

Med Sea Turtles App and Responsive Website

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Project overview



The product:

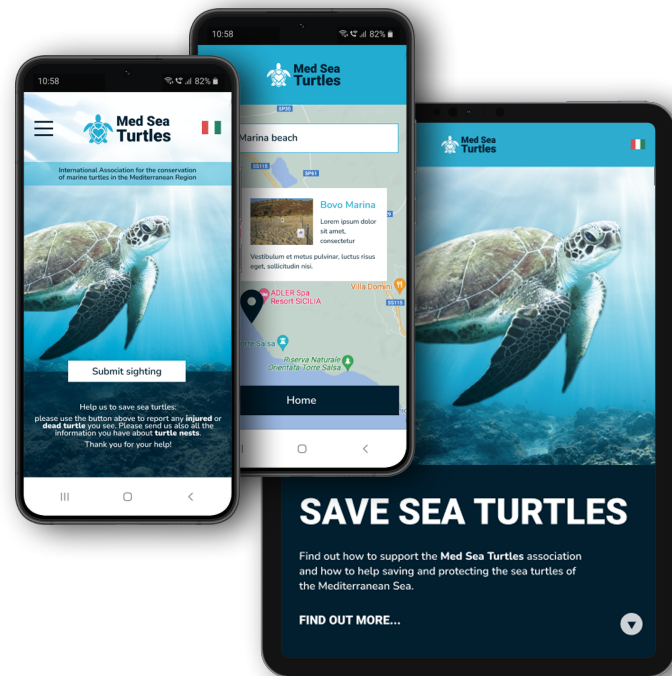
Med Sea Turtles is an **Association for the conservation of marine turtles** in the Mediterranean Region.

The association needs a tool to give users the opportunity to **report sightings** of injured animals or turtle nests. Med Sea Turtles' primary target users include students and adults who are passionate about nature and environmentalism.



Project duration:

Feb 05 2023 to Feb 09 2023



Project overview



The problem:

Coastal development, bycatch, marine pollution, climate change and other **human activities** constitute a huge **threat** for sea turtles and the marine ecosystem they live in.



The goal:

Design an app that will let users actively participate in the association's activities, giving them the opportunity to **submit sightings** of injured turtles or turtle nests, in order to help the association in **protecting the marine turtles** of the Mediterranean Sea.

Project overview



My role:

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



Responsibilities:

Conducting interviews, paper and digital wireframing, low and high-fidelity prototyping, conducting usability studies, accounting for accessibility, iterating on designs, determining information architecture, and responsive design.

Understanding the user

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

User research: summary



I conducted interviews and created empathy maps to understand the users I'm designing for and their **needs**. A primary user group identified through research was students and adults who are passionate about nature and **environmentalism**.

Most interview participants reported feeling concerned about the threats that sea turtles face, but they said they didn't know what to do in case of finding an injured turtle or a turtle nest. The feedback received through research made it very clear that users would be open and willing to use the app to **share sighting information** and to view turtle nests' locations and pictures.

Persona: Despina

Problem statement:

Despina is a Biology student who needs to know ways to **protect marine species** and ecosystems, because they are passionate about environmentalism.



Despina

Age: 19

Education: Biology student

Hometown: Thessaloniki

Family: Lives with their parents

Occupation: WWF volunteer

*"I want to leave the World
a little better than I found it"*

Goals

- To become a Marine Biologist
- To work on environmental conservation initiatives
- To dive in the Red Sea

Frustrations

- Marine pollution is a global threat for living marine organisms
- Climate change is occurring at an alarming rate

Despina is a Biology student at the University of Thessaloniki. They also do volunteer work for WWF.

Their hobby is scuba diving, and they love to watch marine animals in their natural habitat.

They are very concern about the **threats** that marine animals face, and would like to do something more to help **protect marine life**.

Competitive audit

An audit of a few competitor's products provided direction on gaps and **opportunities** to address with the Med Sea Turtles app.

Competitive audit								
Goal: Compare the user experience of each competitor's menu app								
General information								First impressions
Competitor type	Location	Product offering	Website	Business size	Target audience	Unique value proposition	Desktop website experience	App or mobile website experience
The Sea Turtle Fund	Direct	Pantelleria, Italy	Conservation and protection of sea turtles in their natural habitats	www.seaturtlefund.it	Small	Tourists and activists	Well-known in the area they work	Good + Fun and easy to use + Fully responsive
Blue Ocean Association	Indirect	Heraklion, Crete, Greece	Research and conservation of marine species and ecosystems	www.blueoceanassociation.net	Large	Environmental activists	World wide famous association	Okay + Easy to navigate + Nice pictures and illustrations
Hydrosphera foundation	Indirect	Limassol, Cyprus	Protecting and conserving the marine wildlife	hydrospherefoundation.com	Medium	Environmental activists	Founded by EU	Okay + Easy to navigate - Missing some pictures

UX							
(rated: needs work, okay, good, or outstanding)							
Features	App Interaction			Menu app visual design		Menu app content	
	Accessibility	User flow	Navigation	Brand identity	Tone	Descriptiveness	
Good + "Create account" feature + Injured animal sighting report feature	Outstanding + Site is translated in 5 different languages + Images have alternative text for screen readers + Images are clear and legible	Good + Easy to find key info + Very fast user flow	Good + Easy to navigate - Some elements seem clickable but are not	Outstanding + Strong brand identity, including colors, font, style, motion, imagery, and photography	Fun, friendly and indirect	Okay + All key info is present - Unnecessary details	
Needs work + Injured animal sighting report feature - No picture upload options	Good + Images are clear and legible + Images have alternative text for screen readers - Site only available in English	Good + Easy to use + Info is kept up to date	Outstanding + Easy to navigate + Clear text and illustrations	Good + Clear color scheme, font, and nice illustrations	Serious and direct	Okay + Short and to the point	
Okay + Injured animal sighting report feature - No info about the foundation projects	Okay + Website available in two languages - Site isn't compatible with screen reader technologies	Outstanding + Easy to find key info + Info is kept up to date + Easy user flow	Good + Very easy to navigate + Easy to switch languages	Okay + Clear color scheme and art direction - Inconsistent font, photography, and imagery	Serious and direct Friendly in some places	Needs work + Easy to follow - Some info is missing	

Ideation

I did a quick ideation exercise to come up with ideas for how to address gaps identified in the competitive audit. My focus was specifically on **sighting report features**.

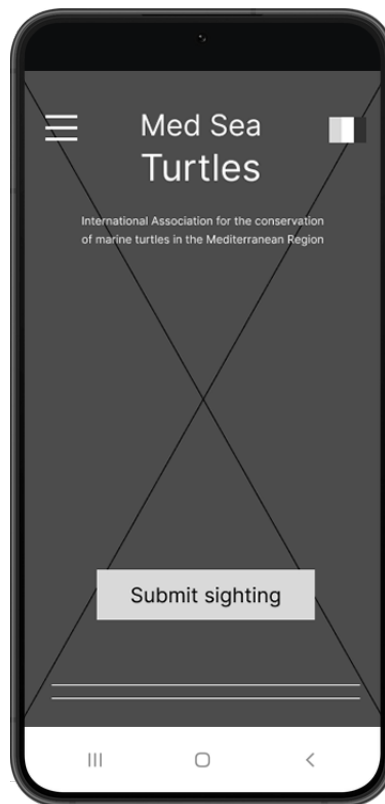
<div>MED SEA TURTLES</div> <div>What did you see? injured turtle</div> <div>where did you see it? </div> <div>when did you see it? </div> <div>CONFIRM</div>	<div>MED SEA TURTLES</div> <div>+</div>	<div>MED SEA TURTLES</div> <div>SIGHTING OBSERVATION</div> <div>take pic upload pic</div> <div>CONFIRM</div>	<div>SIGHTING LOCATION</div> <div>Search ...</div> <div>Map</div> <div>CONFIRM</div>
<div>ADD DATA</div> <div>Please Select: <input type="checkbox"/> INJURED TURTLE <input type="checkbox"/> TURTLE NEST</div> <div>Please upload a picture: take upload</div> <div>Date: </div> <div>Location: </div>	<div>MED SEA TURTLE</div> <div></div> <div>NO PIC TAKE PIC UPLOAD PIC</div>	<div>ADD NEW OBSERVATION</div> <div>What did you see? injured turtle</div> <div>DATE: </div> <div>LOCATION: </div> <div>></div>	<div>MED SEA TURTLES</div> <div>your data: EDIT EDIT EDIT</div> <div>BACK CONFIRM</div>

Digital wireframes

After ideating and drafting some paper wireframes, I created the **initial designs** for the Med Sea Turtles app.

These designs focused on features for uploading sightings of injured turtles or turtle nests.

Hamburger menu to access informative pages that are not part of the main user flow

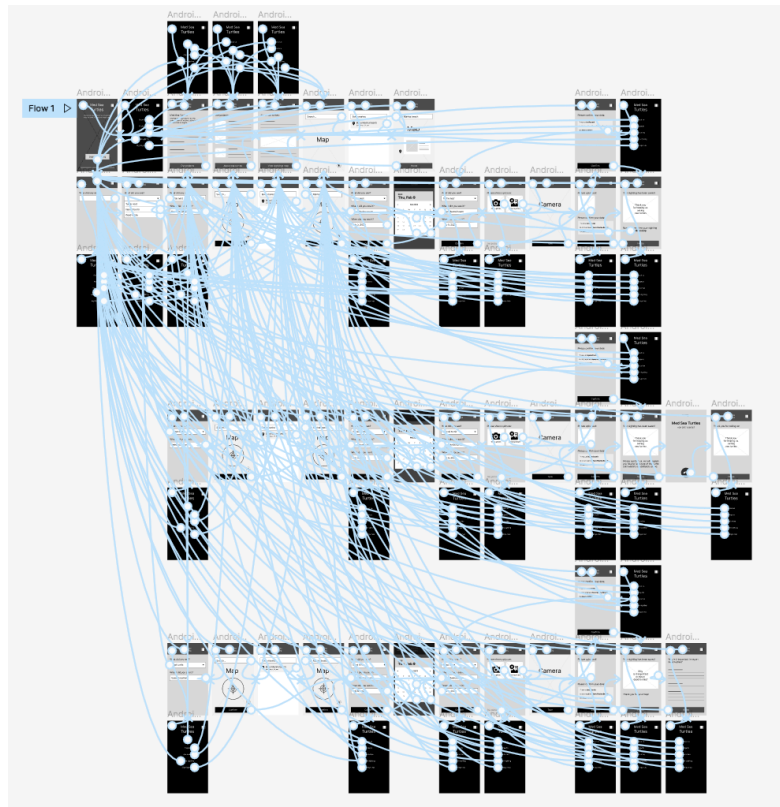


Big button to access the main user flow

Low-fidelity prototype

To prepare for usability testing, I created a **low-fidelity prototype** for the Med Sea Turtles app.

View [Med Sea Turtles' low-fidelity prototype](#)



Usability study: parameters



Study type:

Unmoderated usability study



Location:

Italy, remote



Participants:

5 participants



Length:

15-20 minutes

Usability study: findings

These were the main findings uncovered by the usability study:

1

Interactive map

People want to be able to select the location of their sightings using an **interactive map**.

2

Calendar date picker

People want to easily input the date of their sightings using a **calendar date picker**.

3

Sightings map

People want to be able to view a map of all the turtle **nest sightings** reported on the app by other users.

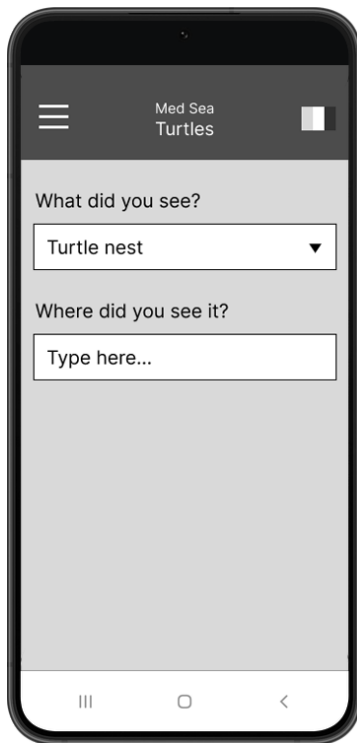
Refining the design

- Mockups
- High-fidelity prototype
- Accessibility

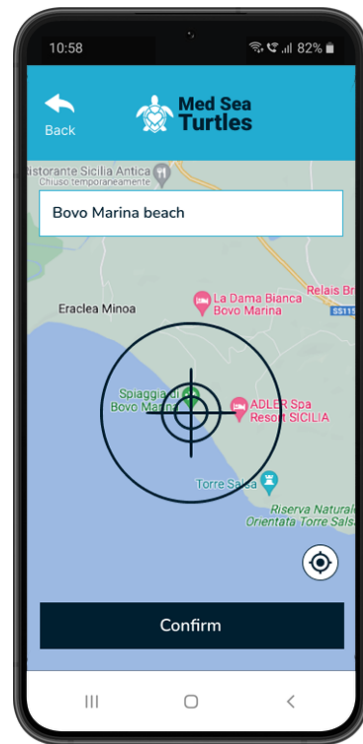
Mockups

Based on the insights from the usability studies, I applied design changes like adding a **map feature** to easily locate users' sightings.

Before usability study



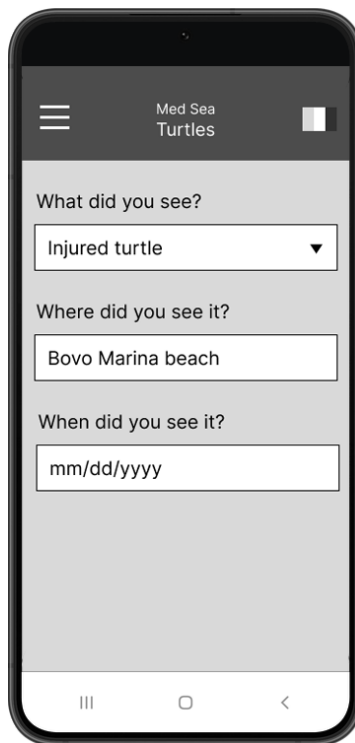
After usability study



Mockups

Additional design changes included adding a **calendar date picker** to easily select the date of users' sightings.

Before usability study



Med Sea Turtles

What did you see?

Injured turtle

Where did you see it?

Bovo Marina beach

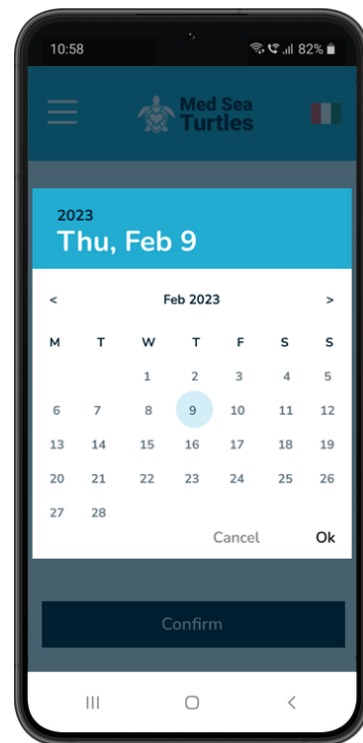
When did you see it?

mm/dd/yyyy

This mockup shows a mobile app interface for 'Med Sea Turtles'. It features a dark header with a menu icon, the app name, and a toggle switch. The main content area has three sections: 'What did you see?' with a dropdown menu showing 'Injured turtle', 'Where did you see it?' with a text input field containing 'Bovo Marina beach', and 'When did you see it?' with a text input field showing a date format 'mm/dd/yyyy'. The bottom of the screen shows standard Android navigation icons.



After usability study



10:58 82%

Med Sea Turtles

2023
Thu, Feb 9

< Feb 2023 >

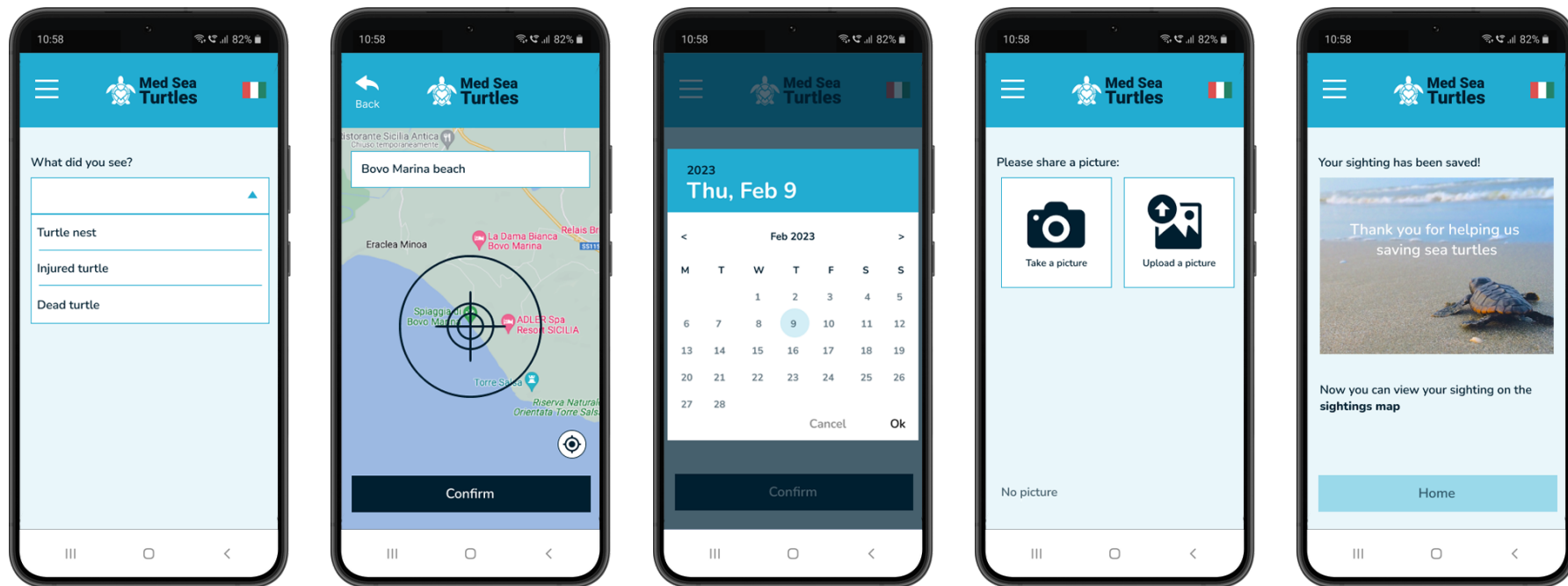
M	T	W	T	F	S	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28					

Cancel Ok

Confirm

This mockup shows the same mobile app interface after usability study changes. The header now includes a status bar at the top showing the time '10:58' and battery level '82%'. The app name 'Med Sea Turtles' is accompanied by a turtle logo and an Italian flag. A new blue section displays '2023' and 'Thu, Feb 9'. Below this is a calendar for February 2023, with the date '9' highlighted in a blue circle. The calendar grid shows days of the week and dates. At the bottom of the calendar are 'Cancel' and 'Ok' buttons. A dark blue 'Confirm' button is now visible at the very bottom of the screen, below the calendar.

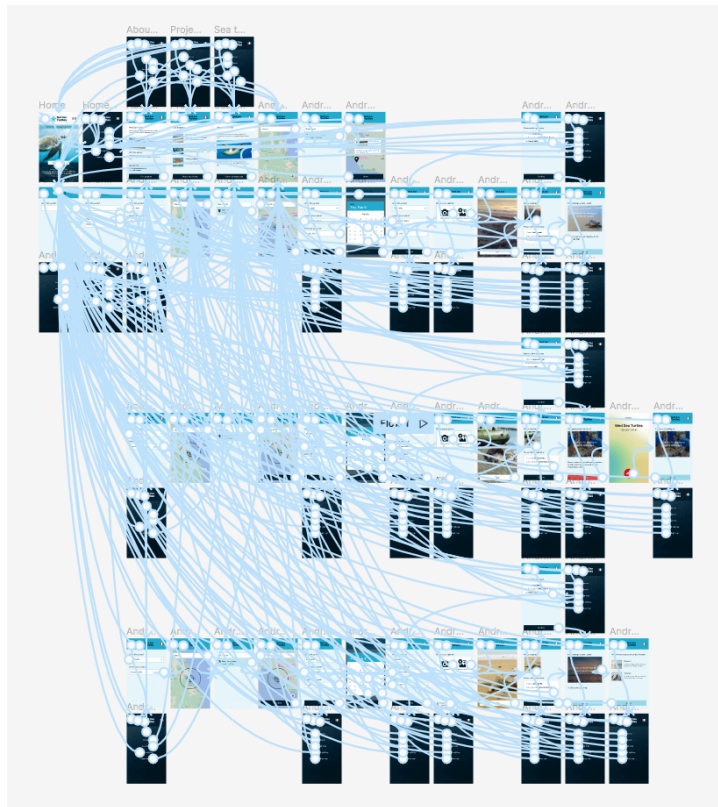
Mockups



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.

View the [Med Sea Turtles' high-fidelity prototype](#)



Accessibility considerations

1

Clear labels for interactive elements that can be read by **screen readers**.

2

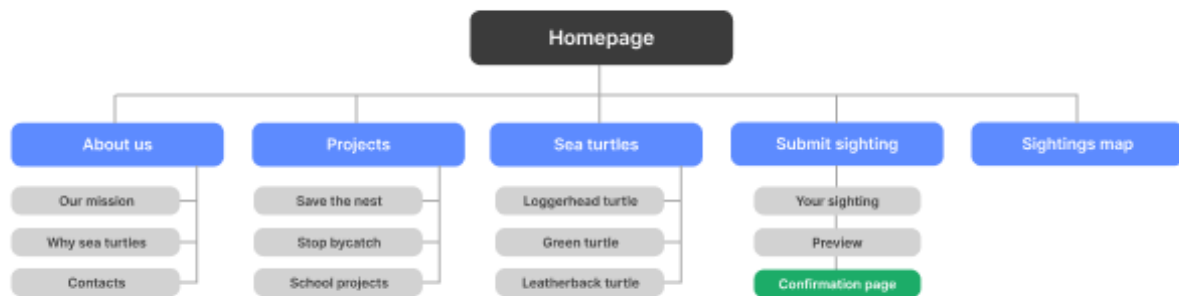
Used only **transitions** between 150 and 500 milliseconds to align to W3C recommendations.

Responsive Design

- Information architecture
- Responsive design

Sitemap

With the app designs completed, I started work on designing the **responsive website**. I used the Med Sea Turtles sitemap to guide the organizational structure of each screen's design to ensure a cohesive and consistent experience across devices.

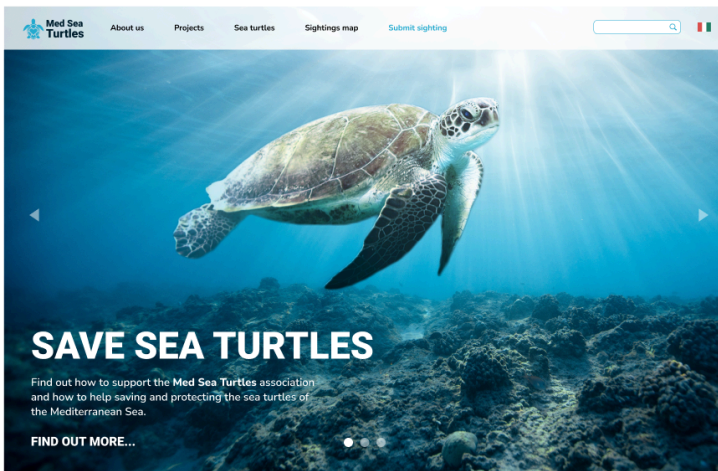


Responsive designs

The designs for screen size variation included mobile, tablet, and desktop. I optimized the designs to fit specific **user needs** of each device and screen size.



Mobile



Desktop



Tablet

Going forward

- Takeaways
- Next steps

Takeaways



Impact:

Users shared that they were interested in the app and that they would use it especially to view other people's pictures and locations of turtle nests. They also said that they think that the app will be useful in **protecting** endangered species of **sea turtles**.



What I learned:

I learned that going through each step of the design process and aligning with specific user needs helped me come up with solutions that were both feasible and useful. **Usability studies** and **peer feedback** are essential in each iteration of the designs.

Next steps

1

Conduct **research** on how successful the app is in reaching the goal to collect sighting information.

2

Add a feature to let people **adopt** a turtle nest.

3

Add a feature to let people **donate** to support the Med Sea Turtles project and activities.

Let's connect!



Thank you for your time reviewing my work on the **Med Sea Turtle** app and responsive website!
If you'd like to see more or would like to get in touch, my contact information is provided below.

Instagram: www.instagram.com/fabs.designer