Stumptown Art Museum

Mobile App Case Study by Katrina Salicrup



Project overview



The product:

Ignite your passion for art with the Stumptown Public Art Museum App! This mobile app empowers users of all ages to easily explore artist collections, purchase tickets online, and delve deeper into the museum's offerings, making any visit a breeze.



Project duration:

Project inception - Dec 15, 2023 Prototype (v7) completed - Mar 5, 2024



Project overview



The problem:

The Stumptown Public Art Museum lacks an online presence, hindering its ability to reach its diverse audience. This creates challenges for art enthusiasts seeking information and purchasing tickets, while also posing an obstacle for educators who need to book field trips online.



The goal:

Develop a mobile app for the Stumptown Public Art Museum that strengthens its online presence, facilitates a seamless user experience for both individual users and educators seeking to book field trips, and expanding the museum's reach to a wider audience.

Project overview

My role:

From researching and understanding user needs through competitor analysis and participant research, I brainstormed, designed, and iterated on multiple design solutions, always striving to empathize with users. Throughout the process, I incorporated valuable insights from usability studies to refine the prototype and ultimately arrive at a strong, user-centered solution.



Responsibilities:

- Conduct User Research
- Conduct Competitive Audit
- Analyze Research Results
- Brainstorm Ideas
- Create Lo-Fi Wireframes
- Create Hi-Fi Prototypes
- Test & Iterate Designs
- Prepare Case Study

Understanding the user

- User research
- Personas
- Problem statements
- User journey maps

User research: summary



Before delving into design, I crafted a fictional character representing a local museum-goer (and middle school teacher) named "Mrs. Frizzle." Mrs. Frizzle loves exploring museums and wants an easy-to-use app for buying tickets and planning field trips. Inspired by her, I researched similar apps and documented features that would make her experience enjoyable and efficient while visually embodying the vibrant spirit of the Stumptown Public Art Museum."



Mrs. Frizzle



Age: 38 Education: Master's Degree Hometown: Portland, OR Family: Married, 2 children Occupation: Middle School Teacher

Goals

- Purchase tickets in advance
- Book field trips online
- Preview upcoming exhibits
- Introduce her students to local art & artists

Frustrations

- Local museums that don't have an online presence
- Not being able to book group visits online
- Having to download and learn new apps

Shirley Frizzle, a passionate middle school art teacher who loves incorporating museum visits into her curriculum. However, the lack of user-friendly online tools from local museums is a constant source of frustration. She struggles to find clear information about exhibits, navigate cumbersome ticketing systems, and connect with museums outside of regular hours. What Shirley needs is a solution that empowers her to plan field trips, purchase tickets, and access relevant information, anytime and anywhere.

"Take chances, make mistakes, get messy!"

User research: pain points



Pain point

The Stumptown Public Art Museum lacks an online ticketing system.

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Pain point

Users cannot directly contact the museum online.



Pain point

Users have difficulty finding previews of the museum's art exhibits.



Pain point

Users have difficulty accessing essential information about the museum.

[Link to detailed research plan]

User journey map

Mrs. Frizzle's on the hunt for the perfect field trip! Before blasting off, she wants to preview exhibits online, test ticket buying, and experience the museum firsthand. The user journey on the right charts this crucial first step in her adventure. It also serves as the foundation for my design explorations, ensuring a stellar trip for one and all.

ACTION	Arrive on homepage	View exhibits	Purchase Tickets - 1	Purchase Tickets - 2	Purchase Tickets - 3	Success!	(Notes)
TASK LIST & USER FEELINGS	 Scroll though homepage. Click on the current exhibits button. Select an artist collection to explore. Optimistic Curious Informed 	 Display overview of artist work(s). Click individual images to view full size. Advance through artist images. Engaged Inquisitive Excited 	 Click purchase tickets button. Select a date. Advance to next screen. Hopeful 	 Confirm selected date. Enter payment info. Advance to next screen Engaged 	 Click "confirm" button to place order. Success! screen pop-up (with option to return to homepage). Satisfied Relieved 	Mrs Frizzle will receive a confirmation message with her tickets, an option to join the newsletter, and useful logistical resources for planning her visit. Informed Optimistic	Mrs Frizzle is booking an individual trip to check out the exhibits before committing to a taking her class ther on a field trip.
IMPROVEMENT OPPORTUNITIES	Engage users with animation and more sophisticated color blending in homepage scroll	Allow users to like images and include links to artist social media outlets	Calendar and Ticket Purchase features could be streamlined and show more branding	Add ability to take a picture or say aloud the payment method instead on manually entering	Payment processing could be handled through a third party with secure payment protocols	Add a pop up with tickets in the app and/or the ability to add tickets to digital wallet	If Mrs. Frizzle is happy with her experience, she will be more likely to book a group trip for he class

Starting the design

- Paper wireframes
- Digital wireframes
- Low-fidelity prototype
- Usability studies



Paper wireframes

Ideas from brainstorming sessions were translated into quick paper sketches, exploring potential solutions to optimize Mrs. Frizzle's app interactions. These low-fidelity prototypes facilitated rapid iteration and refinement before digital app development began.

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Welcome

Animation

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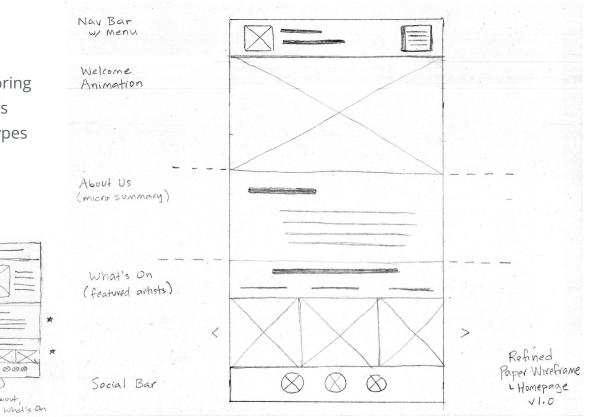
Social Bar

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About

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Digital wireframes

Paper wireframes solidified, I translated them into Figma, iterating on image and button placement for smoother user flow and exploring various text sizes for optimal readability. This continuous refinement not only enhanced the visual design and informed information architecture but also primed the wireframes for insightful user testing.

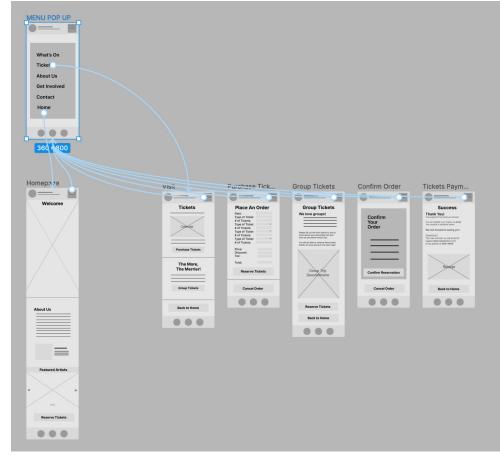
[View more wireframes]

Tickets	Place An Order		Success
Calendar	Date: Type of Ticket # of Tickets: Type of Ticket # of Tickets: Type of Ticket # of Tickets: Type of Ticket # of Tickets: # of Tickets:	Confirm Your Order	Thank You! Your payment has been processed. You will receive your tickets via email Your receipt is available below. We look forward to seeing you! Questions? You can contact us via email at support@emailaddress.com or by phone at ###################################
Purchase Tickets	Price: Discount: Tax:		
The More, The Merrier!	Total: Reserve Tickets	Confirm Reservation	Receipt
Group Tickets	Cancel Order	Cancel Order	Back to Home
Back to Home			

Low-fidelity prototype

Using low-fidelity prototypes, I organized screens and established the initial user flow for purchasing tickets through the Stumptown Public Art Museum app. Users can simulate this process in the prototype, which serves as a base for user testing and feedback.

[Link to low-fidelity prototype]



Usability study: participants

Prioritizing inclusivity and accessibility, a diverse panel of participants from the local community was recruited. This included individuals of various ages, races, ethnicities, and technical abilities. Additionally, the panel encompassed participants with physical impairments (one-handed users) and visual impairments.

Participant 1

Age: 74 Gender: Male Cultural Group: Veteran Tech Ability: Low Special Notes: Neuropathy in one hand

Participant 2

Age: 38 Gender: Female Cultural Group: Mother Tech Ability: High Special Notes: Artist, Performer

Participant 3

Age: 7 Gender: Female Cultural Group: Child Tech Ability: Medium Special Notes: Short attention span

Usability study: findings

Following prototype development, unmoderated usability studies gathered feedback through actionable questions and key performance indicators (KPI's). These KPI's included conversion rates, the System Usability Scale (SUS) score, and open-ended suggestions for improvement.

Round 1 findings

- Users struggled to understand and interact effectively with the input fields required for ticket purchase.
- Participants recommended consolidating the "About Us" and "Contact" pages.
- The app did not provide information about operating hours.

Round 2 findings



Participants found the navigation gestures unintuitive and inconsistent.



- User testing suggests prioritizing the "Purchase Tickets" option on the homepage.

"Success" screens lack legibility, making it difficult for users to understand the information presented.

Refining the design

- Mockups
- High-fidelity prototype
- Accessibility

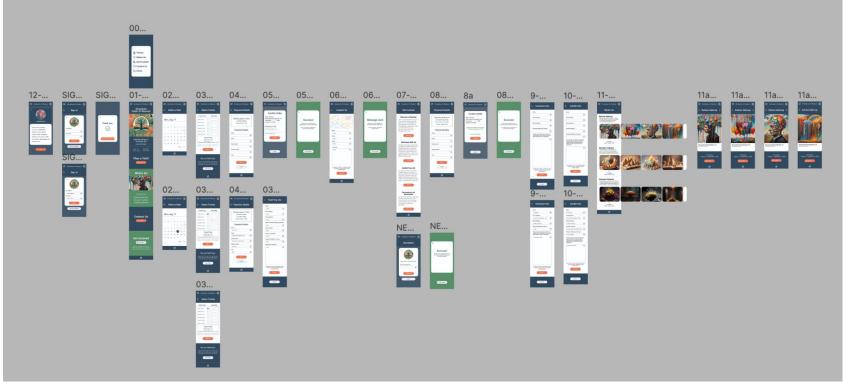
Mockups

From Sketches to Solutions: Refining the Museum App Design

The mockup phase saw the app evolve from low-fidelity wireframes to a fully-featured, visually engaging product. My goal was to continually refine the visual design, information architecture, and user flow. Through an iterative process informed by usability testing and exploration, I integrated learnings and optimizations. Aiming to create an app Mrs. Frizzle would be happy to use and recommend to other teachers and art enthusiasts.



Mockups - (Figma) Design Overview



Homepage

Key Updates:

- → Highlighted ticket purchasing by placing it first on the homepage
- → Prominently displayed museum hours on splash screen
- → Omitted "About Us" section and prioritized elements directly impacting the user experience
- → Introduced a clear Call to Action button in the "Get Involved" section.
- → Incorporated icons into all of the Call to Action buttons
- → Prioritized clarity of information and relevant in-app navigation by replacing social media bar



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v3

Stumptown Art Museum (2) Stumptown **Public Art Museum** 545 NW Glisan St. Portland, OR (555) 555-5555 Saturday Mon - Fri 9am - 6pm 10am - 5pm

Google

Purchase Tickets

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v3

Key Updates:

- Emphasized payment details \rightarrow using visual hierarchy
- Improved overall scannability \rightarrow and information flow
- Implemented Google's Material \rightarrow Design System components to enhance appearance and usability of text input fields.
- Added a "Cancel" button \rightarrow
- Incorporated "Back" navigation \rightarrow
- Prioritized clarity of information \rightarrow and relevant in-app navigation by replacing social media bar

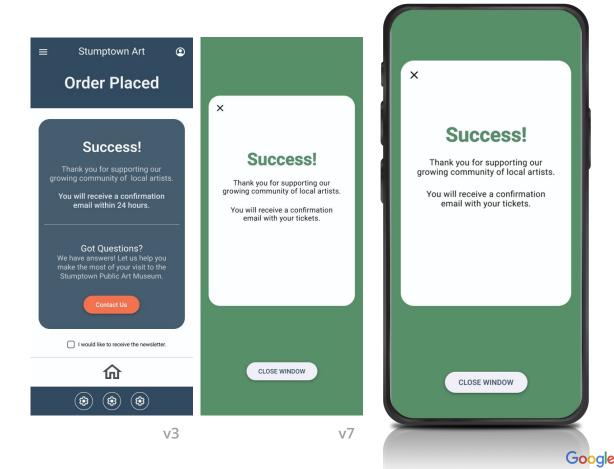
	E Stumptown Art Museum	
■ Stumptown Art © Purchase Tickets	\leftarrow Payment Details	Stumptown Art Museum
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March 17, 2024 x2 Adult Tickets x1 Child Ticket Order Total: \$35	Monday, August 17, 2024 x1 Adult Tickets Order Total: \$15	← Payment Details
	Payment Details	Monday, August 17, 2024
Payment Details	Name:	x1 Adult Tickets
Name:	\otimes	Order Total: \$15
Email Address:	Email:	
Credit Card Number:	Credit Card #:	Payment Details
	\otimes	Name:
Expiration Date:	Expiration Date:	\otimes
CVC Code:	\otimes	Email:
	CVC:	\otimes
Submit	\otimes	Credit Card #:
	NEXT	\otimes
		Expiration Date:
	CANCEL	\otimes
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Order Success

Key Updates:

- → Optimized the information hierarchy of the "Success" screen by simplifying both the layout and copy
- → Utilized green color to visually reinforce the Success message and evoke positive emotions
- → Introduced "Close Window" navigation tools (icon and action button) that return the user to home screen
- → Removed newsletter option, making the page serve a single-function

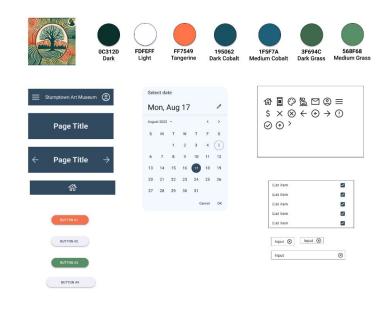


Sticker Sheet

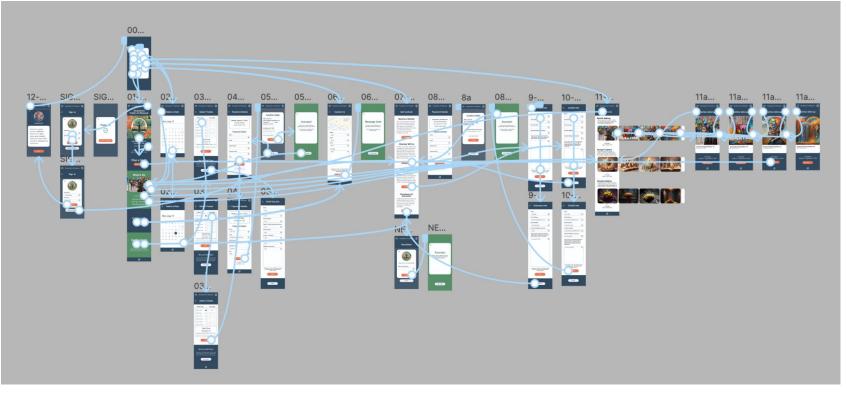
To ensure design consistency and efficiency, I developed a "Sticker Sheet" - a collection of reusable design elements. This combined bespoke elements with existing ones, allowing for creation of linked assets and unified visual language.

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(Figma) Prototype Overview



High-fidelity prototype

High Fidelity Prototype - v7

Updated: 3/05/2024

[Link to high-fidelity prototype]

[Download app demo video]



Accessibility considerations



Colors and Contrast

To ensure the design's accessibility for users with colorblindness, I conducted user research with a participant and employed online testing tools. This combined approach allowed me to understand specific user needs and verify adherence to accessibility guidelines, resulting in a design the effectively functions and conveys informations for all users.



Large Buttons

Large buttons with ample padding were incorporated to address the needs of users with varying dexterity levels, including a 74 year-old participant and a 7 year-old participant.



Iconography

To support users with varying reading abilities, the design utilizes clear icons for key navigation functions (hone, back) and differentiates pop-up actions (cancel) with alternate colored buttons.

Going forward

- Takeaways
- Next steps



Takeaways



Impact:

"The improvements you made to the (Stumptown Public Art Museum) app have made it easier to use, and more fun to browse. I would buy a ticket and visit this museum in person... if it was real!"

- Participant 5

(quote from usability study conducted on 2/28/24)



What I learned:

As a first-time UX designer, I gained a wealth of insights from this project. These were my key takeaways:

- User Empathy: Understanding user needs and perspectives through research and data analysis.
- **Date Driven Ideation**: Translating research insights into creative solutions.
- **Prototyping and User Testing:** Iterating and refining designs based on feedback.
- Effective Communication: Presenting the design process and findings though this case study.

Next steps



Accessibility & Refinement

Two key features, the date picker and interactive text fields, were not fully implemented due to time constraints. To ensure optimal user experience and accessibility, I would prioritize:

- Integrating a fully functional date picker and interactive text fields.

- Conducting additional usability testing to evaluate and refine these features.

- Finalizing the design for seamless handoff to the development team.

Enhancing User Engagement

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Homepage animation:

Implementing an eye-catching animation for the Stumptown logo on the homepage would enhance user engagement and reenforce brand identity.

Image carousel enhancements: Adding subtle animation and shading effects to the image carousels would further elevate the user experience and visual appeal of the app. 3

Optimizing the Payment Process

The current payment system's visual design could benefit from further refinement to achieve a more polished and modern aesthetic. Alternatively, integrating a well-established third-party payment platform with a robust design system could streamline the process and enhance the overall user experience. This approach would not only improve the perceived modernity and credibility of the transaction but also leverage the expertise and trust established by the external provider.

Let's connect!



This project has ignited my passion for UX design and I'm eager to continue learning and growing as part of a team that shares my enthusiasm for user-centered solutions. For me, UX isn't just a career; it's a way of thinking and creating that benefits millions of people every day.

Let's connect!

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Thank You!

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