

Easy Chef

Problem:

Many college students are living away from home for the first time. Many don't know how to cook, but they also don't have time to learn. While many recipe apps already exist, they are catered towards those who are experienced cooks. Many dishes are thrown at the user's face without any indication of how easy or difficult it is to create. This results in a confusing user experience for beginner cooks which will discourage them from cooking in the future.

Solution:

Easy Chef is an easy to use application that provides recipes for its users. It includes a meal of the day so users don't need to search through a large pool of dishes and a simple, easy to use meal planner for users to plan out their week. This application is perfect for those who are new to cooking and are looking for quick dishes to create that taste great.

Core Features:

- The ability to search recipes with filters that include dietary restrictions, allergies, and difficulty of the recipe (time to make).
- Having a personal cookbook page that allows users to include recipes of meals that they like.
- User's also have the ability to modify recipes or add their own recipes to save in the personal cookbook.
- A recipe page per meal that includes nutrition facts, ingredients, directions, difficulty (time to prepare), and the ability to save it to the user's personal cookbook.
- Login and signup system with an email and password.
- The ability to create a meal plan in which user's can drag in meals from the personal cookbook page to each day of the week.
- Meal plan page that shows the meal plan generated by the user for the week.
- The ability to save recipes locally for offline use from the recipe page.

Our application includes a wide variety of recipes. We added multiple filter options to help users find what they are looking for. Some people have dietary restrictions, which is why we decided to include that as a filter. Users will be able to save their

favorite recipes in their personal cookbook. This reduces the hassle of searching for a recipe again. In addition to saving recipes, if users want to modify an existing recipe, they can do that in the personal cookbook. The recipe page allows users to view all their favorite recipes in one section of the application. Every recipe will have nutritional facts and an ingredient list so users know exactly what they are eating, how to cook it, the estimated amount of time to cook and the difficulty level to help users decide if it is worth making the dish, and the ability to save that recipe to their personal cookbook if they wish to view it later. Users will also be able to plan out their week through the meal plan page. This is a convenient feature that will allow users to plan their meals for the week. Users must have an account to create their personal cookbook and meal plan. There will be the option to download the recipes offline as a PDF file, without an account.

Feature Risks:

- Core Feature: Risk of having too many features and spending unneeded time on implementation.
- User Account (sign up): - Developing our own custom sign in might take time away from developing the actual website (better to use existing API)
- Core CRUD Feature: might be hard to integrate with the app and make the features seamless
- Spending too much time on adding new features, rather than making the features complete
- There are endless filter options, need to make sure not to try and implement all of them as filtering is a rabbit hole. Need to prioritize most important options based on target demographic.
- Having a login feature might turn the user away, due to the extra step of logging in to your Google account.

User Personas:

User Personas										
Personas	Name: Chad	Name: Ryan	Name: Spencer	Name: Ishaan	Name: Maggie	Name: Bob	Brad	Jeremy	Alex	Suzi
<p>Required Features: Healthy food option (since he plays sports), Recipe Search</p>	<p>Age: 18 Gender: Male Occupation: College Student/Captain of football team Hobbies: Sports, Video Games</p> <p>Scenario: Chad is just now starting college but doesn't know how to cook. He is also captain of the football team and has a lot of time to cook. He only has one recipe application that is easy, quick, and beginner friendly to use.</p>	<p>Age: 22 Gender: Male Occupation: Full-time student, part-time on-campus job. Hobbies: Working out, Technology, video games</p> <p>Scenario: Chad is working out a lot during his free time. He wants to learn new recipes that are healthy and quick. He also wants to cook more at home because it's cheap and efficient.</p>	<p>Age: 20 Gender: Male Occupation: Full-time college student + part-time at company Hobbies: Playing guitar, Spicy - soccer, workout, loves throwing parties</p> <p>Technology Familiarity: comfortable Devices used: Android Device or iPad</p> <p>Scenario: Ishaan is a college student who uses the app during his free time. He wants to learn new recipes that align with his choices.</p>	<p>Age: 19 Gender: Female Occupation: Full-time student Hobbies: Playing guitar, Technology Familiarity: very comfortable Devices used: iPhone, laptop, airpods</p> <p>Scenario: Maggie is a college student who just started juggling work and school. She needs some quick recipes that are healthy and align with her choices. She also wants to learn new recipes that align with her choices.</p>	<p>Age: 18 Gender: Female Occupation: Part-time working, Cooking Experience: Zero Technology Familiarity: comfortable Devices used: iPhone, laptop, airpods</p> <p>Scenario: Brad is an 18 year old girl that works part-time at a grocery store. She wants to learn new recipes that are easy to make and professsionally can be prepared ahead of time and stored in the fridge. She also wants to learn new recipes that align with her choices.</p>	<p>Age: 18 Gender: Male Occupation: Full-Time College Student Hobbies: Sports, Video Games, Tech</p> <p>Technology Familiarity: comfortable Devices used: PC, Android Phone</p> <p>Scenario: Bob is a college student who is spending a lot of money on food, eating out the majority of the time. He wants to learn new recipes that align with his choices.</p>	<p>Age: 21 Gender: Male Occupation: Engineering Student Hobbies: Sports, Video Games</p> <p>Technology Familiarity: Very Familiar Devices used: PC, Laptop, Smartphone</p> <p>Scenario: Brad is an 18 year old male living on campus. Due to his strict vegetarian diet, he often eats breakfast and lunch at the cafeteria. He would like to learn how to cook meals for dinner at home. After being around a diverse set of people in America, he would like to learn more about the types of meals they eat.</p>	<p>Age: 21 Gender: Male Occupation: Computer Science Student Hobbies: Sports, Video Games, Tech</p> <p>Technology Familiarity: comfortable Devices used: PC, Smartphone</p> <p>Scenario: Jeremy is a 21 year old male living on campus. Due to his strict vegetarian diet, he often eats breakfast and lunch at the cafeteria. He would like to learn how to cook meals for dinner at home. After being around a diverse set of people in America, he would like to learn more about the types of meals they eat.</p>	<p>Age: 19 Gender: Male Occupation: Engineering Student Hobbies: Sports, Video Games</p> <p>Technology Familiarity: comfortable Devices used: PC, Smartphone</p> <p>Scenario: Brad is an 18 year old male living on campus. Due to his strict vegetarian diet, he often eats breakfast and lunch at the cafeteria. He would like to learn how to cook meals for dinner at home. After being around a diverse set of people in America, he would like to learn more about the types of meals they eat.</p>	
<p>Features</p> <ul style="list-style-type: none"> Recipes already on there, preparation, difficulty (number of ingredients/time). Nutrition information, Master ingredient list for the week. Ability to save ingredients locally, ask users for information about them, ability to use locally. 	<p>Required Features: Saving recipes, creating a meal plan, recommendation system, Cost per meal (filtering), Metric to compare what the ingredients are, categories</p>	<p>Required Features: Filters based on diet, restrictions, possibly allergies, nutritional facts, recipe by ingredient of time, quick meal prep, portion size</p>	<p>Required Features: Serving size, health restriction (filtering), meal prep, Calendar filtering, days/weeks</p>	<p>Required Features: Price filtering, time filtering, flavor filtering (spicy, sweet, bland).</p>	<p>Features: Meal prep ahead of time due to school. Easy to make (time/number of ingredients). Filter by symptoms (anxiety, sore eyes)</p>	<p>Features: Flexible to prices, wants to try new things, experience different cultures, suggestion system for ingredients,</p>	<p>Required Features: Low effort / requirements is his top priority</p>	<p>Features: Low effort meals, low requirements, lives to eat, no high expectations for food, allergies</p>	<p>Required Features: Print out option for the recipes, being able to modify the recipes by copying them into a new recipe, try new food</p>	<p>Features: Meal plan for the week with shopping guidelines that has an ingredient list, quick and easy.</p>

From the user personas, we were able to establish our target audience for this application. There was a common trend amongst these personas, a majority being college students who have a lack of experience with cooking or are looking for a quick and easy meal. Laying out this information guided us to create a plan of realistic features for our product.

Target Audience:

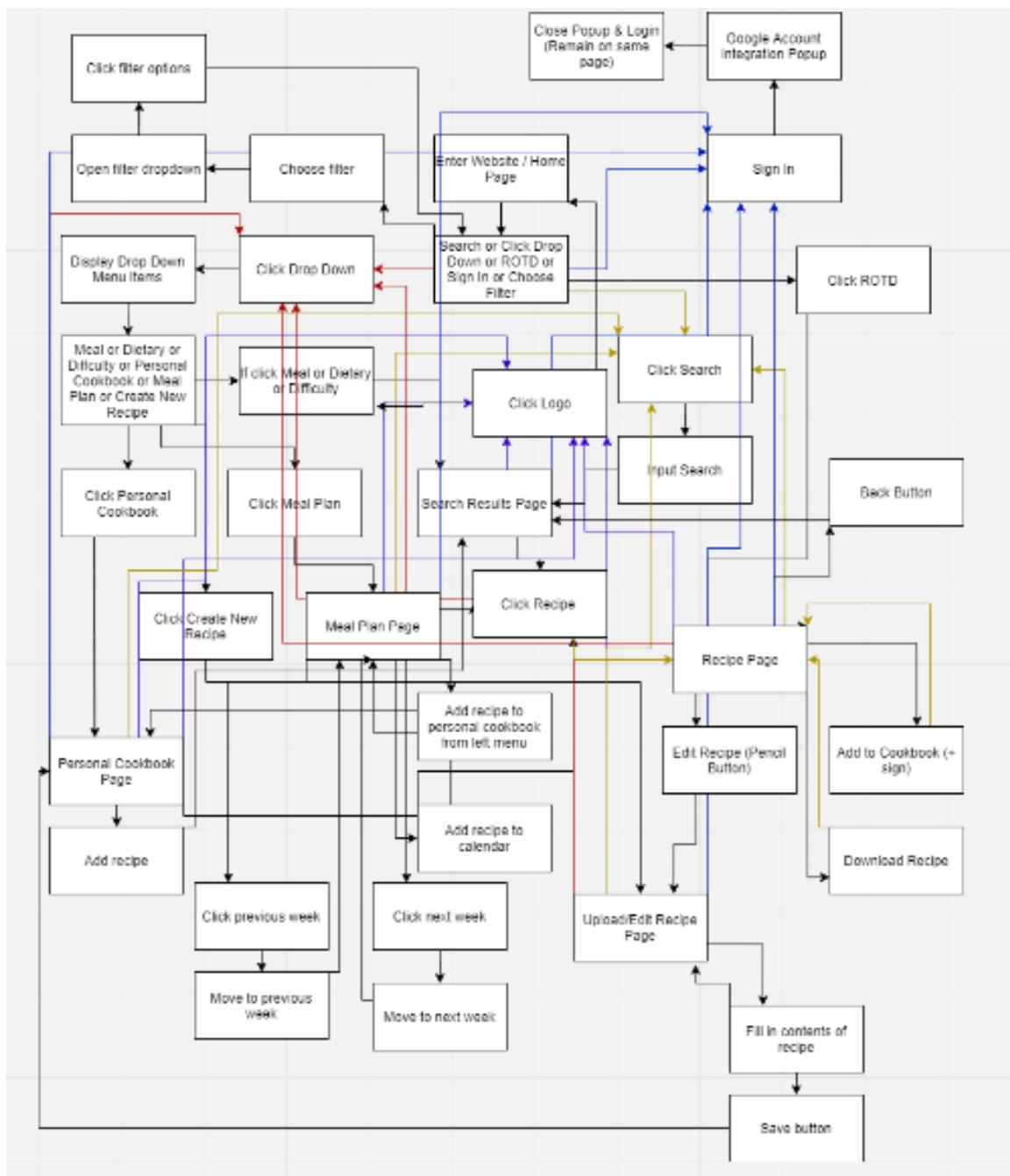
Ryan:

College student, 18, Male, not tech inclined, very active, eats a lot, most meals are dining food, cooks during weekends/meal prepping, wants to learn new recipes and experiment with new cuisines, wants to cook food that has a lot of calories, but is cheap and efficient. Ryan would open the app during an afternoon or evening on the weekend, trying to look for recipes that could help him prep for at least one meal a day. He has a lot of time when he plans to cook, but he only has some cooking experience. He wants to be able to get all his nutrients and would also like dessert to go with all his meals.

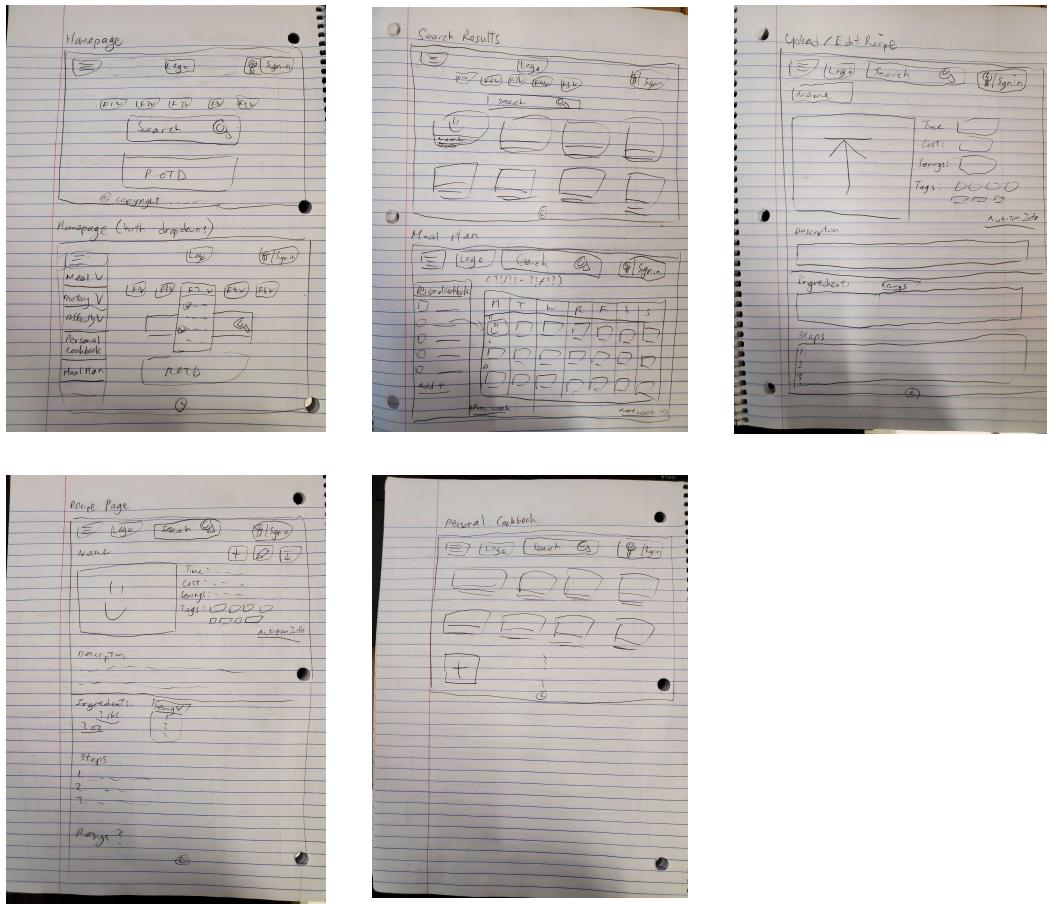
Jeremy:

College student, 21, Male, single, and a CS major, hobbies include video games on PC. Jeremy lives on campus and often skips breakfast due to his busy schedule. He is looking for a way to prepare a quick meal before school. He only eats to live so he has a limited amount of utensils and dishes, and is only capable of cooking simple meals that do not require too much. He is lactose intolerant, so a majority of breakfast meals are off the list. His housemates fill up the fridge, so he cannot prepare meals for the week.

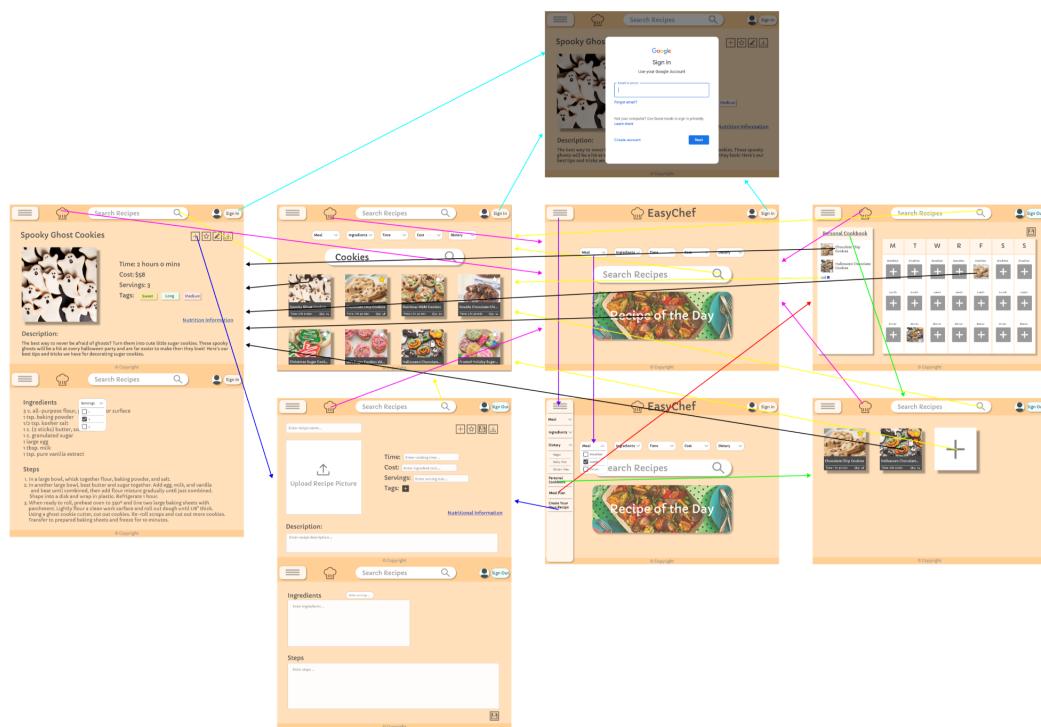
UML Diagram:



Low Fidelity:



Wireframe:



High Fidelity:

The screenshots illustrate the workflow in the EasyChef application:

- Top Left:** Home screen featuring a search bar, a "Recipe of the Day" banner, and navigation filters for Meal, Ingredients, Time, Cost, and Dietary.
- Top Right:** Recipe search results for "Spooky Ghost Cookies". The results page includes a summary, nutritional information, and a detailed description of the cookies.
- Middle Left:** Recipe creation screen for "Spooky Ghost Cookies". It shows the ingredients list (with checkboxes for quantity), steps, and a note about rolling out the dough.
- Middle Right:** A modal window from Google's "Sign in" service is overlaid on the recipe details, indicating a login step is required.
- Bottom Left:** Recipe creation screen showing fields for name, picture upload, and basic metadata like time, cost, and servings.
- Bottom Right:** Personal Cookbook interface displaying a weekly meal plan grid for Monday through Sunday, with icons for breakfast, lunch, and dinner.

Project Roadmap:

Technologies	Google Firebase	Spoonacular API	GitHub	HTML/CSS/JS	Visual Studio Code	Figma	
Week 5	Quality Assurance works on event					Team completes project pitch and presents it to mentor.	
	UI/UX completes low-fidelity + high-fidelity wireframes.	Backend works on completing the list of required features and possible risks for	Team leads work on roadmap and listing extra technologies needed for				
Week 6	Backend starts writing API functions for the backend from Spoonacular API.	Backend sets up user authentication in Google Firebase. Creating functions for login and signup as well as storing	Quality assurance sets up CI/CD pipeline and assists backend if needed				
	Frontend creates skeleton pages for web application and follows high-fidelity design for the web pages. Work on Internal Documentation: ADR due by 11/08.	Design makes revisions to wireframe if needed. Work closely with	Team Leads will set up Github issues as well as milestones for the project and assist Frontend and Backend teams to complete tasks for the week. Team leads will also setup sprint review meetings.				
Week 7	Backend completes all API functions this week and begins deployment process of backend for	Designers make revisions to wireframes if needed and join frontend in development of the	Help backend complete tasks for the week. Begin testing available pages.				
	Team Leads continue assigning Github issues for the week and work with respective teams assigned to:						
Week 8	Minimum Viable Product	Backend begins fixing bugs or helps frontend with completion of the web	UI/UX Team works close with Quality Assurance to modify/design new	Quality Assurance continues testing the web application and decide stretch features that could be added. Start working on			
	Frontend page deployed to	Team leads ensure features for minimum viable product in the Github milestone are completed and performs	Team works on Agile Team status video				
Week 9	Quality Assurance continues addressing bugs that respective teams should work on. Complete Internal Documentation -	UI/UX work with frontend on necessary design changes as well as continuing wire framing for stretch features.	Backend creates new API/functions if needed. Modifies database if there is more data to be added				
	Frontend begins fixing bugs needed as well as creating new pages/assets for possible stretch features.	Backend creates new API/functions if needed. Modifies database if there is more data to be added	Team member interim reviews				
Week 10	Frontend finalizes bugs to the website and works closely with Quality Assurance. Finalize any necessary.	UI/UX works on editing the video for the final project presentation.	Backend works with Quality assurance and frontend to patch bugs. Backend also finalizes internal documentation - ADR for submission.				
	Quality Assurance finalizes finding any bugs within the frontend and backend. Help frontend with completion of	Team leads evaluate completion of milestone and sprints.					
	Once tasks are completed, entire team begins working on						
Week 11	Entire team completes filming for the video. UI/UX makes final edits for submission.						
	Presentation						

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Tools and Technologies:

On the frontend side of the project, we will utilize HTML, CSS, and JavaScript. On the backend, we will leverage the spoonacular API to get necessary information on recipes that include all of our filtering constraints. We will also use Google Firebase as our primary database for user authentication and recipes saved to each user's unique cookbook.