User Management Center Case Study

Overview

The User Management Center (UMC) design project is a project I did to explore the field of UX. The UMC's purpose was to provide an organization with the ability to manage their users and their roles for their organization so that they may control who has access to the products and the information in the platform. For the project, I used the high fidelity prototyping tool Axure for designing the project, and Google suite for storing notes.

My personal goal for the project was to learn and apply UX principles in a professional environment. In this case study, I will be explaining the process I went through from user story to functioning prototype, and will be discussing the concepts and principles I utilized throughout the project. More importantly, I'll be discussing the lessons learned from my experiences.

Process

I used an established design process, which is listed as follows:
1. What problem am I trying to solve?
2. How will I know that I have solved the problem?
3. Define the user tasks
4. Create use scenarios
5. Develop and prototype the design
6. Create UX Design notes

Step 1. What problem am I trying to solve?
The first step is to define the problem based on the user story provided. Defining the problem is an essential part of the process as it helps me understand the core problem, and identify the user's needs. Also, revisiting the problem to be solved often and in detail sets up a smoother workflow for the following steps.

For the UMC, the problem to be solved was that the user needs a centralized location to manage the organization's users and their roles. The user also needs the ability to access audit records of all changes that have occurred to the user statuses and their roles.

Step 2. How will I know that I have solved the problem?
The second step is to define how I will know that the feature designed will have solved the problem for the user. In other words, what are the things I intend the feature to allow the user to do. It is important to be as design-agnostic as possible during this step. To be design-agnostic is to avoid using words that suggests specific UI elements. This allows for maximum creativity and freedom when designing a prototype.

For the UMC, I listed out the specific actions the user is able to perform that would address each of the user's needs. In order to be design-agnostic, I did my best to not use words like click and search. Here's an example:
- View the organization's list of users

- ○ The user can view all users within the organization
- ○ The user can view all user information, including their name, email, role(s), status, date user added, date last invitation email sent, date user suspended, and date of last login
- ○ The user can sort the list of users by:
  - ■ Name (alphanumeric sort)
  - ■ Email (alphanumeric sort)
  - ■ Status (alphanumeric sort)
  - ■ Date of last login (date/time sort)

Step 3. Define user tasks

The third step is to define the tasks that the user needs to perform. The idea is to understand the types of things that the user needs to be able to do, not how the user does them. Again, it is important to be design-agnostic.

Examples of user tasks that I defined for the UMC included the following tasks:
- ● View the organization's list of users
  - ○ View a list of all users within the organization
  - ○ View all user information, including:
    - ■ Name
    - ■ Email
    - ■ All the role(s) assigned to the user
    - ■ Status (active, suspended, pending)
    - ■ Date user added
    - ■ Date last invitation email sent
    - ■ Date user suspended
    - ■ Date of last login
  - ○ Sort the list of users by the following:
    - ■ Name (alphanumeric sort)
    - ■ Email (alphanumeric sort)
    - ■ Status (alphanumeric sort)
    - ■ Date of last login (date/time sort)

Step 4. Create use scenarios

The fourth step is to define the relevant use scenarios as a sequence of tasks that the user will perform. The scenarios are created by stringing together the user tasks identified and captured in the previous step. This step also serves as a cross-check to ensure I haven't inadvertently missed any user tasks in step 3 above.

For the UMC, I expanded on the user tasks by listing the use scenario. Here's an example:

View a list of all users within the organization, including their user information
1. Access the User Management Center
2. View the User Management Center

3. View list of all users within the organization, including their respective user information
4. Information include:
    a. Name
    b. Email
    c. All the role(s) assigned to the user
    d. Status (active, suspended, pending)
    e. Date user added
    f. Date last invitation email sent
    g. Date user suspended
    h. Date of last login

Since the design as a whole has several features and scenarios, I created a workflow drawing to help me better understand the design, and to ensure I did not duplicate or miss out on any features.
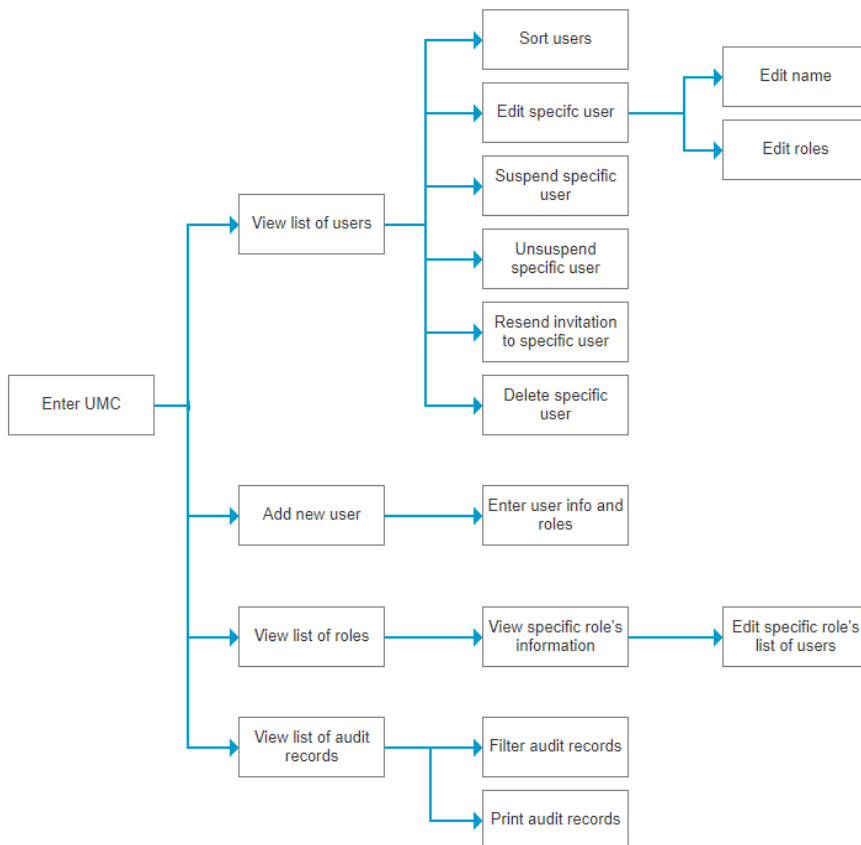
Step 5. Develop and prototype UX design
In step 5, the information identified in steps 1-4 along with UX best practices, standards, and knowledge of users is used to iteratively create interactive visual designs that will allow the feature to meet its intended purpose and solve the problem. I used the following iterative design process:

1. **Design**

2. **Gather Feedback**
3. **Refine**
4. **Verify** (design intentions and problem to be solved are satisfied by design)
5. **Finalize**

When designing, it is possible that some changes may occur to the steps previously. I will further elaborate this step in the following section.

Step 6. Create UX Design Notes for feature
In step 6, the final designs should be documented and communicated. Usually, this step would involve pictures and notes on the details of the designs. The notes would then be used as a reference while building the feature. However, what you are reading is my portfolio version of the UX design notes. It is modified to show the process, concepts, and lessons learnt throughout the project.

Concepts

In this section, I present detail about the design concepts and principles I used during the design phase of the design process.

The concepts are as follows:
- Simplicity
- Consistency
- Multiple indications
- Accessibility
- Trade-offs

Simplicity
Simplicity is important. While designing the UMC, I read *Don't Make Me Think Revisited* by Steve Krug, and it provided me a set of guiding principles. I learned to omit unnecessary words to keep the design clean and easily readable. To reduce user frustration, it was important to not overcrowd and over complicate the design.

The following is an example of applying the concept of simplicity. Initially, the UMC had all the user's information in plain view, which looked busy and complicated. However, after receiving feedback from my manager, I changed the design drastically. I achieved a better design by removing unnecessary information and leaving only the most important information. The user can easily scan the displayed information and decide whether or not to access additional information by expanding the row. This made the user's task simpler because it did not overload the user with information.

User Management Center

		Name	Email	Number of Roles	Status	Date Added	Date Invited	Date Suspended	Last Login
Users	Roles	Audit Records							⊕ Add New User
▶		Abdullah Razak	a.razak@gmail.com	6	Active	2000-12-01	2000-06-02	N/A	2018-06-13
▶		Alex Fanguard	a.fanguard@gmail.com	1	Pending	2005-12-29	2018-06-12	N/A	N/A
▶		Antonia Dunk	a.dunk@gmail.com	7	Active	2014-04-21	2018-06-08	2018-06-14	2018-06-13
▶		Barbara Song	b.song@gmail.com	1	Suspended	2011-05-12	2018-06-12	6/20/2018	6/19/2018
▶		Beatrice Kirkland	b.kirkland@gmail.com	6	Pending	2012-05-30	2018-06-12	N/A	2018-06-14
▶		Chelsea Williams	c.williams@gmail.com	3	Active	2016-02-15	2018-06-02	2018-06-14	2018-06-14
▶		Chun-Li Wong	c.wong@gmail.com	11	Pending	2011-05-11	2018-06-02	N/A	N/A
▶		Fidel Maestro	f.maestro@gmail.com	8	Active	2007-01-21	2018-06-02	N/A	N/A
▶		Hannah Crease	h.crease@gmail.com	3	Suspended	2000-12-01	2018-06-08	N/A	2018-06-13

My first design of the list of users had everything shown as is.

List of Users

⊕ Add New User

Count: 10 Users

	Name		Email		Roles	Status	Last Login
▶	Aaron Conradson	✏	a.conradson@gmail.com		6	Active	2018-06-27
▶	Beatrice Lee	✏	b.lee@gmail.com		2	Pending	N/A
▶	Candice Lopez	✏	c.lopez@gmail.com		3	Active	2018-06-27
▶	Dylan Winchester	✏	d.winchester@gmail.com		8	Active	2018-06-25
▶	Ellen Chute	✏	e.chute@gmail.com		3	Active	2018-06-27
▶	Fiona Stephen	✏	f.stephen@gmail.com		2	Active	2018-06-25
▶	Gary Knowles	✏	g.knowles@gmail.com		4	Active	2018-06-27
▶	Harry Bright	✏	h.bright@gmail.com		5	Active	2018-06-25
▶	India Rosson	✏	i.rosson@gmail.com		1	Active	2018-06-27
▶	Jessica Black	✏	j.black@gmail.com		9	Active	2018-06-27

The final design where the non-sortable information were hidden.

The hidden information is accessible with a click of the dropdown arrow.

Consistency

Consistency is key when designing. It lowers the learning curve, which means navigating through the product becomes simpler and more intuitive.

One type of consistency is the consistency within the design. I was consistent throughout the UMC in terms of design, actions, and layout. Another type of consistency is following design conventions to meet user's expectations. For example, in the UMC links are blue and disabled buttons are grey.

The following is an example of applying the concept of consistency. In the UMC, I ensured that the roles section for adding and editing a user were laid out in the same way, so that users don't have to learn two different designs for the same action.
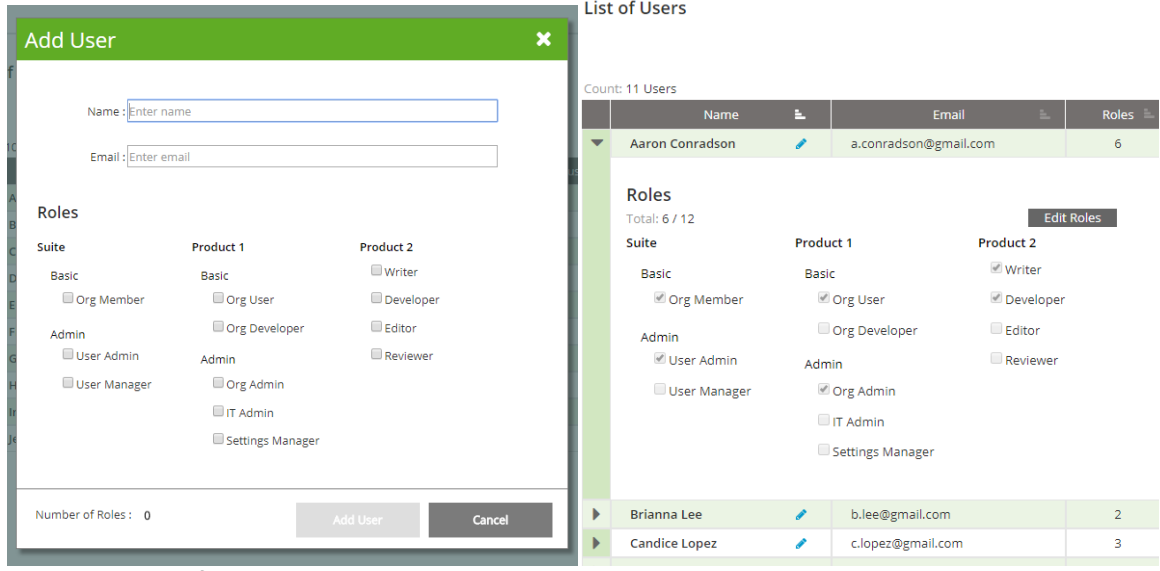
The roles section for add user and edit user has the same design.

Multiple Indications

Multiple indications creates a better interactive experience. It is important to provide multiple indications that a design has a function. Indications can include a change in color, size, shape, or text.

The following is an example of applying the concept of multiple indications. For my project, I ensured that there were multiple indications for all interactions. Buttons, tabs and links changed color when the cursor hovers over, removing any doubts the user would otherwise have.
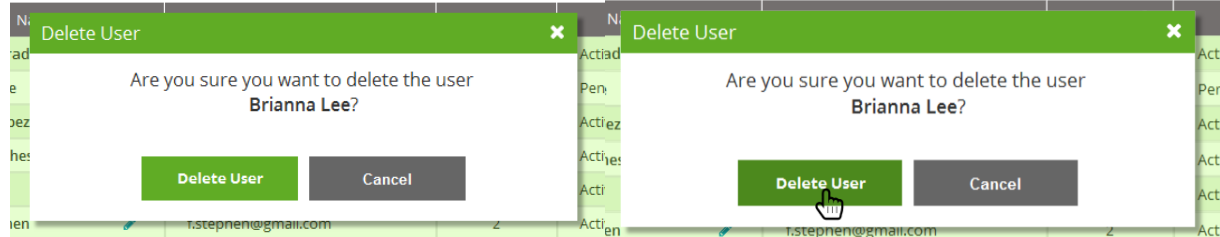
The delete button user changes to a darker green when a cursor hovers over it.

Accessibility

Accessibility creates a better overall experience. As designers, we should accommodate to people who are differently abled. To ensure users can navigate the UMC smoothly, I placed a large emphasis on color contrast, size, intuitiveness, and importance of information.

The following is an example of applying the concept of accessibility. My initial design of the tabs was vague and unclear. The green underline showing the current opened tab was narrow and difficult to spot. Also, there wasn't an apparent connection between the opened tab and current view.

User Management Center

The tabs were not obvious for the first design.

After several rounds of feedback and iterations, the final design fulfilled the accessibility criteria. The tabs were larger, the currently opened tab showed a clear connection to the current view, and there was an obvious contrast between the tabs and the background. As a nod to multiple indications, if the cursor hovers over an unopened tab, the tab text would turn blue.

The final tab design ticks the accessibility concept.

Trade-offs

Trade-offs is something every designer will encounter during the design process. Trade-offs in design usually involves the design being either visually complicated and functionally simple, or simple designs that are functionally complicated.

The following is an example of applying the concept of trade-offs. Initially, I wanted the filter function of the audit records to be a pop-up lightbox, accessible with a button. However, that meant users would have to return to the complete list and repeat the process every time they wanted to perform a filter.

Audit Records

Filter   **Export**

Displaying 1 to 20 of 21 Records

Date and Time	Admin	Type	Affected User	Change Summary
2018-07-06 15:13:16	Jessica Black	Role Change	Ellen Chute	Added the role Writer
2018-07-06 15:13:12	Jessica Black	Role Change	Aaron Conradson	Added the role Developer, Editor, Reviewer
2018-07-05 15:12:52	J	E		uspended user
2018-07-05 15:12:01	E			ended user
2018-07-05 15:10:32	E			oved the role Org User
2018-07-05 15:00:25	J			oved the role Org Developer
2018-07-04 14:32:54	E			oved the role Developer, Editor
2018-07-03 14:43:12	E			ed the role IT Admin
2018-07-03 13:14:12	J			nt invitation to user
2018-07-03 13:14:10	G			ed user
2018-07-02 12:53:32	G			ed user
2018-07-02 12:52:24	G			ed the role IT Admin
2018-07-02 11:32:04	G			ed the role Settings Manager
2018-07-02 09:31:45	G			ted user
2018-07-02 09:11:13	G			ended user
2018-07-01 17:31:12	J			nt invitation to user
2018-07-01 13:21:43	E			ed the role Org Member
2018-07-01 13:10:14	E			ed user
2018-07-01 13:31:42	Jessica Black	Role Change	Harry Bright	Added the role User Admin
2018-07-01 12:12:11	Jessica Black	Role Change	Harry Bright	Removed the role User Manager

Filter Results ✕

Enter one or more filter criteria below

Admin: [Enter name...]

Type: ⦿ All   ◯ Role Change   ◯ Status Change

Affected User: [Enter name...]

Change Summary: [Enter change summary...]

Date: ⦿ All   ◯ Range

[mm/dd/yyyy] To [mm/dd/yyyy]

Filter   **Cancel**

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The initial filter results design was simple but functionally a greater hassle.

Instead, I opted to have the filter section permanently visible. While it meant more information would be displayed, it created an easier workflow for the user, which in my opinion is ultimately more important.

Audit Records

Filter

Dates: ⦿ All   ◯ Range
[mm/dd/yyyy] To [mm/dd/yyyy]

Admin: [All ▾]   Type: [All ▾]   User: [All ▾]   Change Summary: [All ▾]

Apply   **Clear**

Count: 21 Records   Download CSV

Date and Time	Admin	Type	Affected User	Change Summary
2018-07-06 15:13:16	Jessica Black	Role Change	Ellen Chute	Added the role Writer
2018-07-06 15:13:12	Jessica Black	Role Change	Aaron Conradson	Added the role Developer, Editor, Reviewer
2018-07-05 15:12:52	Jessica Black	Status Change	Richard Horn	Unsuspended user
2018-07-05 15:12:01	Ellen Chute	Status Change	Richard Horn	Suspended user
2018-07-05 15:10:32	Ellen Chute	Role Change	India Rosson	Removed the role Org User

This design allows user to view all the necessary information with a glance.

Lessons

This project has taught me some valuable lessons, which are as follows:
- [Iterate and get feedback regularly](#)
- [Process is more important than outcome](#)
- [Curiosity doesn't kill the cat: Ask often!](#)

Iterate and get feedback regularly
Iterating is very important in UX. By iterating and receiving regular feedback, I continued to improve my design and its functionalities.

In the beginning, I researched and designed a huge chunk of the project, and only seeked for feedback after a week's worth of work. After receiving a ton of feedback, I had to change a large portion of my work. It was then that I realized my work style meant a lot of effort was unnecessary because of the sheer amount of changes during the feedback session. Thus, I started asking for feedback regularly. This reduced my workload and improved my design skills.

Here is an example of iteration. Initially, I designed the list of a user's roles such that the roles would be in tabs according to the product. Unfortunately, this meant the user wouldn't be able to see all the roles at a glance.
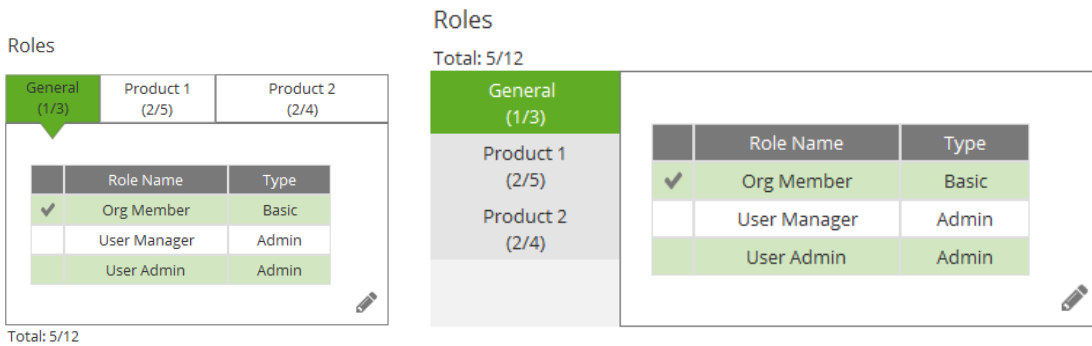
First user roles design.

My second set of designs utilized tables. While all the information was visible, there was still too much unnecessary clutter.
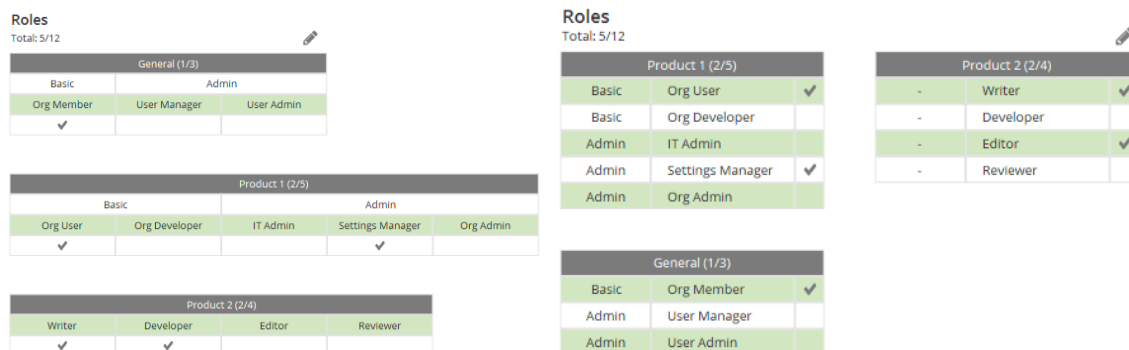
Second user roles design.

Finally, I settled on a simple yet elegant design. It is easily scannable and understandable, and contained a lot of whitespace.

Roles

Total: 6 / 12

[Edit Roles]

Suite	Product 1	Product 2
Basic	**Basic**	☑ Writer
☑ Org Member	☑ Org User	☑ Developer
	☐ Org Developer	☐ Editor
Admin	**Admin**	☐ Reviewer
☑ User Admin	☑ Org Admin	
☐ User Manager	☐ IT Admin	
	☐ Settings Manager	

Final user roles design.

Process is more important than outcome
This is cliche but definitely true as I went through the design process. At every step of the project, I learned something new, either by observing those around me, or through the mistakes I made and feedback I received.

Looking back, I am proud that my UX design skills have improved over time. On a personal development note, I am a better communicator of my ideas and work, I pick up information quicker, and work more seamlessly with the team.

Curiosity *doesn't* kill the cat: Ask often!
Whenever I had an idea, issue, or was just curious, I would compile my questions and ask them during my feedback session. Oftentimes it helped clear the issue, and mistakes that were obscure would be clearer. More importantly, sometimes questions led to new ideas and improvements.

Beyond the scope of the project, I'm generally a curious person and enjoy discovering and learning new things. During the length of the project, I was exposed to new fields and technologies. I discovered project management and how it relates to engineering and UX, I attended meetups and learnt about new technologies, met great people, and so on. It was great getting to know different people with diverse backgrounds such as product managers, UX designers, and engineers as I got to learn from their experiences, and more importantly, form meaningful connections.