

Mobile app: Gale

Weather forecasts for water sports



Role

UX / UI design

Skills

Research
User Experience
Prototyping
Usability Test
Visual design

Tools used

Adobe XD
Survey Monkey
Optimal Sort

Duration

May-October 2020
(6 months)

00. KICK-OFF

Project overview

Gale is a concept of the app which I create during my study at CareerFoundry. The app is designed for water activity enthusiasts, providing clear, simple and precise reports to help people understand and enjoy the weather and stay safe at any time.

01. UNDERSTAND

Problem Statement

Our water-sports enthusiasts need a way to have simple, clear information about wind, wave, and weather conditions at any moment because they wish to plan their water activities with confidence about the weather and stay saved.

Product goals

Provide beautifully displayed and easy to understand wind, wave and weather reports, forecasts and statistics for sailors, surfers, divers and any other water sport aficionado.

Basic App Feature Requirements

- An onboarding page
- A way to sign up and login
- A profile area
- A navigation menu
- A display of wind, wave, weather conditions in real-time
- Recommendations that can help users stay safe

Competitive Analysis

Once the problem statement was clear I started my research from competitive analysis of Windfinder and Weesurf. I analyzed their key objectives, marketing profile, overall strategy, created SWOT and UX analysis.



Windfinder



WeeSurf

Windfinder SWOT

Strengths

- 45000 water sports locations with real-time observations from more than 21000 weather stations worldwide.
- Detailed and accurate forecasts.
- Positive feedback on both app stores: Google and iTunes.

Weaknesses

- In the free version, a lot of advertising appears on each screen of the app. Pro version available without ads.
- The complexity of the app: UX and UI.
- A lot of features don't work in the free version.

Opportunities

- Simple design of the app, which can be used by users less familiar with the professional use of the weather forecasts.

Threats

- Generic weather forecast which gives all necessary information but in a more simple way and for free (like Weather Live, Windy).

Executive Summary

Target Audience

- Anyone who is going to take water activity, like sailors, surfers, divers, kitesurfer, windsurfers, stand-up paddleboarding.
- The main audience will be between 16 and 45 years for surfers, paddle boarding and between 25 and 65 for sailors, divers.
- Our users are passionate about activity on the water (lake, sea, ocean).

Risk / Opportunity

- Risk is to create similar app to already existing.
- Risk is not to be known or to be lost around already existed apps.
- Opportunity is to catch the market by simple and clear UI and intuitive experience.

Competition

- Main competitors are Windy, Meteo Marine, Weesurf, Windfinder, WindHub.
- Generic weather apps like Weather (App store), Weather & Radar, The Weather Channel, etc.

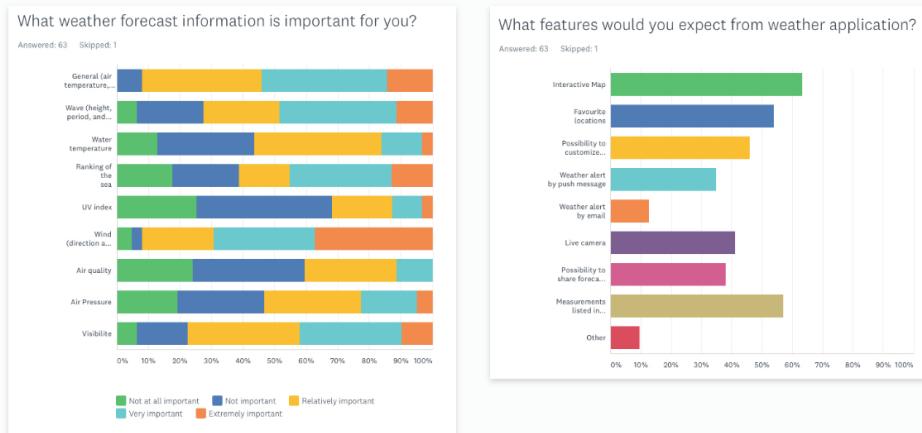
Conclusion

- Even the market already loaded with many popular apps, there is an opportunity to take our place there through clear (and beautiful!) representations of this valuable information, to help water sports aficionados have fun and stay safe.
- Marketing strategy will be a key in promotion of the app.

02. OBSERVE

Survey

As a first step of observe phase, I decided to make a survey to get quantitative data about users' needs and attitudes. I used SurveyMonkey as a tool and collect the results by the link in Facebook (French community of diving and sailing). 64 users took part in a survey.



Insights

- More than 70% check the weather on the phone, so the app is a priority.
- Wind, general meteo, waves and visibility are the most important weather parameters.
- Top 3 features are interactive map, possibility to save locations in favourites and weather measurements in different metrics.
- The main frustration comes with no clear information and navigation of the app.

Interviews

As the second step, I conducted interviews by Skype with 3 potential users, who had experience in diving and sailing. I followed 3 main goals:

01

Understand user needs in a weather app, what kind of information they need out from there.

02

Documenting user opinions on competing weather sites.

03

Determining which weather apps or sites users enjoy using or leave them frustrated.

The results of the interview I turn to affinity mapping and made 3 iterations to find behavioral patterns and insights.

Insights

- Wind, waves, currents, tides and meteo are the main parameters for divers and sailors.
- Users of the app can be professional, sportsmen or just a hobby.
- Important features: weather reports, maps, favourites and alerts.
- Search spots or locations in the search bar or on the map.
- Possibility to save spots and locations in favourites.
- Compare weather at different spots and locations.
- Different type of interactive map to have visual forecasts.
- The best precision of the forecast is one hour.
- Minimum period of forecasting is one week.
- An option to use app without login.

03. POV

Personas & Journey Map

Based on user research I identified 2 personas: sailor Maxime and diver Nicolas with different needs and goals. From this moment all what I do around Vela it is not just my thoughts or imagination. Every step is based on data and with focus to both personas. I used journey maps to understand their thoughts and emotional experience while looking for the weather.

Nicolas



Age: 50 y.o.
Location: Marseille, France
Status: Married, 2 kids
Nationality: French
Occupation: Owner of dive centre

About

Nicolas lives in Marseille. Every single day he spends on the Mediterranean sea. 2 times a day he or his team drive a boat to the dive spot. He dive 3-5 times a week with his clients or with his 2 sons.

Behaviour

- He usually checks the weather forecast 2-3 times a day.
- He uses weather forecasts to plan dives and take decision about the safety.
- He doesn't like to change the app he has a habit to use.

Frustrations

- He is frustrated when the app doesn't run properly after updates.
- He doesn't like to receive something he didn't ask for (like push messages, notifications, advertising).
- He is frustrated when he is not able to access to the app or find the information he needs.

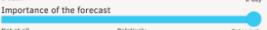
Current source 

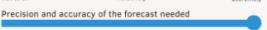
Needs & Goals

- He would like to save spots in Favourites and have quick access to them.
- He would like to parameter the alerts of his favourite spots.
- He needs to compare forecast on different dive spots.
- He needs forecast precision of 1 hour.
- Current apps have many options and features, but in reality, he uses maps, favourites, alerts and meteo.

Experience level

Frequency of forecast control: 

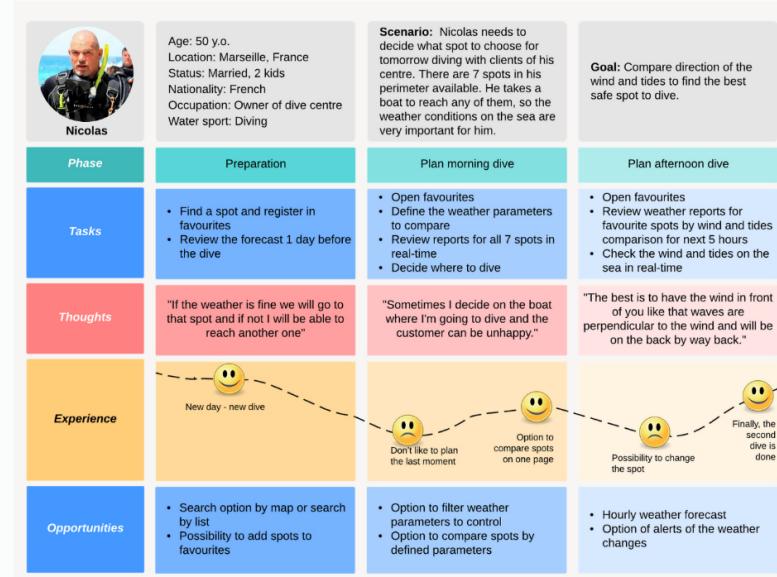
Importance of the forecast: 

Precision and accuracy of the forecast needed: 

Device used: 

"I need to use weather app like a tool - at any time to have a reliable data."

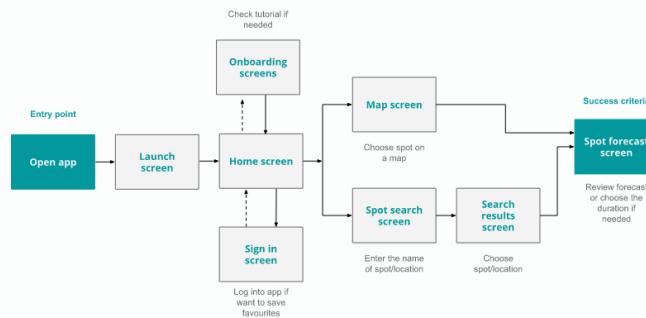
"Professional divers and sailors don't like to change because data is important and their safety depends on it."



04. IDEATE & PROTOTYPE

User flow

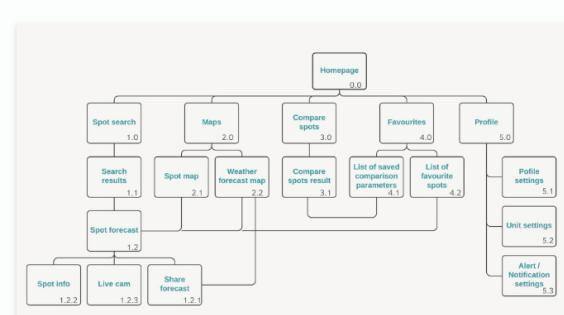
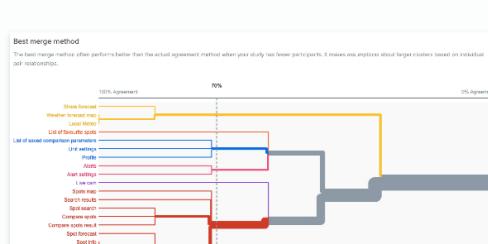
With help of Maxime and Nicolas, I was able to imagine how they can use the app and create user flows for the main tasks step by step.



Sitemap

According to survey users mainly check the weather on a mobile phone, so priority was given to mobile-first design. I decide to use co-existing hierarchies to give opportunity to the user easily switch between features. Keeping in mind all above I created a sitemap as a global view of the app screens and its connections.

I did a card sorting to confirm the right of my choice for the information architecture. I used OptimalWorkshop and collected 12 responses.



Wireframes and Prototype

During the design process, I had several iterations for my app. All of them are crucial and brought a lot of value to my product.

Changes from flow-fidelity to high-fidelity prototype I did based on the research results and my ideas. Then I performed usability testing, which helped me to improve the functionality of the app based on users feedback.

Next iterations were about visual design and assesability: what visual solution could work better for the app. Then this was tested and based on the peer's feedback I made an improvements.

Home Screen Evolution



Spot Screen Evolution



05. TEST

Usability Test

Usability test has been organized twice. In both cases the goals of test were:

- To assess the learnability for users interacting with the Vela app for the first time.
- To observe and measure if users understand the project, find it valuable.
- To confirm if the user understands how to complete basic initial functions such as logging in and searching for/comparing spot forecasts.

01

Mid-fidelity prototype test

Moderated in-person (4)

Moderated remote (2)

3 active practitioner of water activity

3 person without specific preference of water activity

02

High-fidelity prototype test

Unmoderated remote (4)

I use CareerFoundry Slack channel to engage peers for design collaboration and collect their feedback.



All interviews scripts I turned to affinity mapping and find common patterns for observations, errors, negative and positive quotes. I use this as input for rainbow spreadsheet, where I evaluate each point (I measured errors by using Jakob Nielsen's scale), set up the priorities and defined an action plan.

I received all comments screen by screen on Adobe XD platform, so It was easy to set up an action plan and make improvements immediately.

Observations

I think can be good to combine several layers of the map.
Will it be only for bad weather if nothing special, what will be there?
I would like to click Budapest to open a detailed forecast.
How can I see the forecast for the next day?
I don't understand the meaning of the lines (fav screen).
I like to login with Google and it quick.
Can be good in edit mode to change places of the spot, not only delete.
For me not clear what are the numbers and colour if there is no relation, how can I read that.
I have this small red indication 1, someone what to be my friend or do I have a notification.

Errors

Not possible to come from login to sign up screen.
She don't see google account button.
On the compare results page Back to home doesn't work.
To compare my fav spots I will go to my fav.
From interactive maps fav icon doesn't work.
What does mean this alarm sign (favourites).
It is not possible to see if I have weather 2 hours ago.
Back to home and cross have the same function, probably no need to double.

Negative quotes

Why do you have 2 time search and favourites.
This forecast for detailed forecast is too small for me to read easily.
I don't understand why do I have cancel button on the search.
Parameters why they are here, I don't understand what to set up? (spot screen).
Now what?
There is another sign close to Budapest. Probably the app doubts that I'm in Budapest.

Positive quotes

I like that there is minimum info, but only what I need about the forecast.
It's explain very well features of the application. It is clear and short (onboarding).
I like that app proposes to sign up with Facebook and Google and not this is on the top of the usual process.
For search, I like that there are links to spots near me and previous search.

TOP3 issues - Mid-fidelity prototype test



01

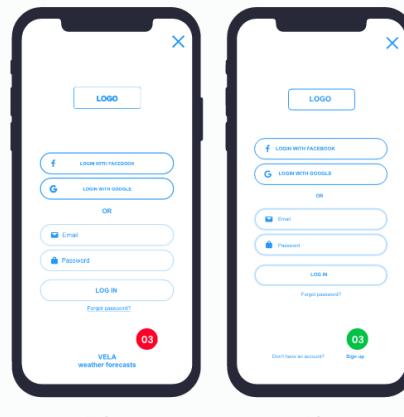
Issue: Not clear how to check the forecast for the next days.

Action: Add daily forecast on the homepage and the spot screens. User can see a short preview of the weather forecast and also click on the day and see more details.

02

Issue: Double icons for search and favourites feature on the home page.

Action: delete double icon for search; move the favourite icon close to the name of the spot on the right side.



03

Issue: Not possible to get from login to sign up screen.

Action: Make connection between screens and processes by link on the bottom redirecting user to correct place.

TOP3 issues - High-fidelity prototype test



01

Issue: Meteo part of the screen feels cramped

Action: I moved Icon to the left and temperature to the right. Moved safety alert to this area and removed its borders.

02

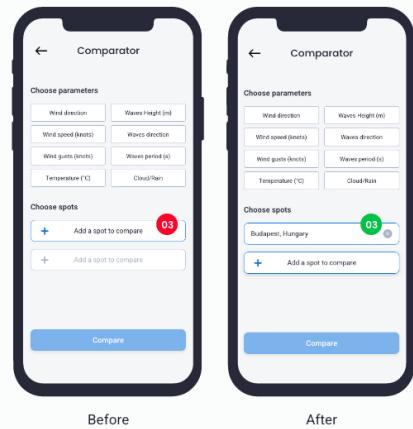
Issue: Alert is looking like a button, but it is just information

Action: delete a border, change colour text and move to the weather information to be hierarchically visible with the most important information.

03

Issue: Clicking «add a spot to compare» open empty forms, but users expect it prefilled with user location.

Action: Add current location to compare screen with option to change it.



06. VISUAL DESIGN

Visual design (Style Guide and Final mockup)

Colors



Typography



Medium
Regular



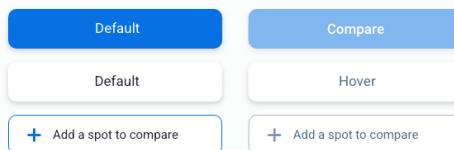
Medium
Regular
Light

Logo



UI Elements

Large Buttons



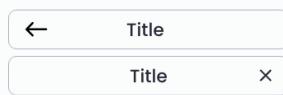
Small Buttons



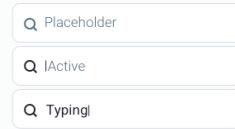
Other Buttons



Navigation Bar



Search Bar



Paginations Dot



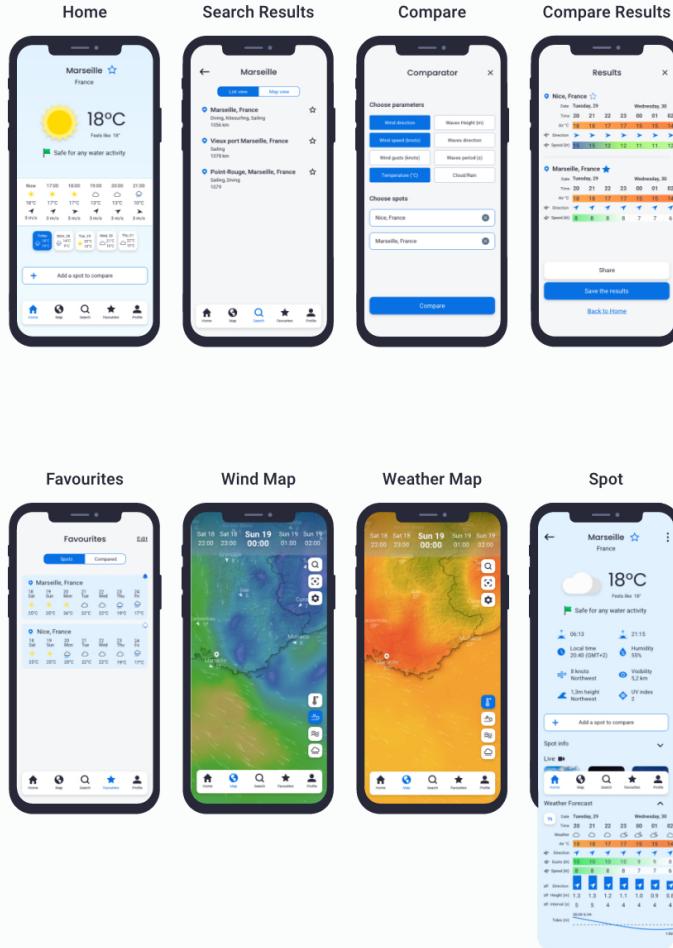
Segmented Control



Icons



Final mockup



07. LESSONS LEARNED

It was important to made a proper research and define personas with their journey map. It gave me a clear understanding of needs and expectations. This way the ideation phase was smooth and fun, but at the same time very productive and based on data.

Iterative process was the best way to keep wireframes on the right way. Important to test each decision and iterate based on the users input and always keep in mind that "you are not a user". Visual design is aimed to support usability and user experience.

Credits

Photo by Alexander Andrews on Unsplash.
Icons made by Freepik and Pixel perfect from www.flaticon.com.