

CMU Dining Services

“Dining Locations” Webpage

Final Project Report

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67-240 Mobile Web Design and Development
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I. Project Description

Project Opportunity

Our project's concern is with redesigning the Dining Locations page that is a part of the CMU Dining Services website. Although the current site contains a large amount of useful information for helping current students, faculty, and prospective students find places to eat, our group believes that the site could benefit from a redesign. Specifically, we think the website can be improved in terms of user friendliness; there are many redundant, confusing, and inefficient elements. We believe we can find solutions to the issues we've identified by first, redesigning using a mobile-first approach, and second, using design principles to reorganize the site content based off the lessons we have learned in class.

Project Vision

Our team's project vision was to redesign and develop a webpage that is mobile-friendly, enjoyable to use, and meets the needs of its main users. We identified three categories of primary stakeholders: faculty and staff, current students and prospective students.

Our first main goal in redesigning the site was to make the site responsive, with a focus on the mobile version. Increasingly, web users are using mobile devices rather than desktops to search for information, especially when on the go. As will be shown, the nature of our content and our target audience corroborate the need to have a fully functional and user friendly mobile version of our webpage.

Our second goal involves improving the general usability of the site, focusing on refining the organization, hierarchy, and prioritization of information. We would like users to be able to quickly understand which locations are open, find a place they are looking for, and perform other actions more efficiently and intuitively.

The main challenge we will face in redesigning the site is organizing and prioritizing the large volume of information. We will need to strike a balance between presenting all the information that users might be looking for or interested in, while also being careful not to overload users cognitively. Users should be able to find what they want in as little time as possible, without questions along the way.

Project Outcomes

Throughout our project, we were able to achieve most expected outcomes, but not all. For example, we were able to style the fonts and colors of the text, focus on the responsiveness of the website, redesign the layout, and implement an interactive heat map within the ‘Places to Eat’ page.

We were able to meet most of the tasks we had set for our team, whether it was user testing, attending client meetings, or designing the website based on our own deadlines. For example, after each client meeting, we conducted user testing to observe the user’s preferences in regard to the original website, our refined wireframes, and our redesigned website (can see this in the ‘User Testing Summary’).

We were also able to code up a new filter which had different filters to search restaurants by. The team had divided the filters by ‘Open Now’, ‘Order Online’, ‘Off-Campus Locations’, and ‘On-Campus Locations’. We added a visually appealing search bar as well, which dynamically searches for the restaurant the user is beginning to type. This makes the search process easier for users instead of having to type out the entire restaurant name and hit enter to receive a result. In addition to the revised filter and search bar, we redesigned the ‘Today’s Soups’ and ‘Today’s Specials’ link locations at the discretion of the client’s suggestions for the website.

Design artifacts that we had taken into account when approaching this project include redesigning the information hierarchy within the website. Users were not completely comfortable interpreting the information regarding each restaurant due to the lack of distinction in the information being displayed on the website. In light of this, the team chose to emphasize specific aspects of the website, i.e. implementing an interactive map, spacing out the information within a restaurant card, and showing the soup and specials buttons on the top of the site. Behind all this were refined wireframes and a vision that we had for the website.

Some outcomes that were not achieved include the inability to redesign the ‘Hours of Operation’ page, as well as the other pages across the CMU Dining Services page. An impactful factor regarding this outcome was the time the team had in designing the website, and further steps indicate the need to possibly redesign the ‘Hours of Operation’ page, the ‘More Info’ pages for each restaurant, and even making the restaurant card expansive once it is hovered over.

II. Final Project Deliverables

Google drive

<https://drive.google.com/drive/folders/1hUR0tTOw6HMztDRcZkz8QB7fGxZJ0Hcn?usp=sharing>

Our Google Drive folder compiles all google docs, sheets, forms and other documents used throughout the web development process. These documents include meeting notes, data from user testing, different versions of our wireframes, all project submissions and our final deliverables. The final deliverables folder contains our website code, any designs (wireframes, personas, etc.), and our final report.

Github

<https://github.com/miminiou/CMUDining>

Our github repository contains all of our website's code. The website can be viewed locally when all files are downloaded. Index3.html is our final version for all browsers, while index2.html is an alternative that designed specifically for mobile devices.

Presentation Slides

https://docs.google.com/presentation/d/1kzRxsXvFdQ2CHPhXG_KJLL0wMD802AP0hhEqmj35GO/edit?usp=sharing

Our presentation slides are provided within the Google Drive mentioned above.

III. Next Steps

Possible Extensions To Be Implemented

If given more time, we would like to implement several other features to CMU Dining Locations page to improve its functionality and usability.

- To make the site more interactive and appealing, we would like to consider making the restaurant cards expandable so that users can see information about a restaurant without clicking into a separate page. And in order to implement this feature, the database should be designed in a different way so that data can be pulled out efficiently.
- To make the map more useful, we would like to use an embedded map that highlights each restaurant when users hover over the cards.
- We would also like to provide more information about the traffic of restaurants at different time of the day so that users, especially those who run short of time, can decide which restaurant to go to more efficiently.
- We did not modify Hours of Operations page on the website. The load time of the current page is quite long, and information is not displayed in a clear, user-friendly way. We believe the page can be designed in an interactive and more aesthetically pleasing way so that it better serves users.

IV. The Team

Mimi Niou

- **Year:** Junior
- **Major(s) and/or Minor(s):** ECE, Human-Computer Interaction
- **Career Interests:** Project Management, Software Engineering, UX/UI Design
- **Role:** Creating wireframes and interactive prototypes, conducting user interview and research, designing the website, coding the HTML, CSS, and Javascript of the website,

Roxanne Zhang

- **Year:** Sophomore
- **Major(s) and/or Minor(s):** Information Systems, Human-Computer Interaction
- **Career Interests:** Product Design, data Analysis and front-end development
- **Role:** Creating wireframes and interactive prototypes, conducting user research and testing, designing the layout and navigation, coding the CSS, HTML and Javascript of the website, and making sure the flow of the website makes sense.

Malik Khan

- **Year:** Sophomore
- **Major(s) and/or Minor(s):** Statistics & Machine Learning, Business Administration
- **Career Interests:** Data Analysis, Project Management, Cybersecurity
- **Role:** Helping conduct topic research, user research and testing, and generating extra contents of the website (e.g. finding logos and other information)

V. Appendix

- A. Wireframes
- B. Persona Development
- C. Design documents
- D. User testing summary
- E. Competitive analysis
- F. Screenshots of solutions

Appendix A. Wireframes

Low Fidelity

The wireframe illustrates a mobile application interface for CMU Dining Services. On the left, a sidebar contains a list of filters:

- By building (dropdown list)
- Today's Specials
- Today's Soup
- Open Now
- Order Online
- Off Campus

The main content area, titled "Places to Eat", features a search bar with a magnifying glass icon and a "filter" button. Below the search bar is a placeholder text box labeled "A map showing all locations". The main content is organized into four horizontal cards, each representing a restaurant:

Restaurant #1	Location	Hours of Operation	Order Online
Description			↔
Restaurant #2	Location	Hours of Operation	Today's Soup
Description			↔
Restaurant #3	Location	Hours of Operation	Description
			↔
Restaurant #4	Location	Hours of Operation	Description
			↔

A "Footer" section is located at the bottom of the screen.

(Mobile View)

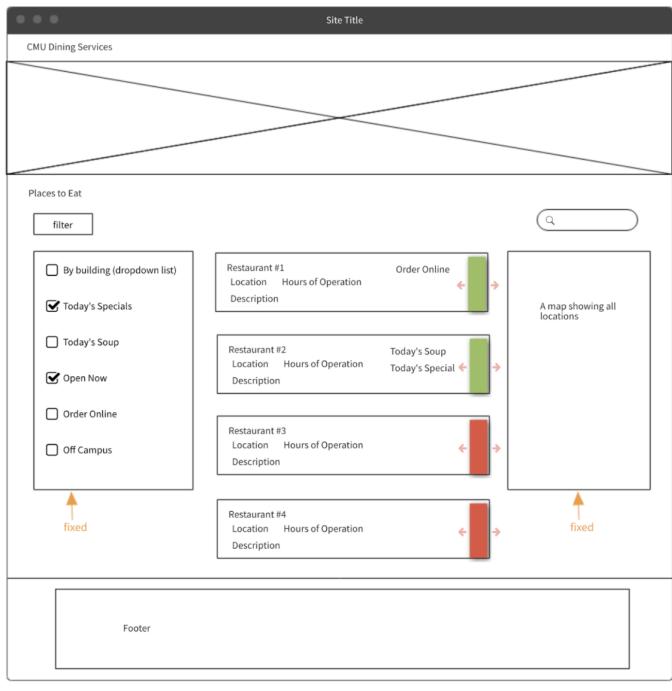
The wireframe illustrates a tablet view of the same application. The layout is similar to the mobile view, but the sidebar is wider and includes a larger list of filters:

- By building (dropdown list)
- Today's Specials
- Today's Soup
- Open Now
- Order Online
- Off Campus

The main content area, titled "Places to Eat", includes a search bar with a magnifying glass icon and a "filter" button. To the right of the search bar is a placeholder text box labeled "A map showing all locations". The main content is organized into four horizontal cards, each representing a restaurant, with the first card containing a map placeholder.

A "Footer" section is located at the bottom of the screen.

(Tablet View)

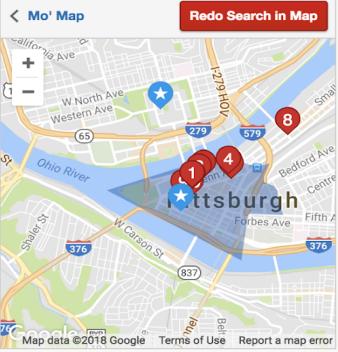


(Desktop View)

High Fidelity

Carnegie Mellon University

Locations | Get Funds | Nutrition Calculator



Mo' Map Redo Search in Map

Filter Search

★ Today's Specials ☕ Today's Soups

The Underground
 Location: Morewood Gardens, Lower
 Today's Hours: 8:30 AM - 2:00 PM
 Hamburgers, chicken tenders, pasta,
 soup, salad, breakfast, fruit, desserts

Au Bon Pain
 Location: Cohon Center, Second floor
 Today's Hours: 7:00 AM - 2:00 PM
 Coffee/tea, espresso, soup, sandwiches/salads,
 grab-n-go, yogurt parfaits, fruit, snacks

Au Bon Pain

Carnegie Mellon University

Locations | Get Funds | Nutrition Calculator



Mo' Map Redo Search in Map

Filter Search

★ Today's Specials ☕ Today's Soups

The Underground
 Location: Morewood Gardens, Lower
 Today's Hours: 8:30 AM - 2:00 PM
 Hamburgers, chicken tenders, pasta,
 soup, salad, breakfast, fruit, desserts

Au Bon Pain
 Location: Cohon Center, Second floor
 Today's Hours: 7:00 AM - 2:00 PM
 Coffee/tea, espresso, soup, sandwiches/salads,
 grab-n-go, yogurt parfaits, fruit, snacks

The Exchange Order online
 Location: Posner Hall, 1st Floor
 Today's Hours: 8:00 AM - 8:00 PM
 Sandwiches, salad, soup, hot entrées, coffee,
 tea, baked goods, fruit, yogurt

On campus locations
Off campus locations
Open Now
Order Online
Building: Select Option

(Mobile View)

Carnegie Mellon University

Locations | GET Funds | Nutrition Calculator

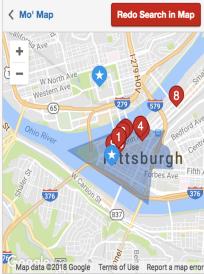


Filter Search

Today's Specials Today's Soups

The Underground
Location: Morewood Gardens, Lower
Today's Hours: 8:30 AM - 2:00 PM
Hamburgers, chicken tenders, pasta, soup, salad, breakfast, fruit, desserts

Redo Search in Map



Au Bon Pain
Location: Cohen Center, Second floor
Today's Hours: 7:00 AM - 2:00 PM
Coffee/tea, espresso, soup, sandwiches/salads, grab-n-go, yogurt parfaits, fruit, snacks

The Exchange
Location: Posner Hall, 1st Floor
Today's Hours: 8:00 AM - 8:00 PM
Sandwiches, salad, soup, hot entrées, coffee, tea, baked goods, fruit, yogurt

Carnegie Mellon University

Locations | GET Funds | Nutrition Calculator



Filter Search

On campus locations

Off campus locations

Open Now

Building: Select Option

Order Online

The Underground
Location: Morewood Gardens, Lower
Today's Hours: 8:30 AM - 2:00 PM
Hamburgers, chicken tenders, pasta, soup, salad, breakfast, fruit, desserts

Au Bon Pain
Location: Cohen Center, Second floor
Today's Hours: 7:00 AM - 2:00 PM
Coffee/tea, espresso, soup, sandwiches/salads, grab-n-go, yogurt parfaits, fruit, snacks

The Exchange
Location: Posner Hall, 1st Floor
Today's Hours: 8:00 AM - 8:00 PM
Sandwiches, salad, soup, hot entrées, coffee, tea, baked goods, fruit, yogurt

(Tablet View)

Carnegie Mellon University

Locations | GET Funds | Nutrition Calculator

Filter ★ Today's Specials ☕ Today's Soups Search

The Underground Location: Morewood Gardens, Lower Level Today's Hours: 8:30 AM - 2:00 AM Hamburgers, chicken tenders, pasta, soup, salad, breakfast, fruit, desserts	NAKAMA Location: Morewood Gardens, Lower Level Today's Hours: 8:30 AM - 2:00 AM Hamburgers, chicken tenders, pasta, soup, salad, breakfast, fruit, desserts
Au Bon Pain Location: Morewood Gardens, Lower Level Today's Hours: 8:30 AM - 2:00 AM Hamburgers, chicken tenders, pasta, soup, salad, breakfast, fruit, desserts	Cafe Location: Morewood Gardens, Lower Level Today's Hours: 8:30 AM - 2:00 AM Hamburgers, chicken tenders, pasta, soup, salad, breakfast, fruit, desserts

Mo' Map Redo Search in Map

Map data ©2018 Google Terms of Use Report a map error

Carnegie Mellon University

Locations | GET Funds | Nutrition Calculator

Filter ★ Today's Specials ☕ Today's Soups Search

On campus locations <input checked="" type="checkbox"/>	The Underground Location: Morewood Gardens, Lower Level Today's Hours: 8:30 AM - 2:00 AM Hamburgers, chicken tenders, pasta, soup, salad, breakfast, fruit, desserts	NAKAMA Location: Morewood Gardens, Lower Level Today's Hours: 8:30 AM - 2:00 AM Hamburgers, chicken tenders, pasta, soup, salad, breakfast, fruit, desserts
Off campus locations <input type="checkbox"/>	Au Bon Pain Location: Morewood Gardens, Lower Level Today's Hours: 8:30 AM - 2:00 AM Hamburgers, chicken tenders, pasta, soup, salad, breakfast, fruit, desserts	Cafe Location: Morewood Gardens, Lower Level Today's Hours: 8:30 AM - 2:00 AM Hamburgers, chicken tenders, pasta, soup, salad, breakfast, fruit, desserts
Open Now <input type="checkbox"/>		
Building: <input type="button" value="Select Option"/>		
Order Online <input checked="" type="checkbox"/>		

(Desktop View)

Appendix B. Persona Development

Persona #1

Mary



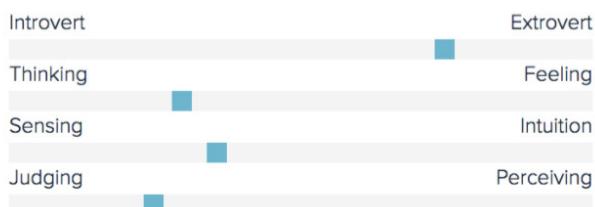
"I want to make sure my son eats well away from home."

Age: 45

Work: Senior Manager

Family: Married and has two children

Personality



Goals

- Get an overview of what types of food option are on campus, and whether or not there is enough variety and ideal choices for her son.

Frustrations

- There are too many choices and Mary isn't sure what food locations are near her current location.
- Mary has never used this website before, and finds it is taking a while to learn how to navigate through the pages. She finds it frustrating to click into the homepage of each restaurant and compare menus.

Motivations

Mary's son is a prospective student and Mary is visiting CMU for the first time. As a visitor, she wants to explore food, compare restaurants and try something special. She also wants to find out what types of food options her son will have if he attends CMU.

Persona #2

Jack



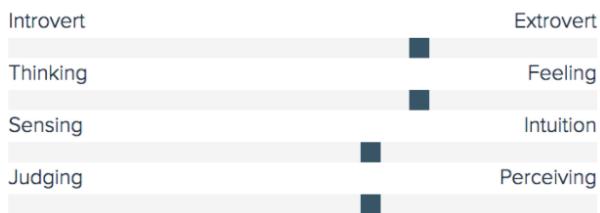
"I eat on campus for all of my meals because I'm on a meal plan."

Age: 20

Work: Freshman at CMU

Family: Single

Personality



Goals

- Get information about the locations, hours and menus of places where he can use dinex or block to buy food.

Frustrations

- Bad design for mobile views. Jack normally uses his phone to check the website while walking, and finds it hard to use the current website on his phone. The mobile layout is not appealing and is hard to scroll through.
- Wrong information. Jack gets frustrated if he walks to a location but finds the restaurant closed.

Motivations

Jack is new to CMU and unfamiliar with dining locations. He's enrolled in CMU's meal plan and usually eats on campus. He often uses this website to check on locations, operating hours and menus of places to eat.

Persona #3

Sally



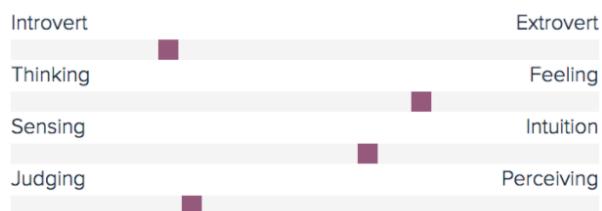
"I'm a vegetarian because I don't like the taste of meat."

Age: 22

Work: Undergraduate student at CMU

Family: Single

Personality



Goals

- Sally hopes to get information about on-campus restaurants that offer vegetarian foods and soups.
- She wants information about the ingredients, nutritive values, and calories of specific foods.

Frustrations

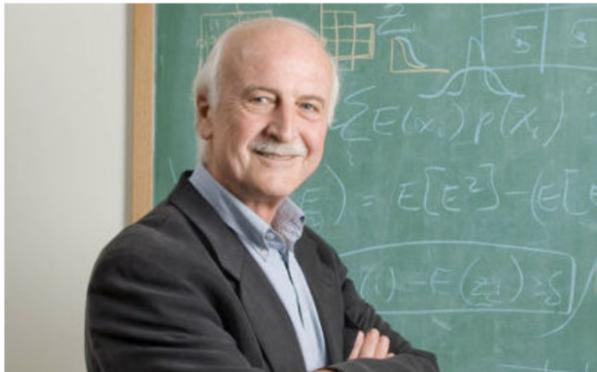
- The website displays too much irrelevant information for Sally's use.
- The search bar is hard to use. The current system only allows you to search based on the names of dining locations, and not what foods they offer.

Motivations

Sally is a vegetarian, and she usually goes on the page to check which restaurants offer food that meets her dietary needs. Besides, Sally's favorite food is soup, and she uses the website to check what kind of soup is offered at each location.

Persona #4

Mark



"Being a university professor is a stressful job."

Age: 60

Work: Undergraduate student at CMU

Family: Married and has three children & four grandchildren

Personality



Goals

- Order online for food and pick it up once it's done.

Frustrations

- Mark finds it frustrating that he has to find the same restaurant and order the same food each time. He hopes that the system can memorize his preferences, listing those restaurants at the top or providing search suggestions.
- The navigation of the website is hard to learn. There are two online ordering portals, one under the 'CMU Dining Services' page and the other under 'Places to Eat'. Mark often gets confused about which one to use.

Motivations

Mark is very busy all day long. He's quite familiar with on-campus restaurants and usually only eats at a few places that he likes. Since he knows exactly what to order and where to order from, he wants to do that more efficiently.

Appendix C. Design Documents

Color Scheme



Typography

Roboto Thin

Roboto Light

Roboto Regular

Roboto Medium

Roboto Bold

Roboto Black

Roboto Thin Italic

Roboto Light Italic

Roboto Italic

Roboto Medium Italic

Roboto Bold Italic

Roboto Black Italic

Open Sans Light

Open Sans

Open Sans Semibold

Open Sans Bold

Open Sans Extrabold

Open Sans Light Condensed

Appendix D. User-Testing Summary

The goal of user testing session is to determine how effective the current Dining Locations page on the CMU Dining Services website is. Through task oriented and general behavior testing, we will be able to get good insights into where user pain points are, what elements are confusing or hard to use, and what users would like to see.

Task-Oriented Testing

Usability Testing Script:

Hi, my name is _____ and I'll be guiding you through this testing session. During this session, you'll be exploring the Dining Locations page on the CMU Dining Services website. As you use the site, please try to think out loud. Say what you're looking at, what you're trying to do, and what you're thinking, and be as honest as possible. If you have any questions or concerns at any time, let me know.

First, I will give you a few different tasks to accomplish on the site.

- **Task 1:** Find the menu of NAKAMA
- **Task 2:** Find the location of Chef's Table
- **Task 3:** Find Today's Soup at Pasta Villaggio

Next, I will give you a few moments to explore the site, then I will ask you a few general questions.

General Behavior Testing

Usability Testing Script:

- Have you used the site before? If so, how often?
- What did you like about this website?
 - Do you find this site clear and intuitive? How so?
- What did you dislike about this website?
 - Did anything confuse you?

- What info was missing/what would you like to see on the site?
- Anything you found redundant?
- Any other comments/questions?

That concludes everything we have for the testing session. Thank you so much for your time and input!

Round 1

Summary

In total, we tested **12** users:

- Undergraduate CMU Students: 6
- Faculty/ Staff: 3
- Incoming Students/ Parents: 3

Issues

- Information organization is hard to digest and skim/lack of visual hierarchy
- Too much scrolling
- Hours of Operations and Order Online pages are visually unappealing
- Dining map is not responsive
- Search function and filtering function are not live.

Further Improvements

- Use colors on the side of the card to indicate if a location is open/closed.
- Display available restaurants at the top.
- Implement a left-hand filter.
- Delete redundant information for Map It and Today's Soup/Specials.
- Implement visual hierarchy on the restaurant cards.
- Keep consistent fonts and less color choices.
- Implement a map that constantly shows for the restaurants.

Round 2

Summary

In total, we tested **11** users:

- Undergraduate CMU Students: 5
- Faculty/Staff: 3
- Incoming Students/ Parents: 3

Issues

- One user wasn't clear about how the locations were organized, and didn't immediately get that the green and red meant open and closed
- A user mentioned that two fields in the filter seemed to be overlapped ('By Building' and 'On-campus Locations')
- Buttons are too small (especially for mobile)
- Text is too small
- Map is not really useful
- No back button on the filter

Further Improvements

- Make blocks expandable, load time
- Increase text size
- Increase size of filter button, search bar, and other buttons/links
- Add a back or close button on the filter popout
- Think about putting some filter options in the subheader area so that people know what options there are
- Hide the map and make it available only if needed
- Determine the interactivity details with the map
- Improve the visual hierarchy of information displayed on cards

Round 3

Summary

In total, we tested **9** users:

- Undergraduate CMU Students: 3
- Faculty/Staff: 3
- Incoming Students/ Parents: 3

Issues

- It's hard for users to interact with the website in depth since we just implemented the first version of our website.
- We were not able to put all of the restaurants as the options, so users were inclined to scroll down and find the restaurant, rather than using the search bar, since there weren't too many restaurant cards displayed.
- The tasks were a bit too general, so users did different things. The objectives were not specific enough to achieve the same outcome each time.
- The search bar was not as transparent, it did not stand out
- The search bar itself is pretty small
- The white space looks a little uneven among different parts of the site.
- The colors might need to be contrasting a little bit more
- Change font style

Further Improvements

- We can change the font and color style to emphasize certain aspects of the site.
- We can enlarge the search bar and change the style such that it seems emphasized
- We can make the cards expansive
- Work on the 'Hours of Operation' page if time permits

Appendix E. Competitive Analysis

CMUEats! - <http://cmueats.com/> (Webapp)

CMUEats!			
If something's wrong or broken, tell me at cpnewman@andrew.cmu.edu			
Pasta Villaggio University Center 2nd Floor Closes in 5 minutes (Today at 8:00 PM)	Spinning Salads University Center 2nd Floor Closes in 5 minutes (Today at 8:00 PM)	Schatz Dining Room University Center 2nd Floor Closes in 5 minutes (Today at 8:00 PM)	Rothberg's Roasters II Scott Hall Closes in 5 minutes (Today at 8:00 PM)
Evegefstos University Center 2nd Floor Closes in 5 minutes (Today at 8:00 PM)	Rice Bowl University Center 2nd Floor Closes in 5 minutes (Today at 8:00 PM)	City Grill University Center 2nd Floor Closes in 5 minutes (Today at 8:00 PM)	The Pomegranate Resnik Servery Closes in an hour (Today at 9:00 PM)
Mac 'N Cheese Resnik Servery Closes in an hour (Today at 9:00 PM)	Taste of India Resnik Servery Closes in an hour (Today at 9:00 PM)	Spice It Up Grill Resnik Servery Closes in an hour (Today at 9:00 PM)	Nakama Resnik Servery Closes in an hour (Today at 9:00 PM)
El Gallo de Oro University Center 1st Floor Closes in 2 hours (Today at 10:00 PM)	Tartans Pizza Resnik Servery Closes in 3 hours (Today at 11:00 PM)	Au Bon Pain UC (Skibo Cafe) Closes in 6 hours (Tomorrow at 2:00 AM)	Carnegie Mellon Cafe Resnik Servery Closes in 6 hours (Tomorrow at 2:00 AM)
The Underground Morewood E-Tower Closes in 6 hours (Tomorrow at 2:00 AM)	Entropy+ University Center 1st Floor Closes in 7 hours (Tomorrow at 3:00 AM)	Maggie Murph Café Hunt Library Closes in 4 days (Friday at 9:00 PM)	Tazza D'Oro Gates Hillman Center 3rd Floor Opens in 11 hours (Tomorrow at 7:00 AM)
SEIber Café Software Engineering Institute Opens in 12 hours (Tomorrow at 7:30 AM)	iNoodle Newell-Simon Atrium Opens in 12 hours (Tomorrow at 8:00 AM)	The Exchange Posner Hall Opens in 12 hours (Tomorrow at 8:00 AM)	Stephanie's Mellon Institute Opens in 12 hours (Tomorrow at 8:00 AM)

Strengths

Extremely intuitive, easy to learn and use

Easy to skim (big font and thick weight for restaurant names, good spacing, color grouping)

Responsive design

Weaknesses

Lack of detailed information (only location and hours) Lack of search function

Google (example is for ABP) (Webapp/Android app/iOS app)

The screenshot shows the Google Business Profile for Au Bon Pain. At the top, it displays a 2.0 rating with 23 reviews, categorized as a \$\$. Coffee Shop located 0.1 mi away. There are links for Website and Directions. Below this, a brief description states: "Counter-service chain cafe serving soups, salads & sandwiches along with breads & other baked goods." It also lists the location as Carnegie Mellon University, address as 5000 Forbes Ave, Pittsburgh, PA 15213, and operating hours from Open to Closes 2AM. The phone number is (412) 621-1934. There are links to Suggest an edit and Own this business?.

Know this place? Answer quick questions

Questions & answers Be the first to ask a question [Ask a question](#)

Popular times [Mondays](#)

7 PM: Usually not busy

Plan your visit
People typically spend 20 min to 1.5 hr here

Strengths

Lots of information (busy times, hours of operation, location, description, reviews)

Information presentation is clear and understandable

Easily accessible on mobile

Weaknesses

Third party information, not necessarily correct or updated. Information availability is inconsistent for different dining locations. Locations must be searched separately.

Yelp (example is for ABP) (Webapp/Android app/iOS app)

The screenshot shows the Yelp homepage with a search bar for "abp" and a location filter for "Near Downtown, Pittsburgh, PA". The main focus is the listing for "Au Bon Pain" (Claimed), which has 8 reviews. It includes a map showing the location at 4910 Forbes Ave, Carnegie Mellon University, Pittsburgh, PA 15213, and a photo of a coffee and cheese danish. Below the main listing are reviews from other businesses: "Klavon's Ice Cream Parlor" (153 reviews) and "350° Bakery" (5 reviews). To the right, there are sections for "Ask the Community", "Recommended Reviews" for Au Bon Pain, and "Hours". The "Recommended Reviews" section lists reviews from users like Kelly V., Linda L., and Sirena W. The "Hours" section shows business hours and accepts credit cards.

Strengths

Attractive UI (clean design, bright color accents, etc.)

Images of food, tips from customers, map of location, ratings and reviews, price range estimate

Mobile App

Weaknesses

Dining locations listed separately, many unlisted

Third party information, not necessarily correct or updated Information is focused on reviews, though listings include location and open hours of operation

Appendix F. Screenshots of Solutions

Mobile



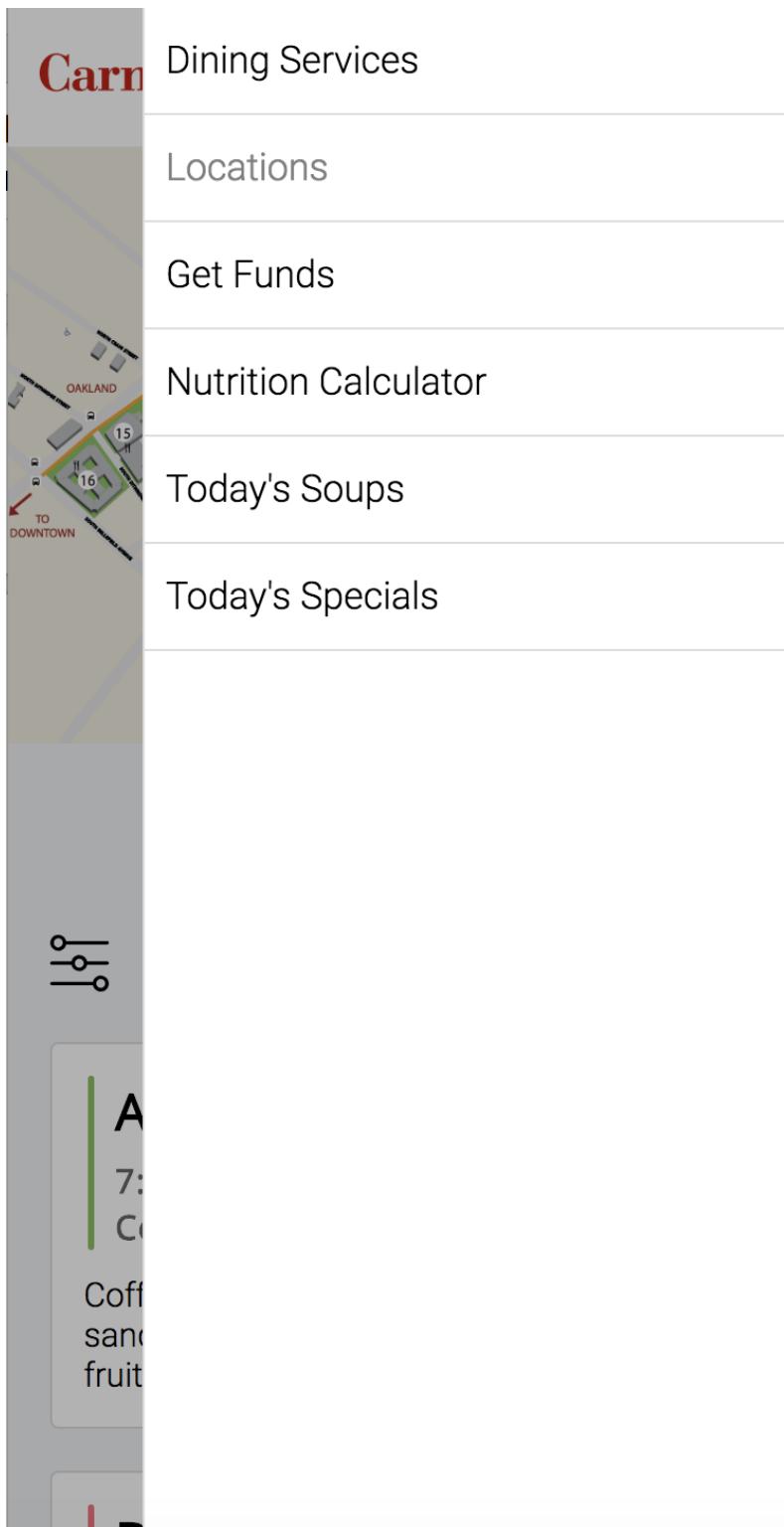
Dining Locations

Search Q

Au Bon Pain
7:00 AM - 2:00 AM
Cohon Center, 2nd Floor
Coffee/tea, espresso, soup, sandwiches/salads,
grab-n-go, yogurt parfaits, fruit, snacks

Breakfast Express

Mobile (Navigation Bar)



Mobile (Locations List)

Dining Locations

Au Bon Pain
7:00 AM - 2:00 AM
Cohon Center, 2nd Floor
Coffee/tea, espresso, soup, sandwiches/salads, grab-n-go, yogurt parfaits, fruit, snacks

Breakfast Express
Closed · 11:00 AM - 2:30 PM
Resnik House
Waffles, oatmeal, breakfast sandwiches, fruit, and coffee

Carnegie Mellon Cafe
7:30 AM - 2:00 AM
Resnik House
Hot breakfast all day, smoothies, superfood breakfast bowls, sandwiches, wraps, ice cream

City Grill

Mobile (Dynamic Search Functionality)

Dining Locations

Downtown Deli
Closed · 10:30 AM - 4:00 PM
Cohon Center, 2nd Floor

Deli sandwiches, wraps, side salads, soups, and fruits

El Gallo De Oro
Closed · 10:30 AM - 10:00 PM
Cohon Center, Ground Floor

Mexican cuisine, burritos, and burrito bowls, tacos, quesadillas, salads

Garden Bistro
Closed · 11:00 AM - 9:00 PM
Resnik House

100% vegan, plant-based cuisine, choose from our chef's signature sandwiches or build your own

Mobile (Filter Functionality)

Filter

Open

Order Online

On Campus 

Off Campus 

Oakland

Squirrel Hill

Shadyside

Apply **Reset**



salads,
fruit,
bread,
cream

Tablet

Carnegie Mellon University



Dining Locations



Search



Au Bon Pain

7:00 AM - 2:00 AM
Cohon Center, 2nd Floor

Coffee/tea, espresso, soup,
sandwiches/salads, grab-n-go, yogurt
parfaits, fruit, snacks

Downtown Deli

Closed • 10:30 AM - 4:00 PM
Cohon Center, 2nd Floor

Deli sandwiches, wraps, side salads, soups,
and fruits

Eat N' Park

6:00 AM - 3:00 AM

Eat Unique

Closed • 11:00 AM - 8:00 PM

Desktop

Carnegie Mellon University

CMU Dining Services

Locations | Get Funds | Nutrition Calculator | Today's Soups | Today's Specials



Dining Locations

Filter

- Open
- Order Online
- On Campus
- Off Campus

Reset

Search



Au Bon Pain

7:00 AM - 2:00 AM
Cohon Center, 2nd Floor

Coffee/tea, espresso, soup, sandwiches/salads, grab-n-go, yogurt parfaits, fruit, snacks

Breakfast Express

Closed • 11:00 AM - 2:30 PM
Resnik House

Waffles, oatmeal, breakfast sandwiches, fruit, and coffee

Carnegie Mellon Cafe

7:30 AM - 2:00 AM
Resnik House

Hot breakfast all day, smoothies, superfood breakfast bowls, sandwiches, wraps, ice cream

City Grill

Closed • 5:00 PM - 9:00 PM
Resnik House

Fine dining meals offered on Tuesdays and Thursdays

Downtown Deli

Closed • 10:30 AM - 4:00 PM
Cohon Center, 2nd Floor

Deli sandwiches, wraps, side salads, soups, and fruits

El Gallo De Oro

Closed • 10:30 AM - 10:00 PM
Cohon Center, Ground Floor

Mexican cuisine, burritos, and burrito bowls, tacos, quesadillas, salads

Entropy+

7:30 AM - 3:00 AM
Cohon Center, Ground Floor

Carnegie Mellon's on-campus convenience store

Evgefstos

Closed • 10:30 AM - 9:00 PM
Cohon Center, 2nd Floor

Vegan Vegetarian Superfoods