

# MIDTERM PROJECT PROPOSAL

## EasyCal

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### PREPARED FOR

COM S 3190 - Construction of User Interfaces  
Iowa State University Computer Science Department

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# 1. Introduction

We, Brian Craciun and Muhammad Blal, are from team JK\_13. We are both Sophomores majoring in Computer Science. We are in the process of learning demanding web development skills like HTML, CSS, and JavaScript from this class, COM S 3190. Throughout past assignments in this course we have become familiar with building a catalog. So, for this upcoming midterm project, we plan on integrating an external calorie calculating API with our current knowledge to develop an easy to use website that can help anyone figure out the nutritional facts of the food they are eating.

## 2. Purpose of the Proposal

We aim to create a website that can guide users to an understanding of the nutritional information of the food they are going to be eating. While many people go throughout their daily lives not knowing what they are actually eating and putting into their bodies, we hope that our website, “EasyCal” is able to break this information down in an easy to consume way and help people live a healthier life.

## 3. Goals and Objectives

Our project's goals and objectives include:

- Developing a website that is easy to use, read, and navigate
- Styling the website with a coordinated color scheme and simple UI
- Providing information about foods nutritional data
- Incorporating CalorieKing’s API to bring forth this data
- Creating a display that is easy to read for the user displaying nutritional information about their item.
- Demonstrating proficiency in HTML, CSS, and JavaScript for web development.
- Incorporating a search feature that allows users to look up the food they are planning to eat
- Consistently updating the website with new foods and data
- Including a survey form for user questions and recommendation for what else should be added

## 4. Project

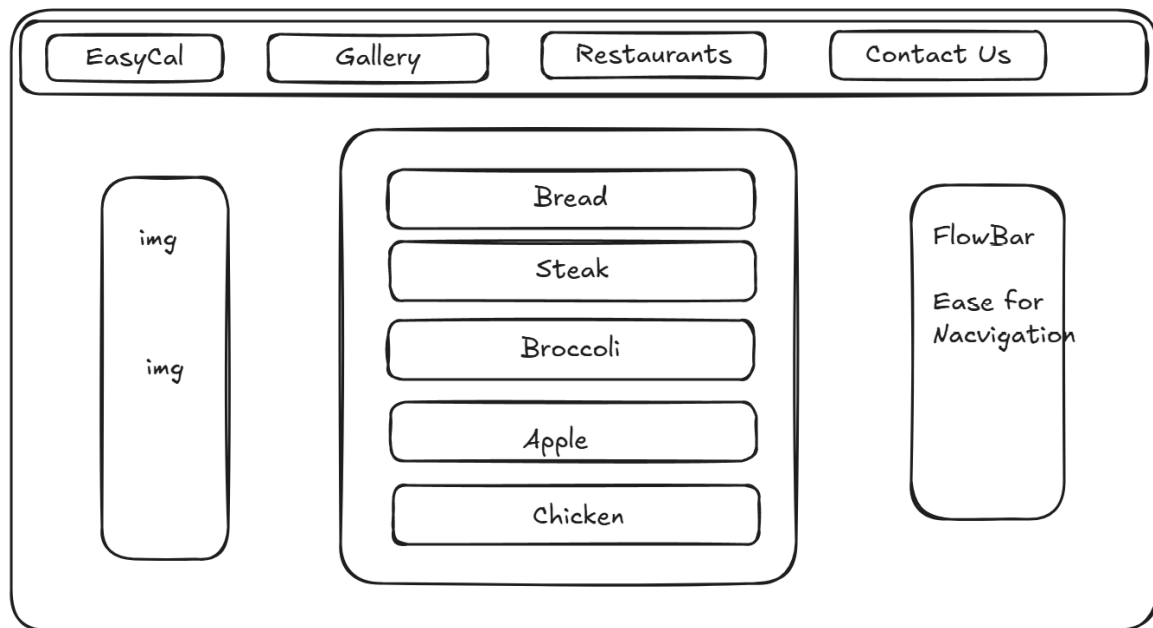
With our website, “EasyCal”, we want a place where anyone with any amount of experience can get nutritional information about their food. The ability to take part in knowing what food you are consuming on the daily and how it may affect your body is a key step in living a healthier lifestyle.

Here are some of the key features of our project:

- **A List of Easy Access foods** quick references for users just dropping in
- **A Search Bar** enables you to search for food type
- **A Seamless Design with Intractable Pictures** users can see what diet facts basic meals may have
- **Further Resources** where users can find more information about what the nutritional facts mean
- **Help Ticket** users can request a food or an update to the site
- A tab of **popular restaurants** that contain macronutrients of foods of their particular restaurant

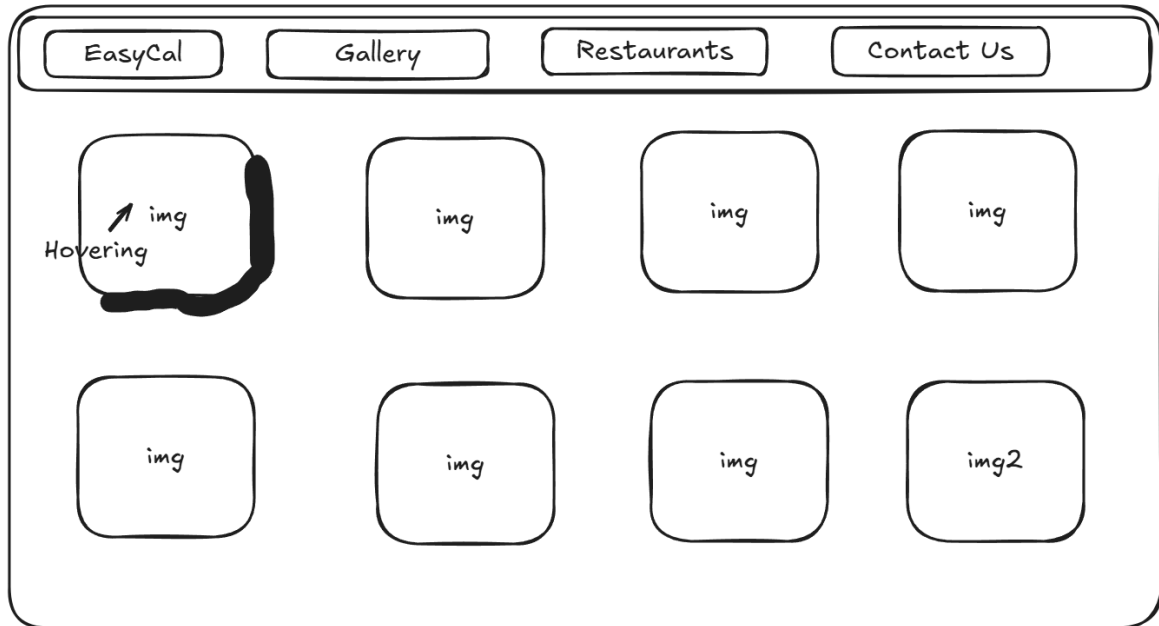
### Example Wireframe for Homepage:

- A clean interface with a centered catalog
- A nav bar to focus the user on only specific content that is on each individual page



### Example Image for Food Gallery Page:

- A grid layout displaying foods using Bootstrap.
- Each item should have a popup when clicked, and when hovered over it should lift slightly off the page.



## 5. Resources

1. Web development programming languages: HTML, CSS, JavaScript.
2. Use of JSON files to store information about certain foods if necessary.
3. Copyright-free Image assets from Google.
4. Use of DOM to include HTML & CSS code within the JavaScript file.
5. Time allocation for each team member to collaborate on the project.
6. Use of GitHub as our version control remote repository to push and pull work to keep our team's work up to date.
7. Use of Bootstrap for the catalog template to show off images of food and their corresponding popup of information
8. Leverage GitLab issue boards to distribute tasks among team members, improving the development experience and integrating the SCRUM model into our workflow.
9. Use of a CDN from Bootstrap to enhance website loading speed by distributing assets across multiple servers geographically.
10. Integration of an external API from a renowned calorie database to enhance website functionality, ensuring compatibility with all foods's nutritional content, including foods from popular restaurants. The API will contain the following:
  - Integration of an external API from a renowned calorie database to fetch and display nutritional content, including foods from popular restaurants.
  - Units: The API provides nutritional data in grams and milliliters. JavaScript will handle unit conversions.
  - Nutrient Information: The website will display detailed nutritional breakdowns, including energy, fats, carbohydrates, proteins, vitamins, and minerals.
  - Tags and Categories: Users can search and filter foods using tags and the API's category tree.
11. Use of Draw.io to design prototypes for different pages of the website.
12. Use of Excalidraw to create wireframes for key web pages, including the homepage, timeline, gallery, and shop. These wireframes will guide UI development to ensure a user-friendly experience.

## 6. Future Work

*EasyCal* is designed with the idea of future updates and expansions.

Post-launch, we plan to:

- Get in contact with restaurants and local businesses to have their food on file with their specific information.
- Creating user accounts where people can
  - Plan Meals
  - Track Calories
  - Get Bites of Nutritional information daily
  - Receive a yearly recap about their eating habits

This project lays the groundwork for our final project, potentially incorporating more advanced features such as having algorithms determine the optimal meals for users, and helping users get healthier by recommending foods they have access to.

## 7. Final Comments

This is our proposal for *EasyCal*. We believe this project will give us a chance to apply all the learning that we have done in class to a proper digital project. It also gives us the opportunity to help people live a better, healthier life. Thank you for considering our proposal for *EasyCal*. We are open to suggestions.

You can reach out to us at:

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