Wireframe Prototype Iterations

Design Decisions: How to Display the Map

We want to make sure the user gets the informational needs they require to understand the map, as well as have a positive experience navigating around the map itself. The customer wants to also explore adding graphs to the map.

We will explore what the website would look like with a view different options:

- A giant map with pop ups for information
- A giant map and a giant text/information section
- A giant map with graphs intertwined and separated

Option 1: Info View/ Large Map Split

The goal of this website was to show a few different components:

- Information about the website/map
- A large map view of the visualization
- A social section to share the map to friends/family members

I made this design decision so users would know the context of the data they were looking at before they looked at the map



Option 2: Large Map & Side Key

- The goal of this website was to focus on a large map visualization.
- The key is docked on the left side of the map in this iteration
- This is a view of the map zoomed in on a Providence supported state



Option 3: Large Map & Bottom Key

- The goal of this website was to focus on a large map visualization
- Since there is no data/info view on top of the map in this view, this iteration uses pop ups to explain the purpose of the map.
- The key is docked on the bottom of the map in this iteration



Option 3 (cont.)

- This is a view of the map zoomed out at the USA level before zooming into a specific area.
- The website is also requesting the user's location to directly navigate them to the region they live





Option 3 (cont.)



- This is a view if the map zooms in on a user's location that is not on the map. This isn't the best experience since the changes of your area being supported are low.
- We also see what it would look like if the area was supported



Option 4: Map/Graph Toggle

- This iteration has the data view above the map, and a large section dedicated to a toggle for the map view, and graph view. This is the first iteration showing graphs integrated into the website as the customer requested this feature.
- I think this is very confusing for users and the data views need to be integrated





Option 5: Giant Page: Data & Map

- This is very similar to option 1. The main difference is the size of the infographics.
- This view focuses on letting the user know which areas are supported by Providence before they get discouraged knowing their area isn't supported (once being zoomed in)



Decision: Option 3 – Giant Map!

Since there is no section dedicated to informational text when arriving to the website, we want to make sure the user gets the informational needs they require to understand the map. To achieve this, we are using pop ups.

These include

- Glossary of map terms "key"
- About this map pop up on arrival



Pop Up: "About this Map"

About this Map

Vink to about page

description of what the time is or timestamp.

states/ supported by providence

のたちます

Dima.

This will give a brief overview about who built the map, the areas the map supports, as well as a link to the about page if users want to learn more.





Pop Up: "Glossary of Map Terms"

This pop up opens when you click the question mark button on the bottom right corner. It explains what the term "risk" means, as well as explaining what non supported data sections are

Navigating Around the Map





Users can navigate to a state using a drop down (preselected to only the 7 supported states)

They can additionally use the search bar to navigate to an area of their choosing

Zooming in on a Supported Area

If a county is supported, this is what the user will see - a heat map approach to view risk of infection.

A graph will also pop up showing the spread of COVID over the last 7 days. This graph will be collapsible if the user doesn't want to see it.







About Page

Includes the following:

- About this map description
- Info graph on areas supported •
- FAQ
- Social Media options for sharing the map •

O DETECTION MAP	HOME MAPS ABOUT
Disease Intensity Amor LoreiLorem ipsum dolor sit amet, consectetur adipiscing elit. Ouisque et ullamcorper metus. Pr venenatis lacus venenatis, egestas massa. Ouisque feugiat pellentesque lectus, sed sollicitudin gravida felis. Vestibulum pellentesque quam sed ex tristique pharetra. Cras ornare diam in pelle enim eu mollis. Morbi maximus vitae sem pretium dapibus. Cras aliquam consequat igula, ac el consequat a.	ngst Users roin malesuada egestas ante eget fringilla. Aliquam vitae arcu maximus, n tellus varius quis. Nunc eu viverra ex. Morbi fringilla vestibulum nibh, in entesque bibendum. Proin sit amet auctor ex. Mauris aliquam consequat elfend neque finibus et. Maecenas ultrícies pulvinar orci, nec rutrum leo
	Counties Supported Per State Meshington Lee County, Lee Coun

State

ION MAP	
About This Map	
LondiLorum lastem doko el annet, consectatur adigital egitil. Out ve remeti triaca venerarili, egestar massa. Quingae feugial pellent gravida filis. Vestikuum peleterargar quan and os filisidue piten en un mello. Posti mestimus vitue som protium depiteu. Das el consecutar	ng and a silametergan motors. Proin makes and a opportant and output Vinej Ru. M guarn vitant and a motor maximum, maya inset ar, and selficitualist table variant spills. It is easy inversant. Most Vinej Ru weat allow on this, is found on the self-self-self-self-self-self-self-self-
Lonik oren ignam dolor et tanat, conerctetur adiplating eff. Quin venerat is lactor veneratina egestion masse. Quincor Rougist polarit generata hilta. Vasibulum polaritorium genarat ana ten di talcap atema entim euromite. Hosti modirus vitore som pretium depites. Das al commenzatio	que et ultancasper netus. Proin nuiexueda operata sete eget Misglia. Al quen vicar anos maximus, espai locitos set sete indicidado tobu verta quio. Praos ou mensos Marti Misglia verdatadan etto, in accura conceptor (quels contel tente requer fridava et: Marenaes utricios parlamentos), escurramien
LovelLovenripromision al annet, consectedor adiplacing elit. Dub venerati lacua veneratis, especto mosso, Quinque teuple peliven grandar dels, Vestibuten peleretraga e quan sed en Histopo phane enime a mala. Norbi manimus Vose sem pretium depleus. Ene al consequeto.	span et alliente stoper metala. Preih media audia separtana onto segat Mindijla. Al gazer vitana anca mantenas mesure tenzo, eset estéctivadori tenda vardia rapia. Ina tar eve alverta nes. Hattá hittojila veditakan na fahi hi Into Zena omaré destri está derivana de la denadora. Prist el al destri destri en Alterita destri en construigad Iguam comanguat figuin, se eletimont negate fizibas et. Historinas utilidas galviner sect, nec netra na vie
	Regions Supported by Providence
Him	Washington Lee Courty, Lee Cou
	On a gion Line County, Line Cou
	California Leo Parety Leo Danta Leo Counta Leo Counta Leo Counta Leo Counta Mantana
۷ ۲ 🔍	Lee Dearly Lee County, Lee County, Lee County, Lee County, Lee County, Lee County,
Sapported By Book States Net Stat	Exer Douring, Lee Douring, Lee Couring, Lee
FAQ	
Larem (psum dolor alt anvet, consectetur adipliacing elit. Integer er Crest tenter magna, pellentengue at exit exit velicula mailmun purua pellentesque at est seit velicula mailmus purus. Dras suscipit velit	u nollis eras. Enze sambjek velit n.bit. nani imperdivi delor olician a. Proin dictum magna in porta efficitur. Cina tartor magna nilat. annimperdet delor dictarna. Proin dicta in magna i a porta efficitur.
Lorem losum dolor alt arret, consectetur adiplecing elit. Integer es	u molfis eras. Vivanus commede quam area
Crao tantor magnal pallemesque at est sedi vehicule movimus punus.	Dres suscipt, will eite
Lorem (psum dolor sit arreit, consectetur adipliscing elit. Integer es	u molila
Craw Lorior misgon, polientivo que si est avel, vehiculo maei mus purus.	Erne suscipit willt i Ed. non i oppind vi dolor diction
Lerem Ipsam dolor sit anset, consectetur adipisoing olit. Integer ex Crastarior magna, pellentesque at vet ood, vehiculo maei mus parus.	u mobile . Drava suskuljuči, veliči ni čelu, nasni imperidi et dolori cilcitarn

Share 🕤 🖬 🍽 🖌 🕤 🐿

Providence

• • • • • • • • •

Mobile View - Map











Mobile View - About Page



Design Decisions: Accessibility and Color

We want to make sure our hexagon colors are accessible to all types of color visions. The current color selection picked by the customer is not the most accessible unfortunately

We want to explore what the map looks like to the following color visions:

- Green/Red Color Blindness (Deuteranomaly, Protanopia)
- Blue/Yellow Color Blindness (Tritanopia)
- No color blindness

The purpose of this exercise is to visually show the customer what the different options looks like so they can make a decision backed up by data. We will explore what the map looks like in multicolor, single color, and monochromatic views for these types of color vision

COLOR OPTIONS: Multicolor and Single-Color Gradients



Option 2

Option 2: Multicolor



Option 3: Multicolor



Option 4: Orange









Option 5: Peach

Option 1: Multicolor

Option 6: Light Blue

Option 7: Gold

Option 8: Teal

COLOR VISION - None



Option 1: Multicolor



Option 5: Peach



Granite Falls

Sulta

Silver Firs

Redmond

Renton

Kent

Shoreline

Seattle

Option 2: Multicolor

Bremerton

Option 6: Light Blue

Whidbey



Option 3: Multicolor



Option 7: Gold



Option 4: Orange



Option 8: Teal

COLOR VISION Deuteranomaly: Diminished response to green and red



Option 1: Multicolor



Option 5: Peach



Mill Creek

Lake Washington

Renton

Monroe

Cottage Lake

Redmond

Option 2: Multicolor

Shoreline

Kingston

Vasho

Option 6: Light Blue

Poulsbo

remerton



Option 3: Multicolor



Option 7: Gold



Option 4: Orange



Option 8: Teal

COLOR VISION Tritanopia: Retina has troubles distinguishing blue and yellow



Option 1: Multicolor



Option 5: Peach



Option 2: Multicolor



Option 6: Light Blue



Option 3: Multicolor



Option 7: Gold



Option 4: Orange



Option 8: Teal

COLOR VISION Protanopia: Retina doesn't respond to green or red



Option 1: Multicolor



Option 5: Peach



Option 2: Multicolor



Option 6: Light Blue



Option 3: Multicolor



Option 7: Gold



Option 4: Orange



Option 8: Teal

COLOR OPTIONS: Monochromatic



Color Vision: None



Color Vision: Deuteranomaly



Color Vision: Tritanopia



Color Vision: Protanopia



Color Vision: None



Color Vision: Deuteranomaly



Color Vision: Tritanopia



Color Vision: Protanopia

Problems

- Monochromatic of one color
 - Gradient is still needed to display decimal ranges inside of the [-6 to +6] spectrum
- Multicolor
 - \circ Potential bias
 - Green/red solution: green means go, red means stop. Green doesn't mean go with COVID, still not safe
 - Color Vision Different Abilities
 - o Multicolor solutions are very hard to see for people with different color visions
 - o Gradient/Non-Gradient
 - If we want to include the range of [-6 to +6], we need a gradient. Gradients look messy for multicolor solutions

Solution: Peach



Color Vision: None



Color Vision: Deuteranomaly



Cottage Lake

Mania Valley

Snoqua

Redmond



Color Vision: Tritanopia

Color Vision: Protanopia

Renton

Shoreline

Solution: Peach



<image>

Color Vision: Tritanopia

Maple Valley

Color Vision: Protanopia

Design Decisions: Displaying Not Supported Areas

We want to clearly show areas where data is not available.

Current Implementation:

• Use Azure Maps "Grayscale Light" theme, and take advantage of white map to represent data not available

Current Problem:

- Users interpret white to be map
- Users interpret white to be "clear" or "no COVID" since it is the lowest color on a singlecolor color gradient scale

Option 1: Thin Stripes



Option 2: Thick Stripes



Option 3: Squares



Option 4: Dots



Solution: Option 1- Thin Stripes

We want to clearly show areas where data is not available.

Problem: Users interpret white to be map

Solution: Use a layer instead of an Azure Maps theme, with a pattern

Problem: Users interpret white to be "clear" or "no COVID" since it is the lowest color on a single-color color gradient scale

Solution: Use gray (a color outside the color gradient) to show data not available



Design Decisions: Map Layering

The hexagons should do the following:

- Clearly displays COVID high intensity hot spots and low intensity spots so the user can distinguish them from each other
- Are distinct, but also have enough visibility for users to zoom in and out of different areas, as well as see neighborhoods

Solution: Find a good transparency setting which can achieve both goals

DETECTION MAP COVID-19 Intensity Amongst Users



Azure Map Layers

← → O (A InterNational Anternational DETECTION MAP COVID-19 Intensity Amongst Users

🐐 42 📑 Mirrard





Final Decision

🖌 🗠 🏋 Microsoft



- 🗆 ×







Proposed Solution

- Stay with Grayscale Light
 - Less distractions on the map
 - We are using a patterned overlay, so it isn't too much grey
- Other Map Themes
 - Too many colors
 - Green forests, yellow roads



Final Design

Final Design





Final Design – Graph View





Pop Ups

 \times

Glossary of Map Terms

Colors represent the proportion of all patients seen at Providence in a specific area who had either the syndrome of interest or positive test result. The determination of where the data lives within this is based on the proportion of reported symptoms in each area that correlate to the specific infection.

Data Not Available:

Areas with insufficient data for accurate estimates

Low Risk:

Fewer number of patients with test or snydrome

Medium Risk:

Medium number of patients with test result or snydrome

Major Risk:

Large number of patients with test result or snydrome

Welcome to Detection Map!

Welcome to DetectionMap, an infection awareness tool brought to you by Providence. Our goal is to provide up-to-date information regarding the prevalence of symptoms relating to specific diseases in your community. Updated every 24 hours, this heat-map style visualization showcases where both COVID-19 and INFLUENZA like illness symptoms are being experienced.

Start by searching your region of interest in the search bar above.

See About Page for More >

 \times

Disclaimer

DetectionMap data and visualizations are not intended to provide guidance on decision making by individuals or government entities. The information presented is based on analysis by Providence and does not contain all symptom data available in a specific region. Providence makes no claims, no representations, and no warranties, express or implied, concerning the validity (express or implied), the reliability or the accuracy of the data, including the implied validity of any uses of such data. The data provided in this site are provided for informational purposes only. Providence is not responsible for the misuse or misrepresentation of the data Its about supporting patients, caregivers, and the community.

 \times

Not Supported By Providence

Area not supported by providence. Please go to the about page to see what areas are supported by Providence

See About Page for More >

 \times

About

🥵 DetectionMap

ABC

Providence

About DetectionMap

What is DetectionMap?

The COVID pandemic has brought with it a steady state of uncertainty. It has also brought a new and richer set data that has provided the public with a view of infection and mortality rates in the world in which we live. With a goal of getting more valuable data in the hands of the public, DetectionMap aims to reduce this uncertainty by providing the current state of health in the areas Providence serves. Updated every 24 hours, the DetectionMap displays where symptoms most highly correlated with COVID-19 and INFLUENZA like illness are spreading.

How does DetectionMap work?

The COVID pandemic has brought with it a steady state of uncertainty. It has also brought a new and richer set data that has provided the public with a view of infection and mortality rates in the world in which we live. With a goal of getting more valuable data in the hands of the public, DetectionMap aims to reduce this uncertainty by providing the current state of health in the areas Providence serves. Updated every 24 hours, the DetectionMap displays where symptoms most highly correlated with COVID-19 and INFLUENZA like lilness are spreading.

FAQ

V Who created DetectionMap?

DetectionMap was created through a collaboration of Providence Health and Microsoft. Read more about the strategic alliance of these two companies, HERE.

> What is DetectionMap?

😵 DetectionMap		MAP	ABOUT
FAQ			
	✓ Who created DetectionMap?		
	DetectionMap was created through a collaboration of Providence Health and Microsoft. Read more about the strategic alliance of these two companies, HERE.		
	> What is DetectionMap?		
	> What is the goal of DetectionMap?		
Sharing Share these maps!			
	00000		
	Detection Map runs on Microsoft		
Disclaimer		₩ Pro	vidence

Disclaimer