

INFO 691: PROTOTYPING THE USER EXPERIENCE



## Prototype 3: Functional Prototype

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## Introduction

Welcome to **Animania**, the zoo of the future! Animania is not just a place to see animals; It is an interactive and educational destination designed to connect people with the wonders of the animal kingdom. To make your experience as smooth, enjoyable, and immersive as possible, we have developed a digital platform that puts the zoo in your pocket. With this app or website, visitors can plan their visit, explore special exhibits, purchase tickets, and so much more.

## Product Description

The **Animania App/Website** is a seamless digital tool that enhances the zoo-going experience by streamlining ticket purchases, enabling users to browse special exhibits and activities, and providing helpful visit-planning resources. From seeing real-time crowd updates to finding the quickest route to your favorite animal exhibit, Animania's platform ensures every moment of your visit is stress-free and exciting.

## Purpose

The purpose of the Animania app/website is to:

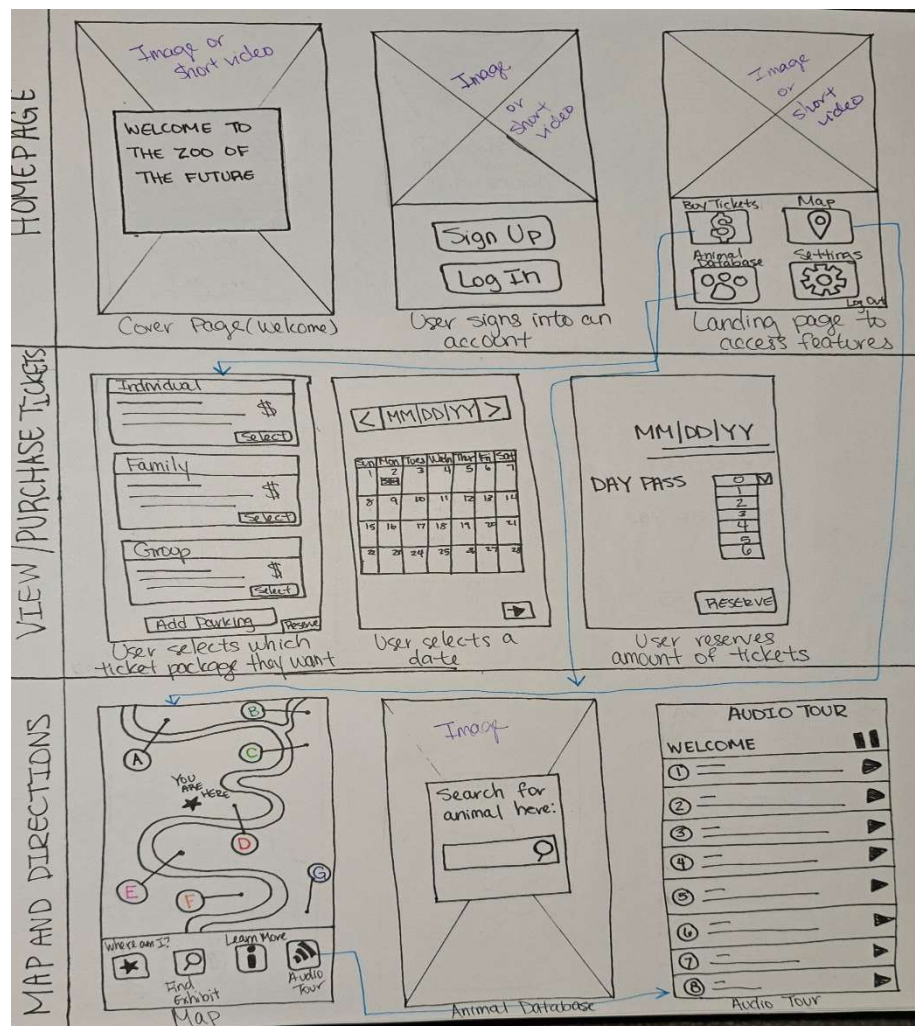
1. **Enhance Visitor Convenience:** Simplify the processes of ticket purchasing, special event booking, and navigating the zoo.
2. **Encourage Exploration:** Provide detailed information about exhibits, events, and animal conservation efforts, encouraging deeper engagement.
3. **Improve Accessibility:** Allow visitors to plan and tailor their visits in advance, accommodating a variety of needs and preferences.
4. **Support Conservation Efforts:** Make it easier for users to donate to the zoo's initiatives directly through the platform.

## Functionality

1. **Ticket Purchases:**
  - Select dates and ticket types (e.g., general admission, family passes, group discounts).
  - Add-on options for special events, exhibits, or guided tours.
  - Secure checkout process with multiple payment options.
2. **Special Exhibits and Events:**
  - Browse detailed descriptions of ongoing and upcoming exhibits or activities.
  - Add special passes to your visit.
3. **Visit Planning Tools:**

- View maps and directions to and within the zoo.
  - Anticipate busy times with real-time updates on crowd levels.
  - Access tips for preparing for your visit (e.g., what to bring, dining options).
4. **Conservation and Donations:**
- Learn about Animania's conservation projects.
  - Contribute to specific animal care or environmental efforts through easy online donations.
5. **Interactive Zoo Map:**
- Navigate the zoo with a dynamic map that includes routes to exhibits, amenities, and rest areas.

## Initial Wireframes



Our team decided to approach this design by referencing our research on other zoos and their web presence. In our research, we found that zoos, like the Smithsonian National Zoo and the Philadelphia Zoo, focused primarily on ticket purchase, membership, donation, social media presence, map, animal knowledge bases and more. For this project, we decided to focus on

several features that we felt like covered the core experience of the average zoo-goer, which is to access the location, traverse it successfully and learn about the exhibits as they go. These initial wireframes showcase the cover page, login, landing page, ticket purchase/reservation, map, animal knowledge base and audio tour.

## **User Feedback on Wireframes**

We gathered Feedback through 15-minute semi-structured interviews with two participants. Participants were given a brief explanation of the intended purpose and functionality of our designs, followed by an overview of the wireframes. We asked questions relating to its design, functionality, and usability to better understand what areas need to be improved. Here is an overview of the questions asked:

### **Interview Questions:**

1. What are your first impressions when looking at these designs?
2. Can you walk me through how you would go about buying a ticket?
3. What do you think about the interactive map? How do you see yourself using it?
4. Are there any features here that you really like?
  - a. Any you think you would not use?
5. Is there anything that is confusing or does not make sense to you?
6. How do you feel about the design of the landing page? Does it make you want to explore more? why or why not
7. Do you think this app would make planning a zoo visit easier? Why or why not?
8. If you could add any feature or change something in this app, what would it be?

### **Participant 1 (Pilot – Visited a zoo within the last year)**

Participant 1 found the overall design user-friendly and intuitive, mentioning specifically that the ticket purchasing flow seemed quite simple. They appreciated the interactive map as a useful tool for navigating the zoo and felt that it is important to include details such as restroom and concession stand locations. They suggested adding a button for frequent visitors, like membership options or their pre-saved preferences. They also highlighted how easy it was to click into the main functions from the landing page. They mentioned how it could be helpful to change the buttons to make main functions more prominent, so it is easier to click into options that are more interactive or important to boost someone's experience at the zoo.

### **Important Quotes:**

- “The ticket purchasing process is straightforward - like what I’ve seen before”
- “I’d want to see markers for things like restrooms and concessions on the map”
- “The landing page looks nice; it’d be easy to click into buying tickets or something. But It could be bigger or stand out more.”
- “A membership feature would be interesting, something that is for people who visit often or have been there before.”

### **Participant 2 (Nurse – Infrequent Zoo Visitor)**

Participant 2 found the design appealing but immediately mentioned that they do not know if they would want to sign up for something just to go to the zoo. They really liked the idea of an interactive map but mentioned wishing it included a way to search for specific animals or exhibits within the map, not only just in the animal database. Additionally, they suggested a feature to recommend exhibits or upcoming events at the zoo to make the app more engaging for guests.

#### **Important Quotes:**

- “I like the map, but I’d want to search for a specific animal or exhibit instead of scrolling through it.”
- “As someone who doesn’t visit a zoo often, I’d love suggestions on what to see or do, especially if it’s my first time there.”

#### **Findings:**

This feedback revealed important themes that influenced our design of the first iteration of our prototype. The participants discussed making key features, such as purchasing tickets or accessing the map, more prominent so that users can easier navigate the system. Additionally, the participants highlighted the need for more personalization by recommending membership options and recommendations on what they should do.

## **Prototype**

[Figma link to Prototype](#)

## **User Feedback on Prototype**

We gathered Feedback on the clickable prototype of the Animania app to evaluate its ease of use, navigation, and functionality, with the goal of identifying areas for improvement. The process followed a usability test format, where potential users were asked to complete a series



of tasks followed by questions to understand their perceptions of the prototype. Each session lasted approximately 15 minutes.

Tasks:

1. Buy a Ticket: Purchase an individual pass and parking ticket for June 14th
2. Add a Special Event: start an audio tour for your visit
3. Explore the Map: Use the interactive map to find the Bear exhibit. What would make this experience better?
4. Search for an Animal: Search for information about an animal. What information would you want to know about an animal?

**Participant 1 (Sales –Visited a zoo in the last year)**

The participant found the prototype intuitive, with most tasks easy to complete. They found the ticket purchasing process simple. The participant also noted that the search function worked well but could benefit from having filters that make it easier to guide your search so that people do not have to be thinking of an animal first. The participant struggled to find the audio tour feature and gave up after searching for a while suggesting that we may need to make this feature more prominent, perhaps moving it to the main navigation on the landing page, especially if it is a feature that is sought after.

Important Quotes:

- “Buying tickets was super simple, just like I’d expect from a modern app.”
- “If the animal exhibits had more details in the map, like feeding times or events going on.”
- “Feeding times, what they eat, fun facts. Also, if there were suggested animals to look at. Maybe highlighted animals here.”

**Participant 2 (Sales –Visited a zoo in the last year)**

Participant 2 found the design visually appealing but struggled slightly with the ticket purchasing due to limitations of the prototype and miscommunication. They suggested adding a step-by-step guide or tooltips for first-time users. They really liked the ability to search up different animals and wanted results to include related events or special exhibits for that animal.

Important Quotes:

- “I love that I can search for animals, but it would be cool if it also showed upcoming events or activities involving that animal.”
- “I wish the view of the map could be different. More detailed, kind of how apple maps is like”
- “The design is clean, but I wasn’t sure where to click at times. Something like a tutorial might help. That could also be good for someone's first time at the zoo to get them used to using the app and explore the zoo.”

#### Findings:

The feedback from the prototype testing highlighted key themes to guide future improvements. Ease of navigation was a major area for concern, with one participant in particular struggling to find this feature since they weren’t making the connection that it would be inside the map. The other participant clicked around and found it quickly, but didn’t seem confident when initially searching, suggesting it may need to be moved to the main navigation. The participants loved the interactive map, but they suggested more details be added, such as feeding times, animal fun facts, as well as a more dynamic view similar to one that is shown on “Apple Maps”.

## Comprehensive Design Justification and Reflections

Our design process for the Animania app/website was rooted in the goal of delivering a user-friendly, feature-rich platform that enhances the zoo-going experience. Below is a breakdown of the design decisions, challenges faced, and lessons learned during the development process.

### Design Decisions

#### 1. User-Centered Approach

- **Why:** The app/website is intended for a diverse audience, including families, solo travelers, and school groups. We prioritized simplicity and accessibility to ensure ease of use for all visitors.
- **Outcome:** Clean layouts, intuitive navigation, and a clear hierarchy of information (e.g., large buttons for key actions like ticket purchasing and exhibit browsing).

#### 2. Visual Aesthetics

- **Why:** A playful yet professional visual style reflects Animania’s dual focus on fun and education.
- **Outcome:** Bright colors, animal-themed icons, and engaging imagery were incorporated to create a sense of excitement and wonder.

#### 3. Interactive Elements

- **Why:** To immerse users and encourage engagement, we included interactive features like dynamic maps, real-time crowd updates, and detailed event previews.
  - **Outcome:** Users can interact with a live zoo map, explore events, and even plan routes to specific exhibits.
4. **Streamlined Workflows**
- **Why:** Key actions such as ticket purchases and event bookings needed to be quick and straightforward to avoid user frustration.
  - **Outcome:** We designed multi-step workflows (e.g., ticket purchase flow) with logical progressions, ensuring each step required minimal effort from the user.
5. **Feedback Integration**
- **Why:** User testing and feedback are essential to understanding potential pain points and refining the experience.
  - **Outcome:** Feedback from two test users led to improvements such as consolidating navigation menus and making our main functions, such as special exhibit booking flows, more prominent on the landing page.

## Challenges and Solutions

1. **Balancing Simplicity and Features**
  - **Challenge:** Including a wide range of features while keeping the interface uncluttered and not forcing users to sign up which can have adverse effects
  - **Solution:** We prioritized the most critical functions (ticket purchases and exhibit browsing) and placed secondary tools (donations, tips) in accessible but non-intrusive areas.
2. **Navigation Complexity**
  - **Challenge:** Designing an intuitive navigation system that supports quick access to features without overwhelming users.
  - **Solution:** A persistent navigation bar, featuring icons for Tickets, Exhibits, Map, and More. Dropdown menus for additional options.
3. **Real-Time Elements**
  - **Challenge:** Displaying dynamic data like crowd updates and special event availability in an understandable manner.
  - **Solution:** We adopted visual indicators like color-coded busy times and notifications for sold-out events, ensuring clarity.

## Reflections

1. **What Worked Well**
  - The **wire-framing stage** was effective in showing key workflows and potential usability issues early. This saved time during the prototyping stage.



- Gathering **user feedback** during the clickable prototype phase was invaluable. It provided fresh perspectives and revealed usability improvements we had not considered.
- 2. **What Could Be Improved**
  - **User Testing Scope:** We gathered Feedback from only two test users. In future iterations, testing with a broader audience would produce more accurate feedback.
  - **Accessibility Features:** While the app is visually appealing, accessibility features like screen reader compatibility and adjustable font sizes need further attention.
- 3. **Lessons Learned**
  - **Iterate Early and Often:** Regularly revisiting designs and incorporating feedback prevented significant issues from persisting, similar to what we have learnt over the term with our sketching assignments.
  - **User-Centered Design is Key:** Even small usability tweaks (e.g., larger buttons or consolidating menus) can make a notable difference in the user experience.

Based on reflections and feedback, for future iterations: Expanding accessibility options, such as contrast settings and voice navigation support, Incorporating personalized recommendations (e.g., suggested exhibits based on user interests), and lastly, enabling more detailed visit customization, such as creating itineraries or syncing events with a personal calendar.