Bioacoustic Dashboard Project Brief

Started on: 05/17/2023
Last updated on: 10/30/2023

Background
Describe what the project is about, what's its context and background.
Describe why it's being carried out. If it's a part of a wider customer journey, link it here.

Marine scientists benefit from data resulting from Orcasound hydrophones. Data such as call types, date and time of listening event, human-originating sounds, and other marine ecotype bioacoustics data could be provided to marine scientists. Currently, Orcasound sends orca call data tagged by humans to OrcaHello and is part of training the AI to detect and auto tag SRKW calls. However, there is no dashboard interface providing data that would benefit marine scientists, and this is a need identified by stakeholders.

Orcasound data is sent to Acartia (https://acartia.io/home), a responsive web app that is the hub of marine sighting information. Acartia also allows users to geotag all kinds of whale ecotypes. From the home page: "A decentralized data cooperative for sharing marine animal locations within the Salish Sea. Let's work together to monitor and map marine wildlife -- from plankton to orcas!"

(Ben's project explanation)

There is a dashboard of all user tagged acoustics from the listening web app- https://beta.orcasound.net/reports. This could be user tested and improved, folded into the Orcasite architecture.

Objective
Describe what is the ideal future you want to have once this project is finished. What is the outcome you're looking to get out of this?
How does this fit into your team's and/or company's wider goals? (Link them here.)
What is the benefit for the business?
What is the benefit for the user?

Design a bioacoustic dashboard using data from Orcasound hydrophones and potentially other data sources that meets the needs of marine scientists. This bioacoustic dashboard would display hydrophone-originating data, both human and AI in origin, in ways that would be helpful for marine scientists.

Key results & Success criteria
How will you know the project was successful once it's finished?
Think KPIs, OKRs, UX metrics, benchmarks, company targets (whatever your company is using).

Research: Discovery research that clearly explains the bioacoustic problem space, user needs, and recommendations for a bioacoustic dashboard design.

Usability testing that confirms that the bioacoustic dashboard design has a high level of usability as evidenced by qualitative measures.

Design: Mockups of a bioacoustics dashboard based on user research that can be sent to development for implementation on the Orcasound website, either integrated into an existing web app or a new web app.

Development: A fully functioning bioacoustic dashboard implemented on the Orcasound website based on design specifications and using available technology resources and tech stacks.

Target audience

Describe the target audience for this project.
You can link to your personas.

Primary persona- Professional Marine Conservation Scientist persona

The team and stakeholder map
Define team roles and responsibilities.
List stakeholders and describe what level of involvement is needed/expected.
Who is the decision-maker (sign off)?
[Note: One way of doing this can be a RACI matrix]

Stakeholders:

- **Main Orcasound Stakeholder:** Can provide background on who, what, where, why, and how for project requirements, including technical limitations. Limited, as needed involvement. *Scott Veirs*
- **Principal UX Manager:** Can provide background on who, what, where, why, and how for notification system, including technical limitations, but will refer to Main Orcasound Stakeholder. Involved as needed, is contacted before Main Orcasound Stakeholder, and directs project lead. Signs off on work when requested. *Brendan Thatcher*
- **Product Manager:** Can provide background on who, what, where, why, and how for notification system, including technical limitations, but will refer to Main Orcasound Stakeholder. Involved as needed, is contacted before Main Orcasound Stakeholder, and directs project lead. Signs off on work when requested. Facilitates UX work to production in GitHub. *Brendan Thatcher*
- **UX Managers/Other UX, Dev, or Other Leadership:** Can provide background on who, what, where, why, and how for notification system, including technical limitations, but will refer to Principal UX Manager or Main Orcasound Stakeholder. May not be direct reports but can be as needed. *Various*

UX Team Members

- **Team Lead/Co Lead:** Schedules, leads, and sends reminders for weekly team stand up meetings. Can be an individual contributor (IC) as well. Writes or delegates the writing of user stories in Github when design is sent to production. Reports to Principal UX Manager.
- **UX Researchers (IC):** Plans, conducts, and reports on UX Research for project. Accesses Research Operations program to recruit participants for studies. Reports to Team Lead/Co Lead. *Various*
- **UX Designers (IC):** Designs based on user research as reported by UX Researchers. Reports to Team Lead/Co Lead. *Various*
- **Other UX Roles As Needed (IC):** Content Strategists, UX Writers, and any other UX-oriented roles who contribute their core competencies as needed. Reports to Team Lead/Co Lead. *Various*

Dev Team Members

- **Front End, Back End, Full Stack Devs:** Assigned issues by Team Lead/Co Lead or designate to develop design work. Uses established frameworks that meet the needs of technical specifications.

*** Note:** Any team member can transfer roles at any time. There is full support for exploring different roles for professional development. Please communicate role changes with teammates and leadership as needed.

Scope
What's in scope
Describe what definitely needs to be worked on and why.

Creating a dashboard that sources and displays user- and AI-tagged marine data originating from Orcasound hydrophones.

What might be in scope
Often, there are those 'maybe areas and topics' — list them and describe conditions under which they could be included (e.g. if we have time, if we find out enough evidence in user research, etc.)

Creating a dashboard that sources and displays marine data from other websites or platforms, when permission and access is given.

What's not in scope
Describe what the design team should not challenge (e.g. hard technical constraints, change of CMS, major design overhauls during a platform migration project, etc.)
[Note: I use this one more as a guide to understand which topics will be hard to change, which things shall be taken as project constraints, and what the business values as a status quo. However, in practice, if you make some key discoveries which could significantly help the product and you have a really strong rationale for them, everything can be challenged.]

Creating a dashboard that sources and displays non-marine data.

Dependencies
Are there any other teams, people, technology or anything else that the success of this project is dependent on? Describe them.

- Access to Orcasound hydrophone data
- Access to marine data from non-Orcasound sources
- AWS and other cloud platform technology access, resources, and restraints
- Collaboration with data scientists
- Technology stacks

Risks
List risks and caveats that need to be considered.
E.g. What are the risks to the success of this project? What would happen if we don't meet the deadline?

TBD

Deliverables
List tangible artifacts that this project is expected to deliver.

Research:
- Discovery research presentation to key stakeholders, UX, and cross functional team members
- User stories in the Product repo in GitHub assigned to UX Design team members
    - Provide links to research reports
    - Clearly describe a user-based bioacoustic dashboard
- Usability study presentation(s) that communicate:
    - Qualitative measure of usability
    - Recommendations for design and/or next iteration based on study data

Design:
- Design reviews to gather feedback and buy-in from project team members, stakeholders, Orcasound leadership, devs, and other cross-functional team members
- Fully functioning prototype of bioacoustic dashboard ready for user testing
    - Does not include global navigation header and footer
- User stories in the appropriate development repo for the Bioacoustic Dashboard assigned to devs who will do production work

    - Clearly defines and visually displays design specifications of bioacoustic dashboard
        - Includes all animated micro interactions, etc.
        - URLs for all links, buttons, etc.

Ways of working
Communication
What communication tools will you use and what for? (Email vs Slack vs JIRA vs Zoom, etc.)

Slack channel: #ux-bioacoustic-dashboard

Shared data
Where is the project space/folder and all the materials relevant to the project? Does everyone have access? If not, who will make sure everyone has it?

- Project folder: https://drive.google.com/drive/folders/1cwj2VmD35raDgS8ayMf40cC3AGyUQEJh?usp=drive_link
- GitHub Product Repo: https://github.com/orcasound/product
    - GitHub project: https://github.com/orgs/orcasound/projects/27

Additional notes
If there is something else, specific to this project, state it here.

UX Project Resources: Link to GitHub wiki here