

Project Proposal

ABS-OLUTELY

Dear Professor Galen Long,

Below is our details proposal for our final group project.

Group Members:

- David Tran (tht35)
- Nam Dao (nhd36)
- Linh Phuong Nguyen (pn383)

Group name:

Abs-olutely

Project Description:

As the name described, our project is a website that generates recipes based on ingredients that the user inputs. The website will use Chat GPT to create the recipe and calculate the calories based on the meal. Users can also enter their nutrition information to get a more accurate calorie count and more freedom for them to choose a meal during the day. Users can then select the recipe they want and view the nutritional information (calories, fat, macro/micronutrients, etc.) for that recipe. Additionally, users can enter their own dietary information and track their daily intake on a calendar. Our intended users are people who want to eat healthily and efficiently and may have limited ingredients available to them. Hence, we

expect our website to have an appealing visual and friendly UI so that our users can use the website daily as their habit.

The “wow” factor for this project could be the inclusion of a community where users can share their own recipes and rate recipes generated by the website. This community feature could be a powerful tool for engagement and improving the recommendation algorithm of the website. Users could create their own profiles, upload recipes, and rate recipes generated by the website. The community could also have a feature for users to follow each other and see what recipes they have liked or recommended. This could create a sense of community and encourage users to return to the website. The rating system could also be used to improve the recipe recommendation algorithm. The website could analyze the ratings and ingredients used in highly rated recipes to enhance the recommendations it provides to users (we hope we will have time for the recommender system). This could help ensure that the website provides users with the most relevant and useful recommendations.

Implementing a community feature like this could be challenging, as it would require building a social network within the website. However, it could also be a major selling point for the website and could help set it apart from similar recipe websites. Additionally, the potential benefits of engagement and improving the recommendation algorithm could make it well worth the effort.

GitHub/GitLab Repository:

Link: <https://github.com/tungtrn/simple-recipe>

The repository is public, so no permissions are necessary.

Group Members' Experience and Skills (*question 1*):

Nam has experience as a software engineer at Cisco, primarily working with the backend varies from different types of technologies. Tung has experience as a software engineer at Meta and is skilled in front-end technologies such as React/Redux, JavaScript/TypeScript, GraphQL. Linh is a data science major with basic experience with backend technologies (mainly backend

database technologies) and creating websites. However, she might need more time to learn the tools and get familiar with the technologies the whole team will use.

To address the skill differences among group members, we plan to split up the work based on our strengths and interests and make sure to communicate regularly to ensure everyone is on the same page. For us, it is essential to consider how to distribute the work effectively, ensure that everyone is making valuable contributions, and still make sure everyone contributes equally. We will have one open discussion with the group soon to understand each member's skillset and interests. Therefore, we can identify who may be best suited for specific tasks and help ensure everyone is working on something they enjoy and are confident in. In addition, we will also apply the pair programming technique. Hence, more experienced members can work with less experienced members to help them learn and grow while still progressing on the project. Similarly, we consider collaborative coding so all of us can work on the same piece of code. This can be a great way to ensure that the code has fewer bugs and that everyone contributes to the project and learns from each other. We will also set up regular check-ins to ensure everyone is on the same page and discuss any issues or challenges that have arisen. Overall, with the mentioned strategies, we hope that everyone is making valuable contributions to the project and growing as developers.

Communicate Method and Time Commitment (*questions 2 and 3*):

We have already had a group chat, and this will be our main channel to communicate and keep track of everything related to this project. We will try to have a fixed meeting at 9 pm Thursday (maybe 1-2 hours) so that we can have more changes and discussions since we meet the professor to discuss our project on Thursday morning.

Based on the scope of the project and the skill set of the team members, it is reasonable to expect that the project will take approximately 12-15 hours per person per week to complete successfully. However, this may vary depending on the specific tasks assigned to each team member. This will also depend on factors such as work or school schedules, personal obligations, and other commitments. We also commit to announcing any changes in each member's availability and our plan ahead so that we can allocate tasks and responsibilities accordingly to

ensure that the workload is distributed fairly and everyone can contribute to the project as much as possible.

Unequal Contribution (*question 4*):

We aim to divide the work evenly, but there may be times when one or two team members need to do more work than the others. In that case, we will communicate with each other and adjust the workload as needed. We believe that it is acceptable for one or two team members to do more work than the others to get the team the best product, as long as the workload is distributed fairly and each member contributes equally in other ways. For us, 2-3 more hours per week, or 1-2 more functions in the code, is the threshold acceptable. However, we believe that everyone should contribute equally to the project, and we will ensure everyone has the opportunity to do so.

Dealing with Inequality (*question 5*):

If a member does not contribute equally to the project or follow through on a commitment, we will address it by communicating with that member and finding out the reason for their lack of contribution. We will work together to find a solution, such as redistributing the workload or providing additional support and resources. If the issue persists, we will bring it to the professor's attention for guidance. We never expect this to happen since we only have five weeks for the whole project.

Thank you for your time and consideration. We are looking forward to your feedback.

Sincerely,

Abs-olutely team