VIXN

Ryan Nagle

Project overview



The product:

VIXN is a conservation-minded group focused on saving the Channel Islands fox. The species was recently endangered, and VIXN needs a tool to help scientists with tracking the fox and other species which affect/are affected by the fox population.







Project duration:

August 2021 to September 2021



Project overview



The problem:

The Channel Islands fox was recently endangered; while currently less threatened than before, they remain vulnerable.

Conservation scientists can only gather so much data on their own.



The goal:

Crowdsource data gathering through the use of a citizen-science app, allowing users to tag and share sightings of the foxes, their main predators, and noteworthy prey animals.



Project overview



My role:

UX designer creating the app and responsive website design from conception to delivery



Responsibilities:

Paper and digital wireframing, low and high-fidelity prototyping, conducting usability studies, accessibility considerations, competitive audits, iterating on designs based on user feedback, determining information architecture, and responsive design.



Understanding the user

- User research
- Personas
- Problem statements
- Competitive audit
- Ideation

User research: summary

III

Beginning with research about the Channel Islands and the foxes, I put together a competitive audit of existing conservation mobile apps. I then conducted user interviews based on the information collected from the audit, using the results of these interviews to compile personas to represent two different user types. Most participants want to help endangered and threatened animals, and are especially willing to do so if it is easy and fun.



Persona 1: Avery

Problem statement:

Avery is a nature-loving educator who needs an easy way to help raise ecological awareness because their time in the parks is limited.



"Only if we understand, will we care. Only if we care, will we help. Only if we help, shall all be saved."

Goals

- Increase awareness of local ecosystem
- Enjoy time in nature
- Support national parks

Frustrations

- Wants to enjoy the moment as much as possible, not spend too much time on phone
- Ferry to islands takes a long time

Avery

Age: 49

Education: MA in Environmental

Education

Hometown: Oxnard, CA

Family: Single, lives alone

Occupation: Marine biology educator

Avery is an educator at a university aquarium in Southern California. They frequently visit the California Channel Island national parks and love seeing the wildlife there. They donate their time and money to the parks, and want to feel their efforts are helping the local ecosystem.



Persona 2: Reagan

Problem statement:

Reagan is a photographer who needs socially distanced subjects because they are immunocompromised and want to avoid crowds.



Reagan

Age: 27 Education: BA Hometown: Avalon, CA

Family: Single, lives alone Occupation: Photographer

"You don't take a photograph. You ask quietly to borrow it."

Goals

- Take pictures of neat things
- Avoid crowds of people
- Share images with others

Frustrations

- Heavy tourism makes for large crowds in town
- Difficult to find photography subjects

Reagan lives in a tourism-driven island community. Reagan has a compromised immune system, so they have been spending much more time outdoors by themselves due to the pandemic. They love photographing the natural beauty around them and sharing those pictures with others.



Competitive audit

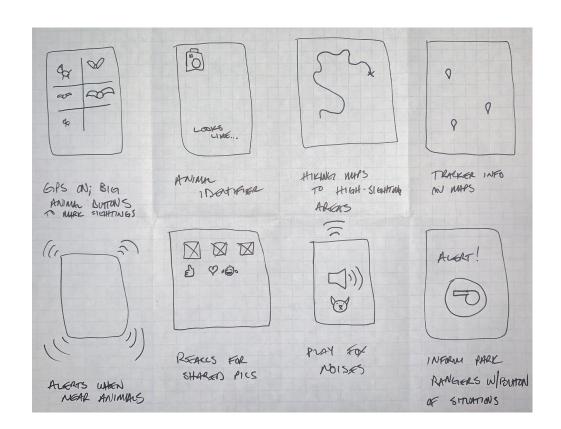
An audit showed there were no direct competitors for an app to meet this project's specific user needs. Indirect competitors provided some direction on gaps and opportunities the VIXN app could address.

Competitive audit	Competitive audit goal: learn about existing conservation/citizen science mobile apps General information							
Wildchain	indirect	online	nothing tangible yet (Kickstarter limbo)	N/A	https://wildchain.io/	small	conservationists, mobile game players	Pay to play a game, adopt an animal with real-world counterpart.
eBird	indirect	online	mobile app	N/A	ebird.org	large (part of Cornell's ornithology labs)	birders, conservationists	One app is for birdwatchers to record which birds they saw and where; another app is required for identification of birds by sight/sound/location
iNaturalist	indirect (closest match)	online	mobile app	N/A	inaturalist.org	large (backed by National Geographic)	nature enthusiasts, citizen scientists	identify plants/animals around you; photograph and share your observations with a community while creating research quality data for scientists



Ideation

I did Crazy Eights for a quick ideation session to come up with various solutions for gaps identified in the competitive audit. My focus was specific to user engagement and the context in which this app will be used.





Starting the design

- Digital wireframes
- Low-fidelity prototype
- Usability studies

Digital wireframes

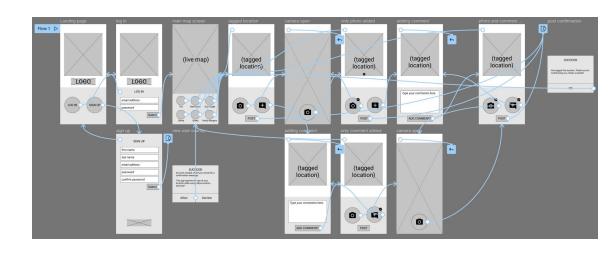
After ideating and drafting paper wireframes, I created the initial designs for the VIXN app. These designs were inspired more by driving directions apps than conservation apps, particularly Waze's map update feature.

User's location is overlaid with maps from the U.S. National Park (live map) Service showing hiking trails on the Channel Islands Simple interface for users to quickly Bald Eagle Gold Eagle tag a location Shrike Snake **Notify Rangers**



Low-fidelity prototype

To prepare for usability testing, I created a low-fidelity prototype that connected the user flow of tagging a location where a fox was seen by the user, with options to add a photo and/or comment if desired.



View <u>VIXN's low-fidelity prototype</u>



Usability study: parameters



Study type:

Unmoderated usability study



Location:

United States, remote



Participants:

4 participants



Length:

10-20 minutes



Usability study: findings

Insert a one to two sentence introduction to the findings shared below.



Privacy

Users prefer having a username instead of their email address if their photos are being shared to a community



Navigation

Users had difficulty with some aspects of navigation.



Photos

Users were unsure if photo was taken, and noted a lack of request for permission for app to access camera/photos



Refining the design

- Mockups
- High-fidelity prototype
- Accessibility

Mockups

Based on insights from the usability studies, I applied design changes like affording users a username instead of using their email address.

Before usability study SIGN UP first name last name email address password confirm password Submit

After usability study

VIXN

First name

Last name

Email address

Username

Password

Confirm password

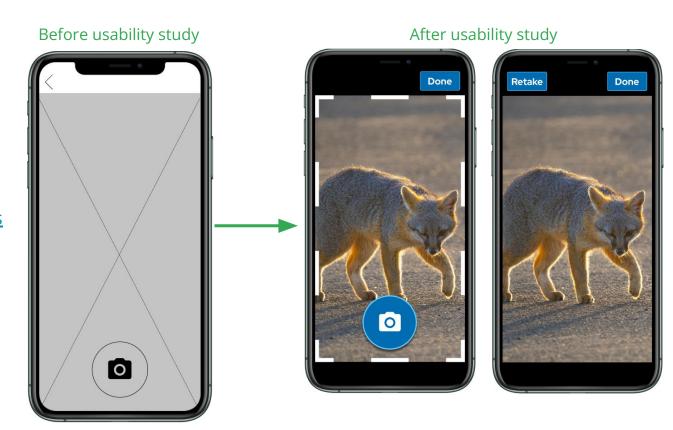
SUBMIT



0

Mockups

Some additional design changes were based on the finding that users had difficulty/confusion with the photo function. With <u>lakob's</u> <u>Law</u> in mind, I leveraged existing mental models and adjusted the photo taking UI to a more familiar design





Mockups











High-fidelity prototype

The high-fidelity prototype followed the same user flow as the low-fidelity prototype, including design changes made after the usability study.

Prov 1 D

androg page

View <u>VIXN's high-fidelity</u> <u>prototype</u>



Accessibility considerations

1

All color contrasts exceed minimum WCAG requirements, ensuring maximum readability.

2

Clear labels for interactive elements to assist with screen reader technology.



Going forward

- Takeaways
- Next steps

Takeaways



Impact:

Target users for the VIXN app feel it is a simple design and easy to use. They value that it is not just a photo-sharing community, but that the data collected will help conservation efforts.



What I learned:

I learned that while a competitive audit is always helpful, sometimes an existing app mental model for an entirely different user need can be applied as a solution. Driving direction map interfaces provided more inspiration with this project than any existing conservation apps I found.



Next steps

1

Conduct research on what other data would be beneficial to conservation efforts.

2

Add in-app resources for animal identification and information.

3

Develop more opportunities for members of the user community to interact with each other.



Let's connect!



Thanks for taking the time to review my work on the VIXN app! If you'd like to discuss this design or get in touch, my contact information is provided below.

Email: ryan@rnd-ux.com

Website: Ryan Nagle Designs

