
PANTRY RAID



— KEEPING YOUR FRIDGE SMART —

EXECUTIVE SUMMARY

Pantry Raid is a revolutionary web application that allows its users to manage, build, and keep track of their refrigerator inventory at all times; leading to healthier life choices and improving the quality of food consumption for all. The application can also improve a person's lifestyle by providing healthier food options that improve that person's overall health.

The improvement of life is made possible by helping users buy food, store food, and keep consistent track of food.

Pantry Raid allows its users to upload and search for recipes throughout the application. For the sake of convenience of our customers, Pantry Raid also allows users to add and edit to a shopping list from their mobile device as they plan their next grocery store trip. A unique feature of our product is our Meal Plan feature which allows users to allocate a set amount of ingredients for a set amount of days in order to give them a more organized. We plan to market this product as a solution which saves time for busy users who are looking for the assistance of technology to ease their lives.

OUR TEAM

Our team is filled with 6 talented software developers who are well versed in the technology industry. Brian Nguyen is our team lead, Jeffery Piercey is our backend lead, Yiyu Zhang is our assistant backend developer, JianQiao Xie is our frontend lead, Malik Iscandari is our Scrum Master, and Vincent Wu is our Github Master.



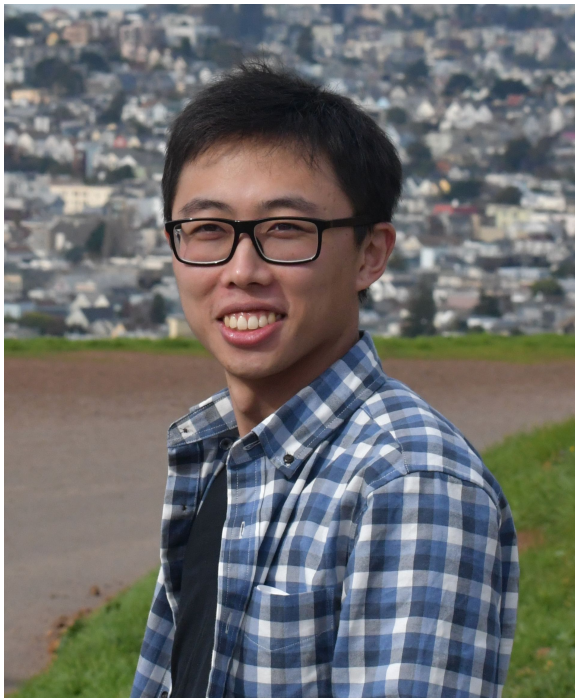
PERSONAS AND USER STORIES

MEET JANEY

- 48 Years Old
- Single Mother of 2 Children
- New to technology but is willing to learn new things
- Very busy so time management is a priority for her
- Does not have good memory and does not want to make a shopping list on paper anymore
- Looking for a simple to use application to manage her refrigerator inventory
- Wants a way to track her grocery shopping history
- Wants a solution that will recommend recipes based on her current ingredients inventory



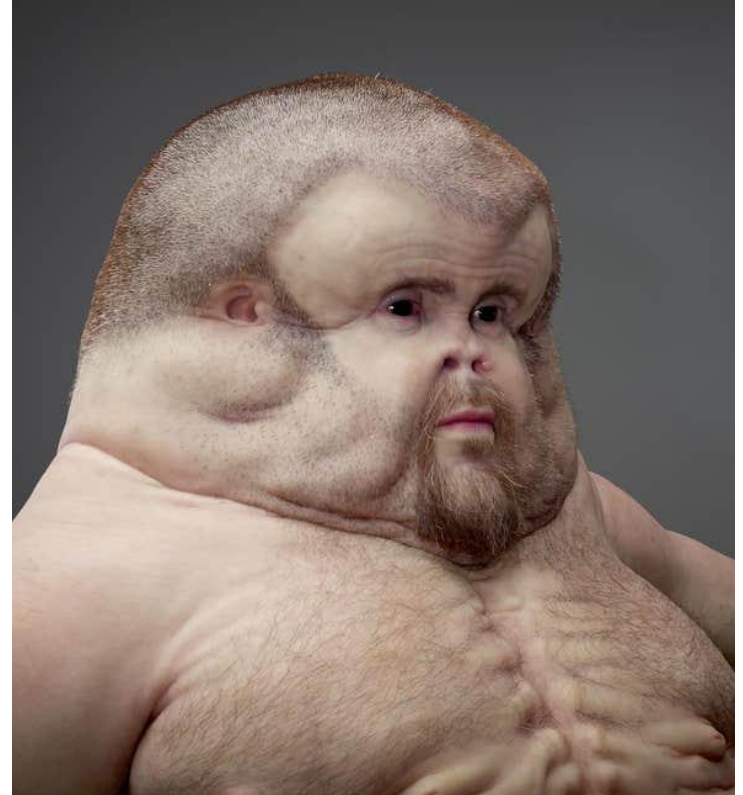
MEET JAKE



- 28 Years Old
- Olympian Bodybuilder
- Lives and works as a Software Engineer in San Francisco, CA
- Well versed within the technology space and open to new ways of implementing technology into his day to day life
- In order to keep fit and compete as a world class bodybuilder, Jake needs a way to maintain his consistent diet
- Wants a shopping list that he can update consistently on the go

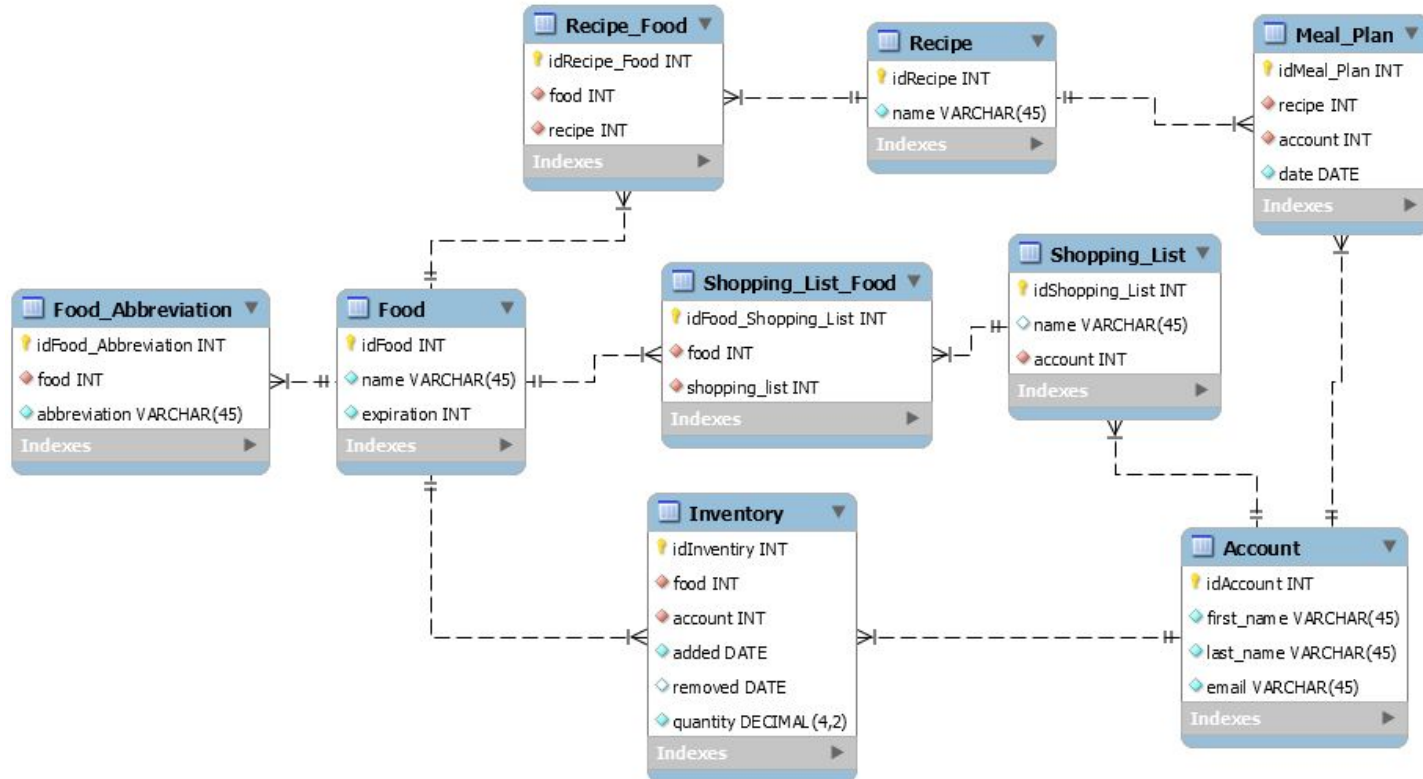
MEET CHARLES

- 40 Years Old
- Avid gamer aspiring to become a professional gamer
- No one knows what Charles does to sustain his gaming lifestyle
- His gaming performance is being negatively affected by his hot pocket and potato chip diet
- Looking for healthy food recipes recommendations that his based on the inventory of his fridge



HIGH-LEVEL ARCHITECTURE

DATABASE ORGANIZATION



COMPETITIVE ANALYSIS

Description	Competitor's Product	Our Product
Refrigerator Tracker	Takes pictures of contents inside the refrigerator and keeps track of expiration dates and shelf life..	User manually inputs items
Recipes List	Shows a list of recipes that can be made provided with a list of available ingredients. Can create a shopping list based on missing ingredients.	Shows a list of recipes that can be made provided with a list of available ingredients. Can create a shopping list based on missing ingredients or other factors like health concerns.
User Friendliness	Barcode scanners to add to the list of ingredients or to check if already have	Allows the user to take a picture of shopping receipt to add items

KEY RISKS

SKILL RISKS

Some of us are familiar with backend but are unfamiliar with our frontend framework. Some of us are familiar with our frontend framework but are unfamiliar with working on backend. Since we are equally distributed, all of us are able to come together to teach each other what we need to know in order to understand what is going on. We use the the study sessions on tuesdays and thursdays to come together to understand what is going on and how we can teach each other. If we don't know anything, we seek each other out for answers, online help, or professors in other courses that could give us a better understanding on how to approach certain scenarios.

Schedule Risks

The entire team is very busy, given that all of us are seniors and are trying our best to study for important midterms and completing assignments. We dedicate ourselves to studying on Tuesdays, Thursdays, and Sundays. On Tuesdays and Thursdays, after class from 2 to whenever (usually for about 3 to 4 hours) we have study sessions in the library to discuss what to do for the project and achieving tasks for the milestone. On Sundays, we have a 30 minute discussion what needs to be completed before our study session and what to complete on our trello page.

Technical Risks

Since most of us are very new in building an application from scratch and making everything work together, we spend majority of our time studying and trying to understand our stack with our given schedule. We are using technology that we haven't used before or are unfamiliar with, for example, we had difficulty in understanding how to use an api properly, but with enough studying from online resources and practicing on how to properly use it through pair programming we were able to understand it. We dedicate as much time studying what we need to know in order to be able to put all the pieces together.

Teamwork Risks

For most of us, it's our first time coming together to collab on building an application with our given knowledge. We try our best to distribute work evenly by using outside applications like trello. We use trello to make cards that allows us to assign tasks to each individual. Since most of us aren't always able to meet up and communicate with one another, we use discord and text messages to always keep in contact with each other by seeing what's going on and how the application/work is progressing. In our discord channel, we have a log section that tells us what happened in our last meeting. We have a resource channel that is dedicated in posting resources on what we should be studying for.