UX/UI Hub: User Experience/User Interface Information Hub for Navigating College

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GRC 462-01-2242: Senior Project
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Author Note
This project was advised by Professor Hocheol Yang and was created during the winter quarter of 2024. Please direct any questions or comments regarding this project to Sydney Yae-Rhee Leia Kong.
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>3</td>
</tr>
<tr>
<td>Importance of the Identified Problem</td>
<td>3</td>
</tr>
<tr>
<td>Summary of Project &amp; Objectives</td>
<td>4</td>
</tr>
<tr>
<td>Success Criteria</td>
<td>5</td>
</tr>
<tr>
<td>Schedule and Production Plan</td>
<td>5</td>
</tr>
<tr>
<td>Literature Review</td>
<td>6</td>
</tr>
<tr>
<td>Self-Efficacy Theory</td>
<td>6</td>
</tr>
<tr>
<td>The Four Elements</td>
<td>7</td>
</tr>
<tr>
<td>Three Elements of Graphic Communication</td>
<td>8</td>
</tr>
<tr>
<td>Application</td>
<td>9</td>
</tr>
<tr>
<td>Results</td>
<td>10</td>
</tr>
<tr>
<td>Outlining the Process</td>
<td>10</td>
</tr>
<tr>
<td>Pilot Testing</td>
<td>12</td>
</tr>
<tr>
<td>Conclusion</td>
<td>12</td>
</tr>
<tr>
<td>Reflection &amp; Limitations</td>
<td>12</td>
</tr>
<tr>
<td>Final Discussion &amp; Conclusions</td>
<td>13</td>
</tr>
<tr>
<td>References</td>
<td>13</td>
</tr>
<tr>
<td>Figures</td>
<td>16</td>
</tr>
</tbody>
</table>
Abstract

Importance of the Identified Problem

The User Experience, User Interface (UX/UI) industry has grown exponentially in the last couple of years. According to a PubMed Central journal article, *Understanding UX Better*, UX has attracted an increasing interest in recent years, extending the views on usability. This growth exists both in academic institutions and the technology industry, evidenced by increasing numbers of UX-related degrees at undergraduate and graduate levels and also by high job demand (Marques). With this new emergence, the Graphic Communication (GrC) major, specifically the concentration in UX/UI, has caught the attention of numerous prospective Cal Poly SLO students interested in front-end design and creative technical roles. These students attempt to research the program; however, they find minimal information. What is missing?

The main issue lies in the lack of resources provided for UX/UI students when entering college and unless you seek those outside of club involvement, you will find yourself lost. As a student concentrating in UX/UI and a senior in college, I have struggled to begin processes such as designing a personal creative portfolio, deciding how to best express myself as a valuable candidate to companies for internships or jobs, figuring out how to format a resume for my industry, and choosing which GrC classes to take in order to equip myself professionally and technically. I want to address this issue by creating an information hub for Cal Poly SLO students interested in UX/UI. This would include specific tips and tricks for resume and portfolio design, advice from UX/UI professors and professionals, examples of students’ portfolios for inspiration, club showcases, suggested GrC classes to take, and more. There are many separate platforms and websites that help assist students, but there aren’t any tools that are specific to the UX/UI concentration within the GrC program. Each element is essential to setting up students for success during and after their college experience. For example, a designer’s work samples and case studies demonstrate their abilities and design methodology, making up
their UX/UI portfolio. It is an essential asset for professionals in this industry since it showcases their skills to prospective clients or employers (Dargan). Additionally in a study conducted by Hover recording the opinions of 121 people, from coordinators to CEOS, 71% of employers agree that a portfolio’s quality will influence their decision on whether to hire or reject a candidate. UX/UI is a growing industry and has become increasingly competitive with a wide array of interest from computer engineers to designers. It is important to equip prospective and current students with the confidence and skill set to navigate their experience within the UX/UI focus of Graphic Communication.

**Summary of Project & Objectives**

For my project, I will start by evaluating the resources available for Graphic Communication students and compiling the content for my website. My objectives include researching the number of current resources available, talking with UX/UI professors and professionals on tips and tricks when it comes to creating an effective portfolio or resume, designing a website that is user-friendly and accessible, and showcasing different topics related to the graphic communication industry, student case studies, and related clubs. I will also create a brand guideline for the name of my website, “UX/UI Hub,” which is meant to invoke a sense of collaboration and gathering for users, reflecting that anyone can come to this website for guidance or resources. The look may reflect the navigation components of the current GrC website in combination with the clean and accessible look of Wix Blog, a website that helps bloggers navigate utilizing the platform Wix. To successfully hit each of these objectives would mean students feel supported throughout their journey and more connected or knowledgeable within their major. I also hope to leave this resource for future students or prospective students interested in the program.

**Success Criterions**

The success criterions of this project include a functional website that features helpful resources and information for students. This website would have cohesive branding and
highlight current UX/UI trends, tips and tricks for Graphic Communication majors, and relevant clubs. I would also want 65% of the feedback, from the small pool of students in my senior project class (pilot testing), conducted about the website to be positive and demonstrate the effectiveness of the website. This survey would be for Graphic Communication majors and for students interested in UX/UI on Cal Poly SLO’s campus.

**Schedule and Production Plan**

Shown in Figure 1 is my production plan from week 1 to finals week of the quarter. This outlines how I plan to collect research, design the website interface, and utilize survey results to see the effectiveness of this project. I will start by defining my project goals and tasks, then collecting information from experts and research online, creating branding guidelines, designing a draft of the website, implementing the information I have collected, and finally receiving feedback from peers, professors, and professionals through a survey.
Literature Review

Self-Efficacy Theory

Self-efficacy is defined as an individual’s perceived capability to perform a target behavior (Williams) and is one of the pillars of social cognitive theory. The theory of self-efficacy, also later known as the social learning theory, was written by Albert Bandura, a Canadian American psychologist. In 1977, he published *Self-Efficacy: Toward a Unifying Theory of Behavioral Change* (Artino) which established self-efficacy as people’s beliefs in their capabilities to take control of their actions or the belief in one’s capabilities to be motivated and meet a goal based on the demands of a situation (Abun). Throughout his studies, Bandura discovered that self-efficacy influences humans’ levels of motivation, well-being, personal accomplishment, and how people think or behave in accordance with their purpose (Abun). This theory has grown in popularity, as numerous researchers in social and behavioral sciences have used self-efficacy to predict and explain a wide range of human functions and decisions (Artino). For example, over the last 34 years, educational researchers from diverse fields have used the theory of self-efficacy to predict and explain functions such as athletic skill or academic achievement (Artino). We will be breaking down the crucial components of this important theory into four categories: mastery experiences, vicarious experiences, verbal persuasion, and physiological and affective states (Pfitzner-Eden).

The Four Elements

Mastery experiences provide information about people’s success, as well as their failures. The trends that generally follow are successful experiences increase self-efficacy beliefs or confidence in themselves, while failures lower this belief (Pfitzner-Eden). Amongst the four components, mastery experiences have the strongest influence on self-efficacy development. We will have to face many challenging situations throughout our life to overcome
difficulty, build stamina, and instill perseverance as we develop. The brain is more susceptible to change when younger, so it is important to build these skills earlier on.

Vicarious experiences provide information about expectations of attainment, which influences one's self-efficacy beliefs by creating standard competencies or model learning standards, providing a point of reference for social comparison (Pfitzner-Eden). People use their vicarious experiences to inform their judgment of how to approach mastery experiences. Low general self-efficacy leads to negative self-comparison to others (Wilde). It is important for people to feel equipped and confident in their own abilities, as comparison plays a negative role in stunting development.

Verbal persuasion is when people of significance can convince others of their capabilities, especially if this persuasion comes from a notably credible source (Pfitzner-Eden). Lifting one another up through encouragement and creating resources for others to share provides opportunities for people to learn and explore new things. Post-graduate professionals can give advice confidently and assure students that they are knowledgeable about the subject they studied because they speak from their own experience and can empathize with students.

Lastly, psychological and affective states help to provide information about physiological and affective arousal during situations in which capability is in question (Pfitzner-Eden). This last state dictates how you view others and yourself in relation to your surroundings. All these elements contribute to the final theory of self-efficacy, connecting our individual perception of not only others, but also our belief in ourselves.

**Three Elements of Graphic Communication**

Within the Graphic Communication industry, three elements that I considered within this project are limitations, variables, and benefits. Limitations can be defined as weaknesses within research that may influence outcomes or conclusions of the research (Ross). It is important to acknowledge and present these limitations to fully communicate the relevance of the research and integrate improvements within the process that would’ve been initially overlooked (Ross).
Within this project there are specific limitations including scope of previous experience and confidence in a user’s personal knowledge of UX/UI resources and trends, accessibility due to the information only being presented on one platform, and credibility because it is not officially backed by Cal Poly SLO’s Graphic Communication department. The information featured on the blog may be transferred overtime to department resources; however, these processes take time and careful consideration. The biggest limitation in the project is time, due to the constraints of having less than one quarter to finish this project. The next element is variables which can be described as aspects of the sample that are under study (Andrade). Understanding the classification and operationalization of variables is very crucial to a project (Andrade). These variables are measured and controlled throughout the process and in my project, this includes time, quality of product, cost, and user experience. All these variables contribute to the success of this project and demonstrate how vital each of these components are to the final product.

Lastly, benefits of this project include increased number of resources and awareness of UX/UI clubs and classes, a central and current spot for everything UX, tips and tricks from professionals that can understand where students are at, and a platform for UX/UI students to interact with one another. This can also be used as a resource for prospective UX/UI students who are interested in learning more about the department.

Application

Why is the self-efficacy theory applicable and important to my project, as well as the three elements of graphic communication? Knowledge and growth as an individual coincide with confidence and assurance in knowing and believing in your own capabilities. Within a study focusing on the relationship between self-efficacy and academic learning, the first finding of the study discovered that when students believe in their ability to perform their tasks successfully, they will enjoy the learning process more. These individuals experience more feelings of hope and pride compared to students with low self-efficacy. This indicates a positive relationship between academic self-efficacy and positive emotions (Hayat). Another finding from this study
found that there was a significant relationship between metacognitive learning strategies, meaning the process of thinking about one’s own thinking, and academic performance. Scholars believed that students who use more effective metacognitive learning strategies have better study plans, awareness of monitoring their strengths and weaknesses, and evaluation of learning material more efficiently. They are also more responsible, detect and solve their problems quickly, and try hard to learn content with a deep intention and purpose (Hayat).

Utilizing this blog as a resource and platform to better equip students with knowledge that will help them succeed, will make them more confident and allow them to focus on learning concepts, rather than stressing over not being good enough. This motivation as a student will produce a trajectory towards delivering results, taking ownership over projects, and creating an identity earlier on within their college experience. Students are better suited to retain more information and have a positive learning experience when they are assured by their peers and teachers, and when they feel equipped to learn. Within another study regarding students’ expectancy-value beliefs, in the conclusion and recommendations, the authors suggest improving students’ perception of their own capacity, especially from the very beginning of the course (Domenech-Betoret). Self-efficacy can only be realized when the environment is supportive of it (Abun). This information hub website helps students learn more about the UX/UI industry and presents resources, opportunities, and advice regarding professional development earlier on within their career. Their perceived capability is only encouraged to grow throughout college and I hope this platform can instill strength and empower students interested in the UX/UI industry.
Results

Outlining the Process

Within the production plan of the website, I first focused on creating a timeline, setting objectives, problem statements, and tasks to complete throughout the project. I spent the bulk of the project researching based on the content buckets created. The structure was organized into six distinct sections: About, Industry, Advice, Resources, Forum, and Contact.

Within the About page, I wrote a mini biography about my background, the story behind the creation of the website, and the mission statement of the brand. In the Industry section, I included information about what UX/UI is, popular trends, and potential job titles for individuals within these roles. The Advice section features seven UX/UI experts who are alumni of the Graphic Communication major at Cal Poly SLO. By clicking on a professional’s picture, a page will appear featuring career advice, resources, and more information about their role. I connected with these individuals on LinkedIn, reached out through the chatting function, asked them a series of questions to cover a range of topics, and received consent to share the information on the website. The next section, titled Resources, includes professors at Cal Poly SLO that teach UX/UI related content, suggested coursework to take, and a club showcase featuring Iter8 and UXFest, both popular UX/UI clubs on campus. The interactive section of the website called the Forum, is a space where students can post questions they have or recommendations within the categories created. For example, I included a category for student portfolios and asked six students to post a bio about themselves and a link to their portfolio within it. Students can interact with one another on this page by commenting, liking, or sharing posts. Individuals can also post about themselves by making an account through the website. Lastly, I added a section for Contact, in case there are any questions or recommendations for adding new content or if users want to reach out. After outlining the website, I created a mood board to explore branding, designed a logo through sketching and outlining on Illustrator, and
developed a final brand guideline. See Figures 2 and 3 for mood boards and final branding guidelines. I chose Wix, a popular web design platform, to format my website due to time constraints and efficiency of design. I focused on visual hierarchy and consistency throughout my website and was able to deliver my final website on time. Click on this link (https://sydneyykong.wixsite.com/uxuihub) to view the functional website.

**Pilot Testing**

One pilot test was conducted to test the success criterion of the website. This test was conducted with a group of students from GrC 462-01-2242 (Senior Project), held every Monday evening. Individual messages were sent out to this group of students, asking them to fill out a survey, collecting feedback on the website. There was an overwhelming amount of positive feedback received regarding the website being a helpful and useful tool for students navigating the UX/UI concentration within college. Students also felt that this website would’ve previously and currently helped equip themselves with more confidence in their abilities and knowledge of the resources available for them on campus. They suggested posting it as a resource through the Graphic Communication newsletter or sending out an email to the department, making it available to all students interested in using the website.
Conclusion

Reflection & Limitations

The process of developing the UX/UI Hub was extensive and taught me more about the UX/UI industry and long-term project management. It is vital to create goals and metrics throughout this project, setting yourself up for success. Feedback from the pilot testing fulfilled the initial requirements of this platform and projected a successful future for the project. However, there is always room for improvement and further development.

One of the main limitations I encountered was time constraints with developing the content and structure for the website. Designing, researching, and organizing information from scratch within eight weeks was very challenging, especially with the Advice section. Reaching out to professionals and waiting for responses delayed the research timeline by a significant amount. Additionally, another struggle was formatting through Wix and being limited by the design capabilities of the software. If I had more time, experience, and skill, I would want to generate my own website from scratch using HTML and CSS coding. Other aspects I would want to change include adding more interaction functions on the Forum, interviewing and writing bios for the professors featured on the Resources page, and altering the format of the mobile view to accurately showcase the information presented on the desktop view. With the future development of this website, I hope to make these alterations and receive feedback from peers and professors.

Final Discussion & Conclusions

Self-efficacy is an important topic to study, especially in the ways it intertwines with educational support and user interaction within technology. Technology can be used as a resource to equip students with more confidence in their abilities. A website that is specific to a field of study can be a resource for students and can connect others to one another, creating
industry-centric communities. The UX/UI Hub will be a future resource for students to utilize and connect over. As it becomes more refined, the hope is that this will inspire other majors and concentrations to follow this trajectory of encouraging and providing for students.
References


Dargan, P. (2023, April 14). UX/UI portfolios are extremely important to design careers. Medium. https://bootcamp.uxdesign.cc/ux-ui-portfolios-are-extremely-important-to-design-careers-c37436c96da8


## Figures

<table>
<thead>
<tr>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
<th>Week 5</th>
<th>Week 6</th>
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<tbody>
<tr>
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<td>Define project goals</td>
<td>Revisit project goals</td>
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**Background Research**
- Users (students)
- GrC professors
- UX/UI professionals
- Online resources

**Branding**
- Color palette
- Typography
- Logo creation
- Visuals & photography

**Website Design**
- Icons
- Brand story
- Efficiency & ease
- User-experience/interface language

Submit and present

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**Figure 1.** Project timeline designed in a GrC 462 senior project class activity.

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**Figure 2.** Mood board for initial exploration of branding.

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My senior project is an information hub for user experience, user interface students. It helps provide resources, to help them gain confidence in their ability and skill as they navigate college.
Figure 3. Final branding guidelines for the website.