

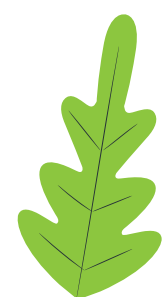


toronto ZOO

REDESIGN & RESTRUCTURE OF TORONTO ZOO WEBSITE

A UX, UI and Information Architecture design project by Omid Vahidi & Colleagues

Fall 2022 (6-week project)



OMID'S PARTICIPATION

Card Sorting

Wireframing

IA design

Lo-fi & Hi-fi mock-ups

User Flow design

Usability Testing

TEAM MEMBERS

Omid Vahidi

Daria Markova

Joyce Ofoche

Nicole Yeung



USED METHODS AND TOOLS

Card Sorting

Miro

Usability Testing

Zoom

Figma

Google Meet

Table of Content

Introduction	.....	PAGE 3
Exploration, Synthesis, & Design Implications	.....	PAGE 5
Concept Generation	.....	PAGE 7
Evaluation & Refinement	.....	PAGE 13
Results	.....	PAGE 20
Conclusion	.....	PAGE 34
Appendices	.....	PAGE 35

Introduction

Project Brief

Client: The Toronto Zoo

Research goal:

- Restructure the Toronto Zoo website in response to complaints from visitors that their website is really hard to use
- Help the users easily find the information they are looking for

Business objectives:

Based on the Toronto Zoo's mission from: <https://www.torontozoo.com/tz/about>

- Educate their community on wildlife, plants, and conservation science
- **Acquire revenue through ticket and merchandise sales, donations, and sponsorships**
- Generate revenue by having other brands do business in the zoo (i.e. restaurants, Lego toy shops etc.)



Introduction

Project Brief

Types of users and their tasks :

- Parents And Caregivers
- Kids
- Teachers
- Donors
- Press and Media



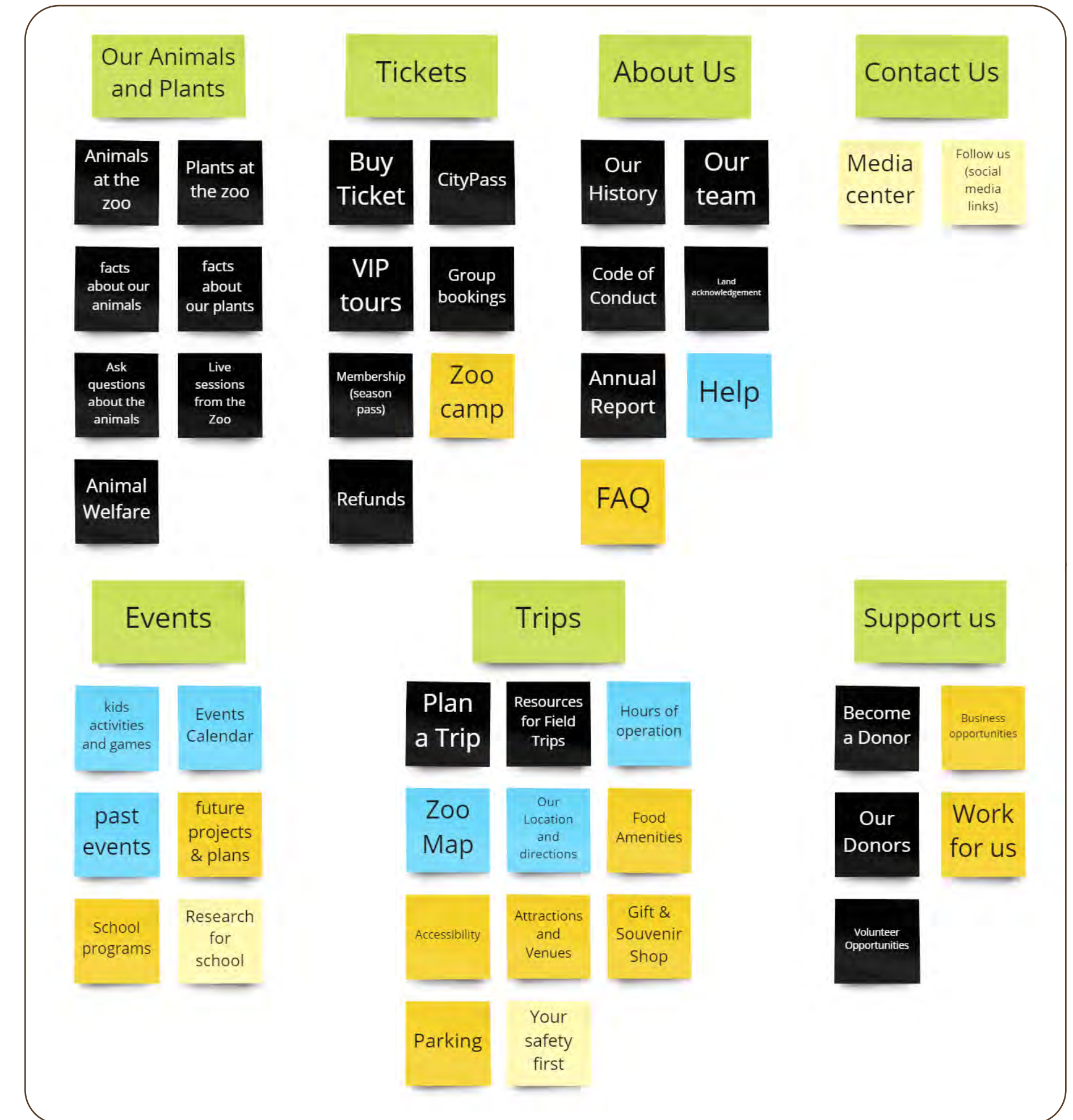
Exploration, Synthesis, & Design Implications

Card Sorting

Based on the user goals and business objectives, as well as the data provided by the Client, the Team created content for the Card Sorting.

The Team conducted **8 card sorting sessions** to gauge the users' expectation of how the content on the website should be categorized.

After analyzing and synthesizing the data, the Team was able to come up with the **final card grouping**.

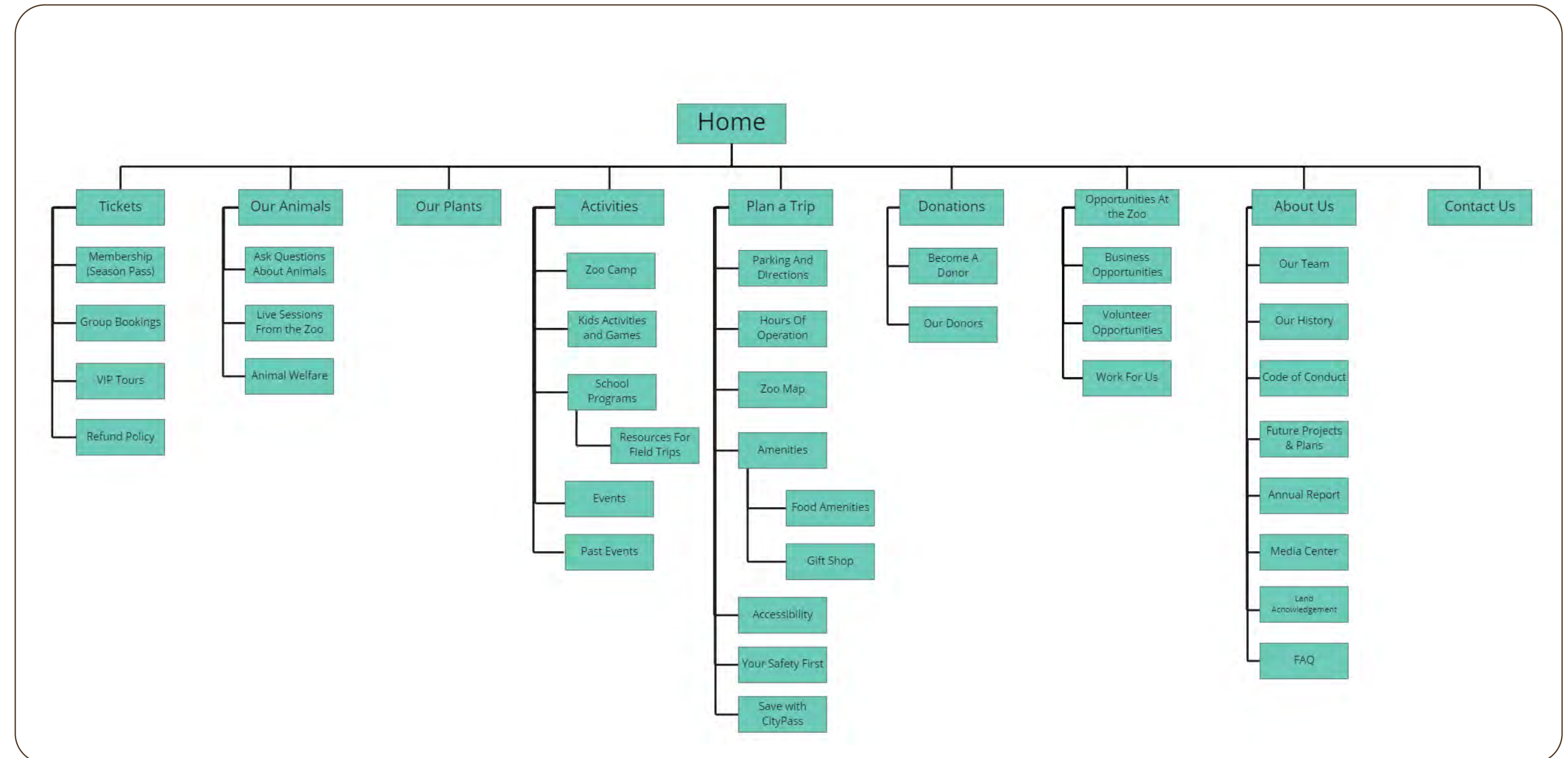


Exploration, Synthesis, & Design Implications

IA Diagram

Using the data from the Card Sorting, the Team created an **IA diagram** for the Toronto Zoo, to illustrate how to best organize the website's existing content.

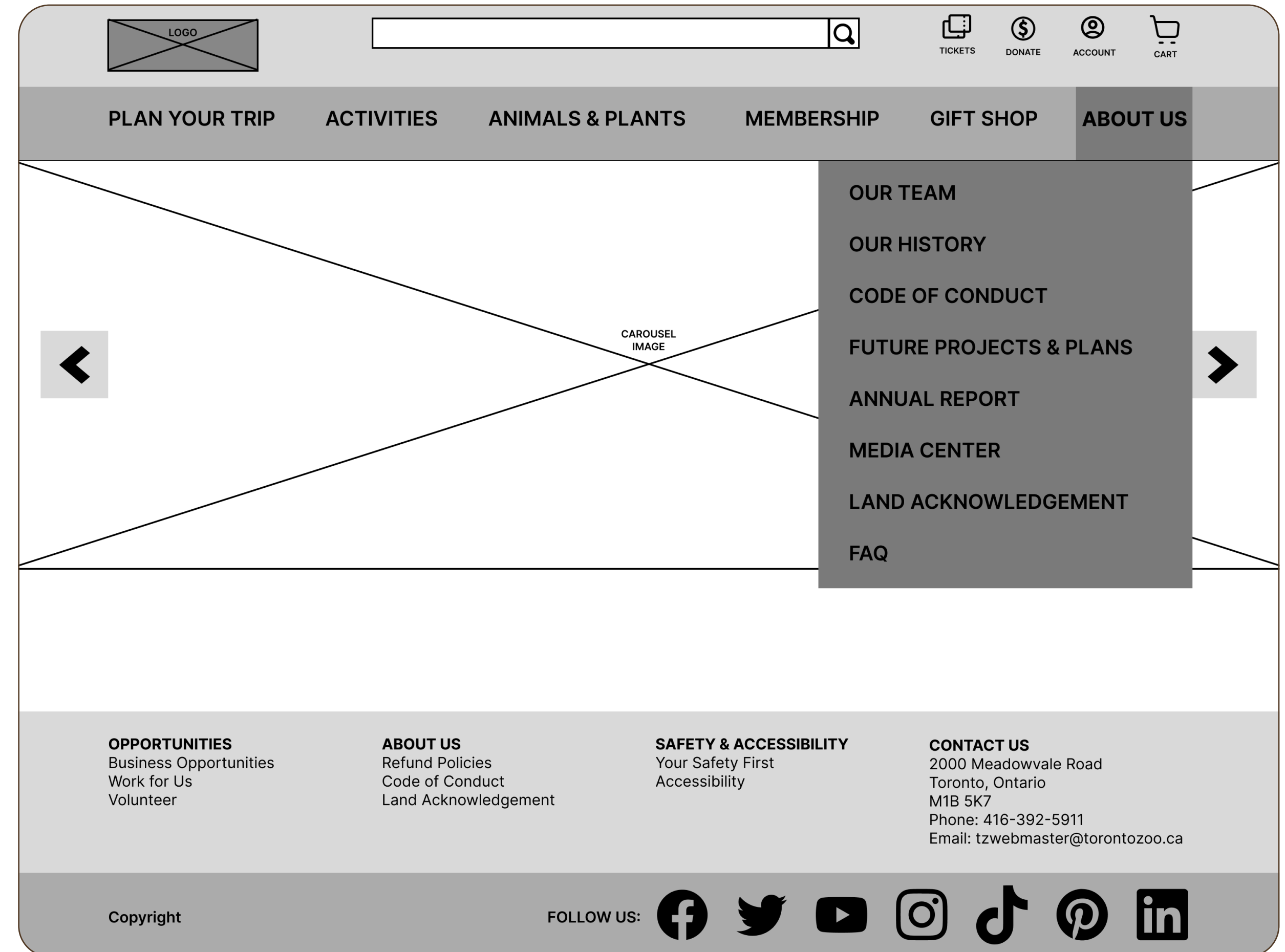
Our aim was to make the process of searching for information easy for the users.



Concept Generation

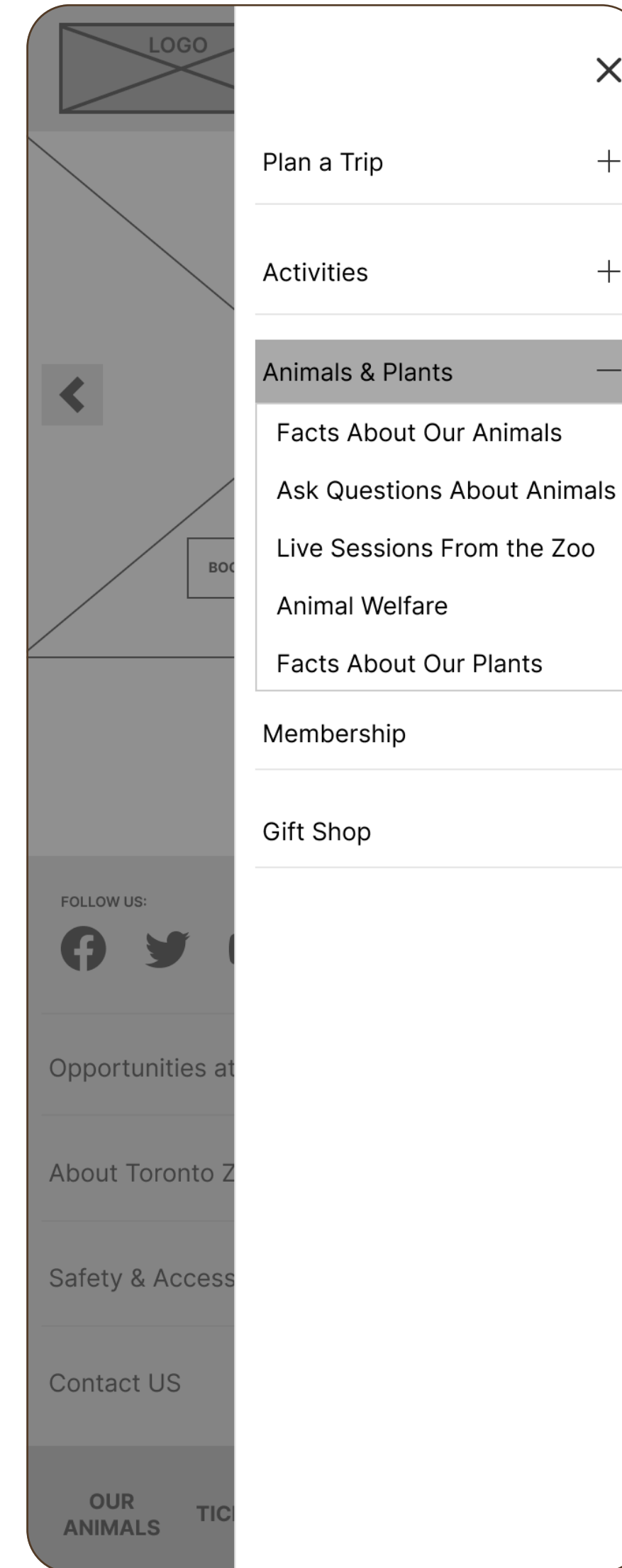
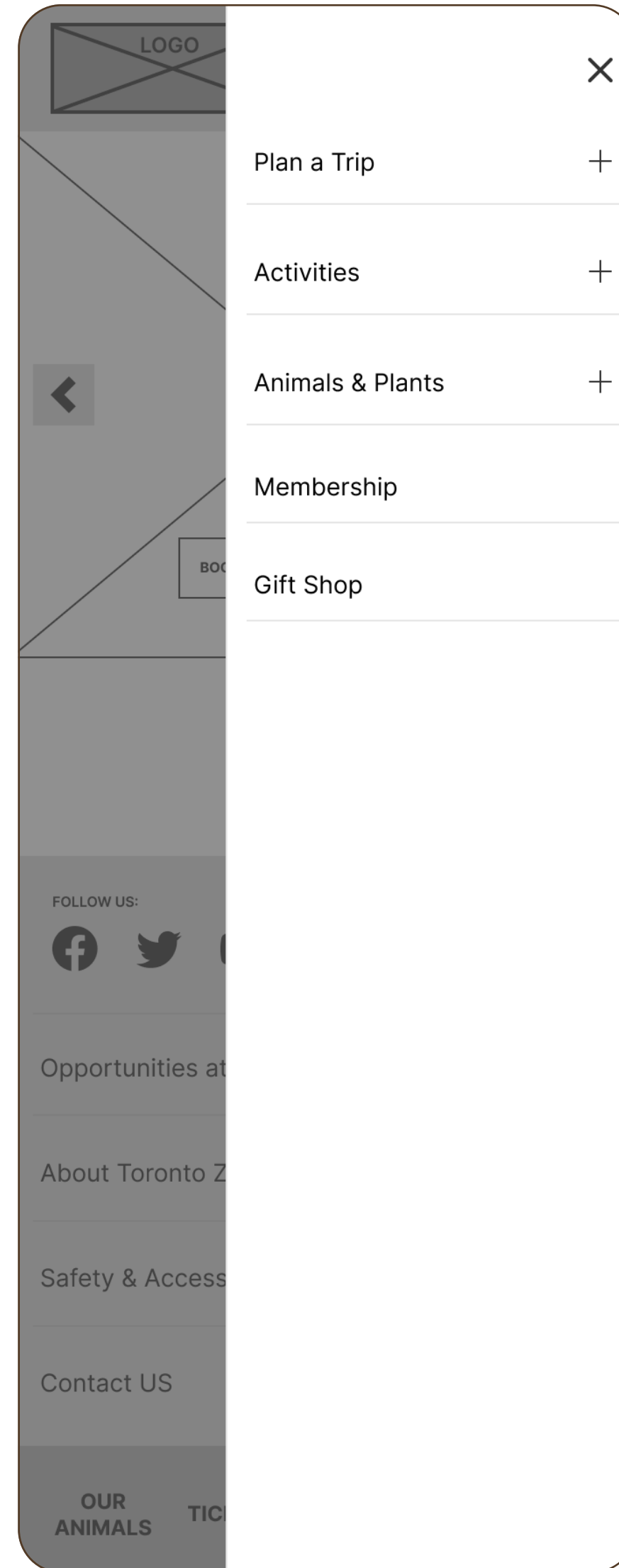
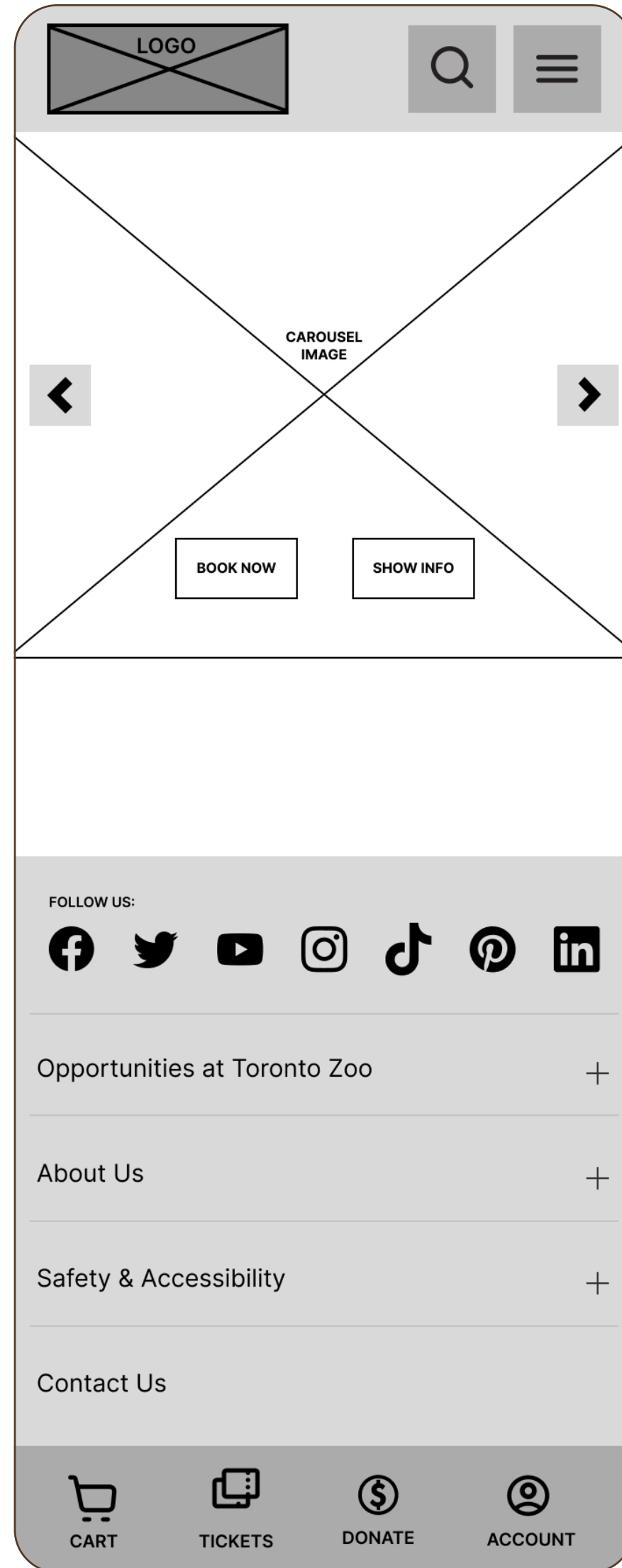
Nav Design / Desktop

- We synthesized our knowledge about the Client and their target audience, and based on the IA Diagram designed the navigation system for our Client's **responsive website (mobile) and classic website (desktop)**
- We **prioritized specific pages that were important to our Client's business goals** (ticket sales, donations, membership)
- We **added social media icons as a secondary/utility navigation** because that's how our Client can achieve one of their business goals - **attracting new visitors**



Concept Generation

Nav Design / Mobile



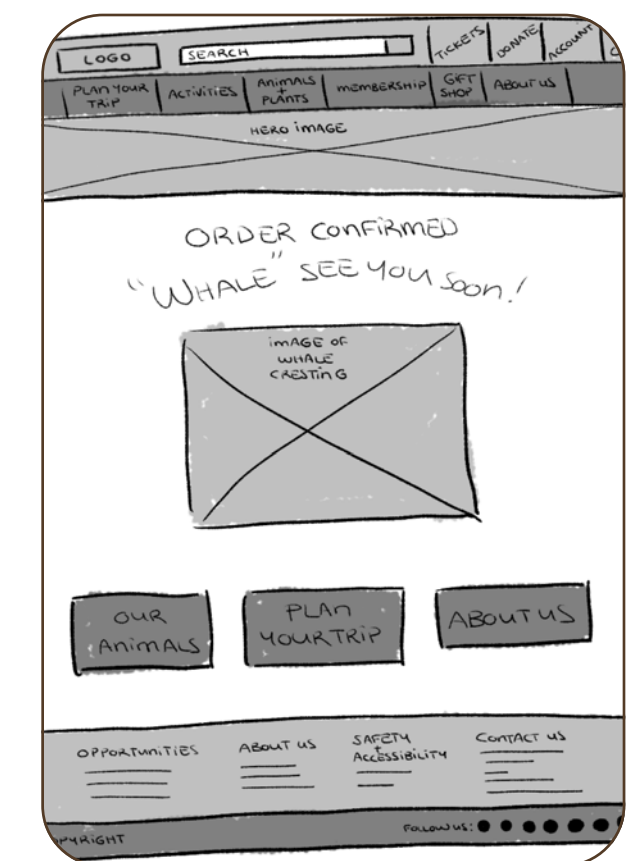
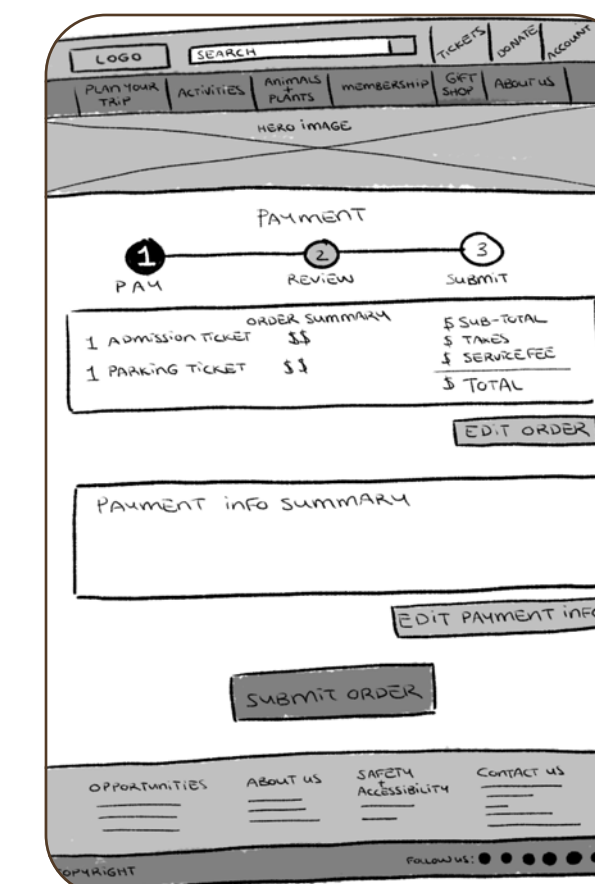
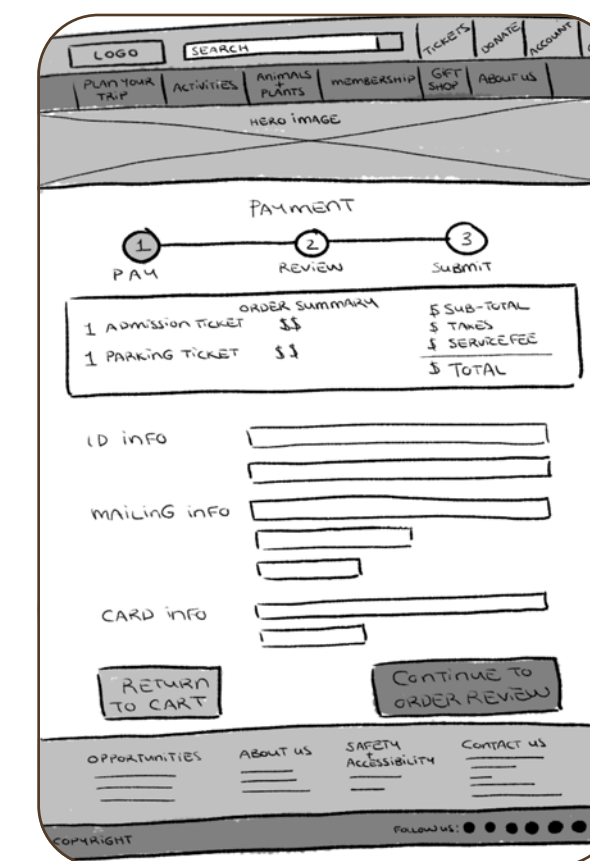
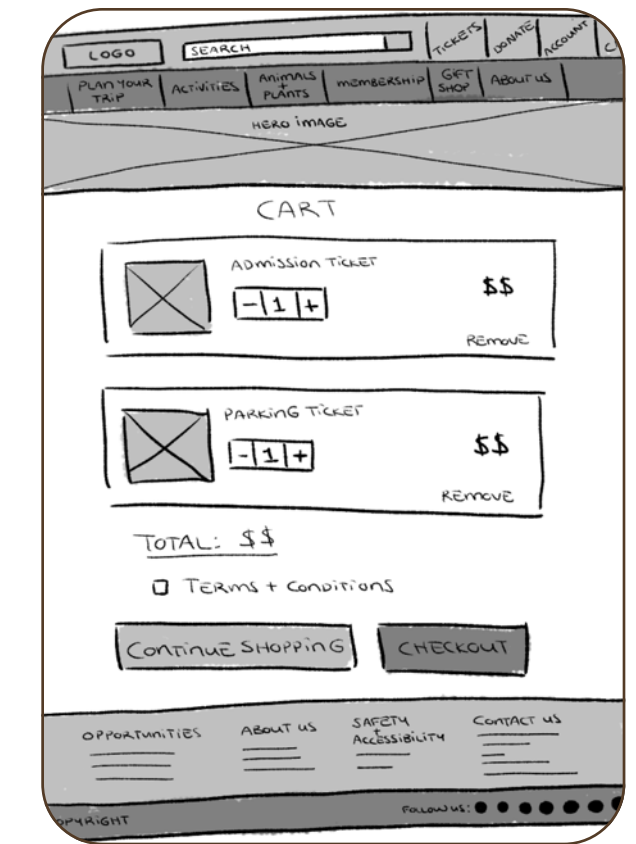
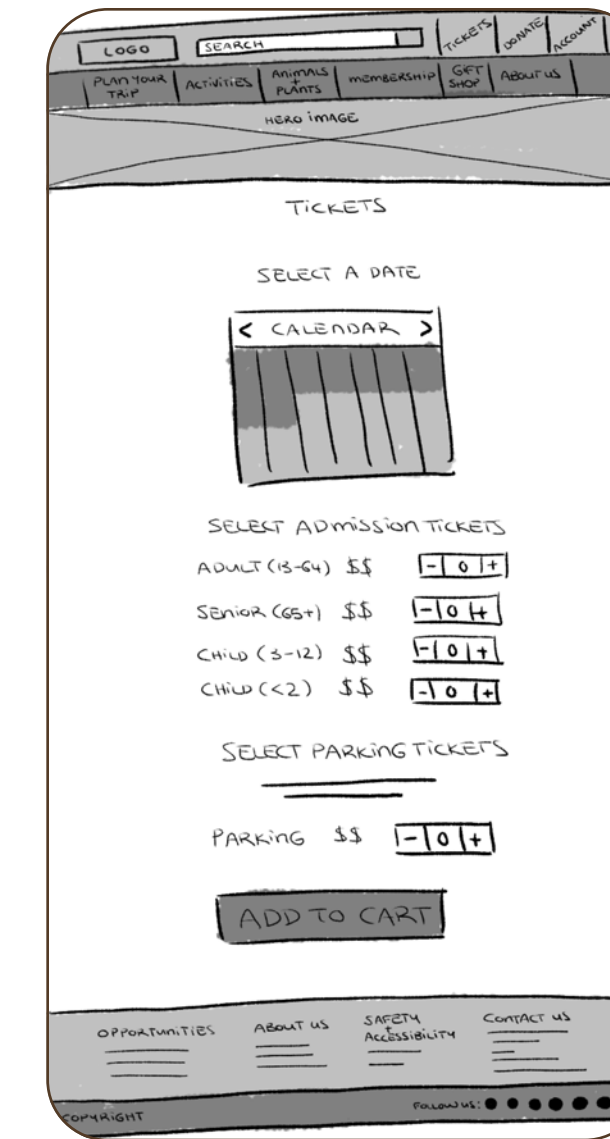
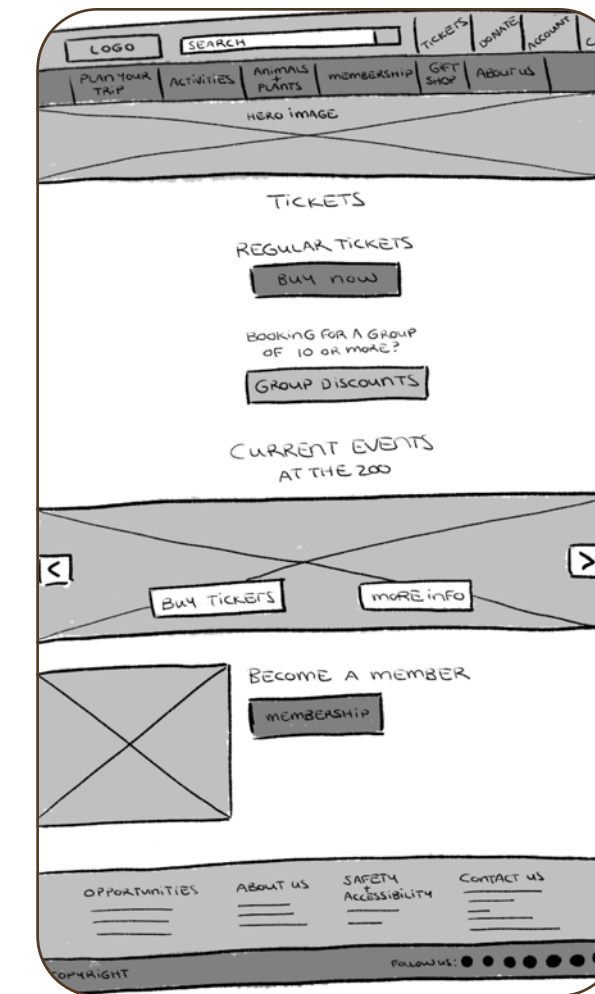
Concept Generation

User Flow Selection and Sketches

The Team decided to explore the user's experience on the website as they fulfill the task of **purchasing regular tickets online**.

This task was selected by the Team as one that correlates with the Client's key business goal - **generating and increasing revenue**.

To illustrate that path, we have sketched out wireflows of the user's journey clicking through the pages to purchase a regular ticket.



Concept Generation

Low-Fidelity Wireframes

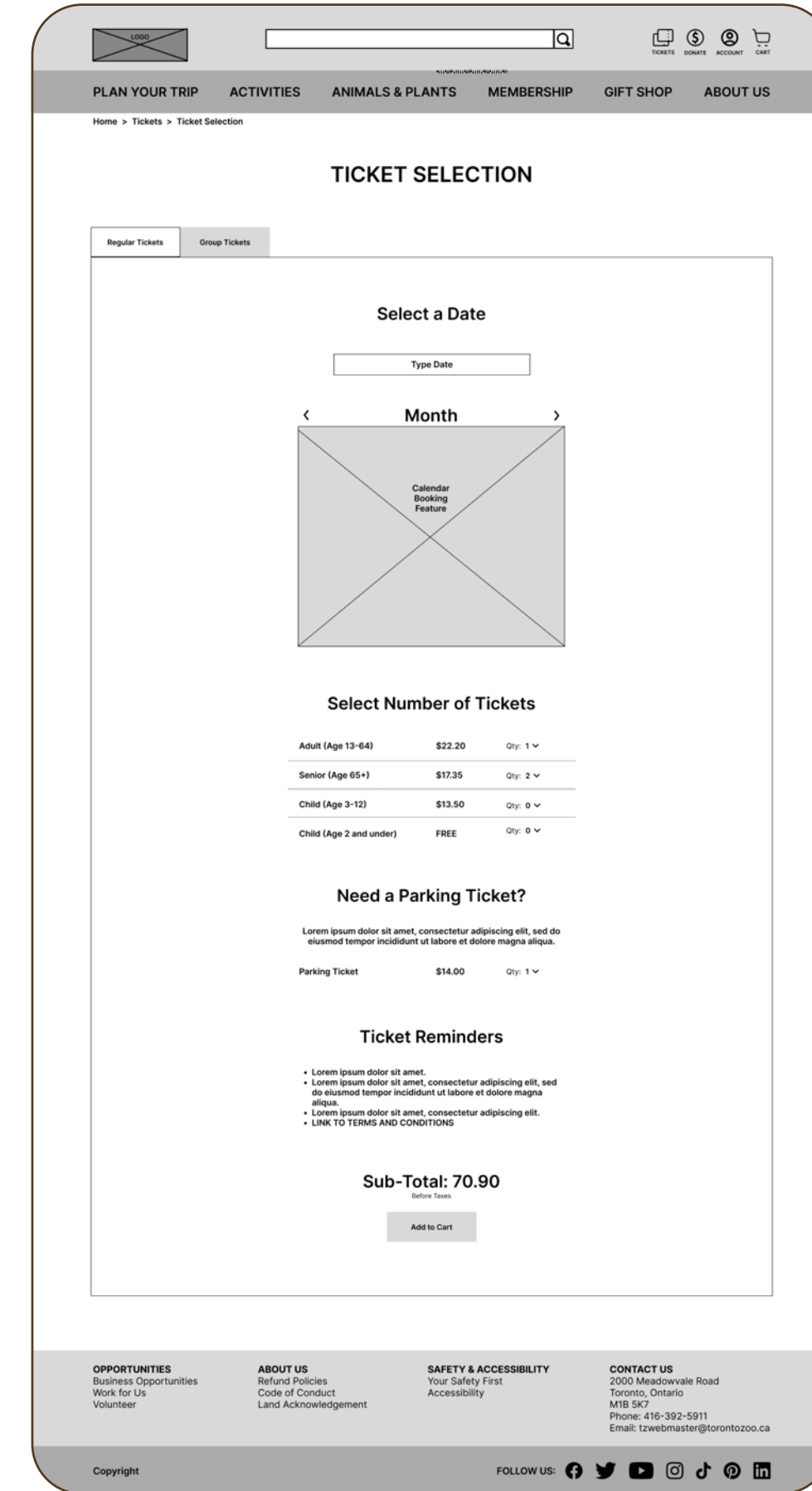
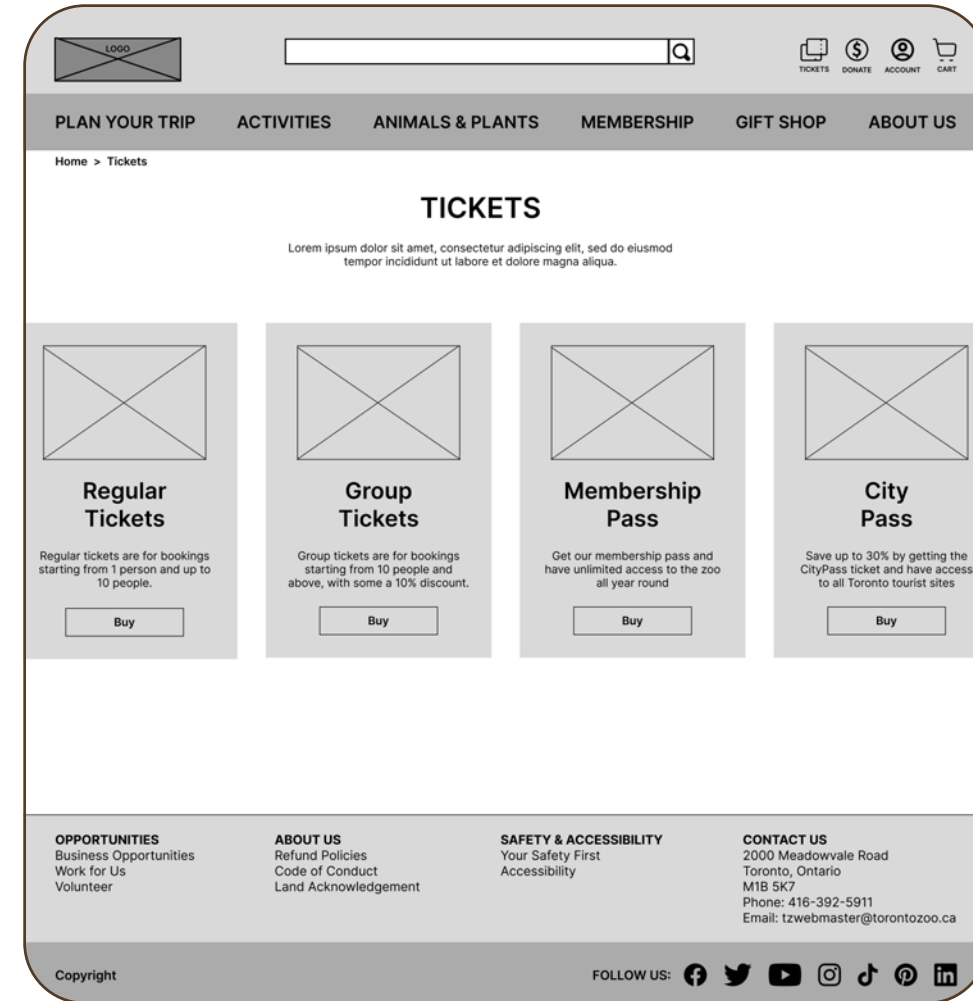
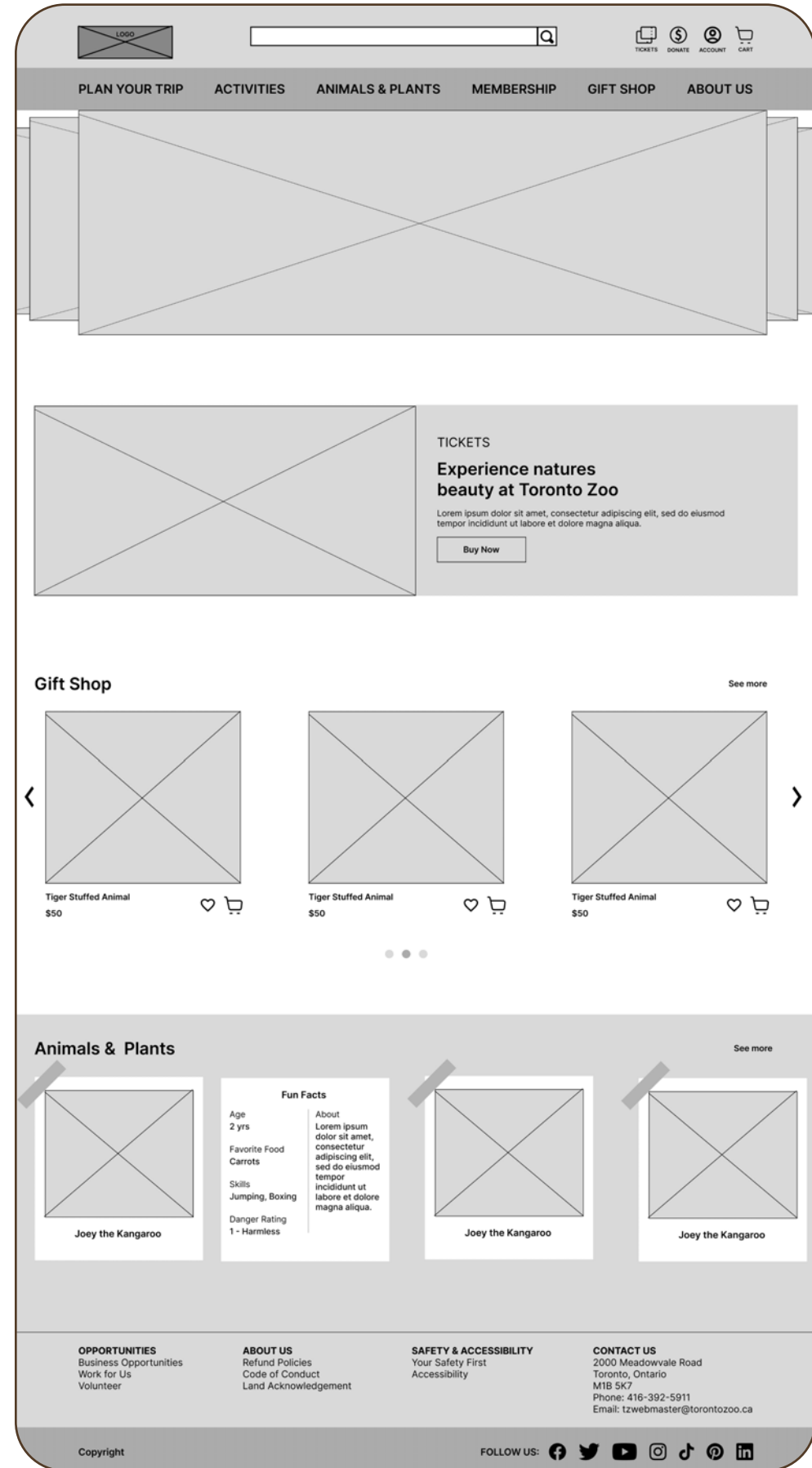
As a next step, the Team created **Low-fidelity Wireframes** for the selected experience - purchasing regular tickets online.

We used this milestone to conduct **usability tests of our Prototype** to get the users' insights on its improvement and integrate them into the High-Fidelity Wireframes.



Concept Generation

Low-Fidelity Wireframes



Concept Generation

Low-Fidelity Wireframes

Home > Tickets > Ticket Selection > Cart

CART

Items - 4

ADMISSION TICKETS Delete

Adult (13 - 64)	Senior (64+)
\$22.20 Qty: 1	\$34.70 Qty: 2
Child (3 - 12)	
\$0 Qty: 0	
Sub Total: \$56.90	

PARKING TICKETS Delete

Slots
\$14.00 Qty: 1
Sub Total: \$14.00

TOTAL AMOUNT - \$80.12

Price Breakdown

Sub Total	\$70.90
Tax	\$9.22
Total Amount	\$80.12

I confirm that I have read and agree to the [Terms of Use](#).

Check out

[Continue Shopping Tickets](#)


OPPORTUNITIES
Business Opportunities
Work for Us
Volunteer

ABOUT US
Refund Policies
Code of Conduct
Land Acknowledgement

SAFETY & ACCESSIBILITY
Your Safety First
Accessibility

CONTACT US
2000 Meadowvale Road
Toronto, Ontario
M1B 5K7
Phone: 416-392-5911
Email: tzwebmaster@torontozoo.ca

Copyright

FOLLOW US: 

Home > Tickets > Ticket Selection > Cart > Payment

Payment

1 Payment Info 2 Review 3 Submit

Order Summary

Admission Ticket	QTY: 1	\$22.20	Sub Total	\$36.20
Parking Ticket	QTY: 1	\$14.00	Taxes	\$4.71
			Service Fee	\$0.00
TOTAL				\$40.91

Billing Address

Street Number

Street Name

City Province/State

Postal Code/Zip Code

Buyer Info

First Name

Last Name

Phone Number

Email Address

Payment Info

Card Number

Expiry Date CVV

Name on the Card

Return to Cart **Continue**


OPPORTUNITIES
Business Opportunities
Work for Us
Volunteer

ABOUT US
Refund Policies
Code of Conduct
Land Acknowledgement

SAFETY & ACCESSIBILITY
Your Safety First
Accessibility

CONTACT US
2000 Meadowvale Road
Toronto, Ontario
M1B 5K7
Phone: 416-392-5911
Email: tzwebmaster@torontozoo.ca

Copyright

FOLLOW US: 

Home > Tickets > Ticket Selection > Cart > Payment > Review

Review

1 Payment Info 2 Review 3 Submit

Order Summary

Admission Ticket	QTY: 1	\$22.20	Sub Total	\$36.20
Parking Ticket	QTY: 1	\$14.00	Taxes	\$4.71
			Service Fee	\$0.00
TOTAL				\$40.91

Edit Order

Payment Information Summary

Billing Address	Buyer Info	Payment Info
123 A Ave. Anyplace, AB OAD ADA	Name: John Smith Email: john.smith@sample.com Phone: (123) 456-7890	Card Number: 5191 **** *1234 Expiry: 09/24 CVV: *** Name on the Card: John Smith

Edit Payment Info

Submit Order


OPPORTUNITIES
Business Opportunities
Work for Us
Volunteer

ABOUT US
Refund Policies
Code of Conduct
Land Acknowledgement

SAFETY & ACCESSIBILITY
Your Safety First
Accessibility

CONTACT US
2000 Meadowvale Road
Toronto, Ontario
M1B 5K7
Phone: 416-392-5911
Email: tzwebmaster@torontozoo.ca

Copyright

FOLLOW US: 

Home > Tickets > Ticket Selection > Cart > Payment > Review > Review > Review > Review

ORDER CONFIRMED

"WHALE" SEE YOU SOON!

Image of whale creating

Reminders

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Back to Tickets **Plan Your Trip** **Our Animals**


OPPORTUNITIES
Business Opportunities
Work for Us
Volunteer

ABOUT US
Refund Policies
Code of Conduct
Land Acknowledgement

SAFETY & ACCESSIBILITY
Your Safety First
Accessibility

CONTACT US
2000 Meadowvale Road
Toronto, Ontario
M1B 5K7
Phone: 416-392-5911
Email: tzwebmaster@torontozoo.ca

Copyright

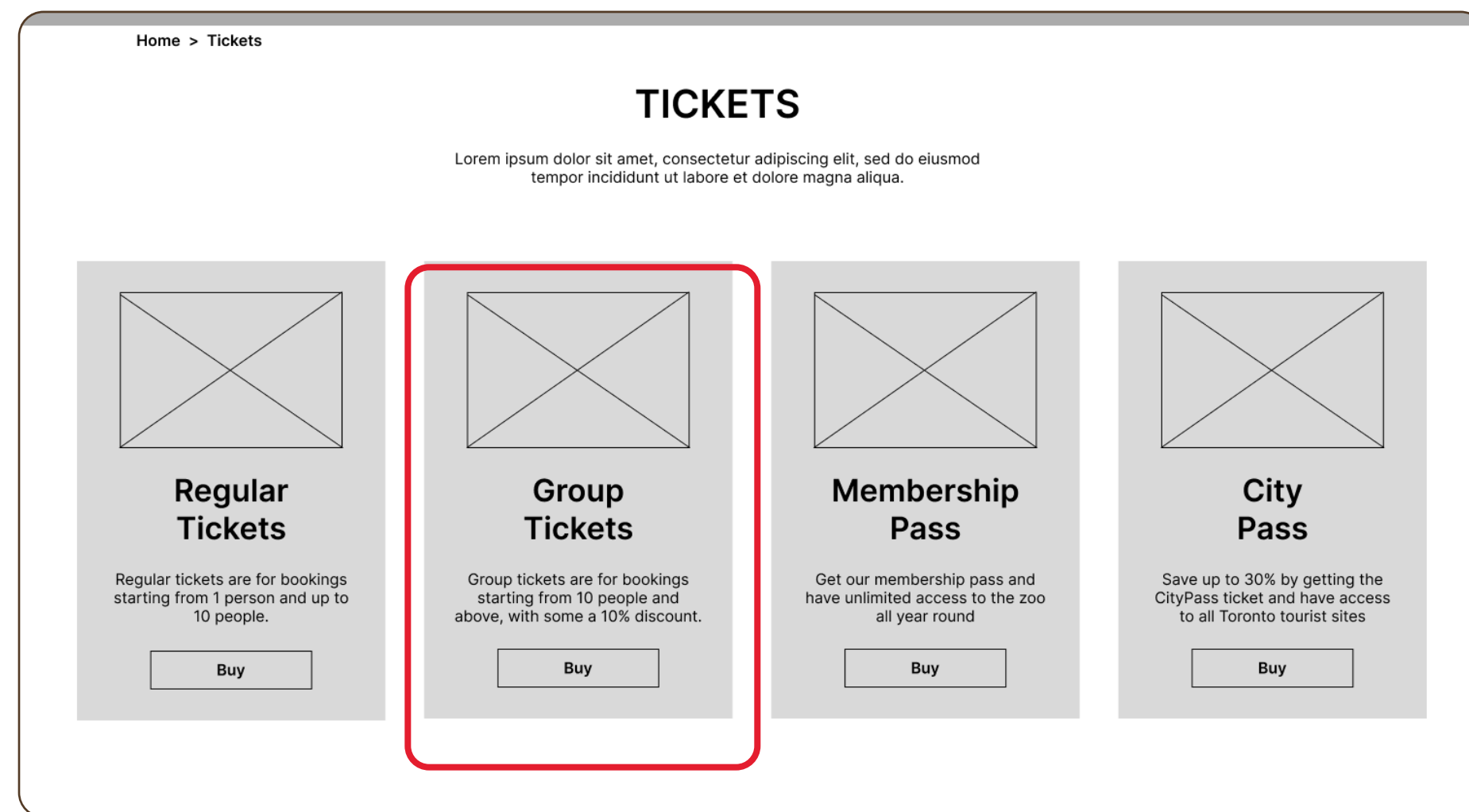
FOLLOW US: 

#1

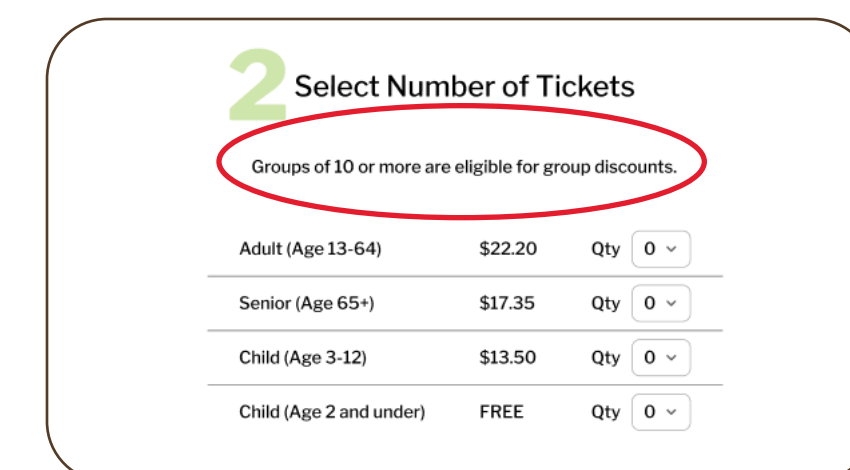
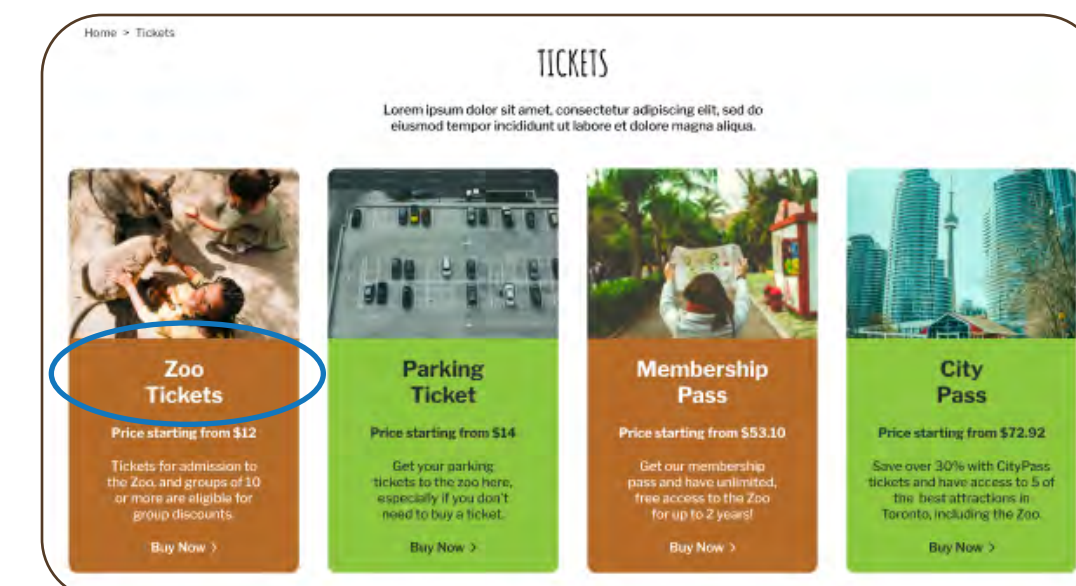
Group tickets and Regular Tickets: Some of the participants wanted to go to Group tickets instead of Regular tickets for checking prices before the family visit

Revisions:

- Not separating Regular and Group Tickets
- Adding a message informing the users about the group discount on the Ticket selection page
- When users insert quantities 10 and above, adding an alert they are eligible for the discount



Before testing



After testing

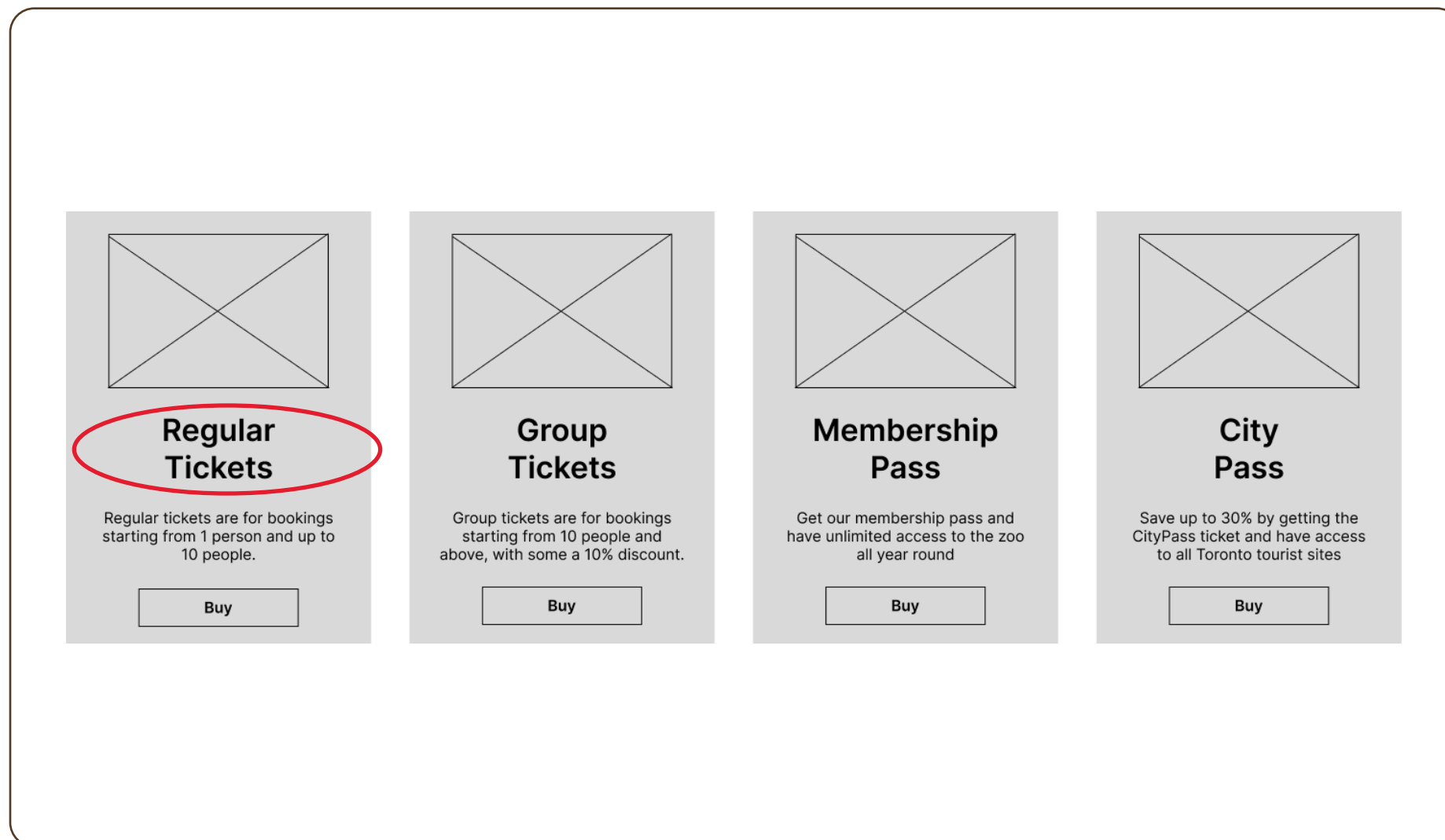
#2

Comparing prices for various tickets' categories:

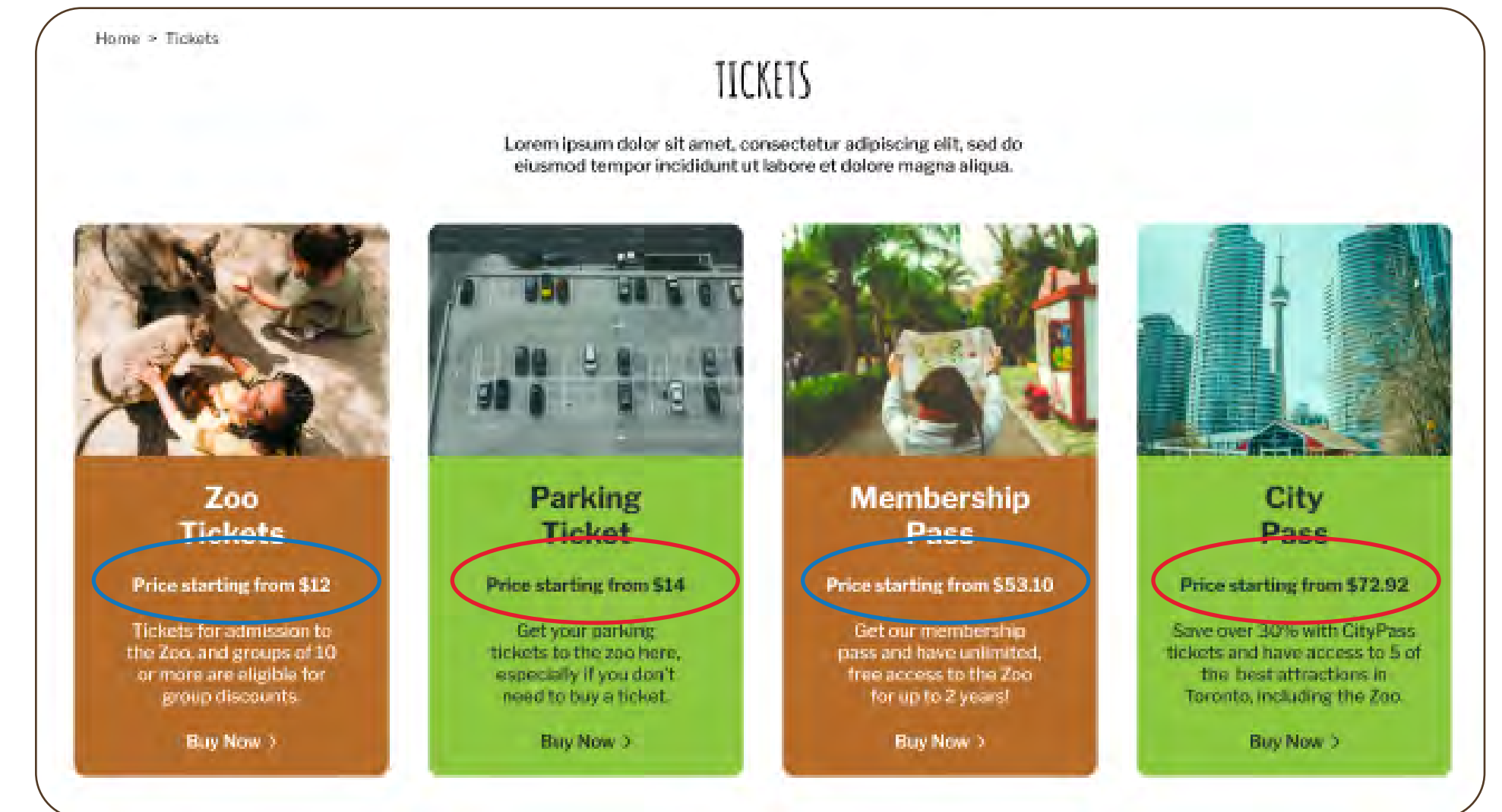
Participants wanted to see prices for different categories as early as possible (on the Home page or Tickets page) to be able to compare them

Revisions:

Adding an option to see the prices' range for all the categories on the Tickets page before clicking on them



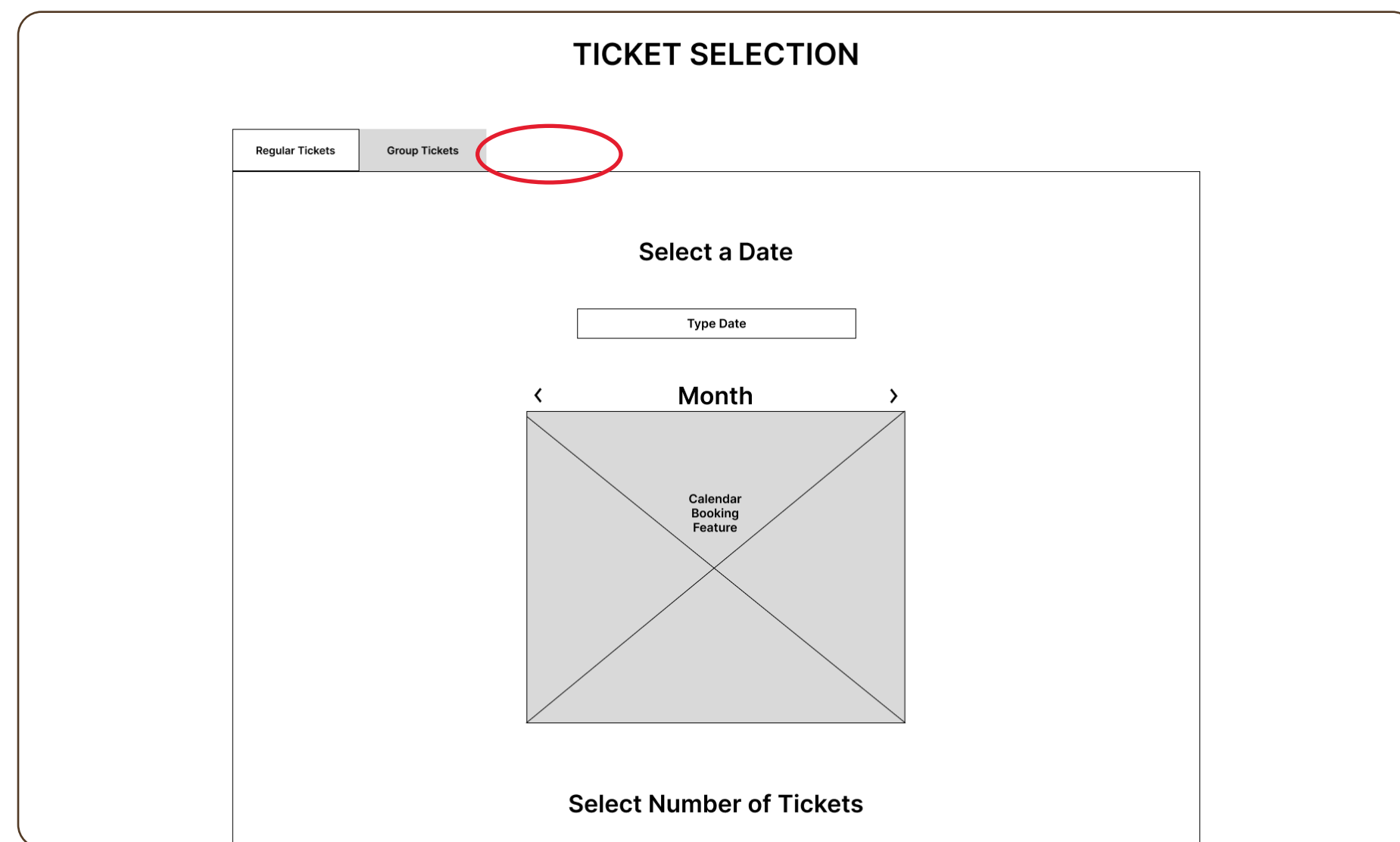
Before testing



After testing

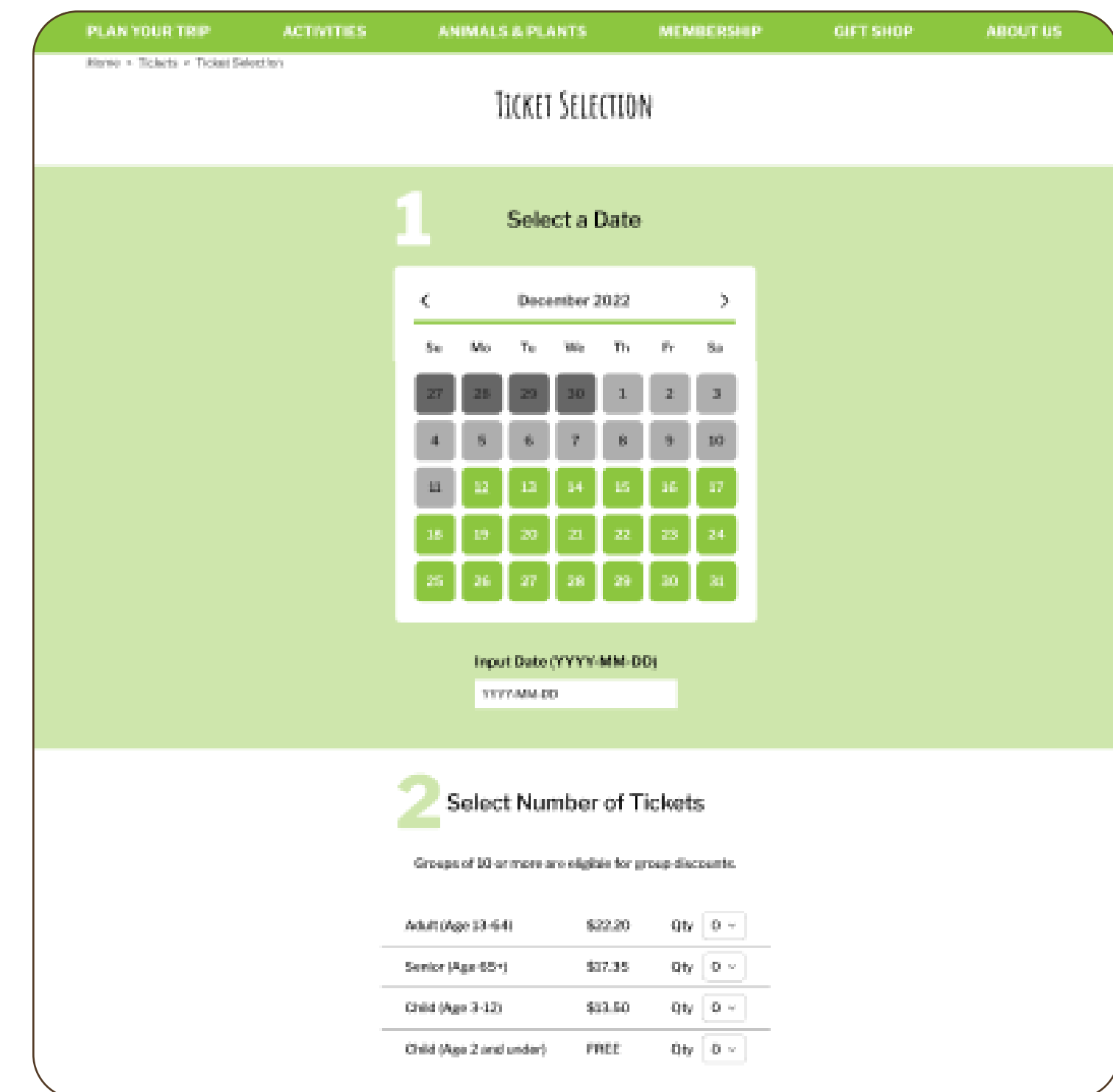
#3

Events tab on the Ticket selection page: Participants were not sure what the Event tickets are about, they would probably go there to get a discount for the Birthday in the Zoo or similar group/family event



Before testing

Revisions: We removed this tab from the Ticket selection page. Events were supposed to be under Activities in our IA Diagram



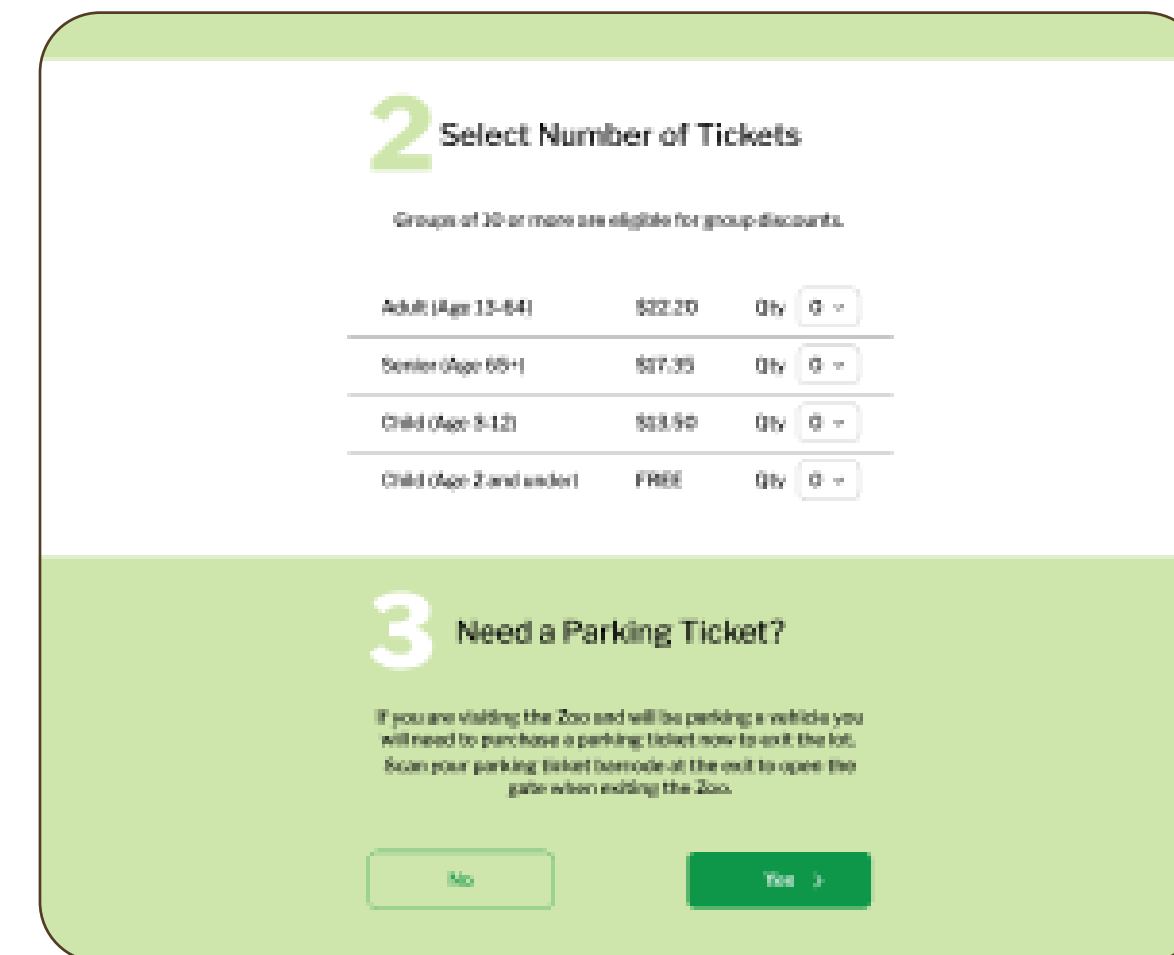
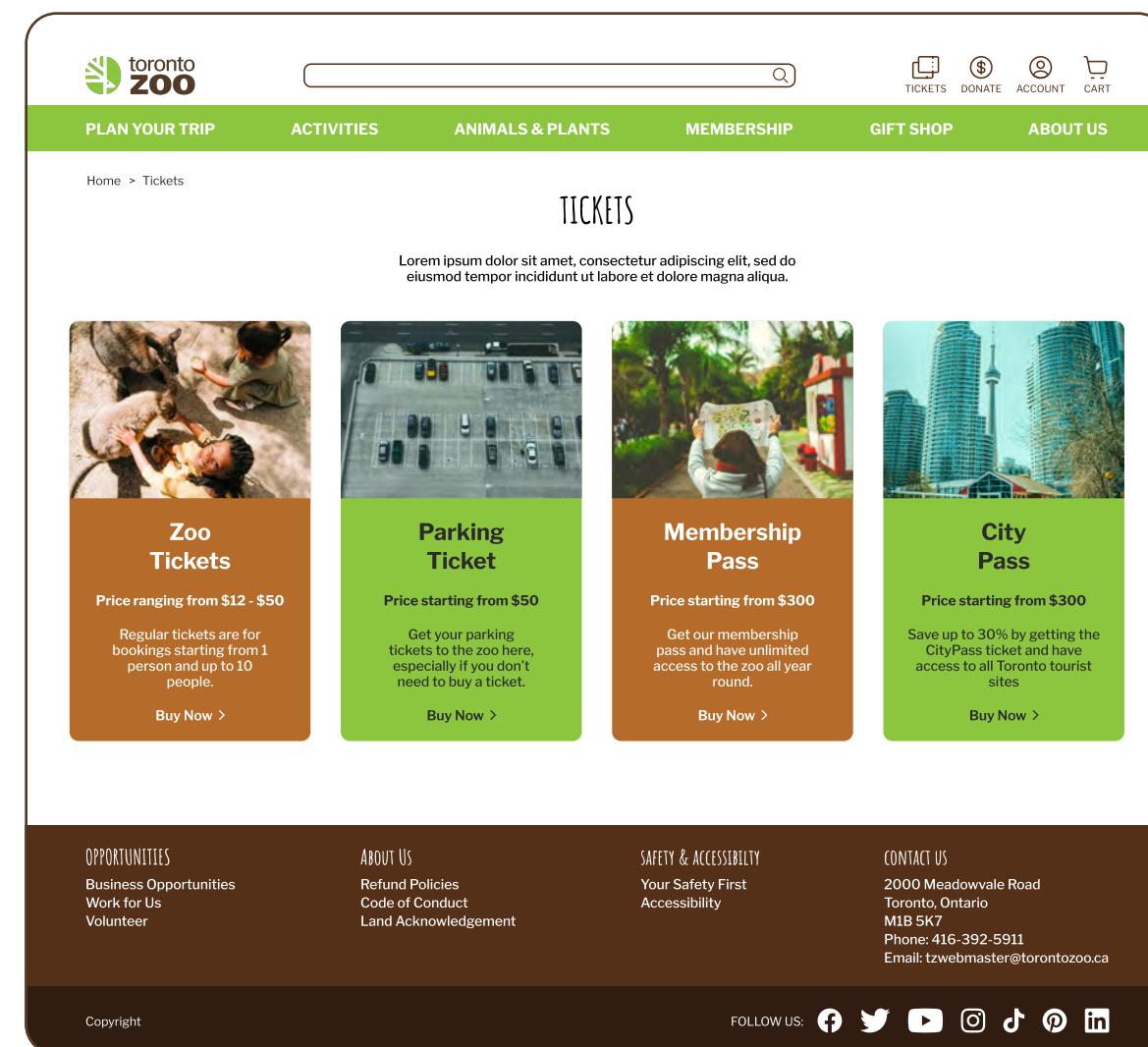
After testing

#4

Parking tickets: Participants expected to have the option to buy parking tickets or not

Revisions:

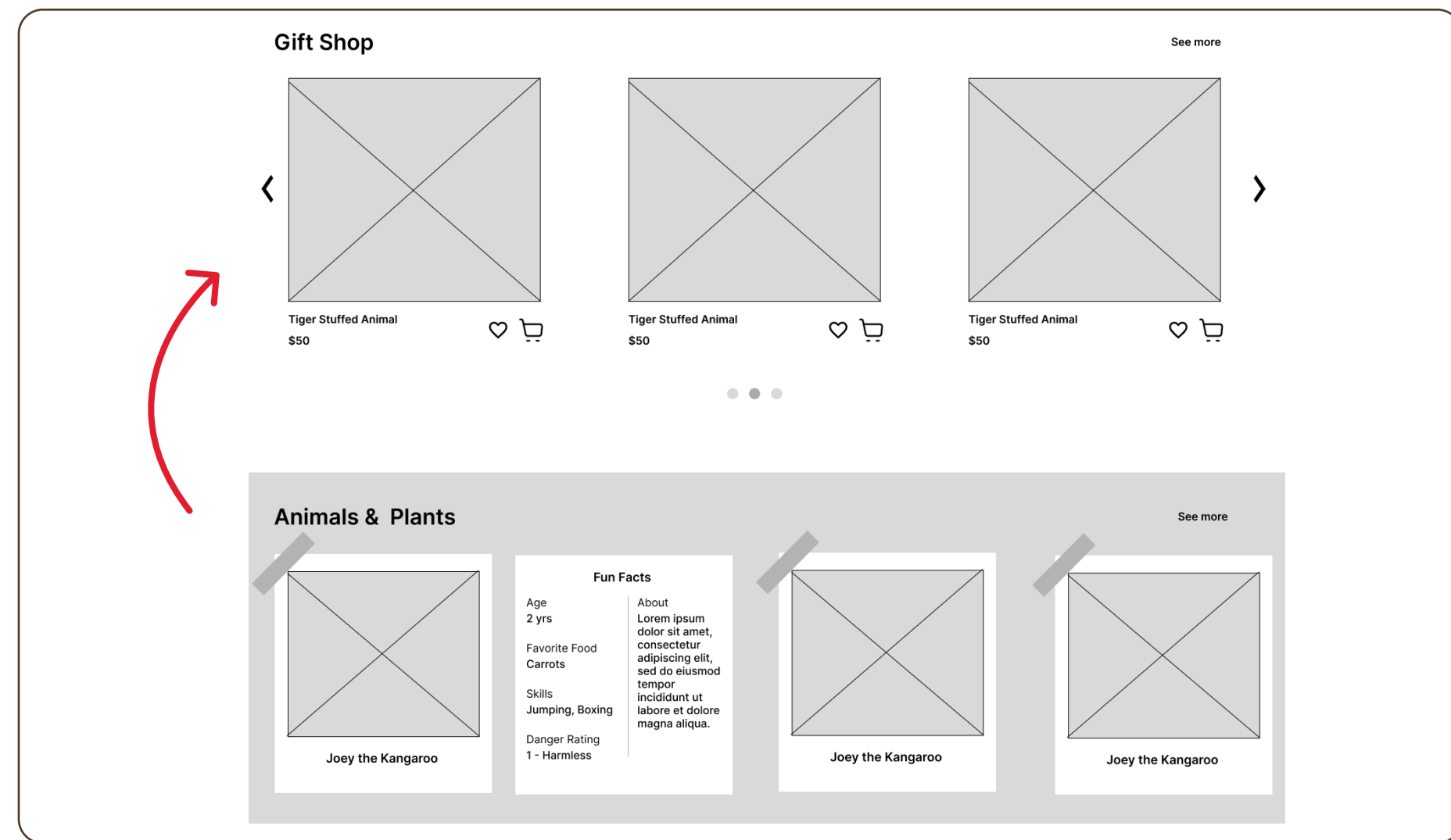
- Replace Group tickets with Parking tickets in the design
- On the Ticket selection page ask users if they want to add parking tickets or not
- If yes, they would see drop down menu with Parking tickets



After testing

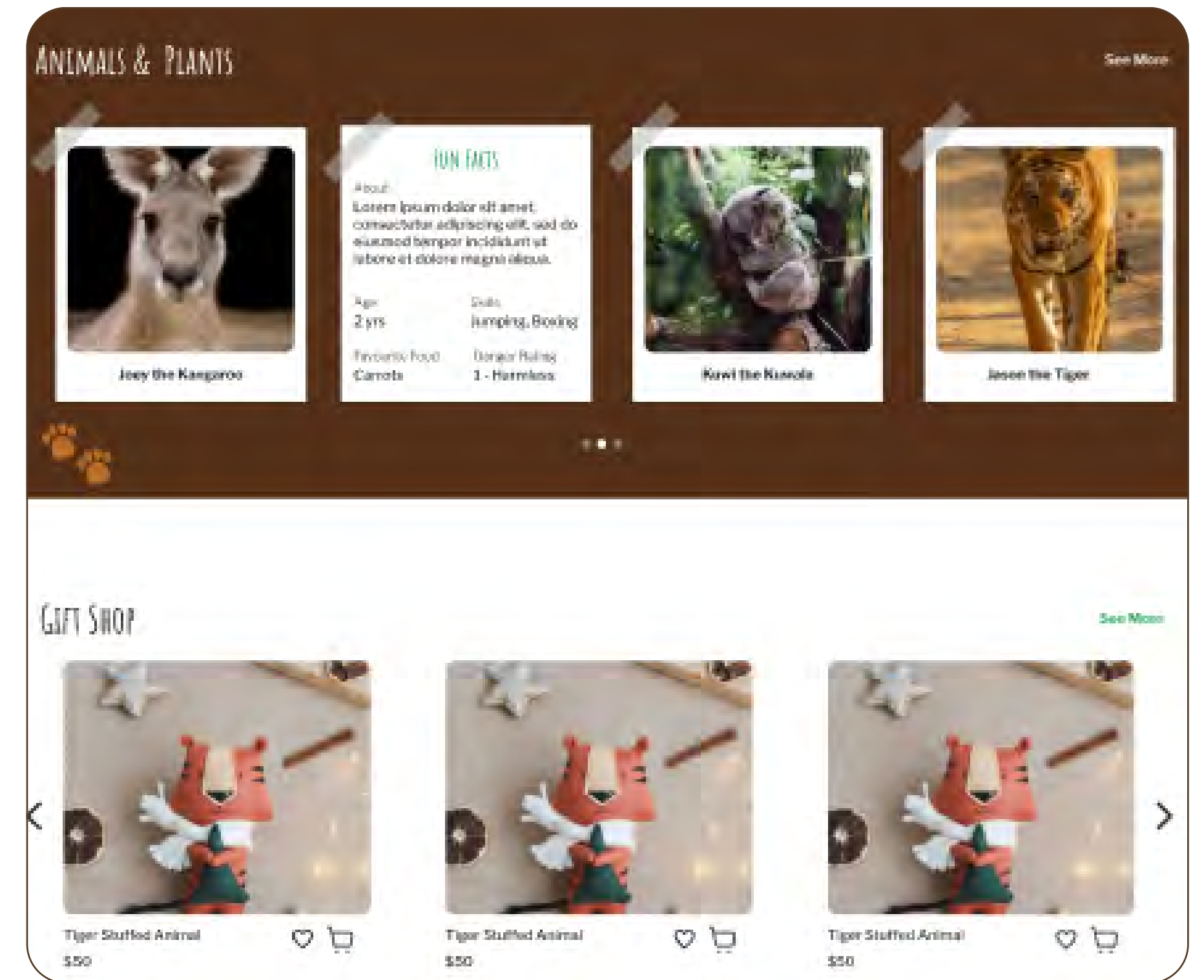
#5

The order of the information provided to the users: On the home page, Participants wanted to see Animals and Plants before the Gift shop.



Before testing

Revisions: On the home page, provide The Animals and Plants before the Gift shop



After testing

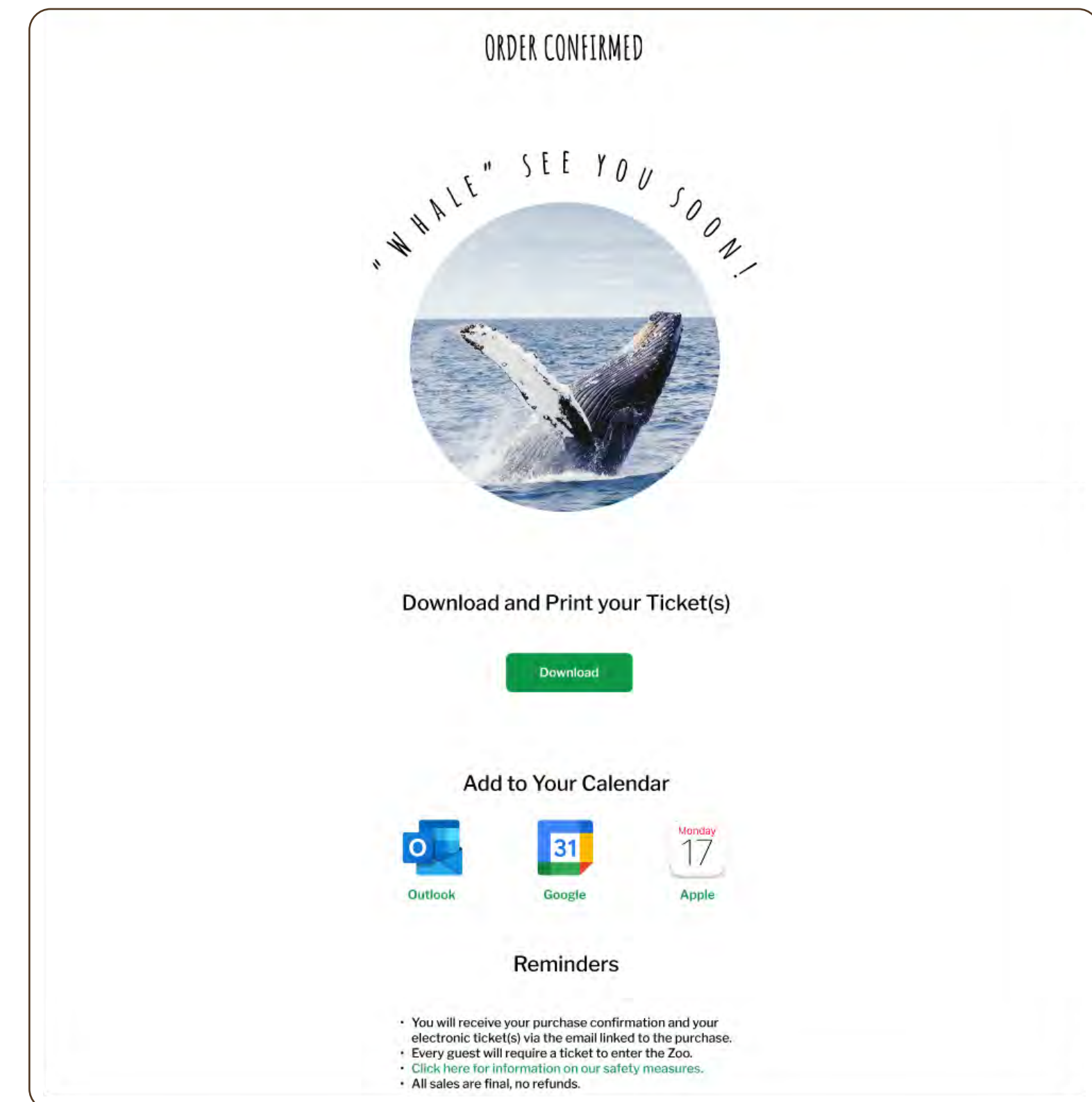
#6

Ticket confirmation: Participants needed to get ticket confirmation at the end of the purchase flow (email, link, ticket number, the option to put it in the calendar, etc.)

Revisions: Ticket confirmation added



Before testing

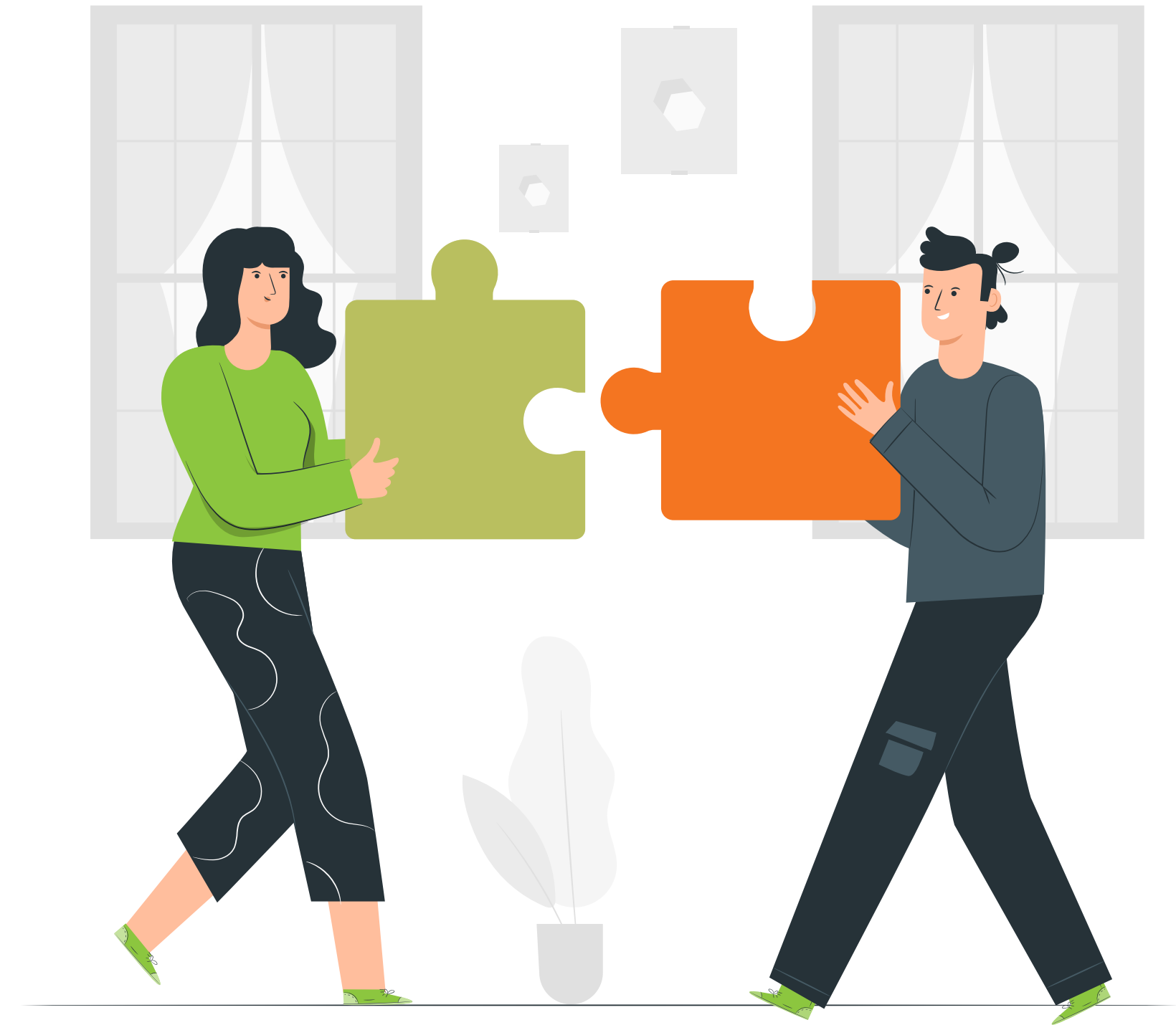


After testing

Evaluation & Refinement

Usability Testing

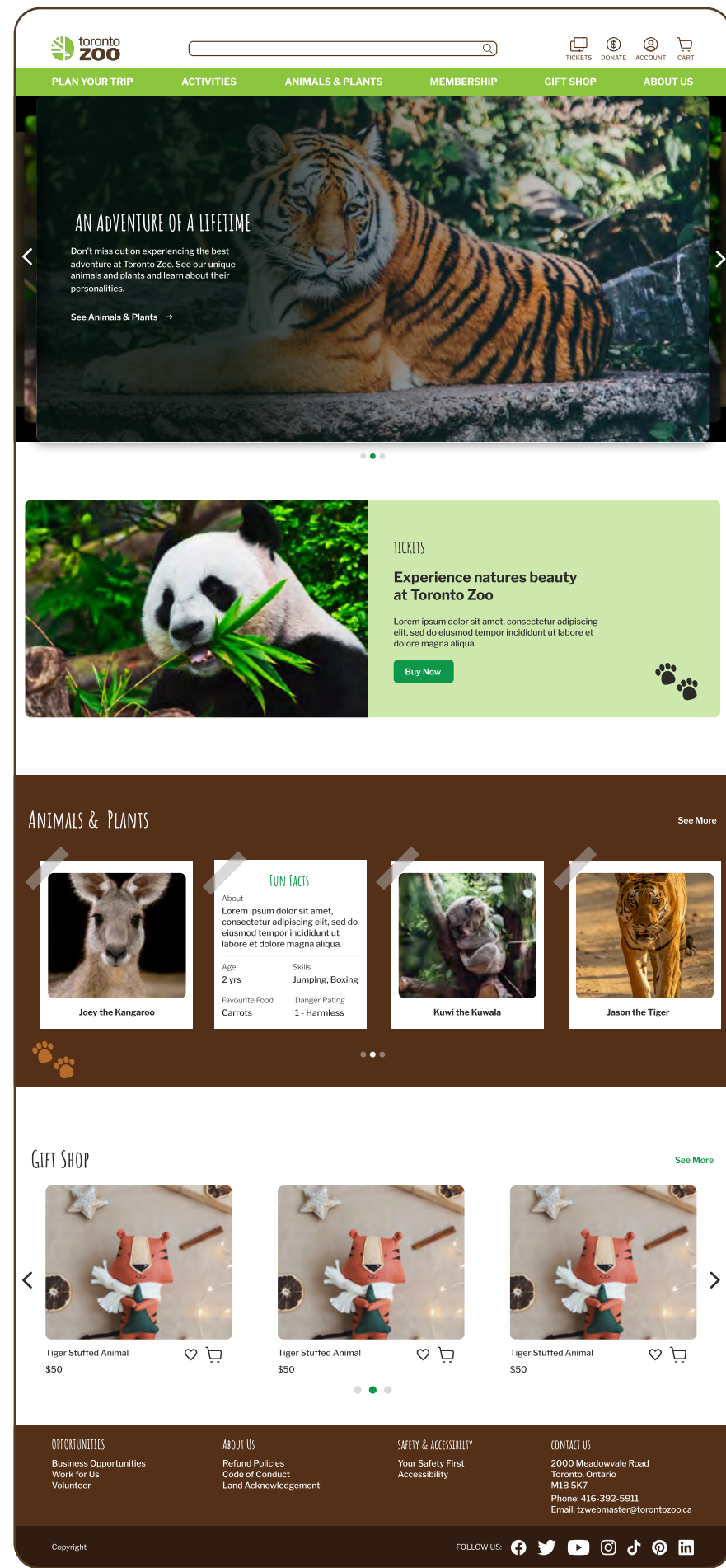
- All participants were able to complete the tasks they were given and overall, their experiences was positive and as expected
- We discovered that most of the issues we anticipated were confirmed by the users in the usability testing sessions
- Usability testing allowed us to uncover some issues that were not previously expected
- We integrated all the findings into High-Fidelity Prototype



Results

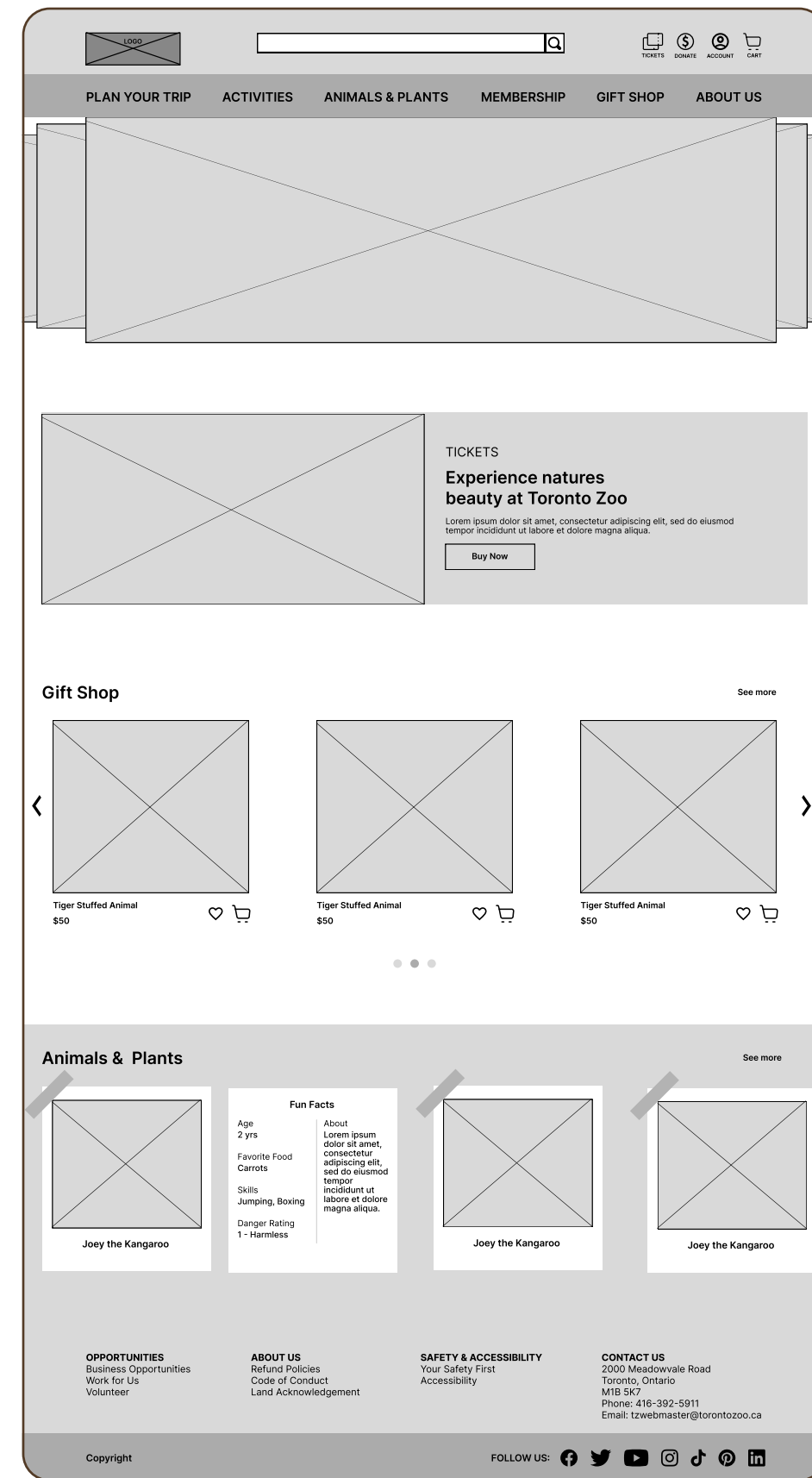
High vs Low Fidelity Wireframes

HOMEPAGE

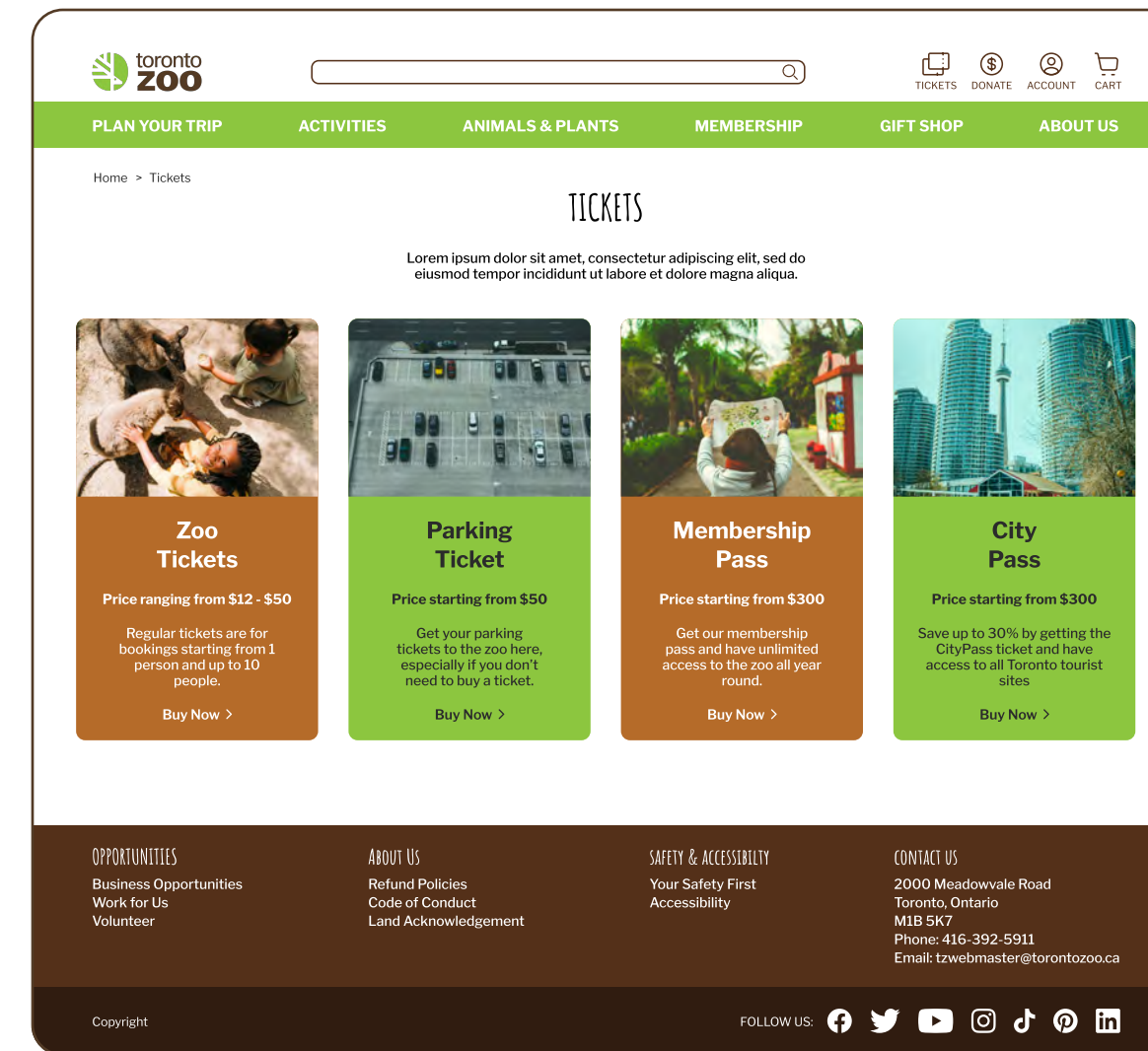


High Fidelity

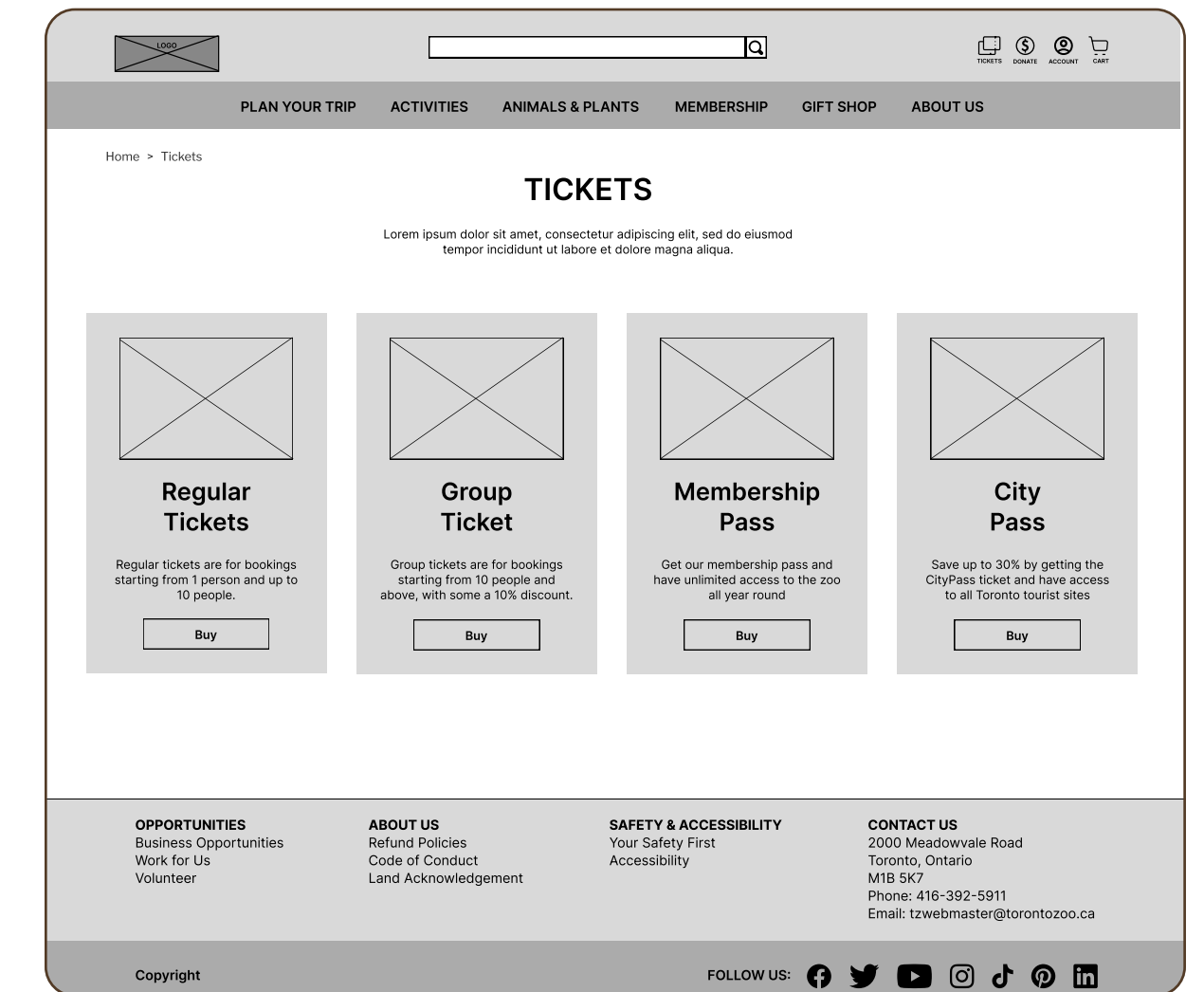
TICKET PAGE



Low Fidelity



High Fidelity

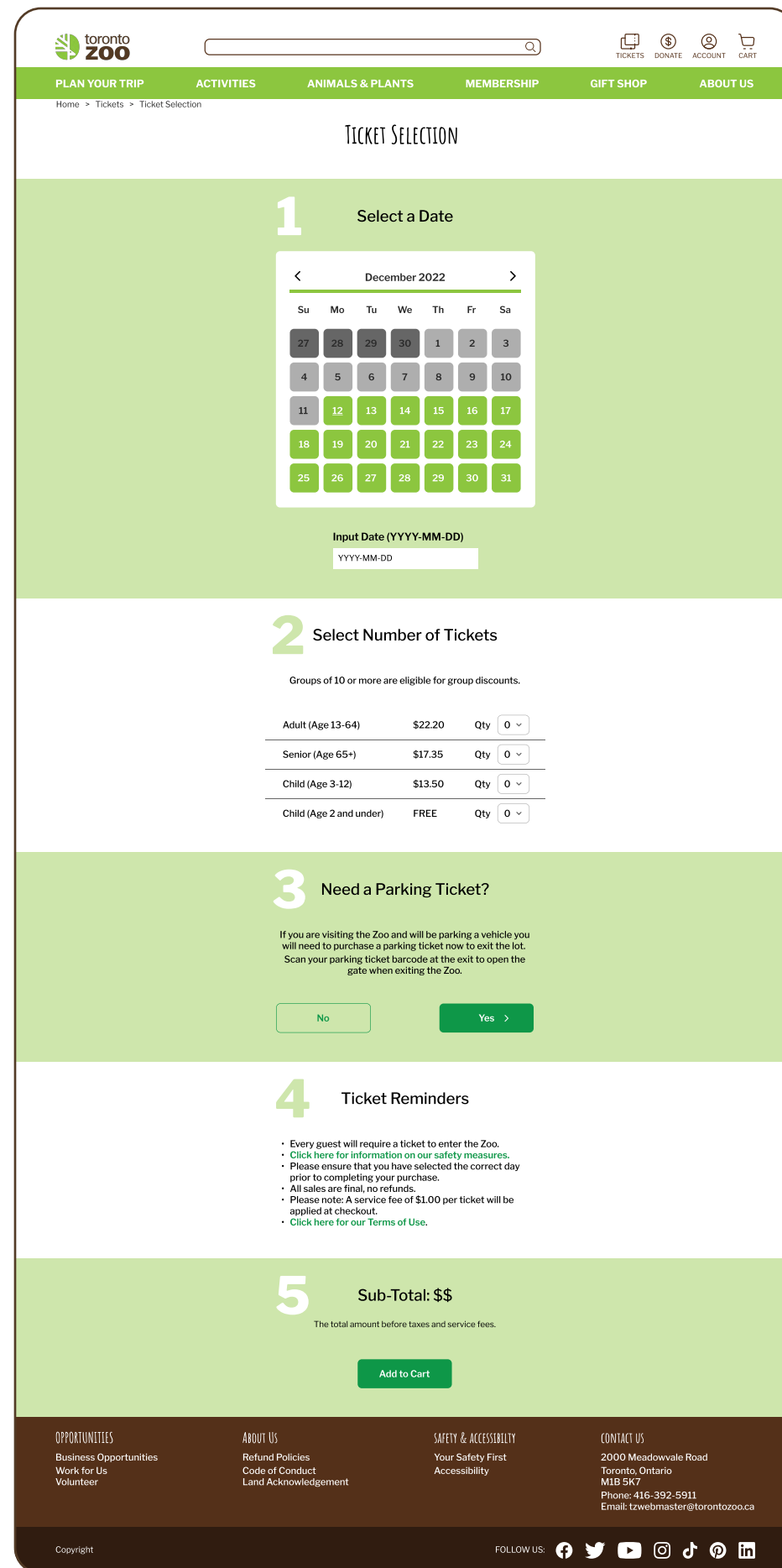


Low Fidelity

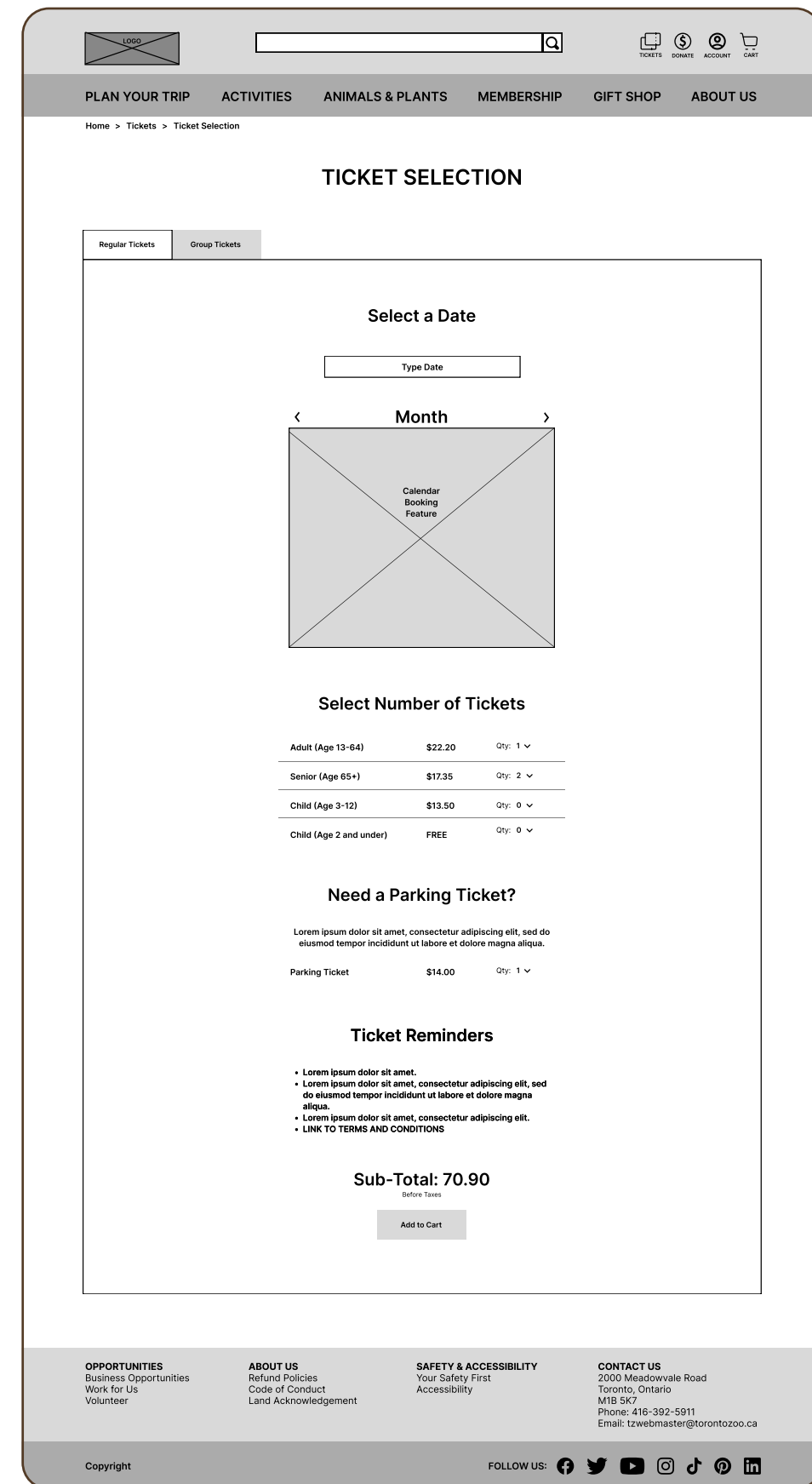
Results

High vs Low Fidelity Wireframes

TICKET BOOKING PAGE

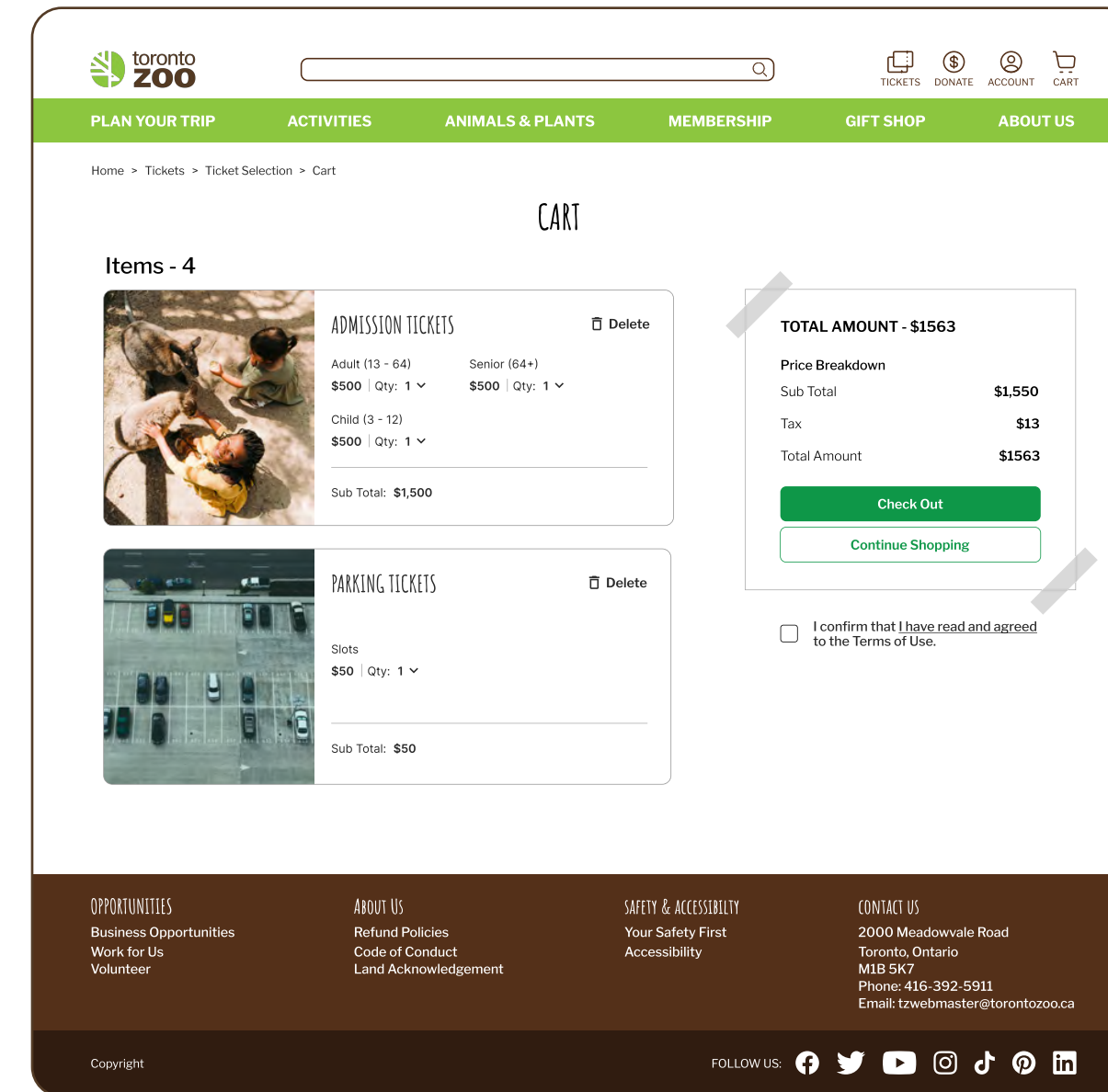


High Fidelity

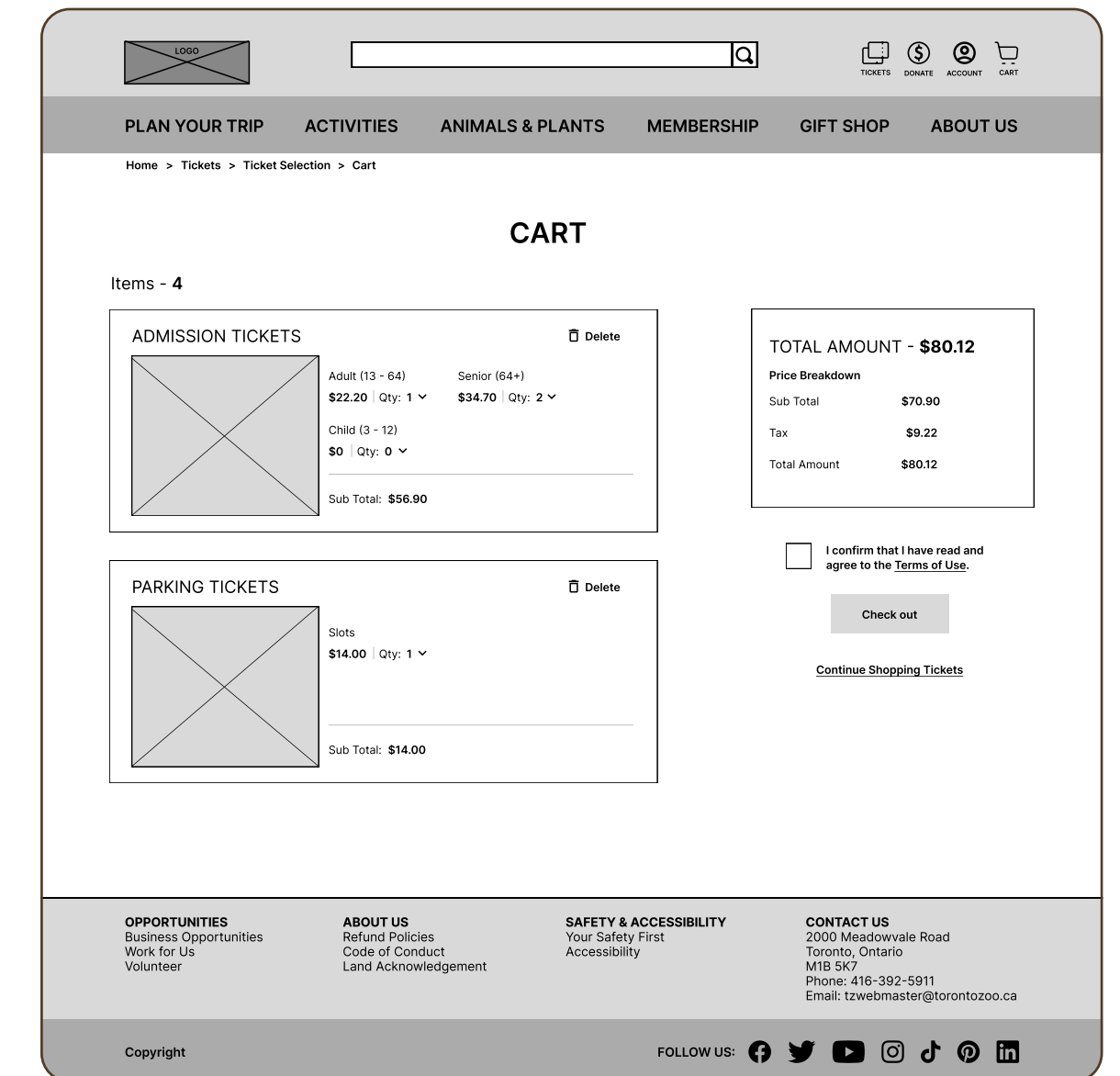


Low Fidelity

CART



High Fidelity

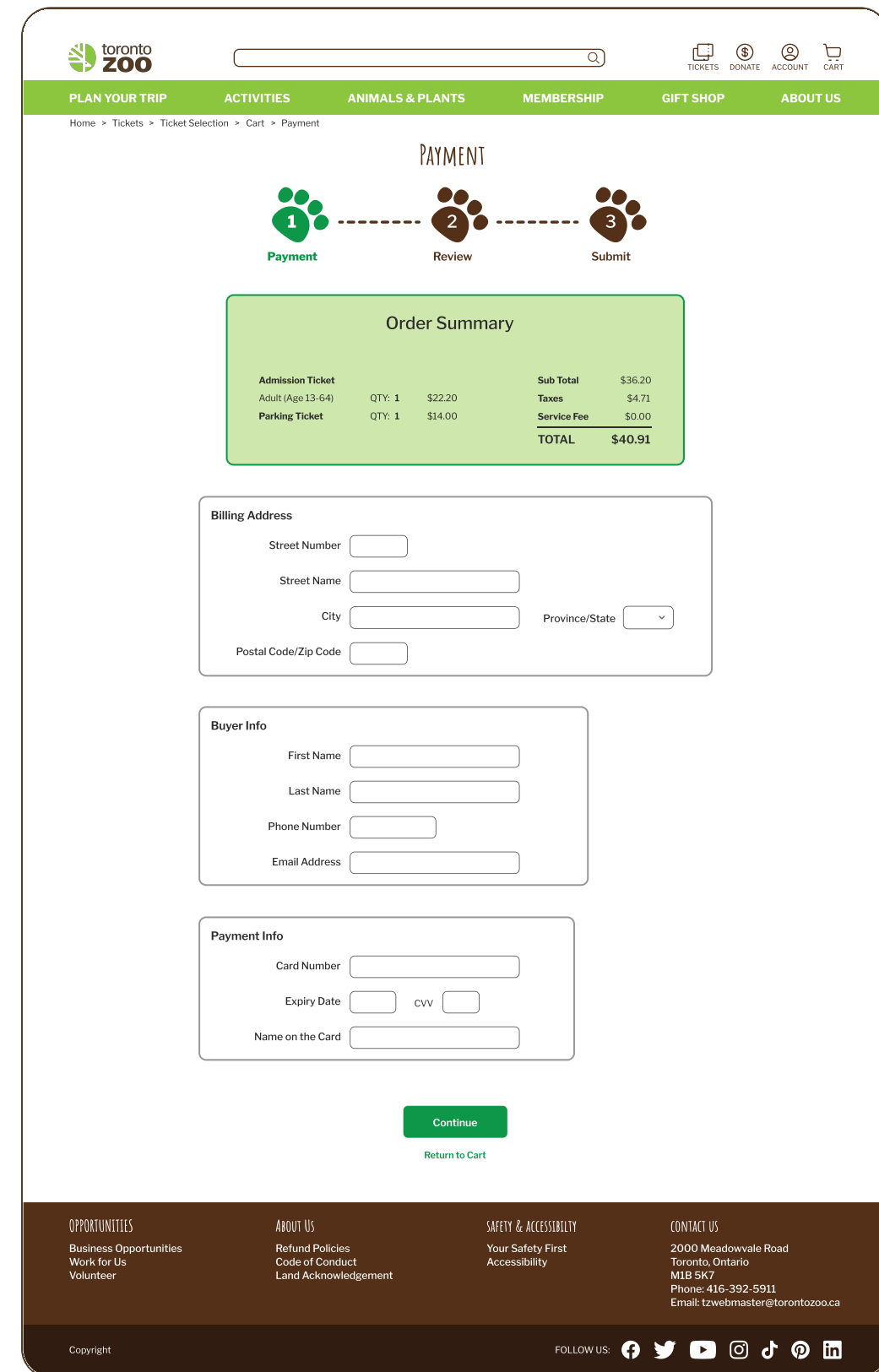


Low Fidelity

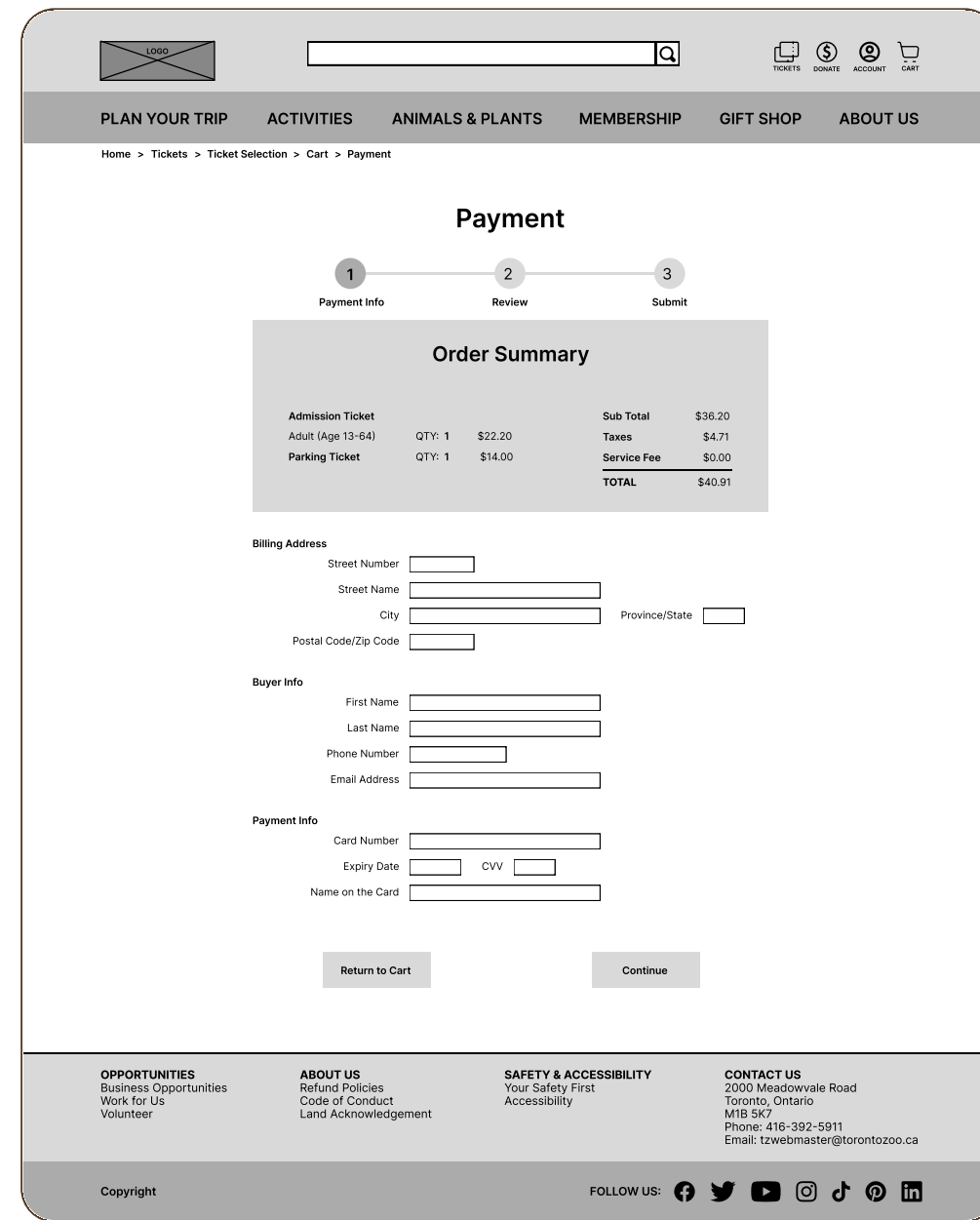
Results

High vs Low Fidelity Wireframes

PAYMENT PAGE



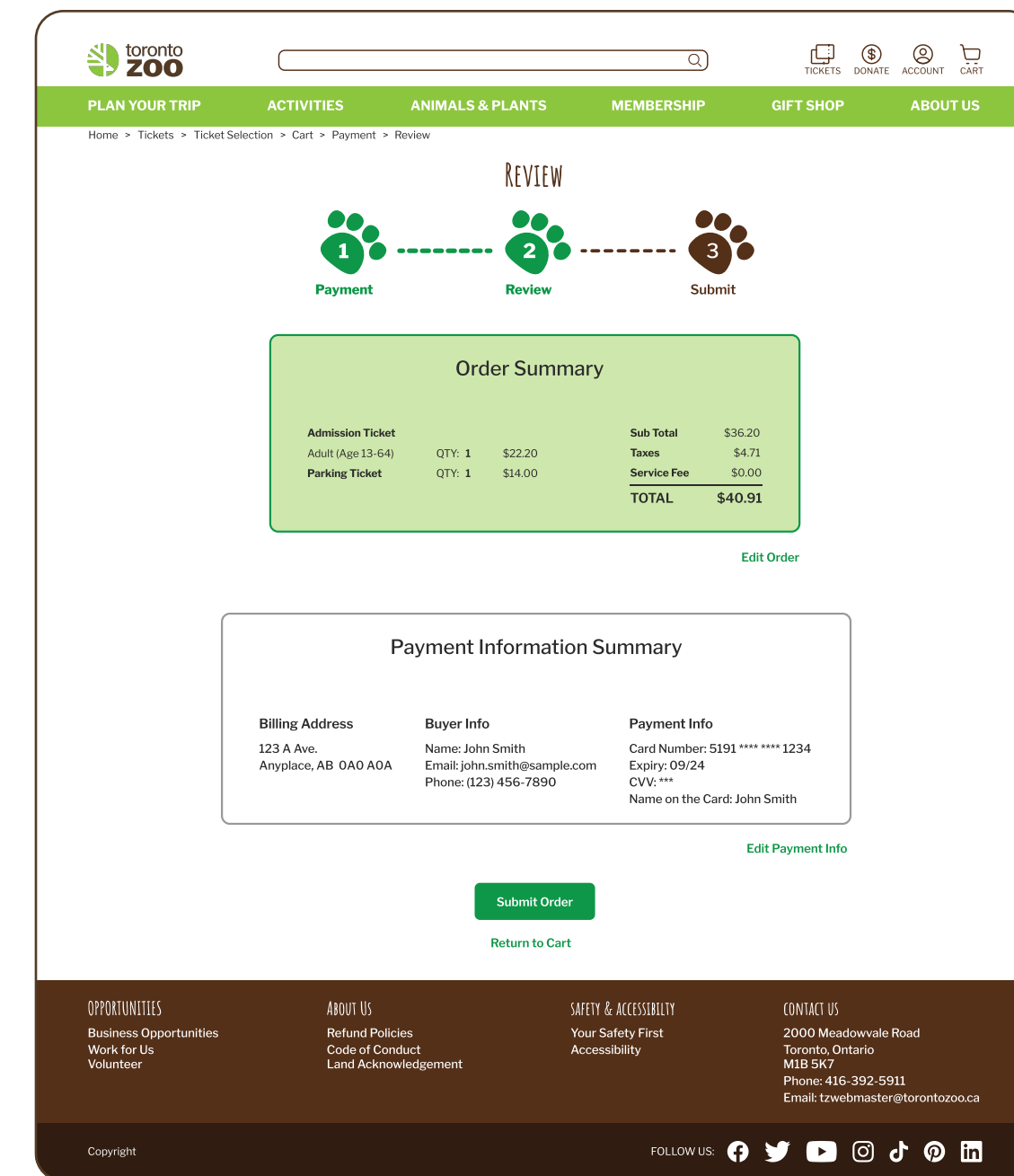
High Fidelity



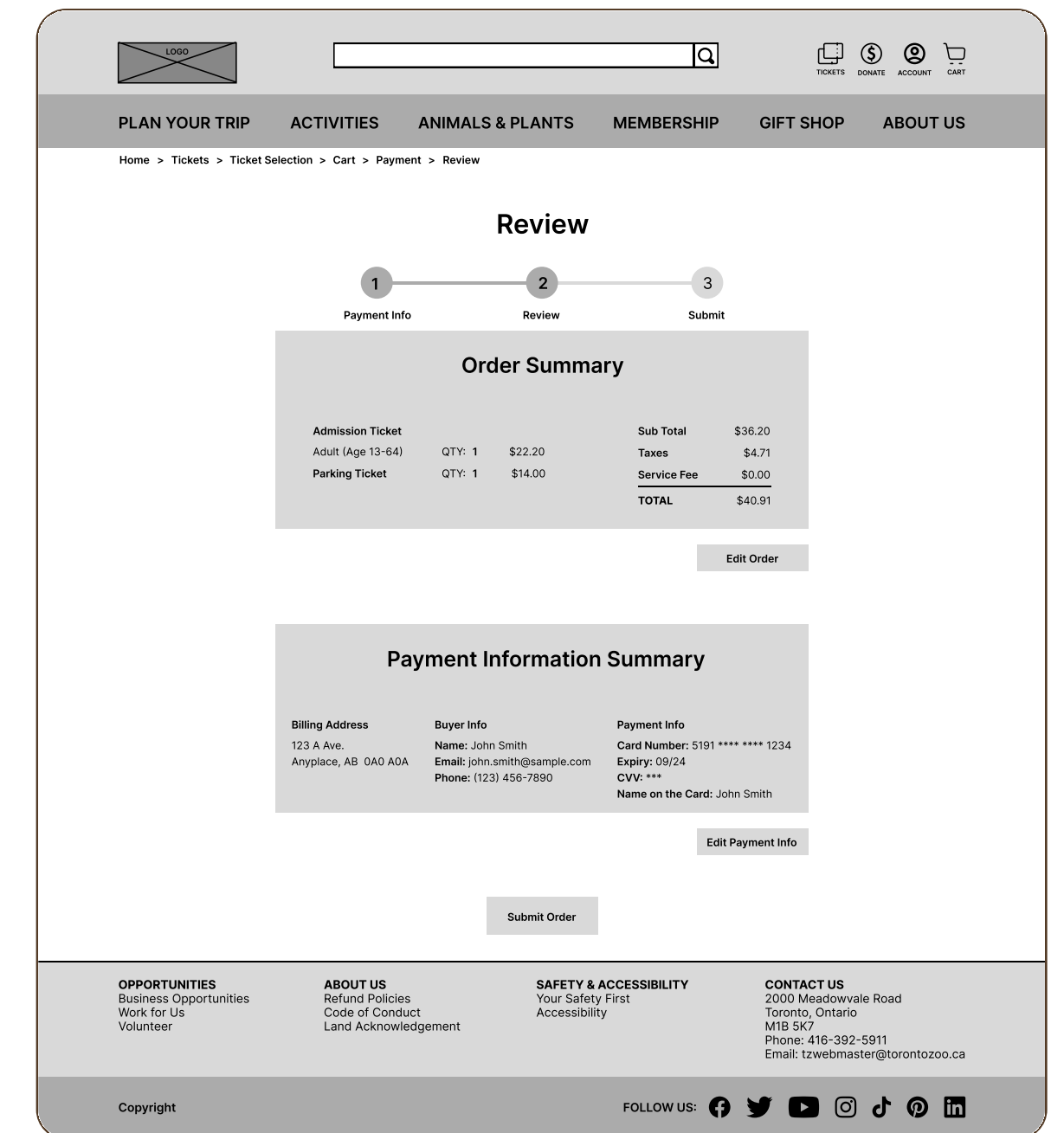
Low Fidelity



ORDER REVIEW



High Fidelity

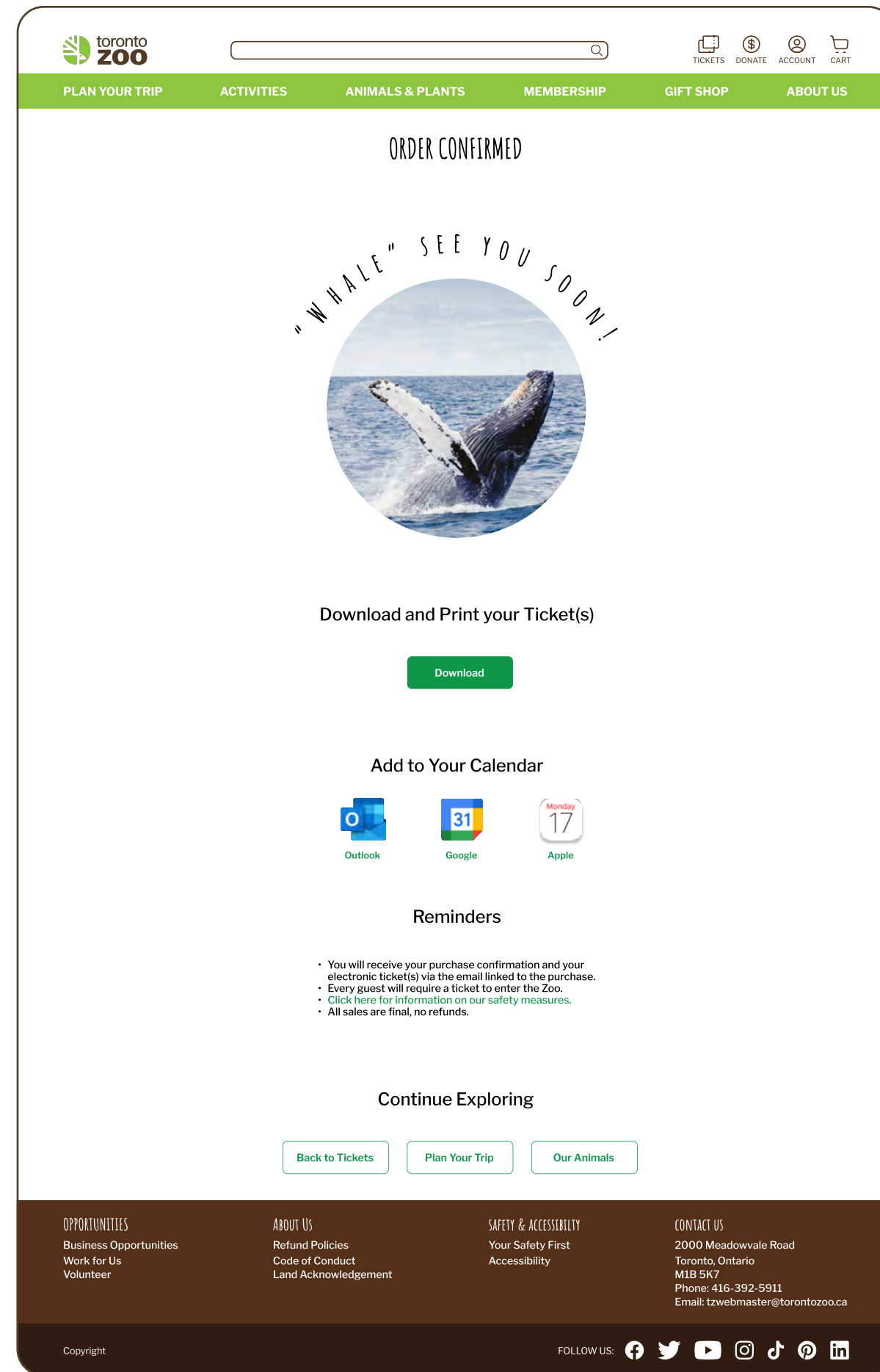


Low Fidelity

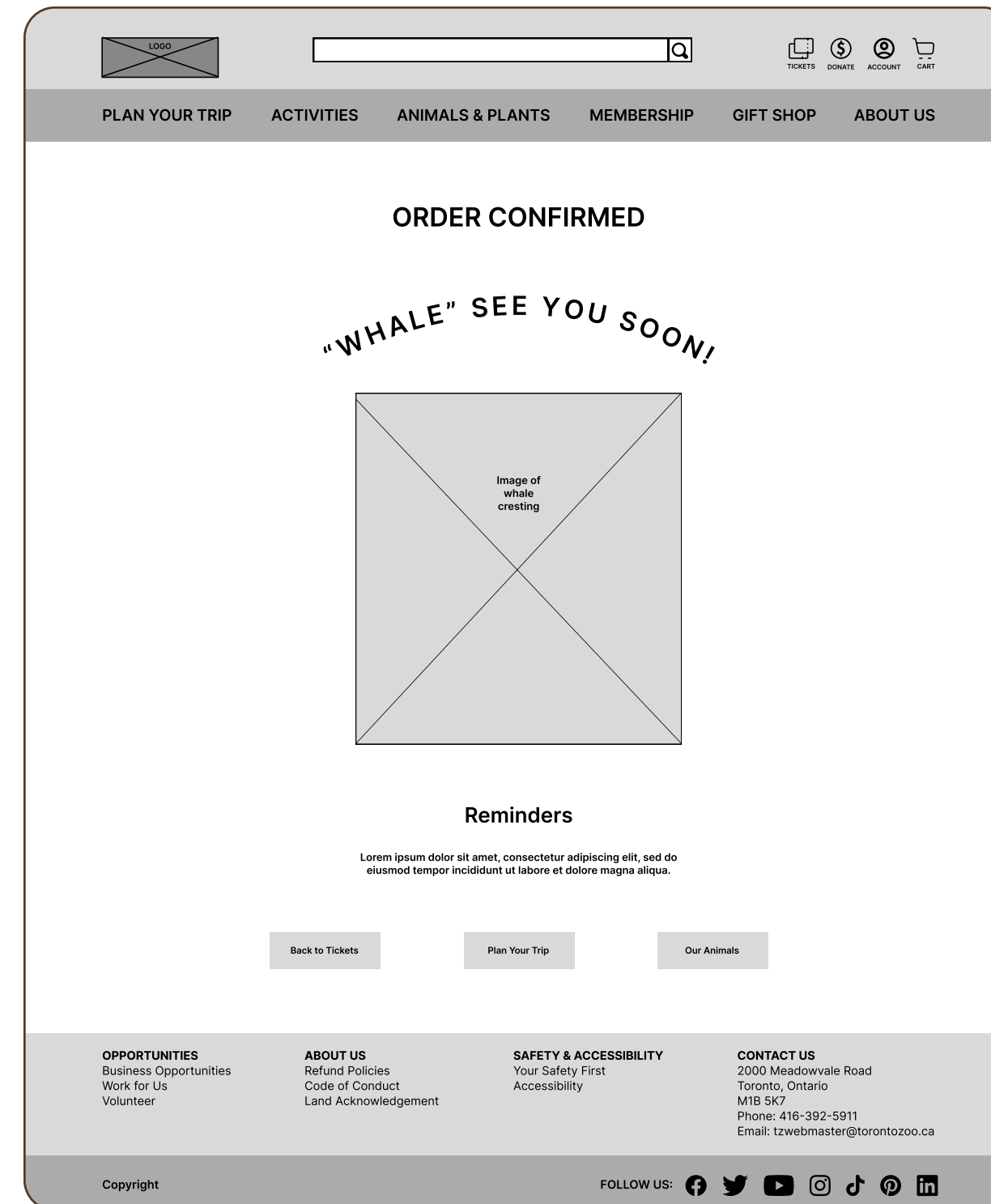
Results

High vs Low Fidelity Wireframes

TICKET CONFIRMATION



High Fidelity



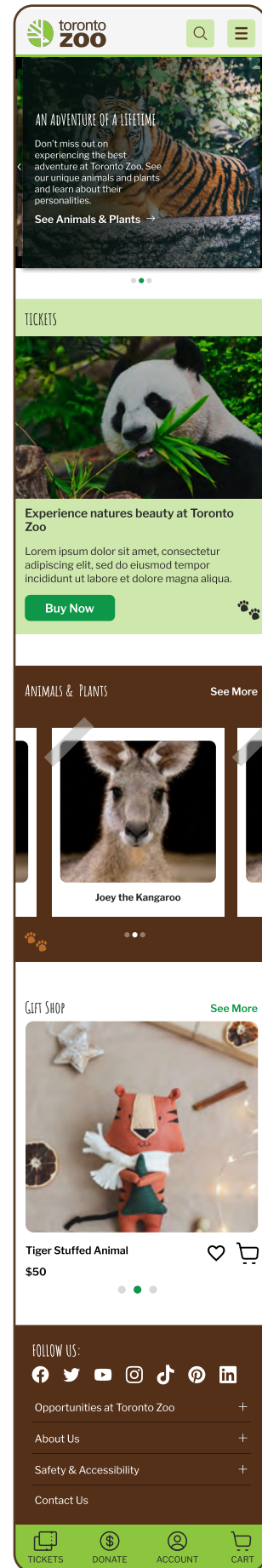
Low Fidelity



Results

High vs Low Fidelity Wireframes

HOMEPAGE

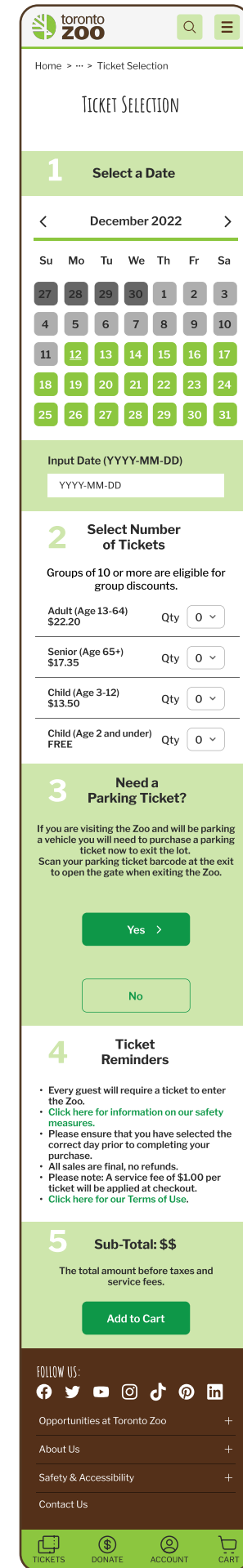


High Fidelity

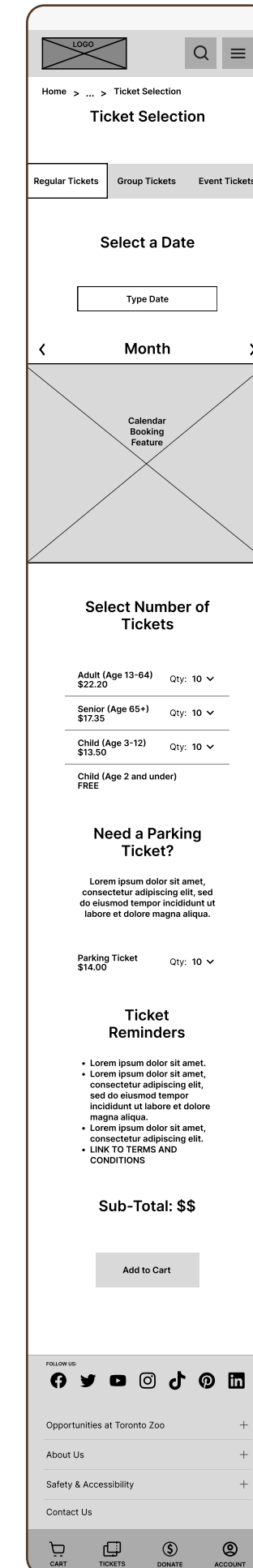


Low Fidelity

TICKET SELECTION

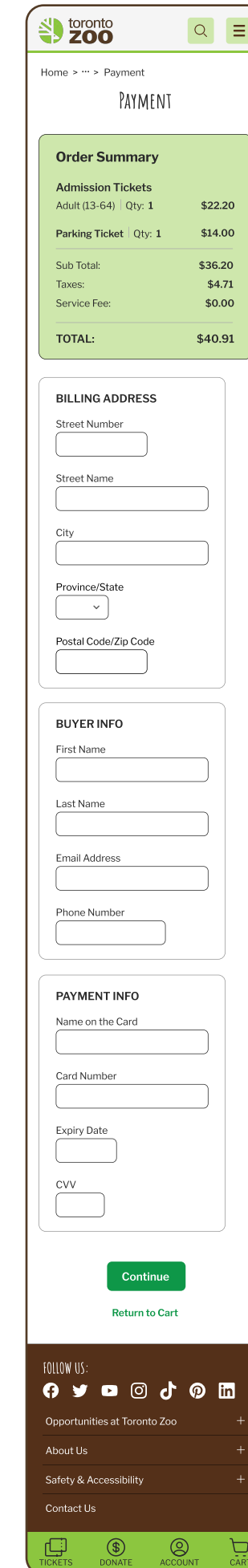


High Fidelity

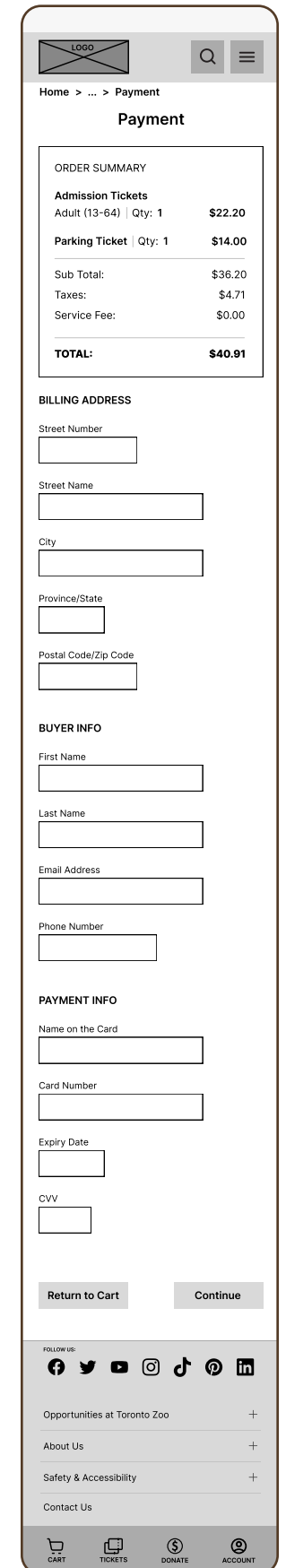


Low Fidelity

PAYMENT



High Fidelity



Low Fidelity

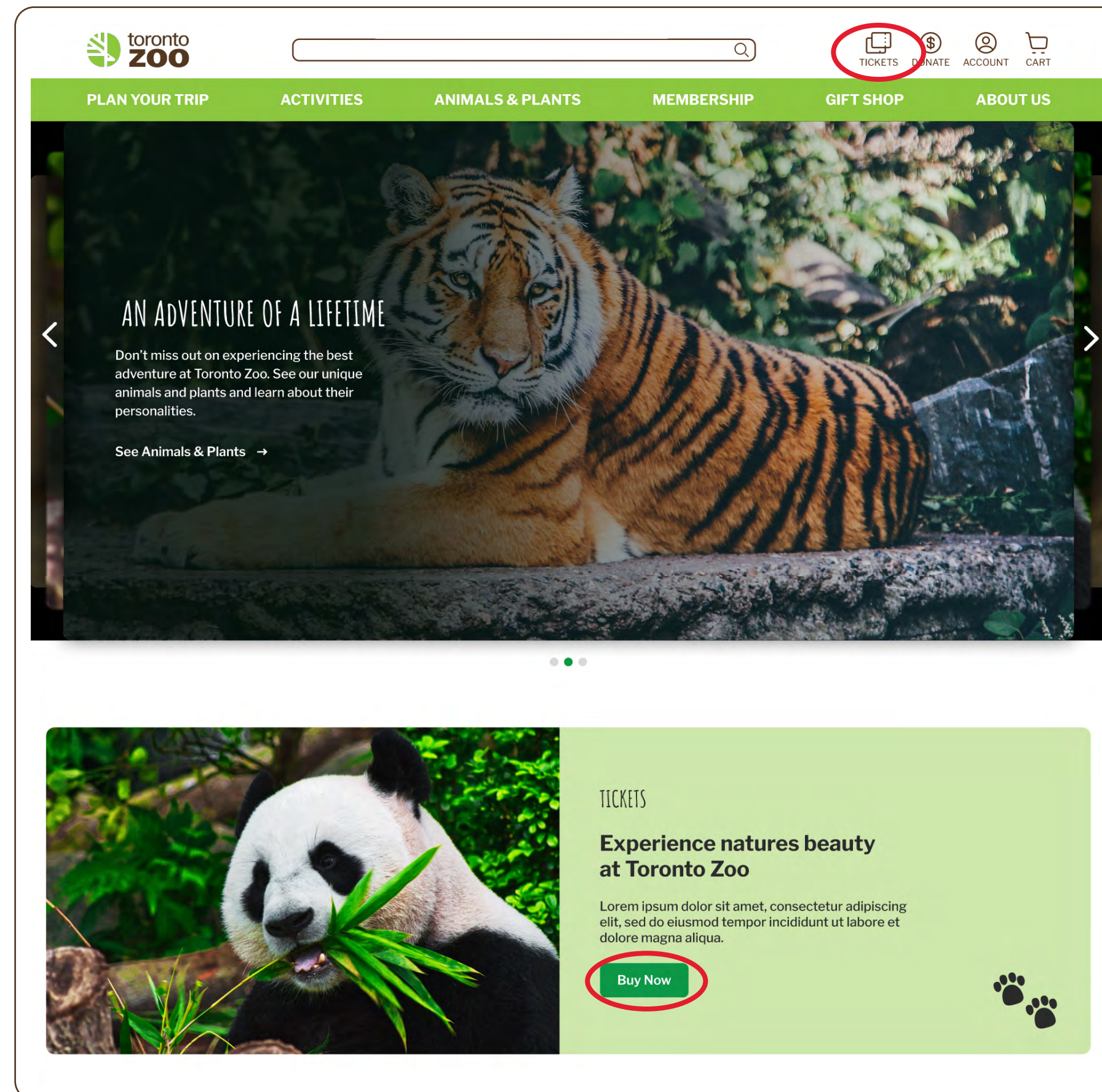
Results

Key Design Principles and Heuristics

#1

Affordance: How easy the user can figure out intuitively how to use the product

Example: Buy now or Ticket button



Results

Key Design Principles and Heuristics


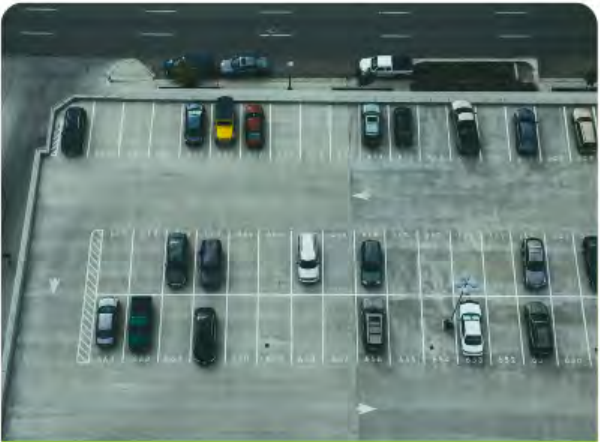


#2

Discoverability: The degree of ease with which the user can find all the elements and features of a new system when they first encounter it

Example: Ticket's categories and their detailed description

TICKETS

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

 <p>Zoo Tickets</p> <p>Price ranging from \$12 - \$50</p> <p>Regular tickets are for bookings starting from 1 person and up to 10 people.</p> <p>Buy Now ></p>	 <p>Parking Ticket</p> <p>Price starting from \$50</p> <p>Get your parking tickets to the zoo here, especially if you don't need to buy a ticket.</p> <p>Buy Now ></p>	 <p>Membership Pass</p> <p>Price starting from \$300</p> <p>Get our membership pass and have unlimited access to the zoo all year round.</p> <p>Buy Now ></p>	 <p>City Pass</p> <p>Price starting from \$300</p> <p>Save up to 30% by getting the CityPass ticket and have access to all Toronto tourist sites</p> <p>Buy Now ></p>
---	--	---	---

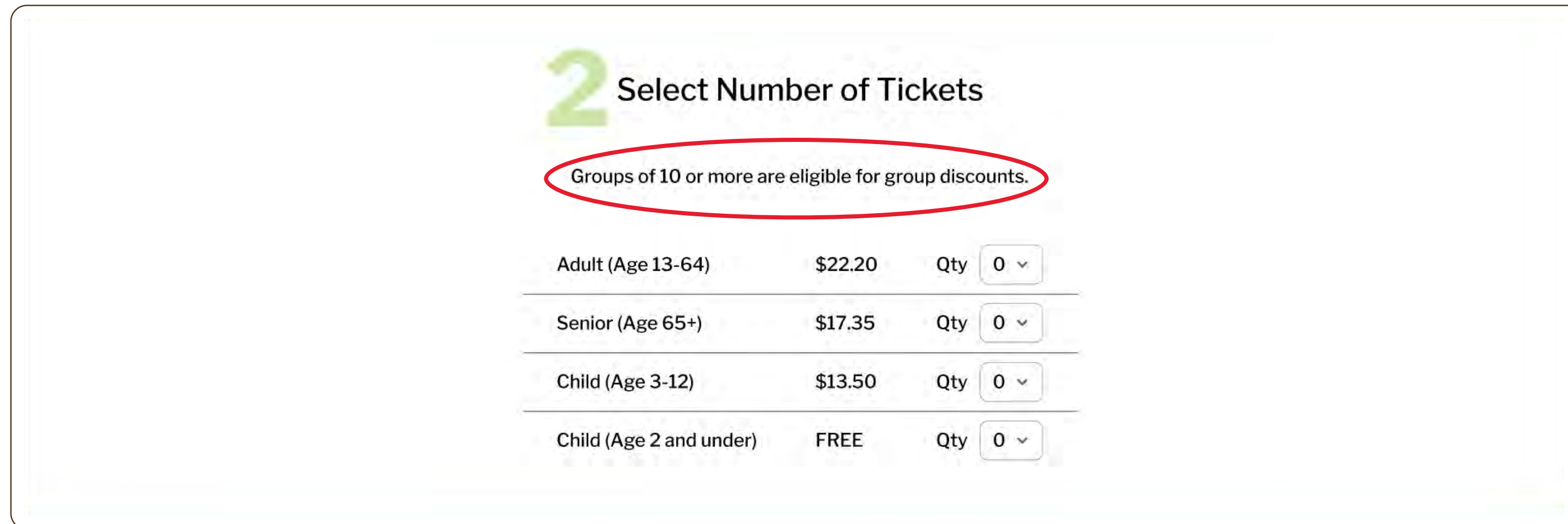
Results

Key Design Principles and Heuristics

#3

Constraints: Limiting the number of choices a user can choose to act upon

Example: If the number of tickets accesses 10, the user gets a “group” discount



2 Select Number of Tickets

Groups of 10 or more are eligible for group discounts.

Adult (Age 13-64)	\$22.20	Qty	0 ▾
Senior (Age 65+)	\$17.35	Qty	0 ▾
Child (Age 3-12)	\$13.50	Qty	0 ▾
Child (Age 2 and under)	FREE	Qty	0 ▾

Results

Key Design Principles and Heuristics

#4

Visibility of System Status: How well the state of the system is conveyed to its users

Example: Checkout “paw”gress bar



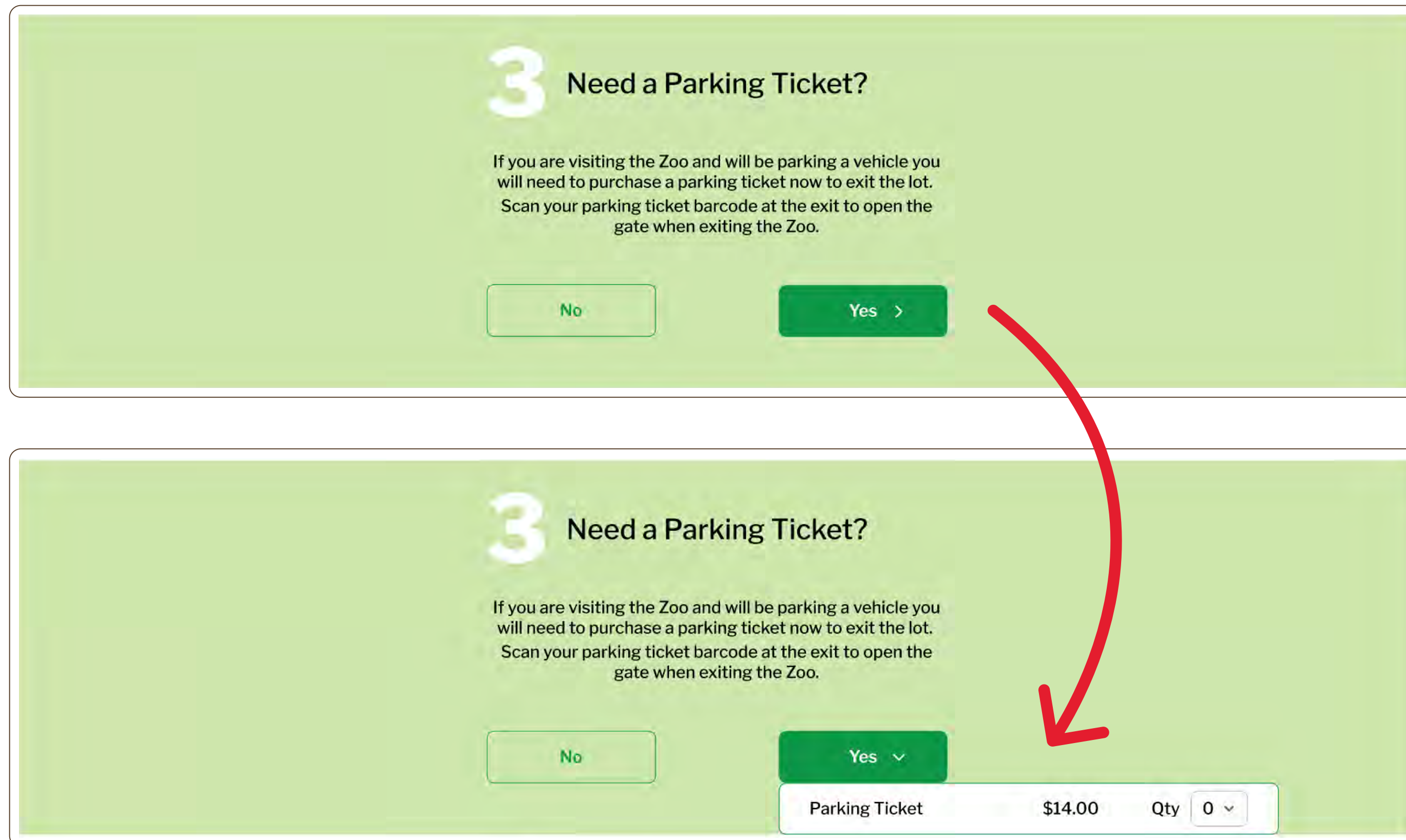
Results

Key Design Principles and Heuristics

#5

User Control and Freedom: Giving the users the control to do what they want or the option to undo something if it goes wrong

Example: Providing users with an option to add parking tickets or not



3 Need a Parking Ticket?

If you are visiting the Zoo and will be parking a vehicle you will need to purchase a parking ticket now to exit the lot. Scan your parking ticket barcode at the exit to open the gate when exiting the Zoo.

No Yes >

3 Need a Parking Ticket?

If you are visiting the Zoo and will be parking a vehicle you will need to purchase a parking ticket now to exit the lot. Scan your parking ticket barcode at the exit to open the gate when exiting the Zoo.

No Yes ▾

Parking Ticket \$14.00 Qty 0 ▾

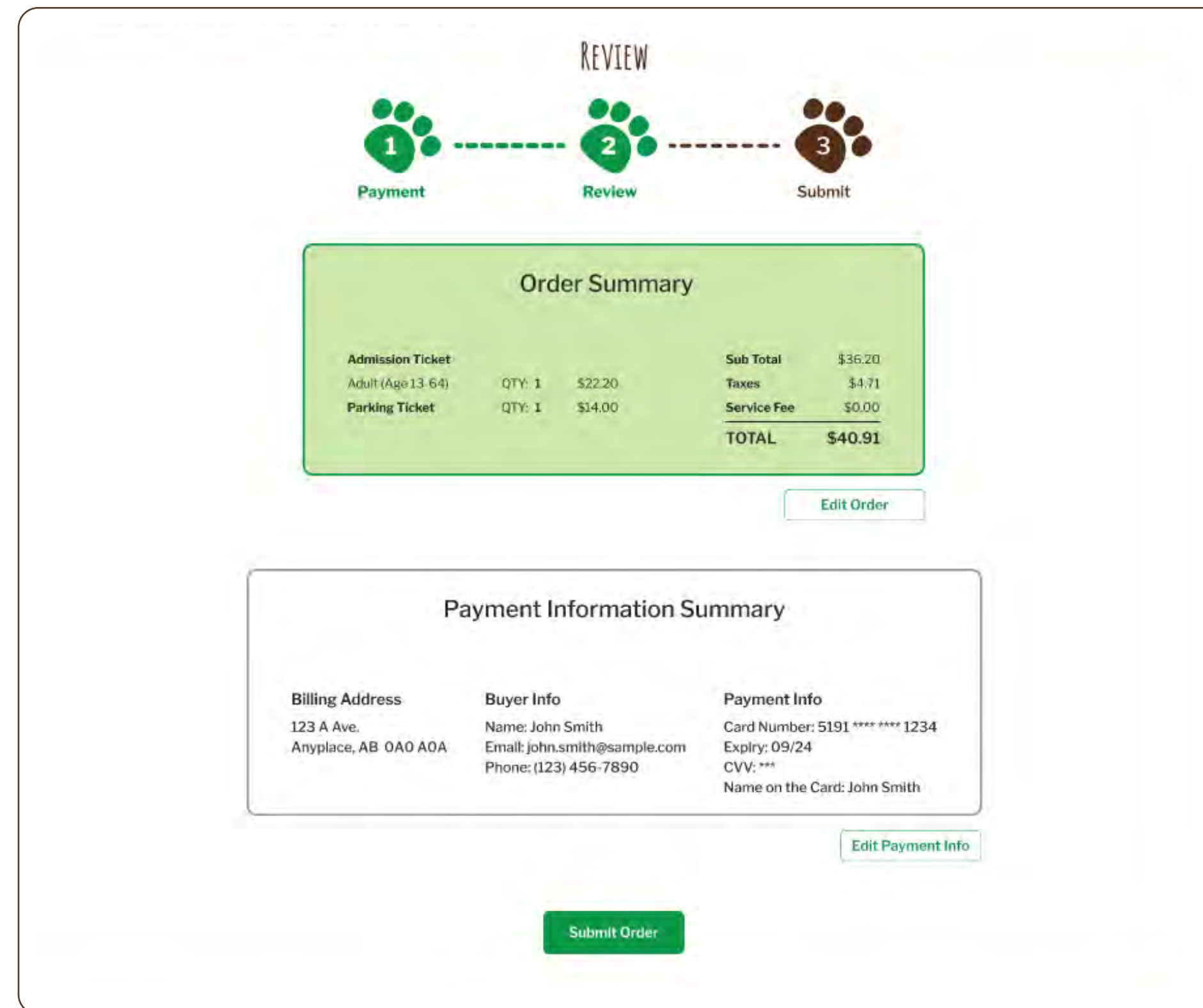
Results

Key Design Principles and Heuristics

#6

Error Prevention: Degree to which a system protects users against making errors

Example: Order review page



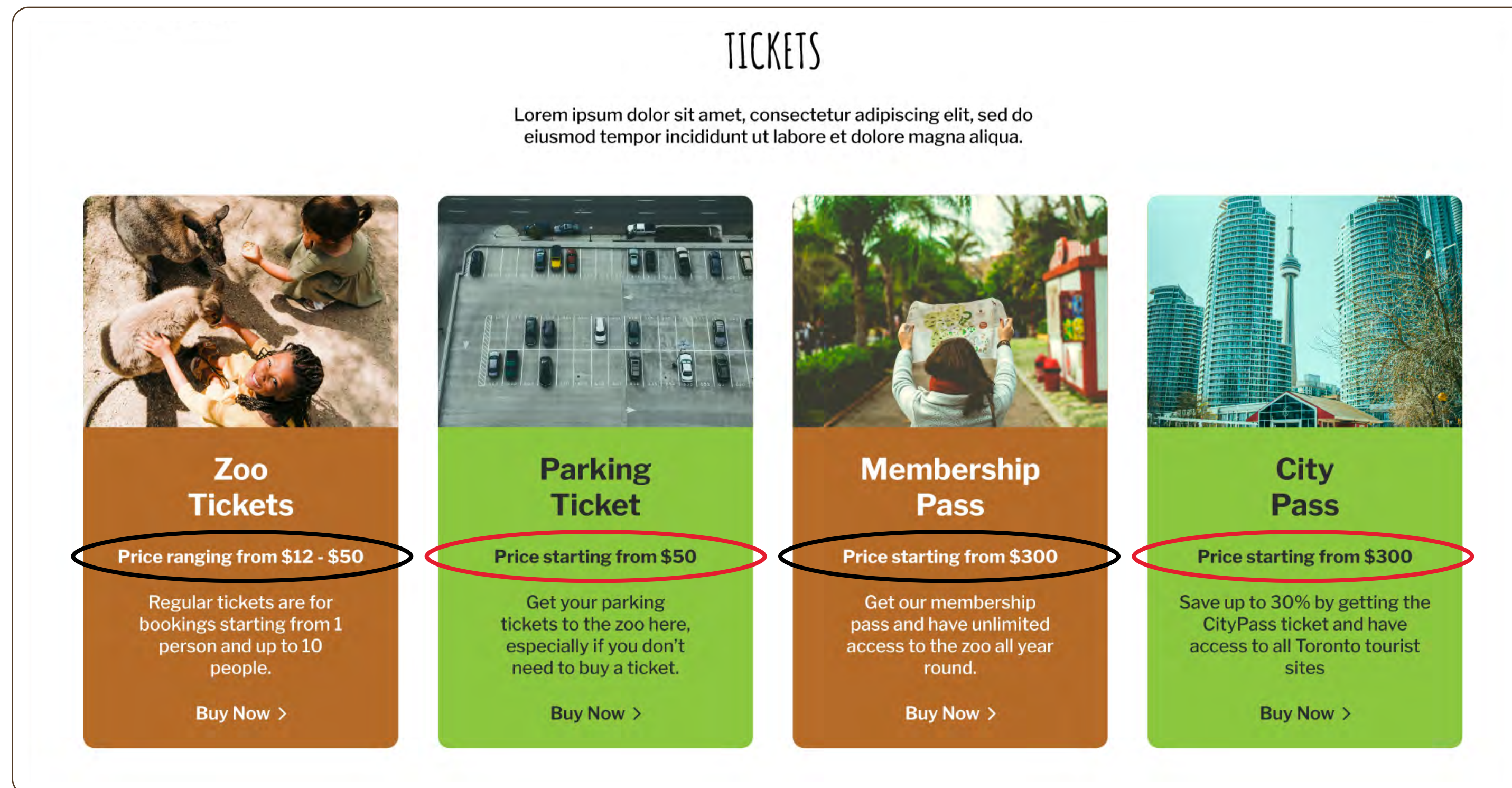
Results

Key Design Principles and Heuristics

#7

Recognition Rather Than Recall: Minimizing the user's memory load by making objects, actions, and options visible

Example: Price's range on the Tickets page



The screenshot shows a 'TICKETS' section with a placeholder text: 'Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.' Below this are four card-style options:

- Zoo Tickets:** Price ranging from \$12 - \$50. Description: 'Regular tickets are for bookings starting from 1 person and up to 10 people.' Button: 'Buy Now >'
- Parking Ticket:** Price starting from \$50. Description: 'Get your parking tickets to the zoo here, especially if you don't need to buy a ticket.' Button: 'Buy Now >'
- Membership Pass:** Price starting from \$300. Description: 'Get our membership pass and have unlimited access to the zoo all year round.' Button: 'Buy Now >'
- City Pass:** Price starting from \$300. Description: 'Save up to 30% by getting the CityPass ticket and have access to all Toronto tourist sites.' Button: 'Buy Now >'

The price ranges for Zoo Tickets, Parking Ticket, and City Pass are circled in red in the original image.

Results

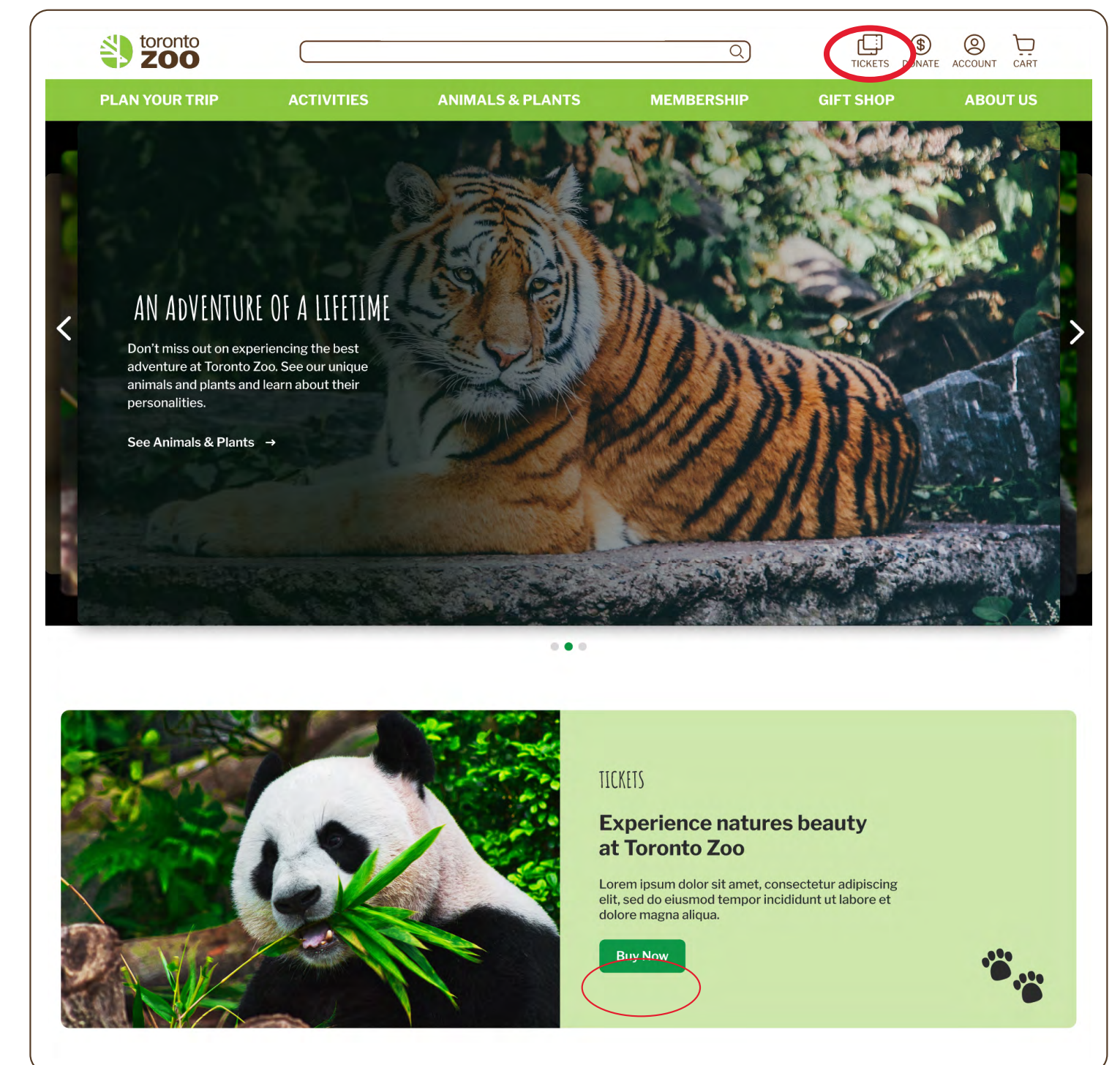
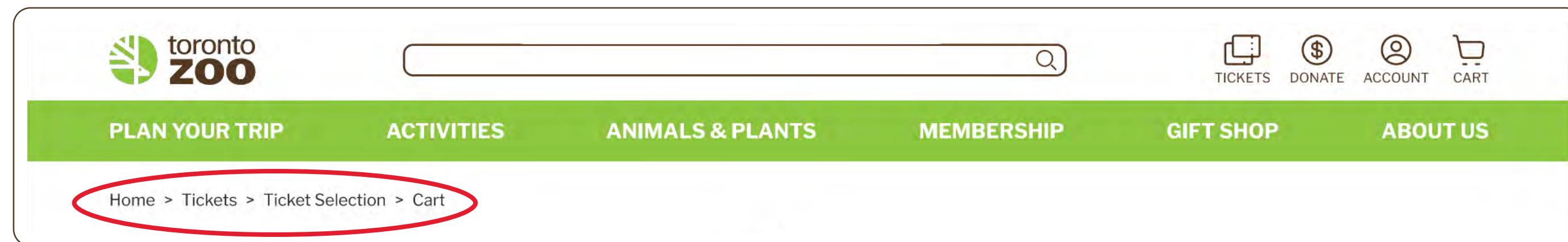
Key Design Principles and Heuristics

#8

Flexibility and Efficiency of Use: Allowing users to approach tasks in multiple ways to suit their working style

Example 1: Breadcrumbs

Example 2: Opportunity to buy tickets clicking on either Buy now in the body of the Home page, or Tickets button in the secondary nav



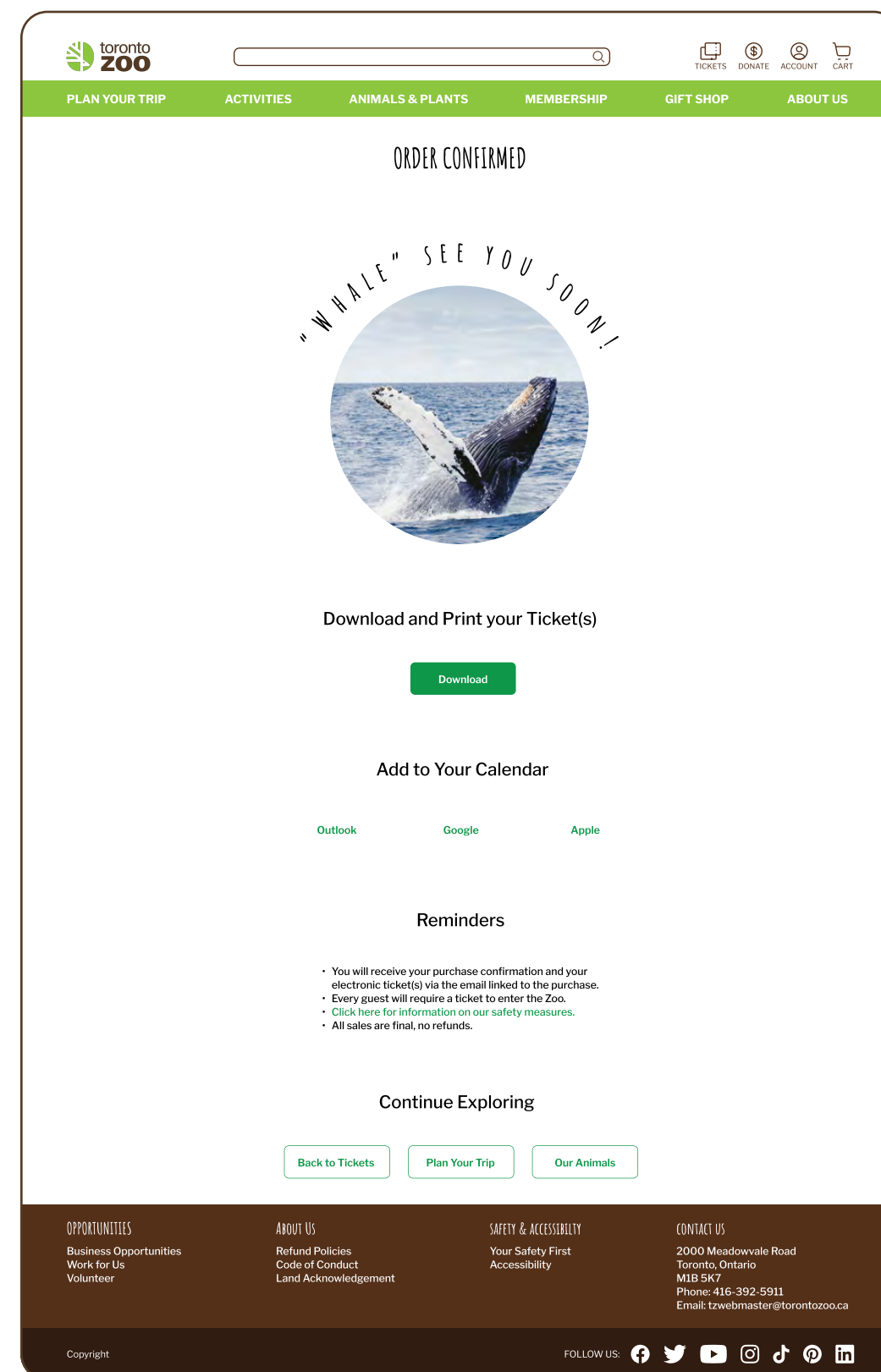
Results

Key Design Principles and Heuristics

#9

Feedback: Making it clear to the user what action has been taken and what has been accomplished

Example: Ticket confirmation and “Whale see you soon!”



Challenges met as a team and individually:

- Learning Figma on the go
- Technical difficulties: Figma began to lag, slowing down our process
- Transitioning from low-fidelity to high-fidelity
 - Finding a balance between adding playful graphics and making clear design
 - Deciding between similar styles
- Determining Design Guidelines to follow (both individually and as a team)



User Task Flow (Miro link)

https://docs.google.com/spreadsheets/d/1YYDbuX2qgmrnEwRZqviJifp8GFLtBFFalnHA_YLB9cs/edit#gid=1360646660

Card Sorting and IA Diagram (Miro link)

https://miro.com/app/board/uXjVPUL-oG0=/?share_link_id=230231933128

Nav Design (Figma link)

<https://www.figma.com/file/8FLIfiWKDShmpgRPKpAE9q/A3%3A-NAV-Design-Toronto-Zoo-Group?node-id=108%3A263&t=TrScvrdlom5Tb8RD-0>

iPhone 13 Prototype (Hi-Fi)

<https://www.figma.com/proto/e0oc3hqolcx7yhht4vdmLH/M1%3A-Toronto-Zoo-Desktop?page-id=261%3A2875&node-id=261%3A2876&viewport=3105%2C23%2C0.92&scaling=scale-down&starting-point-node-id=261%3A2876>

14" MacBook Pro Prototype (Hi-Fi)

<https://www.figma.com/proto/e0oc3hqolcx7yhht4vdmLH/M1%3A-Toronto-Zoo-Desktop?page-id=261%3A1438&node-id=508%3A3987&viewport=-604%2C-1102%2C0.32&scaling=scale-down&starting-point-node-id=508%3A3987>

