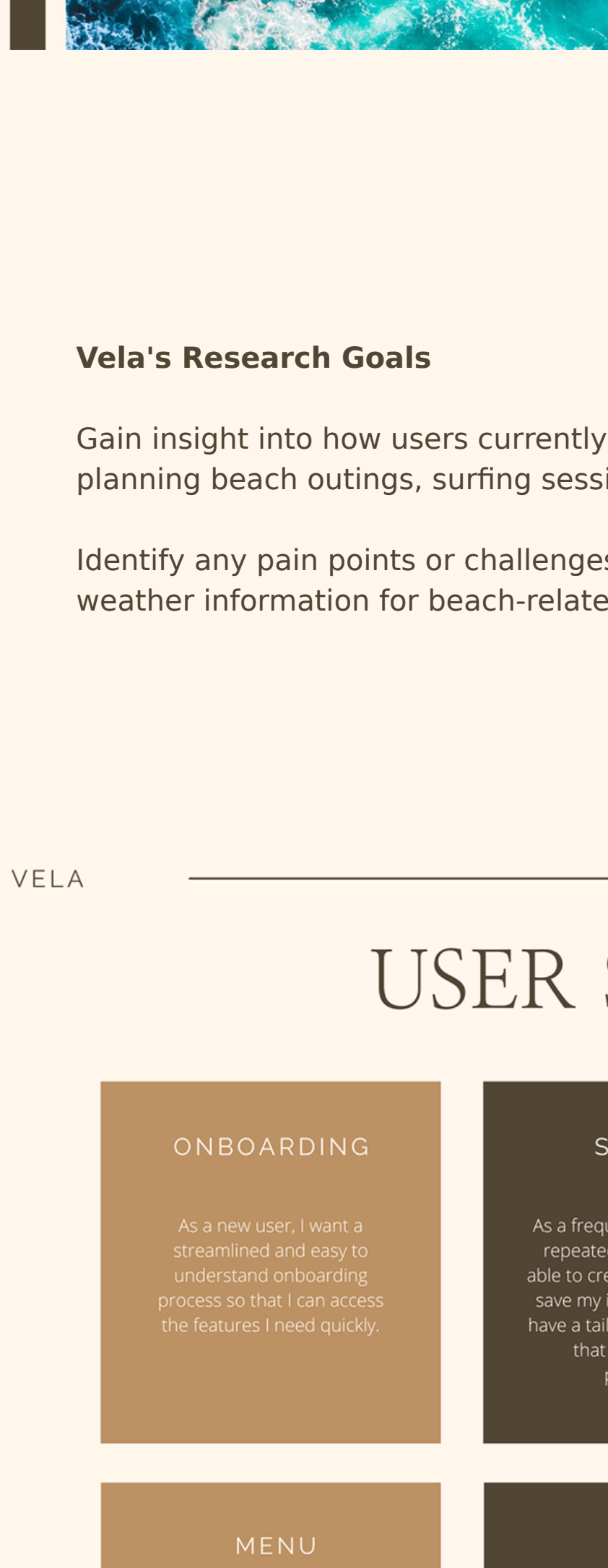
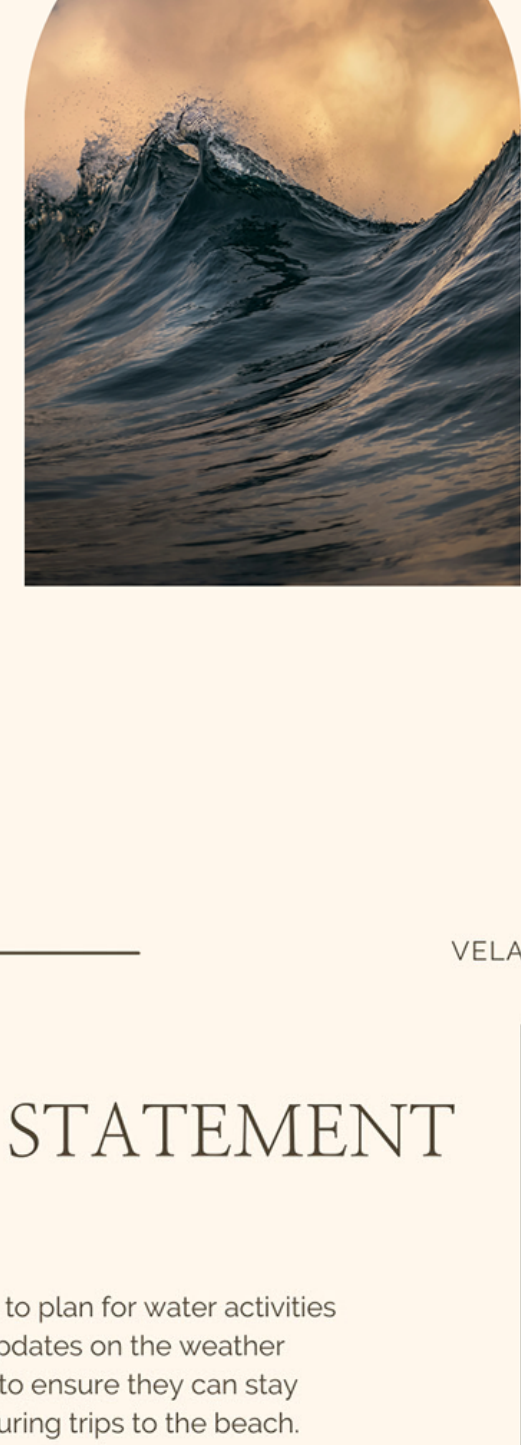


VELA

A WEATHER APP

SEAN NELSON



PROBLEM STATEMENT

A user **needs a way** to plan for water activities and receive quick updates on the weather **because** they want to ensure they can stay safe and have fun during trips to the beach.

We will know this need has been met when users are able to use our app to plan beach trips in advance and access up-to-date notice for when weather conditions change.

Vela's Research Goals

Gain insight into how users currently access and use weather information when planning beach outings, surfing sessions, or boating activities.

Identify any pain points or challenges users face in obtaining and interpreting weather information for beach-related activities.

VELA

USER STORIES

ONBOARDING

As a new user, I want a streamlined and easy-to-understand onboarding process so that I can access the features I need quickly.

SIGN UP

As a frequent beach goer and repeated user, I'd like to be able to create an account and save my information so that I have a tailored app experience that learns from my preferences.

HOME SCREEN

As a visual learner, I need my weather app to have an menu that is easy to read and understand so that I can easily find the info I need.

MENU

As a multi-water sport enthusiast, I need an easy to read navigation system so that I can switch between functions as fast as the weather changes.

WIND CONDITIONS

As a deep sea fisher, I need a readout of wind conditions so that I know how safe my daily route will be.

WAVE CONDITIONS

As a surfer, I would like a live wave report so that I can surf where the conditions are best.

WEATHER CONDITIONS

As a mother of three, I need an app that can quickly show me the day's weather so that I can plan my kids' activities safely.

ALGAE REPORTING

As a beach goer with allergies, I need updated algae reporting so I know if it's safe for me to swim at the beach.

SAFETY TIPS

As a tourist, I'd like weather safety tips for the locations I visit, so that I can still ensure I'm safe when in an environment that is foreign to me.

USER PERSONA

By collecting and analyzing user stories, I was able to identify key patterns in user needs and pain points. These stories became the groundwork for creating Vela's user personas.

USER PERSONA 1



NAME: Ava Martins
AGE: 27
LOCATION: Raleigh, NC
OCCUPATION: Marketing Manager
MARITAL STATUS: Married
KIDS: No

NEEDS AND GOALS

Ava is passionate about outdoor activities and loves spending quality time with her family. She seeks a reliable and efficient way to plan spontaneous beach trips, considering weather conditions. Her goal is to find a user-friendly weather tool that provides accurate hourly forecasts and real-time updates.

BEHAVIORS

Ava often checks weather conditions at work and prefers a mobile-friendly solution as she's frequently on the go. She wants to ensure the safety and enjoyment of her family during beach outings. Ava values simplicity and quick access to essential information.

QUOTE

"Planning occasional beach trips can be a challenge, especially with unpredictable weather. I don't live close, so I don't want to waste the trip on a bad day of rain. I need a tool that simplifies the process and keeps us informed on changing conditions."

I used this user persona to determine which Vela features would be the most critical to test, both before and after prototyping was designed. When using other weather applications, user action can be summed within three major steps, determining destination, checking weather, and planning around said weather. These three phases would help me determine which of Vela's core features were most important for testing.

CORE FEATURES TESTED

FIND A BEACH

Users need to be able to quickly find their needed location, whether searching by map or address lookup.

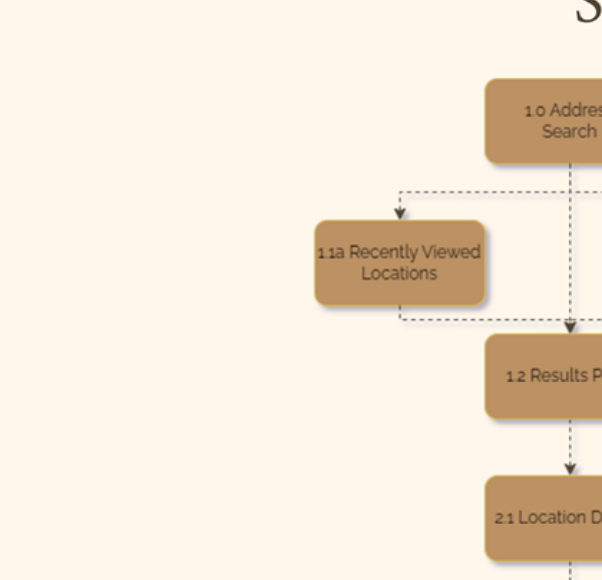
SAVE LOCATION FOR DAY OF

As weather conditions change rapidly, users need to be able to quickly access previously viewed locations day of.

CHECK ALGAE REPORT

Beachgoers need reliable updates on various beach conditions, including the algae report, as well as the ability to share this report with friends or family.

Before transitioning to wireframes, I applied analytical research methods to validate my own insight on user need. Using a similarity matrix and a best-merge method dendrogram, I analyzed behavioral patterns and grouped similar user needs. This process enabled me to uncover connections between preferences, helping guide me in the process of developing a logical user flow and later sitemap.

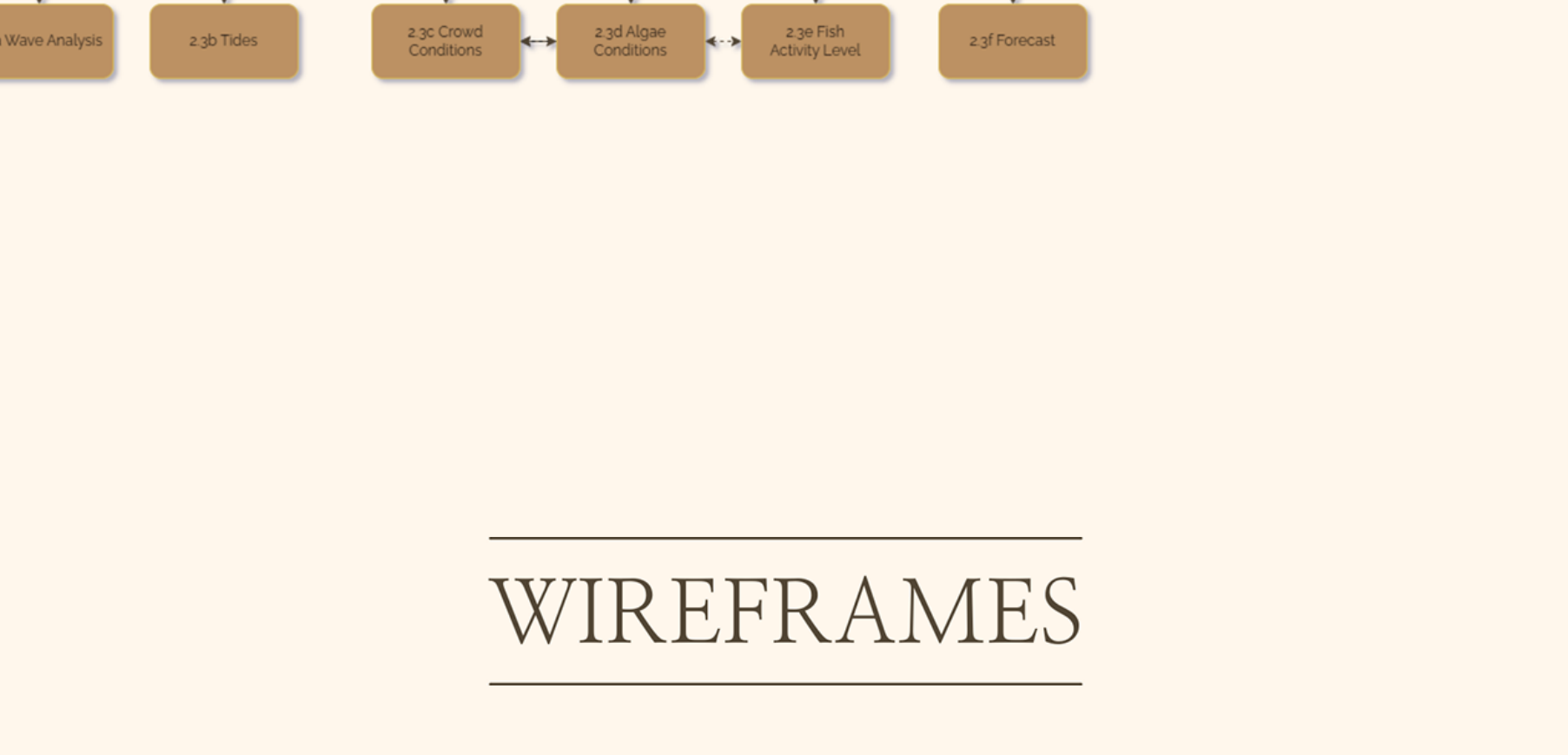


SIMILARITY MATRIX

Open card sorting was completed with 9 participants who organized 22 cards by like category.

This similarity matrix indicates which features participants are most likely to associate together.

BEST MERGE METHOD - DENDROGRAM

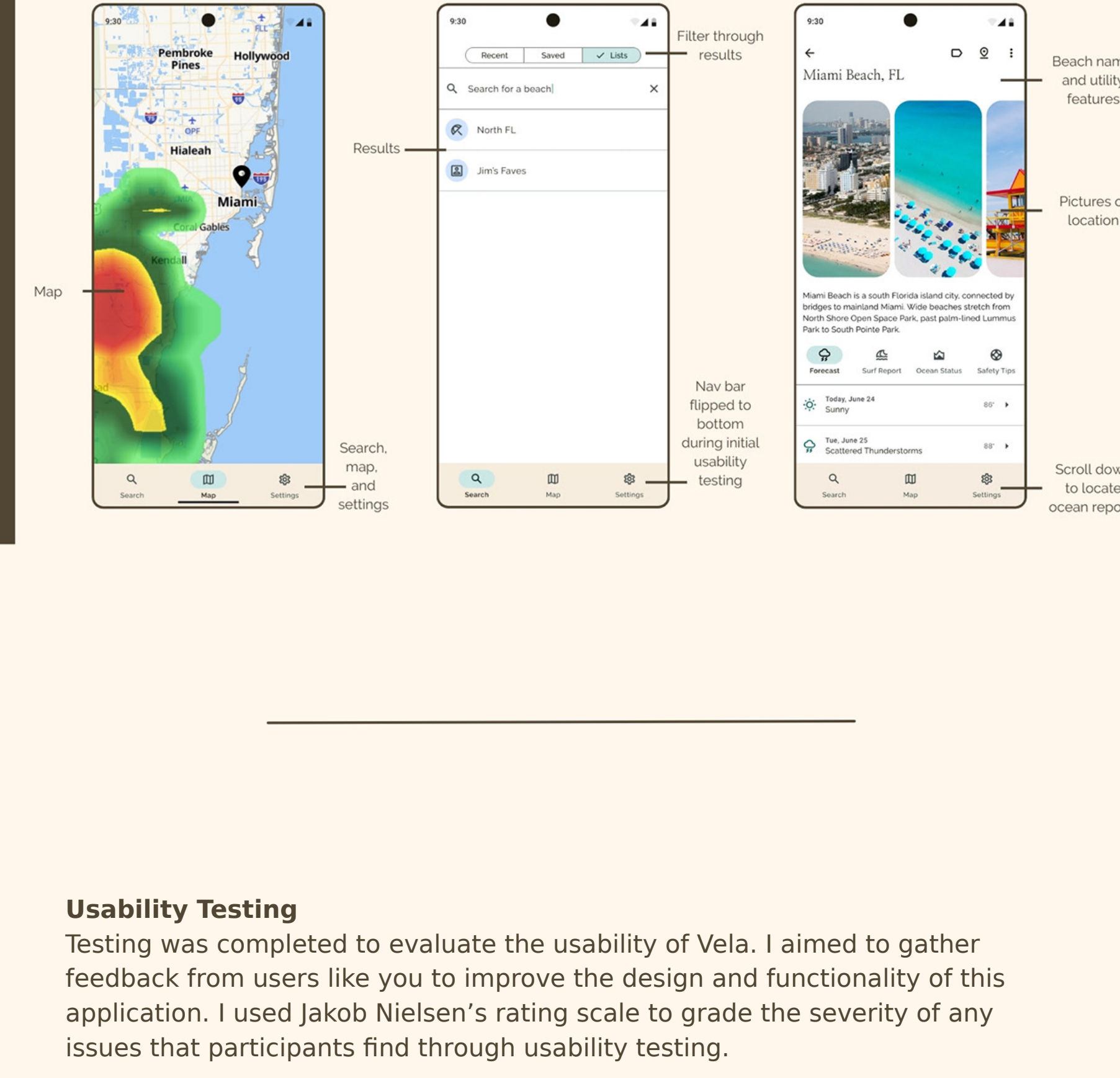


FINDINGS

The **matrix** indicates that there was likely some **confusion** regarding what certain features were intended to do. I.E. "Safety Tips" is a feature that provides weather safety tips to users, but participants organized this alongside the privacy policy and account pages.

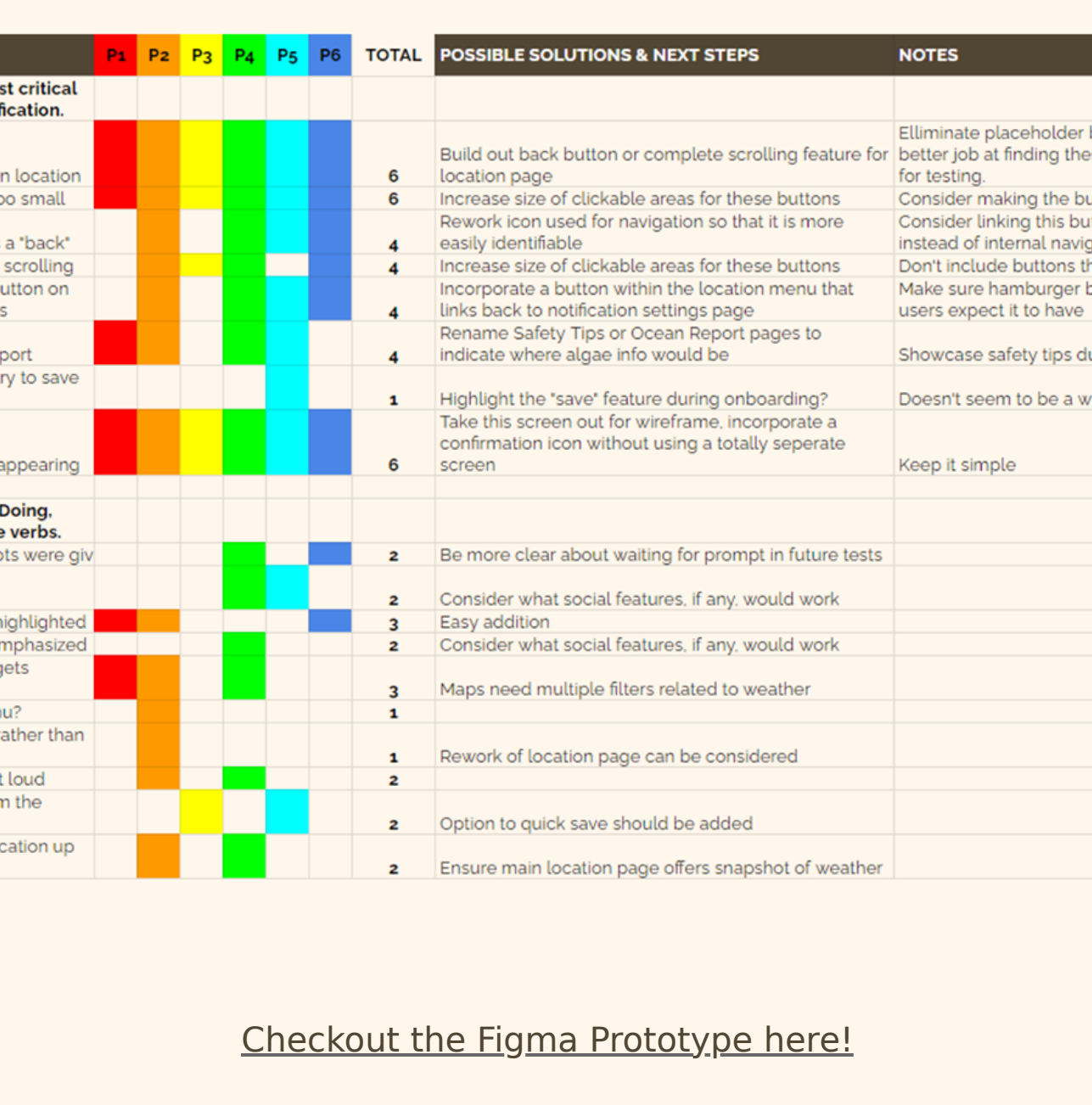
The **dendrogram** results indicate that there are three **primary clusters** that a majority of participants indicated are similar enough to group together.

USER FLOWS



I organized the following sitemap to sort features and navigation paths in a way that aligned with user goals and expectations, ensuring that key functionalities like finding a beach or checking weather updates were easy to access. It bridged the gap between user insights and the foundational layout of the app.

Sitemap Pre-Wireframing



WIREFRAMES

LOW-FIDELITY

MID-FIDELITY

HIGH-FIDELITY

Usability Testing

Testing was completed to evaluate the usability of Vela. I aimed to gather feedback from users like you to improve the design and functionality of this application. I used Jakob Nielsen's rating scale to grade the severity of any issues that participants find through usability testing.

The results of this test were implemented into the current prototype for Vela, the Figma link for which is listed below.

RAINBOW SORTS

MOBILE USABILITY TEST	P1	P2	P3	P4	P5	P6	TOTAL	POSSIBLE SOLUTIONS & NEXT STEPS	NOTES
Errors - Record and prioritize most critical errors based on your error classification.									
4. No clear way to get back to main location								6. Build out back button or complete scrolling feature for better job at finding these obvious errors before sending for testing.	Eliminate placeholder buttons as possible. Try to do a better job at finding these obvious errors before sending for testing.
3. Thought navigate to button was a "back"								7. Increase size of clickable areas for these buttons	Consider making the buttons themselves look larger as well. Consider linking this button to other navigation apps instead of internal navigation.
4. Location page not built to allow scrolling								8. Consider what social features, if any, would work	Make sure hamburger button for extra features has what users expect to see.
3. Clicked into hamburger menu button on location to find notification settings								9. Rename Safety Tips or Ocean Report pages to indicate where algae info would be	Showcase safety tips during onboarding
2. Went to safety tips for Algae Report								10. Highlight the "save" feature during onboarding?	Doesn't seem to be a widespread issue
2. Went back to search screen to try to save location								11. Take this screen out for wireframe, incorporate a confirmation icon without using a totally separate screen	Keep it simple
1. Sent/Saved button not auto disappearing									
Observations - What are people doing, thinking and feeling? Use active verbs.									
Closed through faster than prompts were given								12. Be more clear about waiting for prompt in future tests	
Asked about connecting with friends/community on the app								13. Consider what social features, if any, would work	
Thoughts the current tab should be highlighted								14. Easy addition	
Loves having photos, wants the employees								15. Consider what social features, if any, would work	
Asked about map features (what gets visualized?)								16. Maps need multiple filters related to weather	
Questioned need for settings menu?								17. Re-work of location page can be considered	
Mentioned scrolling to get more, rather than clicking on to many pages								18. Option to quick save should be added	
Processed everything they did out loud								19. Ensure main location page offers snapshot of weather	
Asked about saving a location from the search page									
Mentioned having more info on location up front									

[Checkout the Figma Prototype here!](#)

VELA

BY SEAN NELSON