

Final Design Journey Map (combined)

Group name: A Team

Members' names: Raghav Batra, Spencer Weiss, Ryan Yoon

Members' NetIDs: rb698, scw99, rdy23

Section: 213

Design Journey Part 1

Group name: A Team

Members' names: Raghav Batra, Spencer Weiss, Ryan Yoon

Members' NetIDs: rb698, scw99, rdy23

Section: 213

Part 1: Client Selection

Client Description

Tell us about your client. Who is your client? What kind of website do they want? What are their key goals?

Our client is Halle Bershad, President of the Food Science Club at Cornell University. Halle is a senior at Cornell majoring in food science and is immensely passionate about facilitating a welcoming and supportive environment for students who wish to learn more about the food industry. Halle is currently communicating with the members of the club through a public Facebook group, but would like to have a centralized website dedicated to distributing information to current members, as well as helping to attract new ones. In our meeting with Halle, she noted the importance of having a calendar to display upcoming events, an organized catalog of past event photos, a display of current board and club members, and a way to contact the club.

Below is a list of key features for the website that we identified so far:

- interactive calendar of upcoming events: selecting an event on the calendar should direct users to a page with further details about the event catalog of past event photos; photos should be organized by event
- members' profiles including headshots and position names
- about us page with information about the club
- contact us form which sends an email to the club email address
- simple navigation bar
- functionality to edit website for admin users, i.e., add/edit/delete events, add/edit/delete pictures

NOTE: If you are redesigning an existing website, give us the current URL and some screenshots of the current site. Tell us how you plan to update the site in a significant way that meets the final project requirements.

Target Audience

Tell us about the potential consumers of this website. How, when, and where would they interact with the website? Get as much detail as possible from the client to help you find representative users. This will make it easier for you to test your site on potential users and to generate useful personas.

Potential consumers of this website and their interactions include:

- Halle and other board members of the Cornell Food Science Club who have administrative privileges that allow them to edit the content on the site including the calendar, photo catalog, and member profiles
- General members of the Cornell Food Science Club who will rely on the content of the website to get information on upcoming events and to browse pictures from past events
- Students, namely Cornell students, who have an interest in the Cornell Food Science Club and are hoping to learn more about the organization by surveying the types of events the club participates in, as well as past event photos
- Members of the general public who are curious about Cornell student organizations or organizations that advocate food science

Purpose & Content

Tell us the purpose of the website and what it is all about.

The Cornell Food Science Club has a threefold vision:

1. To provide a support system to students interested in the food industry, food science, and/or the culinary arts
2. To promote club membership across various majors
3. To advocate opportunities in the food industry to students across campus

To that extent, the club achieves its goals through the following:

- Gaining experience about food science through the club's information sessions and mentoring program
- Learning about food science applied in industry/career opportunities through talks by various industry leaders
- Receiving first-hand experience in food science practices through local company tours

Food science is NOT ONLY about making food, although making food is definitely a part of it! Food science is about all of the ways in which we interact and study food, whether that be the different methods by which we prepare food or the various fields that have arisen to investigate the chemical makeup of food.

The purpose of the website that we will be providing to the Cornell Food Science Club is to promote all of the goals noted above.

Hosting Plan

Where will the site be hosted?

The website will temporarily be hosted on the CS/INFO 2300 course server. At the end of the semester, we agreed to assist Halle with moving the website to a private server that the club will maintain.

Needs and Wants

In this table, collect your client's and target audience's needs and wants for the website. Come up with several appropriate design ideas on how those needs may be met. In the Memo column, justify your ideas and add any additional comments you have. There is no specific number of needs required for this, but you need enough to do the job.

Needs and wants (What does your client and audience need and want?)	Design ideas and choices (How will you meet those needs and wants?)	Memo (Justify your decisions; Additional notes)
Interactive calendar that redirect users to event details when an event is selected	Google Calendar or other JavaScript calendar plugins	We can simply incorporate a Google Calendar as an iframe, which allows Halle to easily update calendar through the Google Calendar interface. However, the inability to style a Google Calendar and add interactive elements is pushing us to consider other JavaScript calendar plugins that are more friendly.
Ability to edit website content as an admin without looking at code	Edit website form available to user upon successful login to admin account	User-friendly way for anyone who inherits the website to be able to edit the content of the website, regardless of their background in programming.
View past event photos	Photos organized into albums based on events (similar to Project 3)	Easy for a user to find the photos he or she is looking for
View basic information about the club	About us page	Dedicated page to general club information makes it easy to find
Ability to contact the club	Contact us form	Should be send an email to the club email and additionally send a confirmatory email to the user
Integrated with the Facebook group page	Enable the Facebook plugin on the website	Appealing to our target audience

Part 2: Project requirements

Design

What design elements should be utilized? Tell us about the design elements you plan to have for the site. Do they fit your client's needs? Why did you choose to follow (or not to follow) the client's expectations? If you chose not to accommodate a need, why did you make that decision?

We plan on implementing a website design that focuses on simplicity and accessibility. Seeing as how our target audience for the website is largely Cornell students who are current members or prospective members of the Cornell Food Science Club, we hope to tailor the website to their needs. As such, we want to make information about upcoming events easy to find and clearly displayed. The calendar and photos should similarly be displayed in such a way that makes them easy to access. We will be implementing a standard, multi-page website with a clear navigation bar with the most important content having their own dedicated pages. This is in alignment with the client's needs, as she also believes users will mostly be interested in the calendar and photos. We will use images and artwork provided to us by the club to decorate the various pages with elements that embody the various aspects of food science. We will also guarantee that our design works across many platforms such as mobile and tablets since often times students are looking for quick information on the go.

Client's Edits

Does the client need the ability to edit the site after the end of the semester? If Yes, tell us how you site fit your client's need. If No, write down N/A.

The client will need the ability to edit the site after the end of the semester. To accommodate this need, we will implement a form that is accessible only to users with administrative access and allows admins to edit the content of the page. While in this form, the admin can add/edit/delete various types of content, such as events and photos. This form will function similarly to the form we implemented in Project 3, but will feature a more elegant design.

Information Architecture, Content, and Navigation

Lay out the plan for how you'll organize the site and which content will go where. Note any content (e.g., text, image) that you need to make/get from the client.

Note: As with the Needs and Wants table, there is no specific amount to write here. You simply need enough content to do the job.

Main navigation (List your site's navigation here)	Sub category (List any sub categories of under the main navigation)	Content (List all the content corresponding to main navigation and sub categories)
Home		Eye-catching home page that embodies the vision of the club. Automatic image slider with various images of the club members at various events, log-in form, Facebook like button plugin, sponsors, some information for new members, a way to subscribe to the list-serv
About Us		A more in-depth description of what the club represents and information for prospective members interested in joining. Include the names of some companies that work with the club to host opportunities/events and several images
Events	Upcoming events Past events	A list view of events filtered by date, i.e., upcoming events vs past events. The list view should provide much more detail than the calendar, including a full description of the event, a link to the event page, etc. Search form.
Calendar	Daily view Weekly view Monthly view	Calendar view of upcoming events, which can be toggled to display events for the day, week, or month. The calendar view displays concise information about the events, but directs users to the individual event pages, which contain more details, when an event is selected
Photos		Photos pleasantly organized into albums by events. Basic information about even album should include the event name, date, etc. (similar to Project 3)
Contact Us		A form to email the club and basic instructions on how to reach out to the board if needed

Interactivity

What interactive features will your site have? What PHP elements will you include?

Much of this is up to you, however, implementing a login system is required. Logging in should not be required to view the site, however it must unlock extra functionality, e.g., admin functionality, comment posting, etc.

Also, describe how the interactivity connects with the needs of the clients/target audience.

Below are the interactive features we plan on implementing:

- Login form that provides admins with additional functionality to edit the content of the website
 - This corresponds with the client's greatest need, which is to spread information on new events and opportunities
- Contact form that allows anyone to contact the club by email
 - Meets the current club members and prospective club members' need to be able to easily contact the club board
- Search form that identifies events that most closely match the search parameters
 - Supports easy lookup of specific events

Use of Existing Libraries

What libraries (e.g. editor.js, jQuery Cookie, Image Sliders, jQuery) are you planning to use for the site? What do you have to do to incorporate those libraries? How much of your own code will satisfy the project requirements?

Below are the libraries we plan on using:

- jQuery will be used across the entire website for multiple purposes including dynamically changing components
- Google Calendar API
- Facebook API
- [Potentially] AnimeJS – a JavaScript animation engine
- [Potentially] ReactJS – dynamic front end components

Database

How will you use a database to improve the functionality of the website? Describe a possible schema that could meet your client's needs.

The Users table will track user login information as well as admin status. Each user in the Users table will have a unique username, a hashed password, and a boolean identifying whether the user has admin rights.

The Events table will track events organized by the club. Each event in the Events table will have a unique id identifying the event, the name, date, time, description, and url to event page.

The Images, Albums, and ImageAlbumLink tables are identical to the ones defined in Project 3.

The Profiles table will track club membership. Each profile in the Profiles table will have a unique id, the member's name, major, photo, and description.

Scale

How large will the site be (approximate number of pages) and how many hours of work will be required to complete it?

The site will be approximately 6 pages. A rough outline of the content of each page was listed above. We anticipate that the site will require approximately 10 hours to implement per person, as well as an addition 3 hours for discussion with the client and debugging.

Part 3: Work Distribution

Describe how each of your responsibilities will be distributed among your group members.

Who will be responsible for backing up other members should someone fail to meet a deadline?
 How will you communicate with each other? What are your expectations for communication?
 How will you share your design documents and ensure that no one disrupts each other's code?
 How will you manage deadlines? How you would keep track of task completion and the progress within your group?

If you will be using any tools for scheduling, sharing documents, managing tasks, etc., make sure you describe them here. This is also a good time to identify challenges (like who will be unavailable due to religious holidays or sports events), and how you will manage these challenges. Keep updating this on a regular basis for your own benefit.

If you are not tracking tasks (calendars, shared to-do lists, bug trackers or gantt charts, etc.), you might want to use the basic task tracking table shown below.

Set internal deadlines. Whose task needs to be completed first in order for another person's task to be relevant? Be specific in your task descriptions so that everyone knows what needs to be done and can track the progress effectively. Consider how much time will be needed to review and integrate each other's work. Most of all, make sure that tasks are balanced across the team.

Note: Again, you want the right number of items for the job. The table should have enough information such that each team member understands what is expected of them and by when.

Task	Team Member Names and roles	Due Date	Status
Initial website design	Ryan: front end leader; Spencer: backup	4/21	In progress
Revised website design	Ryan: front end leader; Spencer: backup	4/24	In progress
Database setup	Raghav: back end leader; Ryan: backup	4/21	In progress
Admin functionality	Spencer: leader; Ryan: backup	4/28	In progress
Debugging	Spencer: debugging leader; Raghav: backup	5/1	In progress
Final review with client	N/A	TBA	In progress

Part 4: Additional Comments

If you feel like you haven't fully explained your design choices, or if you want to explain some other functions in your site (such as special design decisions that might not meet the final project requirements), you can use this space to justify your design choices or ask other questions about the project and process.

No additional comments

Design Journey Part 2

Group name: A Team

Members' names: Raghav Batra, Spencer Weiss, Ryan Yoon

Members' NetIDs: rb698, scw99, rdy23

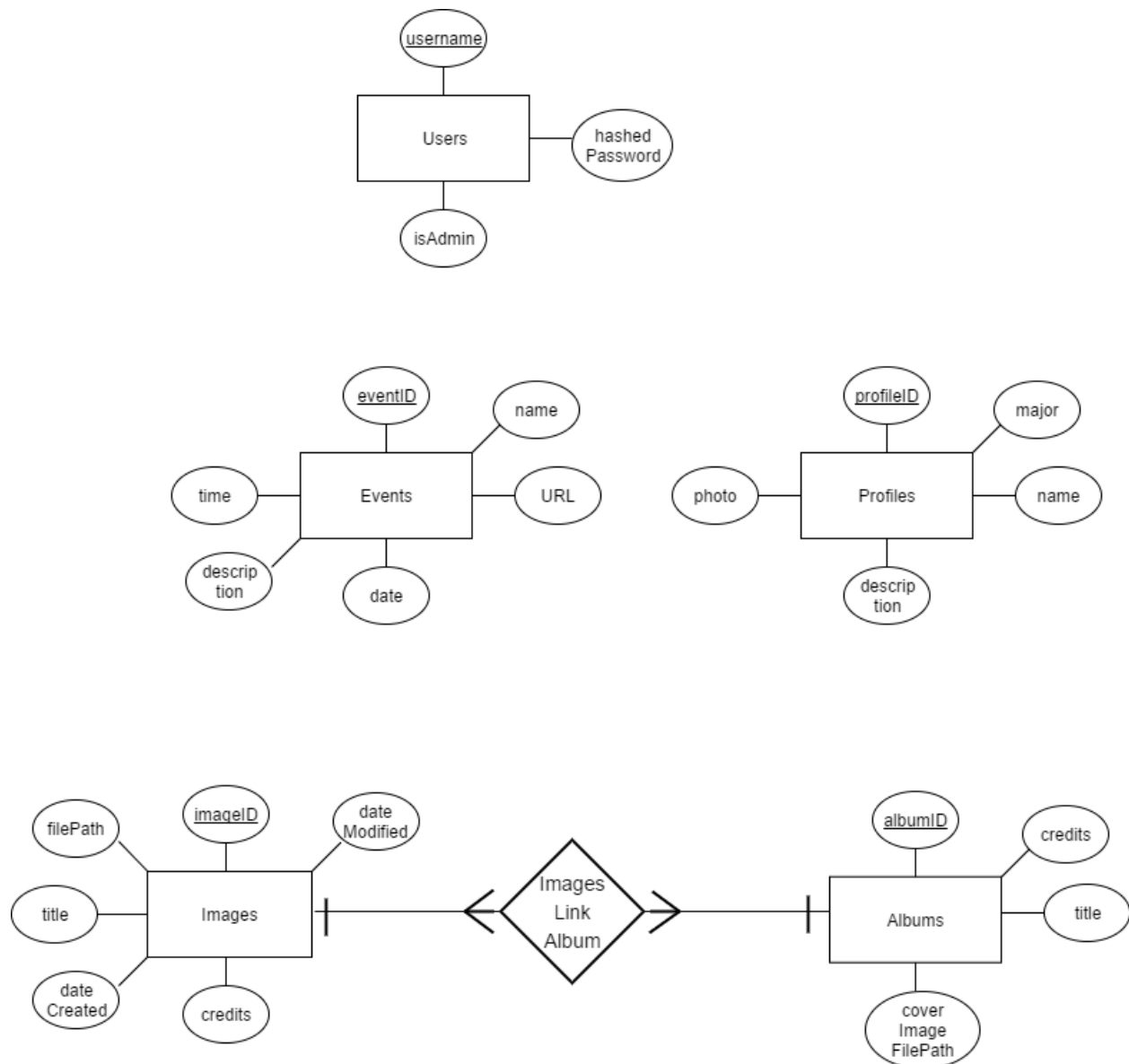
Section: 213

Part 1: Database Design

Conceptual ER Diagram (different arrows, see slide 13 of Lecture 17; relationship and ER, see lecture 16 and 18)

In this part, please copy and paste your ER diagram for your database below (you can make your ER diagram using any tool of your choice). Make sure the relationships between each entity are clear and well thought-out. Don't forget to indicate what kind of relationship each arrow represents. Your database description should go on the next page.

Tables: Users, Events, Profiles, Images, Albums & ImagesLinkAlbum.
Underlined attributes are primary keys.



Database Description

Tell us what the database does. Make sure that you include enough detail so that we are able to understand what is going on in your ER diagram.

Note: this is a description after the ER diagram has been mapped to tables in our database.

To start with, there is a *Users* table that stores information about each user who makes an account on the website. It stores the username, password & a boolean *isAdmin* that states whether the user has admin privileges or not. The username is unique & thus serves as a primary key, while the password is hashed and stored for security reasons.

The *Events* table stores details about each event. Each event has its own *eventID* (and thus it serves as a primary key). Besides this, its name, time, date & description are provided. A URL field helps point to a social media site (if it exists).

The *Profiles* table stores details about the EBoard of the Food Science Club: each is identified by his/her *profileID* & contains information such as his/her name, major, photo & small description.

The *Images* table contains information about each image; identified by its *imageID*, it also contains the title, the date it was created, the date it was modified, the filepath and the credits.

The *Albums* table contains information about each album; identified by its *albumID*, it also contains the title, the filepath for its cover image and the credits.

The *Images* & *Albums* table are in a many-to-many relationship with each other. This is because one image can belong to many albums, while an album can contain many images. Mapping this relationship to a table in the database gets us an *ImageLinkAlbum* table wherein each row is in the form of (*imageID* *i*, *albumID* *a*), which implies that the image with *imageID* *i* is in the album with *albumID* *a*.

Design choice: We were thinking of having a relationship between *Users* & *Profiles*, but soon realized that it wasn't necessary for all users of the website to have profiles; for example, someone who just wants to receive updates may sign up, but will definitely not need a profile on the site!

Part 2: Website Layout

Content Organization

This should be an improvement upon the table you used in Design Journey Part 1

Main navigation (List your site's navigation here)	Sub category (List any sub categories of under the main navigation)	Content (List all the content corresponding to main navigation and sub categories)
Home		<ul style="list-style-type: none"> An eye-catching home page that embodies the vision of the club and makes navigation simple from the get-go. In addition to an automatic image slider with various images of the club members at various event and a list of the club's various sponsors, the page will include a login form, some information for new members, a way to subscribe to the listserv, and a Facebook Like Button plugin for its page
About Us		<ul style="list-style-type: none"> A more in-depth description of what the club represents and information that will make it easy for prospective members interested in joining. Include the names of some companies that work with the club to host opportunities/events to enhance club credibility & attract more students..

Events	<ol style="list-style-type: none"> 1. Upcoming events 2. Past events 	<ul style="list-style-type: none"> • A list view of events filtered by date, i.e., upcoming events vs past events. The list view should provide much more detail than the calendar, including a full description of the event, a link to the event page. This should be searchable as well to allow easy access to the users. <ol style="list-style-type: none"> 1. Upcoming events List upcoming events or information sessions the club is hosting and other various mandatory or optional meetings for members to attend. 2. Past events Archived events that the club has hosted, including the description of each event along with possible images.
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Calendar	<ol style="list-style-type: none"> 1. Daily view 2. Weekly view 3. Monthly view 	<ul style="list-style-type: none"> • Calendar view of upcoming events, which can be toggled to display events for the day, week, or month. • The calendar view displays concise information about the events, & directs users to the individual event pages, which contain more details, when an event is selected. This allows to access more information in less amount of time. • We are also trying to send an email to the user for future correspondence for an event when he/she clicks on a particular event <ol style="list-style-type: none"> 1. Daily view: list events on the day, some details in description(s) of event(s) that day but directs users to individual event pages containing more details when selecting the event. 2. Weekly view: list events on the week, directs users to individual event pages containing more details when selecting an event 3. Monthly view: list events on the month, directs users to individual event pages containing more details when selecting an event
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Photos		<ul style="list-style-type: none">• Photos pleasantly organized into albums by events. Basic information about even album should include the event name, date, etc. (similar to Project 3)• Potentially use JS here to enhance aesthetics.
Contact Us		<ul style="list-style-type: none">• A simple form to email the club and basic instructions on how to reach out to the board if needed.• Emails directly from web page; does not open pop-up window

Navigational Structure

Explain how users will move between pages. What kind of navigational aids will you have? Will there be a menu bar? A drop-down menu? Tabs? Will you have this available across all your pages?

Tell us why you chose a particular navigation scheme over other possible choices, how the overall navigation of your site will work, how the various pages will be linked, and how the navigation categories make sense from a user's perspective. You may find it helpful to include a diagram of your site map here.

Because we are making a pretty standard website, we chose to use a traditional sticky navigation bar on the top. We also plan to add a footer. Our navigational structures will have white text on a black background so that the text is very visible for contrast. This ensures the user can easily click these links if he/she wants to go to a particular page. This will be present on all pages, to enhance accessibility.

The footer will have a Facebook button that links to the Food Science Club's Facebook page. In addition, we might put some important information in there if required.

Depending on the content we put, some pages might automatically redirect to other pages upon mouse clicks or other events. These will also add to user experience.

We chose this design structure because both our client & target audience will use the site as a source of information; this structure ensures information is easy to access & most users of the site will also be very accustomed to this layout. While using a funkier layout may seem to be more aesthetic & "cooler", we don't want to confuse our users with features that they find inaccessible & difficult to use. However, to make sure our site is not just "plain vanilla", we have added some effects to the navbar that also help in identifying which page the user is currently at.

The navigational bar will turn into a dropdown menu on smaller screens, where the limited screen space can be used for content.

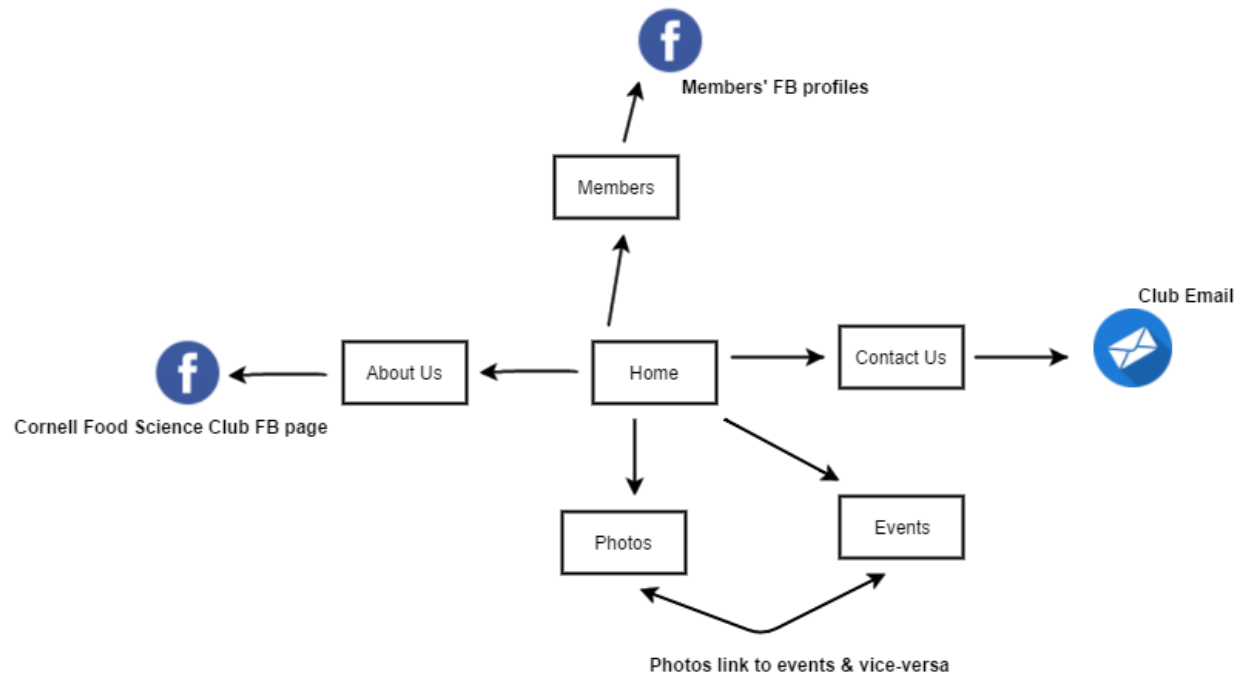
The navigational categories include Home, About Us, Events, Members, Photos, Contact Us & a login button. Why this navigation makes sense for the target audience is outlined below (for each group mentioned in Design Journey 1):

- Admins: Upon successful login of an admin, there will be more categories involving addition, deletion or modification of events/photos/other details.
- General members of the Cornell Food Science Club: They would be most interested in the Events & Pictures sections, both of which have separate links on the navigation bar, thus making it very easy for them to view what they want to see on the site.
- Students (namely Cornell students): Because of its appearance as a typical website, it will be easy for this group to survey events, lookup upcoming events or look at past event photos

- Members of the general public: In addition to the above, there is an “About Us” tab that will help this group find the purpose of this website & the Food Science Club.

NOTE: This is a tentative design; only included to show a visualization of what was described above.

Tentative Site Map:



Part 3: Interactive Functionality

What interactive features will your site have? What PHP and Javascript elements will you include? Describe how the interactivity meets the needs of the client/target audience.

PHP

- Login form
- Contact form
- Search form
- Photo album
- Event page
- General

JavaScript

- jQuery
- Calendar
- Facebook likes
- Contact form
- Animated slides

All the above is as per our audience needs (Design Journey Map 1) & Part 2 (Design Journey Map 2). For example, the Facebook like button will allow users to connect with the Cornell Food Science Club on Facebook, thus also spreading awareness about the club. Another example, the login form will be used by the club admins to change content. Other features listed above fulfil other needs of the audience. In a nutshell, we have listed the above to capture all possible interactivity for users & have tried to make them as intuitive and appealing as possible.

A lot of the JavaScript is to make the site look nicer. We will take care to ensure that these do not impair the functionality of the website in any way in case JavaScript has been turned off in the browser.

PHP Interactivity

For each piece of PHP interactivity that you plan to implement, describe what the interaction is, how you will implement it, and which pieces of PHP code are required to complete it. You can describe these in terms of functions if you like, but only if you want to. If there is overlap between PHP and JavaScript interactivity, describe the interaction both here and in the JavaScript Interactivity section on the next page.

- **Login form:** Admins can login using PHP to validate login input. A call to the database will retrieve a Boolean identifying whether the user has admin rights. Passwords will be hashed using *sha256* hashing (with the possibility of adding a salt to it). When creating a new user, upon validating user input to ensure fields are not left empty, a call to the database will validate whether the username is unique and print an error message if not.
- **Contact form:** Allows anyone to contact the club by email through a simple mail form that is executed through PHP validation and an HTML form that is “echoed” through PHP. We are also thinking of client-side validation with JavaScript: it will also look nicer than the default HTML5 validation.
- **Search form:** Calls to database, selects selected field(s) (or all fields if none specified) and identifies events that most closely match the search parameters. Examples of fields to be searched include the event name, date, time, and description.
- **Photo album:** We will use PHP to make calls to the database containing images and albums and properly populate the various albums and event pages using these calls (much like P3).
- **Event page:** All events will contain a link to any images (if they exist) relating to the event. This will be done by encoding the specific unique imageID within the linked URL.
- **General:** Each page will contain elements that are loaded dynamically via PHP include files that will maintain repetitive code in order to help reduce load times.

JavaScript Interactivity

For each piece of JavaScript interactivity that you plan to implement, describe what the interaction is, how you will implement it, and which pieces of JS code are required to complete it. You can describe these in terms of functions if you like, but only if you want to. If there is overlap between PHP and JavaScript interactivity, describe the interaction both here and in the PHP Interactivity section on the previous page.

- **jQuery:** This will be used across the entire website for multiple purposes including dynamically changing components. This may include something near a small food icon that changes depending on the page or additional styling for each image. Will probably involve basic jQuery such as potentially involving changing the `src` attribute of the image.
- **Calendar:** We will likely be using Google Calendar API to make calls/design our event calendar to navigate between monthly, weekly, and daily views. We may also use JavaScript here to style the calendar for aesthetic purposes.
- **Facebook likes:** We will implement our Like feature using Facebook API.
- **Contact form:** Allows anyone to contact the club by email through a simple mail form that is executed through PHP validation and an HTML form that is “echoed” through PHP. We are also thinking of client-side validation with JavaScript: it will also look nicer than the default HTML5 validation.
- **Animated slides:** We will implement our slideshows through AnimeJS, a JavaScript animation engine and/or ReactJS, a dynamic front end component.

Compared to the first milestone, did you make any changes to your plan to use the existing libraries (e.g. editor.js, jQuery Cookie, Image Sliders, jQuery) for the site? If so, write down the libraries, what you have to do to incorporate those libraries, and how much of your own code will satisfy the project requirements. If there is no change, write down N/A.

N/A

Part 4: Additional Comments

If you feel like you haven't fully explained your design choices, or you want to explain specific functions in detail, do so here. You can use this space to justify your design choices or ask other questions about the project and process.

N/A

Design Journey Part 3

Group name: A Team

Members' names: Raghav Batra, Spencer Weiss, Ryan Yoon

Members' NetIDs: rb698, scw99, rdy23

Section: 213

Part 1: Necessary Information

1. Please provide us your login username and password
(if your site has multiple login systems, please specify which username and password corresponded to which login system)

Username: admin

Password: password

2. Please provide us your DB login username and password

Username: fp_ateam

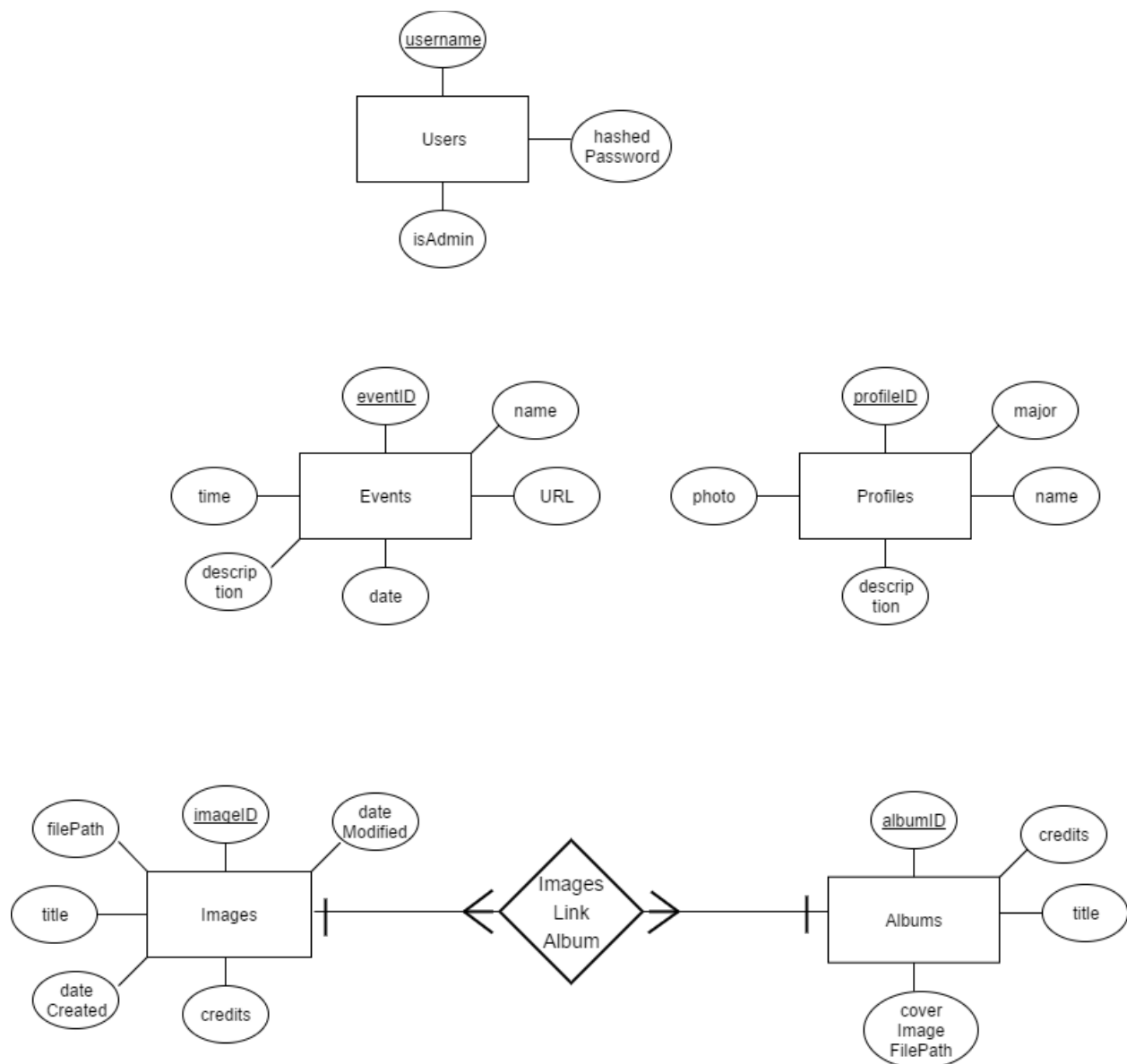
Password: cs2300

Part 2. Database Revision and Implementation

Include your physical ER diagram here and describe any changes you made based on feedback from the previous milestone. Also describe the physical ER diagram (tables, fields, keys, and relationship, please see lecture 17 slides 21).

Tables: Users, Events, Profiles, Images, Albums & ImagesLinkAlbum.

Underlined attributes are primary keys.



Database Description

Note: this is a description after the ER diagram has been mapped to tables in our database.

To start with, there is a *Users* table that stores information about each user who makes an account on the website. It stores the username, password & a boolean *isAdmin* that states whether the user has admin privileges or not. The username is unique & thus serves as a primary key, while the password is hashed and stored for security reasons.

The *Events* table stores details about each event. Each event has its own *eventID* (and thus it serves as a primary key). Besides this, its name, time, date & description are provided. A URL field helps point to a social media site (if it exists).

The *Profiles* table stores details about the EBoard of the Food Science Club: each is identified by his/her *profileID* & contains information such as his/her name, major, photo & small description.

The *Images* table contains information about each image; identified by its *imageID*, it also contains the title, the date it was created, the date it was modified, the filepath and the credits.

The *Albums* table contains information about each album; identified by its *albumID*, it also contains the title, the filepath for its cover image and the credits.

The *Images* & *Albums* table are in a many-to-many relationship with each other. This is because one image can belong to many albums, while an album can contain many images. Mapping this relationship to a table in the database gets us an *ImageLinkAlbum* table wherein each row is in the form of (*imageID i*, *albumID a*), which implies that the image with *imageID i* is in the album with *albumID a*.

Design choice: We were thinking of having a relationship between *Users* & *Profiles*, but soon realized that it wasn't necessary for all users of the website to have profiles; for example, someone who just wants to receive updates may sign up, but will definitely not need a profile on the site!

Part 3: Testing Protocol***How are you going to choose users?***

How will they be representative of the target audience? How will you find them? Where will you meet them? Will you compensate them?

We will plan to find users through the following avenues: friends, students in CS 2300, Halle (our client) & other members of the Food Science Club.

This will make sure we test all factions in our target audience: students & public looking for general information (friends) & students looking for Food Science related events (Halle). We will also try to test this on students in CS 2300, for more users & to also test if our design and layout are easy.

We will try to meet our friends at night, 2300 students after lecture & Halle when she is free. We will try to meet them preferably somewhere on Central Campus, at a convenient location.

This will be a voluntary task.

What tasks are you going to have them do? How would these tasks connect with the client's needs?

Task name	Task description	Task goal/what's being tested/expected outcomes
First impression	Ask the user to look at the site for 5 seconds and describe their emotional and intellectual reactions	See whether the design communicates client's key site goals to the target audience (to gauge whether people like the layout on first glance)
Contact Us	Ask the user to find the quickest way to contact club members	Testing whether a user can find contact information/contact club members as quickly as possible (the more time it takes, the more

		frustrated users get)
Login	Ask an admin to log in	<p>See whether admins can find the login button</p> <p>easily & whether they find the interface intuitive</p>
About Us	Ask users to find club information, including goals	<p>Test how easily potential members can find the</p> <p>navigation for more information & whether this</p> <p>information fulfils the user's needs</p>

What's your script?

How are you going to welcome them? Reassure them that you're testing the site, not them? Get them to think aloud while they use the site?

How are you going to introduce each task? What wording will you give the user? Will you give them any information in advance (probably not -- they won't have it in a real deployment -- but for sketches and early prototypes you might tell them that some things don't work)? How will you remind them to think aloud? How will you decide when to "give up" on the task?

NOTE: Some of the tasks will be done on wireframes; these have been made to match the actual website design as much as possible, so that we can test even if we don't have the required webpage. Confirmed with the professor that this was OK.

Afterwards, what specific questions or general opinions will you ask for about their experience or the site? How will you thank them?

Approaching users carefully is an important part of user testing. To accommodate that, we will greet the volunteers & assure them about the goal of the study, while not telling them too much about the tasks themselves.

We will let them use their own computers, asking them to think aloud exactly what comes to their mind at that moment. We will sit at a faraway distance (leave the room, & use a voice recorder instead if they feel conscious). This will ensure their reactions to the site is as natural as possible.

We will introduce each task as written above in the *task description*, so that the users know what to do, but they do not know what we are testing them on exactly! We will also alert them in advance about pages that are currently in a development stage, and instead ask them what they would have expected on the page.

We will leave a Sticky Note on their laptop to remind them to think aloud & not take more than 10 seconds for the task. If they fail, we will ask them why they couldn't do the specified task, and how the site's functionality differed from the perceived functionality.

Finally, we will thank them for their time.

Part 4: Testing Note

You should have at least 2 testing users.

User 1**1. Who is your user, e.g., where do they come from, what is their background, etc.?**

Sierra Jamir, Secretary, Cornell Food Science Club. Class of 2018, Food Science major.

Represents a member of the Food Science Club & a potential admin.

2. How does this user represent your target audience/client's needs?

Tasks for user 1	User's reaction/feedback/problems?	Re-design ideas and other notes - <i>what are the different solution you can think of to address the feedback/problem?</i>
First impression	"Looks very clean, but then again I am not a design aesthete"	-
Contact Us	"Yes, finally a form that is easy to find; no more messages on the FB group"	-
Login	"Found it!"	-
About Us	"Easy to find; would expect more club information"	Planning to do more user testing to see what all users would expect on the 'About Us' page

3. Other notes from this user that will be useful to think about when redesigning.

Thought it was a generic site (which is what we're aiming for)

User 2

1. Who is your user, e.g., where do they come from, what is their background, etc.?

Nicholas Curcio, Class of 2019, PAM Major, was sitting next to me in the library.

Represents a random sample population's opinion.

2. How does this user represent your target audience/client's needs?

Tasks for user 1	User's reaction/feedback/problems?	Re-design ideas and other notes - <i>what are the different solution you can think of to address the feedback/problem?</i>
First impression	"I love the picture. The website looks clean and easy to navigate. Not a fan of the exclamation point after "learn about us", because you've got a double exclamation point between that and "we do more than just eat food!" Also, the white space at the bottom of the page is kinda awkward. I'd put in a footer."	Remove the exclamation point and implement the footer we currently have planned

Contact Us	"It's right there on the navigation bar."	-
Login	"I'd go right to the login button in the top corner and log in from there."	Login button is temporarily on both navbar & footer
About Us	"It's right there in the middle of the home page."	-

3. Other notes from this user that will be useful to think about when redesigning.

He really likes the image we chose. Hopefully Halle will agree, otherwise we will look to find another attention-grabbing image to replace it.

User 3

1. Who is your user, e.g., where do they come from, what is their background, etc.?

James DeFilippo, Class of 2018, AEM Major, co-founder of the Phi Chi Theta Professional Fraternity.

Gave feedback often to his club's web designer, so he represents someone who has requested and nit-picked custom web pages before.

2. How does this user represent your target audience/client's needs?

Tasks for user 1	User's reaction/feedback/problems?	Re-design ideas and other notes - what are the different solutions you can think of to address the feedback/problem?
<p>First impression</p>	<p>"It's cool! I'd be curious about what those foods</p> <p>are and how they got them so perfectly cube-</p> <p>shaped. It's a bright cheery theme and when I</p> <p>look at that food it makes excited about food,</p> <p>because I'd eat whatever that is. Kinda</p> <p>reminds me of Baked by Melissa's website,</p> <p>because they have a white background like</p> <p>that and a picture of mini cupcakes like those</p> <p>cubes. I like that website."</p>	<p>-</p>
<p>Contact Us</p>	<p>"I see it there in the top right corner of the</p> <p>page."</p>	<p>-</p>

Login	<p>"It is right next to the contact us section of the</p> <p>header; seems simple enough."</p>	-
About Us	<p>"It's front and center on the page."</p>	-

3. Other notes from this user that will be useful to think about when redesigning.

Loves the image on the home page and specified that it draws his interest to the club. Seems like something we shouldn't change

Testing Summary and Iteration

What did you learn? About your users? About your site? About yourselves?

We learned that our website's current theme is a lot more appealing than our previous website's colour scheme and general layout, and that by including an intriguing cover photo for the website, it draws interest to the club. A great website can really make or break someone's initial impressions, which may allow/prevent them from further using the site.

We also learnt that while we had thought that actually executing the script than we had thought!

What are three key changes you made based on the testing, what alternatives did you consider, and why are they appropriate changes?

- We will remove the exclamation point as Nick suggested. An alternative we considered was just leaving it there, but we decided that it was aggressively enthusiastic and unnecessary.
- Next, we implemented a footer, as currently without it, the website looks empty. It also helps in the navigation, which is important for a lot of users
- A third change was to change the word "Vision" to black font, but we left it because it was a word we wanted emphasized. Its current red colour also matches the site's current colours.

If you make any changes to the testing protocol for round 2, tell us what they are here.

N/A

Part 5: Additional Comments/Questions

If you have additional info/comments/questions about testing or the state of the project, you can put them here. However, you might get better responses in office hours at this point in the semester.

N/A

Design Journey Part 4

Group name: A Team

Members' names: Raghav Batra, Spencer Weiss, Ryan Yoon

Members' NetIDs: rb698, scw99, rdy23

Section: 213

Part 1: Necessary Information

1. Please provide us your login username and password. Remember, your username and password should be hashed.

(if your site has multiple login systems, please specify which username and password corresponded to which login system)

Username: admin (8c6976e5b5410415bde908bd4dee15dfb167a9c873fc4bb8a81f6f2ab448a918)

Password: password (5e884898da28047151d0e56f8dc6292773603d0d6aabbdd62a11ef721d1542d8)

2. Please provide us your DB login username and password

Username: fp_ateam

Password: cs2300

Use of Existing Libraries

As there may have been some changes, please give us the most up-to-date list of existing libraries that you are using for your website (e.g. editor.js, jQuery Cookie, Image Sliders, jQuery). What did you have to do to incorporate those libraries? How much of your own code satisfied the project requirements?

- **Lightbox.js:**
 - A lightbox for displaying the images of each album in a user-friendly manner. The user can now press the left & right buttons to navigate. Also gives focus to each image.
 - I had to go through the code to understand it & then tweak it to the requirements of the project.
 - I also had to go through the call to the database in my code & add relevant calls to the lightbox API.
- **Contact form / JQuery.validate.js:** Allows anyone to contact the club by email through a simple mail form that is executed through client-side JavaScript validation using JQuery.validate.js + Captcha PHP validation and an HTML form that is “echoed” through PHP.
 - JQuery.validate.js was used to validate name input (length >2 and not null), email input (ended in a valid email tag), and user message (not null). If not met, it would not allow for submission.
- **Google Calendar API:** makes calls/design our event calendar to navigate between monthly and weekly views.
- **Facebook API:** we used Facebook's API to include a link to the Cornell Food Science Club's Facebook page in our footer.
- **jQuery:** This was used across the entire website for multiple purposes including dynamically changing components. Mostly involves basic jQuery involving changing the *src* attribute of the image.

Part 2: Testing Protocol

1. How are you going to choose users?

How will they be representative of the target audience? How will you find them? Where will you meet them? Will you compensate them?

We will plan to find users through the following avenues: friends, students in CS 2300, Halle (our client) & other members of the Food Science Club.

This will make sure we test all factions in our target audience: students & public looking for general information (friends) & students looking for Food Science related events (Halle). We will also try to test this on students in CS 2300, for more users & to also test if our design and layout are easy.

We will try to meet our friends at night, 2300 students after lecture & Halle when she is free. We will try to meet them preferably somewhere on Central Campus, at a convenient location.

This will be a voluntary task.

2. What tasks are you going to have them do? How would these tasks connect with the client's needs?

Task name/id	Task description	Task goal/what's being tested/expected outcomes
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1	Initial thoughts on website: see the user's reaction to the website in the first 5 seconds of viewing the site	Does the site come across as friendly & aesthetic?
2	Ask the user to browse through images of an album	See if user is able to comfortably navigate between images of an album
3	Make the user contact the Club	See how quickly the user can find the relevant information (usually the longer it takes, the more frustrated the user gets)
4	What would you expect to see in "Events"?	Assess user's expectation of a certain page to know whether they see what they want to see
5	Ask a site admin to edit content in the "Members" section	See how easy it is for an admin to correct/change information on the site (once we do hand the site to them, this will be how they change content!)

3. What's your script?

How are you going to welcome them? Reassure them that you're testing the site, not them? Get them to think aloud while they use the site?

How are you going to introduce each task? What wording will you give the user? Will you give them any information in advance (probably not -- they won't have it in a real deployment -- but for sketches and early prototypes you might tell them that some things don't work)? How will you remind them to think aloud? How will you decide when to "give up" on the task?

Afterwards, what specific questions or general opinions will you ask for about their experience or the site? How will you thank them?

How did they feel about the overall look & feel; theme; user ease

Approaching users carefully is an important part of user testing. To accommodate that, we will greet the volunteers & assure them about the goal of the study, while not telling them too much about the tasks themselves.

We will let them use their own computers, asking them to think aloud exactly what comes to their mind at that moment. We will sit at a faraway distance (leave the room, & use a voice recorder instead if they feel conscious). This will ensure their reactions to the site is as natural as possible.

We will introduce each task as written above in the *task description*, so that the users know what to do, but they do not know what we are testing them on exactly! We will also alert them in advance about pages that are currently in a development stage, and instead ask them what they would have expected on the page.

We will leave a Sticky Note on their laptop to remind them to think aloud & not take more than 10 seconds for the task. If they fail, we will ask them why they couldn't do the specified task, and how the site's functionality differed from the perceived functionality.

Finally, we will thank them for their time.

Part 3: Testing Notes

You should have tested your site on at least three representative users.

User 1

1. Who is your user, e.g., where do they come from, what is their background, etc.?

Evan Zhao is a sophomore at Cornell University studying Computer Science. Evan has a strong background in algorithmic concepts and web development, namely back-end development. He has interned at several tech start-ups located in Palo Alto and New York City as a software engineer. Evan is also on the CUAUV project team and CMS team as a programmer. Additionally, he is an aspiring cook with no formal training, but loves to experiment and learn from cooking shows in his free time.

2. How does this user represent your target audience/client's needs?

Evan is a student at Cornell University who is clearly proactive about participating extracurricular activities and is interested in cooking. He is a good representative of our target audience, which is primarily Cornell University students who are interested in food science or the culinary arts. While Evan is not a Food Science major, he is very interested in food related activities. Our client Halle also stressed the importance of diversity within the club, making sure that students of all majors are welcome. Evan falls in line with this philosophy. Finally, Evan has experience designing and implementing several websites so his feedback would be very valuable.

Tasks for user 1	User's reaction/feedback/problems?	Re-design ideas and other notes - <i>what are the different solutions you can think of to address the feedback/problem?</i>
Initial thoughts on website	Finds the color scheme pleasant and soothing, especially notes that the color scheme nicely reflects the University's school colors. Likes the subtle effects with the navbar and footer on hover. Appreciates that the site looks clean and not overly cluttered.	N/A
Ask the user to browse through images of an album	Search bar is poorly styled and creates a stark contrast from the rest of the page. Albums/images are not centered on page. Likes the light box effect.	A problem with different people implementing different pages. Went back and changed styling to maintain a consistent theme.
Make the user contact the club	Easy to find the contact form (clearly displayed on the navbar). Styling of the Send button does not match the style of the rest of the site	A problem with different people implementing different pages. Went back and changed styling to maintain a consistent theme.
What would you expect to see in "Events"?	Expected a list view of events, but believes a calendar is also a very natural and clear way to display events. Complimented the partner companies section.	N/A

Ask a site admin to edit content in the "Members" section	N/A	N/A
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3. Other notes from this user that will be useful to think about when redesigning.

N/A

User 2

1. Who is your user, e.g., where do they come from, what is their background, etc.?

Peter Weiss, Managing Director and Head of J.P. Morgan's Housing and Northeast Groups. Studied computer engineering at Penn in the 80s, has some background in web design from way back. Has deutan colorblindness (a type of red-green color blindness). Nitpicky when it comes to design. Loves to

cook, experiments with new recipes and has perfected meals of his own. Could've been a chef but went into computer engineering and then into business instead.

2. How does this user represent your target audience/client's needs?

While not necessarily our exact target audience in terms of being a student at Cornell, Peter is very interested in food related activities and reviewed the website as if he were a prospective student. Halle stressed the diversity of the food science club, as students across all majors can freely join, and he represents someone coming from an engineering background. Most notably, his feedback about the website's design will be notable as it will show whether the website really is well adapted for students who also share his colorblindness.

Tasks for user 1	User's reaction/feedback/problems?	Re-design ideas and other notes - <i>what are the different solutions you can think of to address the feedback/problem?</i>
Initial thoughts on website	Loves the header image, likes the white/red "Big Red" color scheme. Navbar makes website easily navigable, footer appropriately styled. Still looks good on mobile	N/A
Ask the user to browse through images of an album	Really likes the photo display (lightbox). Notes the page is spaced poorly when adjusting window size -- seems like it was hard coded for full screen only. On mobile it looks even worse since it's not centered on the page.	Optimized the website for mobile to be centered, adjusted the page to generally scale with the window
Make the user contact the club	Finds it crystal clear where to find the form, as it's right on the top of every page. Impressed that the Captcha is implemented properly, even more impressed by the dynamic error messages. Still looks good on mobile. Wouldn't change a thing	N/A
What would you expect	Expects to see some list view or calendar of events, so	We removed the partner companies section on mobile.

to see in "Events"?	Google Calendar matches expectations. Loves the partner companies section on Desktop, but noted that he would not use the section on mobile. Suggested scrapping that on mobile	
Ask a site admin to edit content in the "Members" section	N/A	N/A

3. Other notes from this user that will be useful to think about when redesigning.

A key takeaway from his feedback was that our website had features that were not necessary on mobile and that ultimately could be scrapped.

User 3

1. Who is your user, e.g., where do they come from, what is their background, etc.?

Our user is Sean Dolan on the executive board of the food science club. Sean is a proud member of the Cornell Food Science Club. In his freshman year he served as freshman representative and is now in the role of treasurer. Outside of the club, Sean is a Food Marketing Fellow and a research assistant in the Moraru Lab.

2. How does this user represent your target audience/client's needs?

As an exec board member, Sean is indirectly our client, as Halle is graduating this year and thus will hand off the website to the rest of exec. We had Sean test our final iteration of the website, so going into the testing we expected no errors or problems with it.

Tasks for user 1	User's reaction/feedback/problems?	Re-design ideas and other notes - <i>what are the different solutions you can think of to address the feedback/problem?</i>
Initial thoughts on website	Really happy with how it looks. We came a long way from the first version of the website he saw, which was tacky. Navbar is consistent and makes the website super user friendly and easy to use.	N/A
Ask the user to browse through images of an album	Really likes the photo display (lightbox). Looks nice on mobile -- he was skeptical about the spacing (which we'd fixed prior to showing him the website). No complaints thus far	N/A
Make the user contact the club	Went immediately to it on the navbar -- almost as if he'd already memorized the navbar's layout. Impressed by the implementation of our own Captcha rather than Google's ReCaptcha. Likes that you can't click "send" until Captcha is properly typed in and the dynamic validation "wowed me".	N/A
What would you expect to see in "Events"?	Expected a calendar of events, and expectations were met. Likes the companies section of the events page, "well executed"	N/A

Ask a site admin to edit content in the "Members" section	After logging in, edited his own section and found it easy to use. Had no problems with it. Overall very pleased with the website as a whole	N/A
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3. Other notes from this user that will be useful to think about when redesigning.

N/A

Part 4: Testing Summary and Iteration

1. What did you learn about your users? About your site? About yourselves?

We learned that the users really like the image we have on the website and are overall impressed by the design of the website, specifically the events page (specifically the companies portion), contact page (specifically the dynamic form validation), and the members page on desktop.

We learned that the website was relatively well optimized for mobile, but it still could use changes to various portions of the pages, and that certain portions that are useful on the Desktop site were extraneous on mobile and could be cut.

We learned that we sometimes overlook things that are problematic to others when testing the website ourselves, and that's why user testing is so important.

2. What are three key changes you made based on the testing? What alternatives did you consider? Why are these changes appropriate?

- Went back and changed styling of search button and Contact us to maintain a consistent theme. We did not consider an alternative, as we agreed with the feedback that it looked out of place. The change was appropriate to maintain consistency throughout the site.
- We additionally removed the companies section of our events page. An alternative we considered was to leave it as is, but we decided not to. We did this because we found that mobile users would be more interested in the content on the website than in viewing other companies' information and as a result found this change to be appropriate.
- We modified the photos page such that everything was centered on mobile. We did not consider an alternative to this -- it looked bad and needed fixing. The change was appropriate because otherwise the user would need to scroll horizontally to center the page.

Part 5: Final Notes to the Clients

1. Describe in some detail what the client will do (or would have to do) in order to make this website go live. What is the deployment plan?

Halle is looking to contact the Food Science department to see if they have an existing server where we can deploy the site. Currently she is talks with them about it. If she cannot do that, she's acknowledged that the club could pay for web hosting if the Food Science department cannot accommodate the website.

Additionally, before going live, Halle will need to replace the Google Calendar currently displayed on the website, as the Google Calendar we currently have implemented is not one that Halle can edit and is merely a placeholder calendar.

2. Include any other information that your client needs to know about your final website design. For example, what client wants or needs were unable to be realized in your final product? Why were you unable to meet those wants/needs?

We actually were able to accomplish all of our client's wants/needs, which were:

- Event calendar
- Feature that clicking event on the calendar brings you to a page with description of the event (automatically implemented within Google Calendar)
- Page with exec board members
- Contact us page
- Multi-page design (Halle specified that she does not want a Single Page Application site)
- About us, background, of the club etc.
- Admin functionality

Part 6: Final Notes to the Graders

1. Give us three specific strengths of your site that sets it apart from the previous website of the client (if applicable) and/or from other websites. Think of this as your chance to argue for the things you did really well (justify the wow factor of your website).

- Our site encompasses all our client's needs, while remaining simple, easy to use & not clunky. The problem with a lot of other sites is that there is an information overload as soon as the user

visits the site. Our site is easy on the eyes.

- Our site is responsive, which is great for students, a majority of our target audience. This is because most young people have shifted to using mobile devices on the go. Our site has been adequately tested to ensure it has the similar look and feel on mobile as it did on desktop.
- Our site makes use of extensive JavaScript and styling. The CAPTCHA on the Contact page, and the Lightbox on the Photos page use JS to enable better functionality. Besides that, the cool effect on clicking on an element of the navigation bar has been done through smart CSS
- There is a “404 Error” page that protects against when malicious users try to alter the GET variables on the URL
- Attention to special needs: one of our user testers was red-green colorblind, to ensure the site was accessible to all

2. Tell us about things that don’t work, what you wanted to implement, or what you would do if you keep working with the client in the future. Give justifications.

- There have been some styling problems with the responsive design. Hopefully they are minor enough to not detract from the experience
- We would have liked to make our own custom calendar, but because of paucity of time, we stuck to the Google calendar
- In the future, maybe implement a more aesthetic admin panel
- Also, maybe design a nice minimalistic logo for the club that matches the website

3. Tell us anything else you need us to know for when we’re looking at the project.

NOTE: Until we settle the deployment issue, email functionality for “Subscribe” and “Contact” is commented out. Right now it always displays the “you have successfully subscribed” message.

There is no “Subscribe” or “Admin login” on the mobile site, as per our own design choices (because of precious real estate on these small screens; also because it would be tedious to control admin settings on such screens).

Some minor changes from the previous design documents:

- The Events table has been replaced by the event calendar
- The Members table is now called Executives
- Certain types of fields in the table have been made larger to accommodate more text

We apologize in advance for the formatting of the tables; this was the best we could do!