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Group Recipe Collection – Final Deliverable

Accessing the Prototype

Important: In order to use our application, you need to have friends also using the application to see their stuff—therefore for grading purposes we have created an account that is our friend on Facebook already and shows our information from using the app. It is:

Username: grouprecipecollection@gmail.com

Password: grouprecipecollection

You can access the prototype from the Facebook Canvas Page at https://apps.facebook.com/215582695215075/ .

Introduction

The Group Recipe Collection is an application that works as a mini food blogging community between Facebook friends, which is useful for people who are interested in recipes and may enjoy blogging, but who want to use a medium (Facebook) that they already understand and already visit frequently. The overall goal of the Group Recipe Collection is to share what a user's friends have been cooking and baking, giving the user more ideas of what he or she can make, and letting the user share what he or she has made.

Functionality

When the user first logs in, he or she sees up to 15 most recent recipes (starting with the most recent) his or her friends who are also using the application have posted. The index page is also accessed when you click "Home" in the navigation bar, or when you click the *Group Recipe Collection* banner. On the right side of the home screen are recent notifications. There are up to 5 notifications shown at a time, going from most to least recent. These notifications are added whenever someone (including yourself) comments on one of your recipes. The notification gives the user's name and a link to the recipe they commented on.

The user can view any recipe by clicking on its name. This recipe viewing page lets the user access the recipe information (title, source, an image, the recipe procedure) and also see which user has posted the recipe. On this recipe viewing page one can also view all comments other users have posted about this recipe, and can add a comment. If you come across a comment that you yourself posted, you can delete it by clicking the "delete" button to the right of the comment.

The user can view the profile of any friend who has posted a recipe from either the recipe page or the home, favorites, or search pages, depending on what recipes are visible. The Friends page also has a list of all the user's friends using the application with links to their profiles. On the profiles users can see all the recipes this user has posted, with links to the recipe viewing pages.

The user can add a recipe on the Add Recipe page, linked in the navigation bar. The user

must include the title, and the complete recipe procedure copy-pasted with line breaks as desired. The user can optionally include a source URL and a picture URL. If no picture URL is submitted there will be a default image provided as a thumbnail. The user can delete recipes that he or she has added from his or her My Recipes (profile) page. Recipes there are ordered starting with the most recent. The user can only delete his or her own recipes, and deleting a recipe will also delete it from everyone's Favorite Recipe collection if other users have starred it. The user can also edit his or her own recipes from his or her own profile page. The button is located under the Delete button, and will lead the user to another form.

The user can add a recipe to his or her favorites by clicking the asterisk next to the name of the recipe anywhere he or she sees it. A recipe cannot be added to one's Favorites more than once. Users can view his or her favorites by clicking the Favorite Recipes link in the navigation bar. Users can remove a favorite recipe by clicking the "Remove" link corresponding to each recipe on the Favorite Recipes page.

Searching for recipes can be done via the Search Bar from any page. The user simply types something into the Search Bar and clicks "Search". The query searches for recipes based on the titles and procedures of the recipes--so, a user can search for an ingredient that's not necessarily in the title of the recipe, and the Group Recipe Collection application will come up with all recipes containing that ingredient. The search searches for all recipes in the database, even if your friend did not post the recipe. If no results are shown, you'll be notified that there are no results. There are up to 50 results.

Post-Mortem

At the beginning, we worked earnestly to figure out how to build a Facebook application using Python and Django with no avail. Even with the provided Heroku code for Python, nothing showed up for us even with the few fixes to the code we could find. Therefore, we switched to our backup plan of PHP and MySQL. The MySQL database is hosted on Sophia's website. We host the rest on Heroku as we learned in Homework 5. After deciding on using PHP and MySQL, we had further issues with how to connect a remote MySQL database to Heroku. We couldn't figure out if the issue was with our MySQL host denying access from outside sources or if there was another issue preventing any MySQL information from showing up on our application. Eventually we found a way to connect to the MySQL a different way, using *mysql_connect* instead of *mysqli*.

We linked our application to Facebook from the start in order to grab information from friends right away, which is important for our application--it's all about sharing with friends. By the intermediate prototype, we had the ability to view a feed of recent recipes from friends; add favorite recipes; search for recipes; add recipes. One problem we encountered was sharing recipes between two people who are not already friends on Facebook. This is due to privacy issues-you can't give the rights of a friend away- and it would be very costly for us to create a database of every user who joins the application if we think about scaling the application. It is better to let Facebook handle and store that information.

Instead of focusing on sharing recipes between two people who were not also friends, we added several other things to our application, including deleting favorites, adding comments to recipes, and deleting your own recipes and viewing a list of all your friends using the

application. By our final version of the application we added a notification system to add extra interactivity between users—users are notified on the index page if someone comments on their recipes.

Between the intermediate and final application, aside from adding a notification system, we also made it so that users can delete their own comments and edit their own recipes. If a recipe is deleted, all comments are deleted. We fixed an error that let you add favorites multiple times, and made our application so that if zero search results show up (or if a user has zero recipes, or zero favorite recipes) there will be a message explaining why nothing is showing up on the page. Search results now only show 50 results, and comments are listed with the top showing most recent. There is now a default image in case a user doesn't have a photo of their food, and the user doesn't have to have a source URL to submit a recipe. Lastly, we added a background to the app which is meant to look like a tablecloth.

We had one issue with our first prototype where sometimes our test account would turn blank after adding a recipe. After deleting that recipe we never encountered the issue again, and we fixed a few areas in the PHP code where mysql_close() may not have been closing the connection correctly. After that we never encountered the issue so we're hoping that we fixed the bug.

During these four weeks we learned a lot about putting something like this together. The main things we learned were about using Heroku and Git, and working together simultaneously—sometimes we encountered issues when pushing to Heroku at the same time (the code occasionally had trouble merging). We also found that different users might see different things—ie when our test account broke and saw nothing, neither of us understood the problem because it had never happened for us.

If we were doing this project again for the same application, we probably would have made our code more readable and maybe separate the files—as it stands, all our PHP code is in one PHP file. But that is pretty much the only large-scale difference we would have done. We think that there could potentially be a lot of a future for an application like this, because we know several people who would be interested in using this type of application for recipes. Other functionalities we might include would be: uploading an image (or multiple images), sharing interesting recipes with particular friends, posting to one's Facebook wall via the application, and an improved notification system. Some of these could have been possible with a longer time to code, but as it stands we think that our application is a great exercise of our skills during the time we had.