredient\_cost = '$newcost' where Ingredient\_name like '$INameU'";
   2. Valid input:
      1. Select add ingredient
      2. Scroll down
      3. On the update ingredient menu, select ‘water’
      4. Put the cost per ounce of water to be 0.10
      5. submit
6. Users can add recipes, to do this they click on the add recipe tab, they will then select the number of steps they need, and submit that. Now the user will have a page with the number of steps they selected, where they can name the recipe, give a description for each step, and add as many ingredients as the total number of steps. When this is all done, the user can submit their steps, and the recipe will be submitted along with it.
   1. SQL example
      1. $query = "INSERT INTO RECIPE (RECIPE\_NAME, USER\_ID) VALUES ('$Rname', '$user\_id\_recieved')";
   2. Valid input:
      1. Select add recipe
      2. Select to add one step, hit submit
      3. Set recipe name as myrecipe
      4. Set step description as add my ingredient
      5. Set my ingredient as the ingredient from the ingredient dropdown
      6. Set the amount of the ingredient in ouncez (like 8 or so)
      7. Submit

…Code – must include comments - 10 points

Total 100 points

What to submit to Canvas. DO NOT ZIP!

* Project Report
* Grade Sheet
* Screenshots of the content and structure of your database tables.
* In comments URL & onid username of the student that submitted to TEACH

What to submit to TEACH. (If you are working in a group submit a single copy)

* Zipped folder containing all files for website and all exported SQL files for your database.