toMEto: a Networks-based Approach to Recipe Recommendation

CS145

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ABSTRACT

Abstract text. Abstract text. Abstract text. Abstract text. Abstract text. Abstract text. Abstract text.

1. INTRODUCTION

Sample text. Sample text.

Citation of Einstein paper [1].

2. RELATED WORK

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3. ALGORITHM DESIGN

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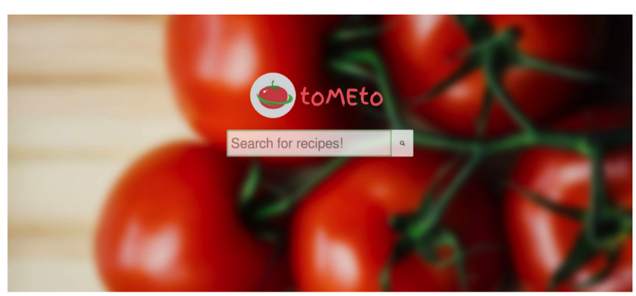
4. WEB DESIGN

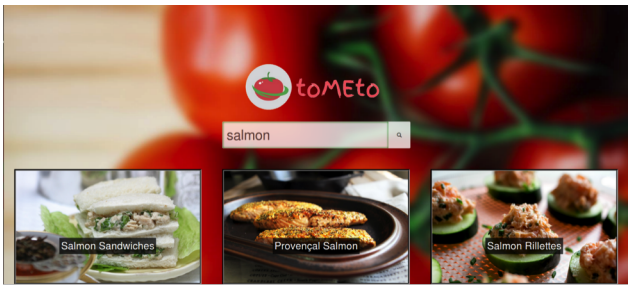
Web design was done using a combination of HTML, CSS, JavaScript, and Python. HTML was used to create the content for display on the page, and CSS was used to style this content. JavaScript was also used for animations and general User Interface tweaks to make browsing the site intuitive and smooth. Finally, Python was utilized as an interface between the back-end and the front-end. Through the usage of PythonâĂŹs Flask framework, it was possible to integrate the back-end algorithms with displaying the relevant computed information on the front-end. In other words, our module app.py imported modules from the back-end, while also using this information to fill in the HTML templates based on search queries, etc. given by a user in the front end.

The primary focus on the front end was to develop a site that is intuitive and self-explanatory, while also featuring only the information that is needed the most. Thus, the landing page has the following design:



Upon searching for a recipe, a loading bar appears, and once recipe information ins obtained, tiles fade in. These tiles

offer an image of the recipe to be prepared, with the recipe title overlaid on top. This can be seen below:

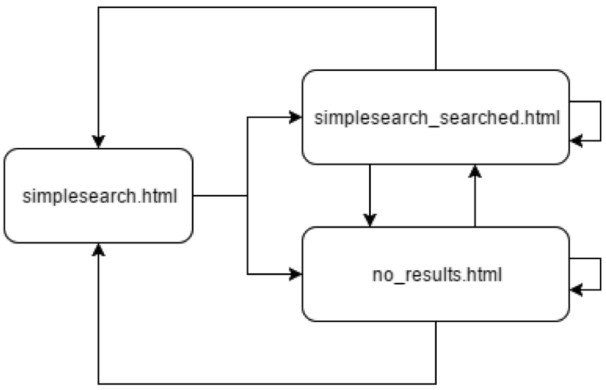


Upon clicking a recipe, a modal popup appears, which lists both the recipe itself as well as toMEtoâĂŹs recommended ingredients, as can be seen in the below image:

Much of the front-end was designed to be easily updated and maintained, and thus small UI tweaks, such as background images, color schemes, etc. are easily changeable by editing the HTML and/or CSS files. The front-end utilizes mainly three different HTML templates:

- simplesearch.html
- simplesearch_searched.html
- no_results.html

simplesearch.html is simply the html for the landing page, before any queries are entered. Then, once a search query is entered, app.py directs this information to the backend, which then generates information which is supplied to the simplesearch_searched.html template. The user is also redirected to this template, which includes the tiles, modal popup information, etc. Furthermore, if a search is entered into simplesearch_searched.html, this also refreshes the simplesearch_searched.html template, utilizing the new information. Finally, no_results.html is used as a template to be redirected to when the query entered into simplesearch.html or simplesearch_searched.html does not contain any results. As a note, a user will be redirected to simplesearch.html upon clicking the toMEto logo.



5. PERFORMANCE

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6. DISCUSSION

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7. CONCLUSIONS AND FUTURE WORK

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8. REFERENCES

[1] A. Einstein. Zur Elektrodynamik bewegter Körper. (German) [On the electrodynamics of moving bodies]. *Annalen der Physik*, 322(10):891–921, 1905.