# 4

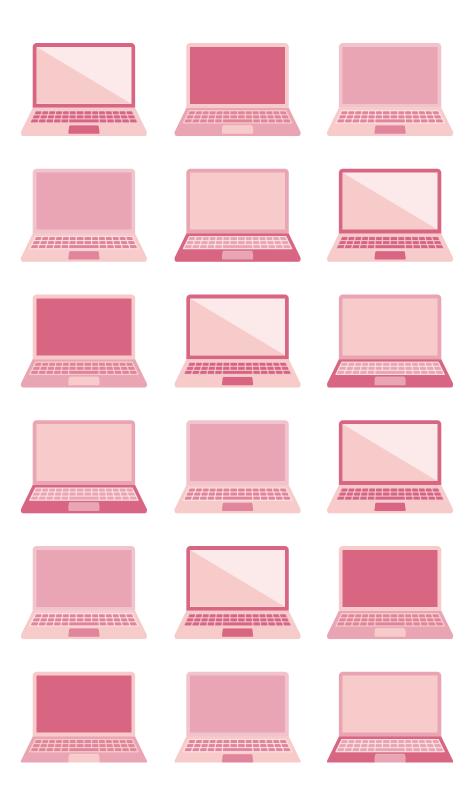
# PASO ROBLES CHILDREN'S MUSEUM REDESIGN





## CALIFORNIA POLYTECHNIC STATE UNIVERSITY TECHNICAL ASSOCIATION OF THE GRAPHIC ARTS

ARTICLE 4



# 4

PASO ROBLES CHILDREN'S MUSEUM REDESIGN





## PASO ROBLES CHILDREN'S MUSEUM REDESIGN

### Hannah Chan and Shreya Hambir

For this project, we plan to redesign the Paso Robles Children's Museum website, utilizing Squarespace. Currently, the website has an outdated look and feel, and the information is somewhat disorganized. Having intuitive navigation is a crucial part of good user experience, as users should not have to dig through the site to find what they are looking for (Hallman, 2022).

Our project aims to improve upon the museum's online presence and recognition in general. Redesigning the website with a focus on functionality and implementing good UX/UI design will help users navigate the site with ease, minimize confusion, and ultimately increase user retention.

#### INTRODUCTION

In our redesign, we plan to regroup related content into sections that mimic websites of other established museums, so the structure is more familiar. The other main issue we want to address is the site's aesthetic; our goal is to modernize the website while still retaining its core branding.

To do this, we will work with the museum director to find the most fitting template for the new site on Squarespace, and then customize it accordingly with a revamped color palette, new photos, and new fonts. We want to capitalize on visuals to draw visitors to the museum, using ample, updated photos of exhibits, events, and visitors and making them stand out on the page.

Our project will align Paso Robles Children's Museum's website with the current market standards and trends, while placing the museum's educational value and community impact at the forefront. A well-designed website can help any business differentiate itself in a crowded marketplace and maintain awareness among both existing and prospective customers (ljaz, 2022). Having a strong design is also important in establishing a business's credibility; users are more likely to trust a business with a website that is aesthetically pleasing (Hallman, 2022).

#### LITERATURE

The concept of usability and user experience (UX) surpasses the qualification of a system as meeting the basic requirements of the users and stakeholder involved. Moving on to examine the usefulness of a system, both utility and usability are taken into account, with utility referring to the application's ability to serve its main function, and usability examining to what extent that function can be utilized by the user to achieve a goal in a specific context of use. User experience involves the user's perception of the system, with respect to previous expectations (Hassan, 2017, p. 217).

Usability is a multi-faceted concept that encompasses multiple components and properties of a user interface, and can be examined through five attributes: learnability, efficiency, memorability, errors, and satisfaction. Learnability and satisfaction are two attributes that are often at the forefront of usability in UX design. Learnability is regarded as the "most fundamental usability attribute" (Nielsen, 1993, p.27). Users need to be able to learn how to use and navigate through the system easily, and learnability often can dictate the user's general attitude towards the system as the

first user interaction is often something along the lines of learning how to use the application.

In the case of redesigning the Paso Robles Children's Museum website and essentially creating an upgraded version, the standard learning curve may not apply; given that the new site maintains consistency with the old site, users should be able to transfer some of the old skills and knowledge. Satisfaction is another attribute that is often a deciding factor when it comes to the evaluation of user experience. In reference to the subjective satisfaction a user feels when using a system, in our case, this places value on the speed with which users can find information and take certain actions on the site (Donahue, 2001, p.28).

When examining usability and user experience, three major elements emerge at the forefront: current trends, factors, and benefits. Regarding usability and UX in the design of a website or application, current trends often dictate design direction and user perception/attitudes. The UX/UI landscape is constantly shifting and evolving; in order to achieve usability among these changes, the baseline of standard compliance must first be addressed, then attention should be shifted towards adapting to the current UX/UI trends. Some recent trends include minimal design, increase in micro-interaction, and long scrolling. Minimalism has been on the rise over the past few years, with this trend utilizing simple layouts and "minimizing complexity" through straightforward content and communication (Joo, 2017, p. 9932).

Micro interaction entails implementing subtle animations in the UI design for transitions such as entries into a new page. Long scrolling is another trend that has become standardized among websites, and can be utilized on full-screen main pages, or confined to sections with horizontal scrolling.

One of the main factors that influence usability and UX is consistency. The "usability of a system is improved when similar parts are expressed in similar ways" (Byrne, 2006, p. 56). Consistency isn't simply limited to aesthetic consistency like screen design, but also includes and depends upon functional consistency, internal consistency, and external consistency. Consistent functions, structures and systems facilitate usability and enhance user experience; users are able to efficiently apply their knowledge to a new context and learn new flows and processes naturally and with ease. Internal consistency can be exercised through a consistent theme and aligned UI throughout the system. External consistency specifically involves aligning the UX/UI

design with market standards, and maintaining a sense of consistency across related applications and systems. Menu hierarchies and site architecture are aspects of UX design that are often used to gauge consistency in accordance with other similar systems; many websites, for instance, utilize broad menus that have minimal levels, reducing the user's need to navigate through multiple pages to reach a desired destination. Essentially, consistency allows for familiarity, which goes hand-in-hand with intuitiveness and ease of use (Kiruthika, 2016).

The main element businesses focus on when thinking about usability and UX is the benefits of creating and implementing intuitive user flows and processes. Good usability and user experience are deciding factors when it comes to the success of a business based on its online presence. When systems and applications are built after examining to what extent functions can be utilized to achieve the user's goals, the potential for good user experience is increased. With respect to attributes of usability like learnability, efficiency, memorability, errors, and satisfaction, companies reap the benefits when they shift the focus from visuals to function and usability, which inherently enhance user experience (Sauer, 2020, p. 135).

#### SYNTHESIS/THESIS

These attributes and elements of usability and user experience discussed above not only dictated our approach to redesigning the website, but also led us to focus on certain aspects of the website that had the most influence on usability and UX. In our project, one of the overarching changes we made was the redesign of the menu; reorganizing the site architecture and layout, and regrouping related content into sections that closely mimic websites of other established museums made the structure and processes within the site more familiar and thus intuitive (Ritter, 2017, p. 32).

Maintaining both internal and external consistency was also a driving force in the redesign; we strived to strike a balance between placing the museum's educational value and community impact at the forefront, while incorporating UX/UI trends that modernized the site. Ultimately, good usability and user experience translate well when users interact with a website; not only will the fulfillment of user goals and intuitive navigation improve user retention, a well-design website will help the museum differentiate itself in a crowded marketplace and maintain awareness among both existing and prospective customers (ljaz, 2022).

#### **RESULTS**

We began the website redesign process by assessing the current website. After doing so, we created a problem statement to guide us through the design process: the museum currently lacks an organized and comprehensive website that is easy and intuitive to navigate. Design principles and styles on the site are outdated, lacking a modern aesthetic that aligns with other established museums in the market. We also defined three main objectives of the new website:

- 1. Align the museum's website with the current market standards and trends
- 2. Place the museum's educational value and community impact at the forefront
- Help users navigate with ease, minimize confusion, and ultimately increase user retention

With those in mind, Shreya and I reorganized the information architecture of the website to allow for intuitive and familiar navigation, and created a new design system that would aid in modernizing the site while still maintaining the museum's history and connection to the firehouse (Figure 1). One of the main things we noticed on the current museum site was the display of the visuals and imagery; there were inconsistencies in the editing and sizing of the photos.



Figure 1 Information architecture

#### **REFLECTION & LIMITATION**

Shreya and I encountered and overcame many obstacles during the website redesign process. As novice Squarespace users, we had to familiarize ourselves with the website creation tool while still keeping up with the project timeline. One of the main problems we encountered was transferring the museum's domain name prematurely, leading to the loss of the previous public site; this forced us to adjust accordingly and we utilized a resource called The Wayback Machine to access the old site.

Regarding future development of the project, Shreya and I are still in the process of finalizing some aspects of the website, then plan to gather feedback from peers, professors, and the museum director.



Figure 2 Design system

#### REFERENCES

Byrne, K. (2006). William Lidwell, Kritina Holden and Jill Butler. Universal Principles of Design: 100 ways to enhance usability, influence perception, increase appeal, make better design decisions, and teach through design. Information Design Journal, 14(2), 185–186. https://doi.org/10.1075/idj.14.2.11byr

Donahue, G. M. (2001). Usability and the bottom line. IEEE Software, 18(1), 31–37. https://doi.org/10.1109/52.903161

Hallman, M. (2022, October 7). The importance of good website design for your business. Evergreen Digital Marketing. Retrieved January 22, 2023, from https://evergreendm.com/the-importance-of-good-website-design-for-your-business/

Hassan, H. M., & Galal-Edeen, G. H. (2017). From usability to user experience. 2017 International Conference on Intelligent Informatics and Biomedical Sciences (ICIIBMS). https://doi.org/10.1109/iciibms.2017.8279761

Ijaz, A. (2022, April 21). Bad UX/UI design really that big of a problem for businesses. Medium. Retrieved January 22, 2023, from https://medium.com/codex/bad-ui-ux-design-really -that-big-of-a-problem-for-businesses-b4f5c3606667

Joo, H. (2017). A Study on Understanding of UI and UX, and Understanding of Design According to User Interface Change. International Journal of Applied Engineering Research, 12(20). https://doi.org/10.37622/ijaer

Kiruthika, J., Khaddaj, S., Greenhill, D., & Francik, J. (2016). User experience design in web applications. 2016 IEEE Intl Conference on Computational Science and Engineering (CSE) and IEEE Intl Conference on Embedded and Ubiquitous Computing (EUC) and 15th Intl Symposium on Distributed Computing and Applications for Business Engineering (DCABES). https://doi.org/10.1109/cse-eucdcabes.2016.253

Nielsen, J. (1993). Usability Engineering (1st). CA: Morgan Kaufmann Publishers Inc. Ritter, M., & Winterbottom, C. (2017). Ux for the web build websites for user experience and usability. Packt Publishing.

Sauer, J., Sonderegger, A., & Schmutz, S. (2020). Usability, user experience and accessibility: Towards an integrative model. Ergonomics, 63(10), 1207–1220. https://doi.org/10.1080/00140139.2020.1774080





### **ABOUT THE AUTHORS**



Hannah Chan

Hannah Chan graduated in June 2023 from Cal Poly, San Luis Obispo with a B.S. in Graphic Communication, and a concentration in User Experience/User Interface. Following Cal Poly's motto of Learn by Doing, Hannah had many opportunities outside of the classroom to apply and expand upon her abilities in the realm of UX design. For her senior project, Hannah and classmate Shreya Hambir worked to redesign the museum's website from end-to-end.

Shreya Hambir graduated in June 2023 with a B.S. in Graphic Communication, and a concentration in User Experience/ User Interface design and a minor in Computer Science. During her time at Cal Poly, Shreya served on the design and marketing teams for UX Fest SLO and led a project to redesign the website for the University Honors Program. The fulfillment and experience she gained from this project inspired her to take on redesigning the Paso Robles Children's Museum for her senior project.



Shreya Hambir

