Web Application Introduction

<http://ec2-54-209-23-12.compute-1.amazonaws.com/project2/homepage.html>

This web application imitates a website that allows users to upload, browser, update and delete recipes. There are **three** main pages: homepage, recipe upload page, and recipe catalog page. From recipe catalog page, users can choose to update recipe (go to recipe update page), delete recipes(as many as the user chooses) and check recipe details(go to recipe detail page).

All pages have the same top and bottom navigations. At the top navigation, only the links “Homepage” and “Recipes” are effective. The “Recipes” is a dropdown menu that includes “Upload Recipe” and “Recipe Catalog”, they can direct user to other pages. The links at bottom navigation point to “#”.

**Semantic Markup:** PHP files and CSS files are separate from HTML. PHP script is interwoven with the HTML markup minimally.

**Database and Table:** The database is the same as the database used in previous labs (createDB\_TBL.php in “create db&table” folder). The create table code is provided in the “createprojecttable.sql” in “create db&table” folder.

**PHP Validation:** The recipe upload page and update page have input validation on every field.

**General Responsive Design:** all pages are responsive to desktop, tablet and mobile screen sizes. The font size, margins, image size, side item size, etc. will change to fit different screen sizes. Note at top navigation, the link’s background color will change when mouse over the links. For mobile screen size, the link’s background color will not change, instead the font color will change to red when user tap the link.

**1. Homepage**

The homepage describes the objectives of the website and act as a website guide. Besides the top and bottom navigation, the homepage also have a side item: “Today’s Recommendation” that includes a dish name, picture and link (point to “#”).

For user’s convenience, there are also two links to the user input page and recipe catalog page in the page content. Note the link’s background color will change when hover over the links at top navigation and the links in the page content.

**Additional Responsive Design**:

For mobile screen size, the side item “Today’s Recommendation” will move to the bottom of the page and becomes an item within the normal flow.

**2. User Input Page**

This page has seven inputs: text, dropdown list, number, radio, textarea, file upload, and submit. All the fields are mandatory and input validation is performed for each field:

**PHP Validation:**

The Dish Name cannot have numbers; it only accepts letters, single quotes, hyphens, underscore and white space. Wrong input will result in failure to submit, red warning message will show up next to the textbox (user\_input validation.php line 11-20).

The Cook time only accepts integer number (user\_input validation.php line 35-37), for wrong input, red warning message will show up next to the textbox.

The file upload check if the image is uploaded and it is a real one (instead of fake one, user\_input validation.php line 60-64). For real images, only JPG, JPEG, PNG & GIF format are accepted, and size needs to be small than 488kb (user\_input validation.php line 72-81). If the file already exists, red warning message will also show up (user\_input validation.php line 72-75). Wrong input will result in failure to submit.

All fields are **required**, if left blank upon submission, the form cannot be submitted, and red warning messages will show up for each missed field. (user\_input validation.php line 11-63)

**Store Record:**

When user corrects all wrong inputs, form data and image will be submitted and stored in database and server file folder (user\_input validation.php line 87-99). He/She will be directed to input display page which shows the uploaded record.

User can go back to homepage (and other pages) if they so desire.

**3. Recipe Catalog Page**

The columns are the same as user input fields. But the recipe detail is not shown in this page, user can check his interested Recipe Detail page by the button “check” provided in the table. The background color of the row will change when mouse over it. User can go back to homepage (and other pages) if they so desire.

**Retrieve Records:**

This page is dynamically generated since the records in table are retrieved from database (viewall table&button action.php line 38-60). Changes to the database records (add, update, or delete records) are reflected.

In the recipe catalog table, users can choose to update recipe (go to recipe update page), delete recipes (as many as the user chooses) and check recipe details (go to recipe detail page).

**Delete Record(s):**

The user can select multiple records to delete at a time (by checkbox and delete button), the pertinent pictures will also be deleted. (viewall table&button action.php line 8-20).

**Additional Responsive Design**:

The column “Type” and “Difficulty” will be hidden for mobile screen size since as the screen becomes too narrow, the user will have to scroll the window to see all the column, which is inconvenient for mobile user. The user can check the complete information of certain recipe by going to the Recipe Detail page.

**4. Recipe Update Page**

**Update Record:**

The user can choose to update certain record at the recipe catalog page by the “update” button, once he/she selects a record to update, he/she will be directed to the recipe update page. The form is prefilled with the data corresponding to the chosen record (updaterecipe validation.php line 5-17).

After the user has changed the pertinent fields (any field unchanged will remain as before), the record is successfully updated, if the image is also updated, the old image in server file folder will be deleted (updaterecipe validation.php line 94-117), he/she will be directed to input display page which shows the updated record.

**PHP Validation:**

All the validation rules are the same as User Input Page (updaterecipe validation.php line 24-92), except that the image upload is optional. If the user chooses not to update the image, the image remains the same as before. If the user would love to upload an image, then the validation rules are the same as User Input Page.

**5. Input Display Page**

When user successfully uploads or updates a record, this page will capture the data and present the uploaded/updated record (input\_display.php line 34-57).

This page follows the general responsive design.

**6. Recipe Detail Pages**

When user clicks “check” button for certain record at recipe catalog page, he/she will go to recipe detail page. This page retrieves the pertinent record (get\_recipe\_detail.php line 7-18). It has all the user input form fields and these fields are displayed in a table. User can go back to homepage and recipe catalog (and other pages) if they so desire.

These pages follow the general responsive design.