

Final project – detailed project proposal

Team name: meal exchange (Team205)

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Words to TAs

Our team's original idea for the final project is "meal exchange" that has a detailed description in the previous report. However, after reading TA's feedback, we decide to make a big refinement based on that idea. The current idea is a community where users can learn how to make a dish according to recipes, display their dish works, and share with their friends.

Related Technique

Python scrapy will be applied to obtain data from Internet for our website, including dish, corresponding receipt (text, image and videos), ingredients and corresponding prices.

YouTube video APIs will be used to display video receipt for a dish.

Google Maps will be used to show the nearest shop or supermarket to buy your ingredients.

HTML Geolocation will be used to collect your current GPS location.

Oauth APIs will be used to login in with Facebook account.

Specification

This section lists all the functionalities for our new idea "cook yourself" that we'll implement during our final project.

1. Base html page:
 - a. Navigation bar
 - i. Searching box - compare keywords with dish name or ingredient name
 - ii. Main page
 - iii. Dish sharing page
 - iv. Login in/Log out
 1. Login user displays a profile with a pull-down menu (shopping list, logout)
 2. Non-login user displays Sign in, Sign up
 - b. Footer (About, Team info, Contact us)
2. Main page:
 - a. A main picture stream displays popular dishes that people may be interested in. Three dishes listed in a row according to popularity by default.
 - b. Different categories of filters in the right sidebar
 - i. Dish style: e.g. Thai
 - ii. Ingredients: e.g. Tomatoes
 - iii. Dish price: e.g. \$3
 - iv. Popularity: e.g. ★★★★★☆
3. Dish sharing page:
 - a. List those dish works according to different sorting order

- i. Popularity
 - ii. Newest updated
- b. Clicking the dish will display a popup that shows the dish works, including
 - i. User name - the poster owner
 - ii. Time - post time
 - iii. Praise button - praise for the dish works
 - iv. Comments on the dish works
- 4. Dish page: a page to display all the items related to this dish [*crawler*]
 - a. Dish name
 - b. Receipt source
 - c. Image - a picture set that shows dish works
 - d. Add the dish recipe to the login user's favorite
 - e. Ingredients
 - i. Price - display the lowest price after price comparison among crawler results
 - ii. Price source
 - iii. Adding to shopping list button - single ingredient or all
 - f. Instructions
 - i. Text - text direction about how to make the dish (required)
 - ii. Video - video direction (optional)
 - g. Comments from users who have made the dish
 - h. Share redirecting buttons
 - i. Nearest stores to buy the ingredients [GPS and Google Map API]
- 5. User profile page: displays the login user info and all the dish works
 - a. Personal info (user name, profile image)
 - b. All the dish works the user has made before
 - c. The user's favorite dish recipe collections
- 6. Shopping list page:
 - a. Display all the ingredients users have put into the chart as a reminder
 - b. Display the price of the ingredients and nearest stores.
 - c. Users can send it to their personal emails
- 7. Shopping list printing preview page: gather ingredient list from the shopping list page, use django to generate a pdf page for users.
- 8. Recommendation page: a recommendation page that will display dishes for the login user.
 - a. Generate a meal plan based on searching history
 - b. Users can use advanced searching options that help to exclude ingredients they don't like
 - c. Users may have some ingredients in the refrigerator but have no idea how to cook them. We provide an interface that allows them to input a list of ingredients, based on these to generate a meal plan for this week. Highlight the ingredients one has to buy. (Baseline is filtering. If time permits, more complex algorithms may be used).

9. Registration and Authentication by using Facebook authentication