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Project 2 – Documentation IGME 235

GOAL:
The goal of this project is to make use of an online API to display recipes based on ingredients and other filters entered by the user, such as maximum calories per serving, meal type, cuisine type, and any health labels the user wishes to include.

DESIGN PROCESS:
My design process started with designing the sematic content of my site. I focused first on what I wanted my page to contain and in what order I wanted those things to appear. This mostly consisted of determining what elements I wanted the user to be able to use to search for recipes. In the end, I settled on requiring the user to search using at the very least 1 ingredient, or if they choose, a comma-separated list of ingredients. In addition, I included filters for maximum calories per serving, meal type (breakfast, lunch, etc.), cuisine type (American, Mexican, Asian, etc.), and health labels (vegan, no sugar, keto, etc.).

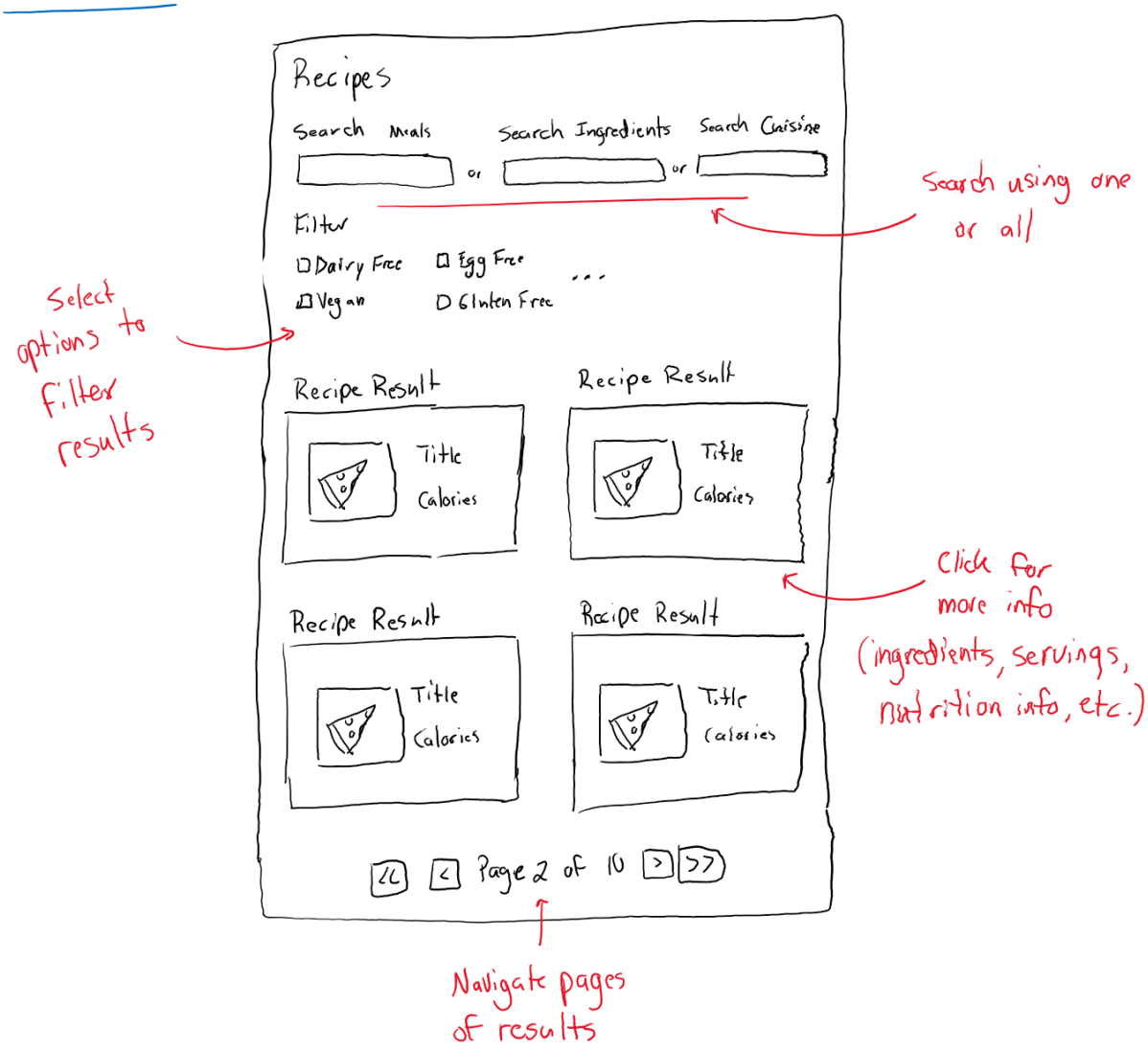
After getting the sematic structure organized, I focused on writing the functionality of my app so that I was successfully able to return results from the API based on user input.

The next step in my process was to incorporate some styling. This included choosing an appropriate font, as well as making use of CSS Grid to format the search fields and results in a pleasing way.

The final step I took in my design process was to refine and tweak things to give a better experience to the user. This included the creation of a placeholder image to be used if the API was unable to provide an image for a recipe, as well as miscellaneous checkbox functionality (discussed further in "Notes" section). This is also about the point at which I implemented the functionality for the "Advanced Search" dropdown menu. At this stage, I was also able to address some of the suggestions given on Slack during the critiquing period.

DESIGN SKETCH:

Sketch 1:



SOURCES:

- API:
  https://developer.edamam.com/
  - Edamam Recipe Search Documentation
    https://developer.edamam.com/edamam-docs-recipe-api
- Fonts:
  https://fonts.google.com/
  - Roboto Slab
    https://fonts.google.com/specimen/Roboto+Slab?query=roboto
- Icons:
  https://fontawesome.com/
  https://icons8.com/
  - chevron-up:
    https://fontawesome.com/icons/chevron-up?style=solid
  - chevron-down:
    https://fontawesome.com/icons/chevron-down?style=solid
  - ellipsis-h:
    https://fontawesome.com/icons/ellipsis-h?style=solid
  - spinner:
    https://icons8.com/preloaders/en/circular#
- Placeholder images and icons besides those mentioned are original works

NOTES:

- Images:
  - Images from the API are 300 x 300 pixels by default.
  - Placeholder images appear if the URL given by the API either does not exist or does not contain a "." in the fourth or fifth to last string index. This "solution" is not ideal, but it covers those cases where image links given by the API are incorrect or do not contain an image extension at the end of the image link (i.e., ".jpeg" or ".png"). In these cases, to avoid a 404 response, placeholder images are used.
- Responsiveness:
  - Starting at 690 pixels, the input elements get larger to accommodate smaller screens. This value was chosen because it is the largest value before text started to look strangely formatted.
- Features:
  - Ingredient input is the only input required (indicated by a "*").
  - The last ingredient search term entered is saved in the browser's local storage and automatically recalled upon page-reload.
  - A user can visit the site at which the recipe originates by clicking on the provided link or by clicking on the image that comes with each recipe.
  - All user input is cleared of invalid characters, and invalid formatting is resolved programmatically (i.e., only numbers are accepted for "Max Calories Per Serving", and "Ingredients" will accept a comma separated list). Ingredients can also contain spaces.
  - For all advanced search options, "All" is automatically selected to show the user that a default search will include all those options.
  - For both the "Cuisine" and "Health Labels" sets of checkboxes, selecting "All" will automatically deselect all other checkboxes in that set. Similarly, selecting any other

checkbox will also deselect "All" in that set. If no other checkbox is selected, "All" will always be selected, and it cannot be deselected unless another box is selected.

- Missing Features:
    - The API currently returns 30 results per search. The implementation of pages would have been ideal, but limitations set on the frequency and number of API calls mean that thresholds could be reached too quickly, and the app would become unusable. To be more specific, the free tier of the API throttles calls to 10 per minute.

TODO:

- Add pages?
- More filters?
- Better styling
- Nutrition facts beyond calories and servings?
- Nutrition label?

GRADE:

I think I maybe could have done a little better, but I think what I have still satisfies the given requirements. Therefore, it is my hope that this assignment will receive full credit.