

# MDH UX STRATEGY

A COMPREHENSIVE + CROSS-DIVISIONAL GUIDE



MARYLAND  
Department of Health

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# OVERVIEW

The purpose of this UX Strategy is to serve as a strategic planning process that helps to prioritize tasks and ensure our team isn't spending time and resources on non-essential work while developing our product. It takes into account the goals of the business, but also the needs of the consumers. A fully realized strategy also helps our stakeholders get a glimpse into our thought process and the reasons behind why we're conducting tasks the way we've chosen to. It also includes a full understanding of the current state of things, aspirations for "the perfect outcome", the development of a vision for future user experience and definitions (i.e. KPIs/metrics, design system, branding guidelines, etc).

# TEAMS & TRACKS

## REQUIREMENTS

### BUSINESS-DRIVEN

This team is in constant contact with the business to gauge exactly what the expectations are. This team makes extensive documentation on what is needed to fulfill the desires of the team, and this documentation is shared as a baseline for all other teams.

## UX/UI

### EXPERIENCE-DRIVEN

This team analyzes the present state of the platform, finds the pain points and usability issues, and reimagines an approach with fresh designs based on stakeholder and customer needs. Strategy approach consists of challenge outline, guiding principles, aspirations, measurements (KPIs, and activities (i.e. wireframes and prototypes).

## SOLUTIONS

### ORGANIZATION-DRIVEN

This team is broken down into 4 parts: 1) Data Architecture, 2) Solutions Architecture, 3) Security Architecture, and 4) Infrastructure Architecture. They outline logical vs physical structure to determine code base, security implementation, and deployment. They receive designs from UX/UI and bring them to life.

## QA/TESTING

### RESULTS-DRIVEN

This team works closely with requirements, compares the intent with the actual actions to decipher test cases with results. Routine responsibilities include writing, conducting/deploying unit tests.

## PROJECT MANAGEMENT

### TASK-DRIVEN

This team oversees all tracks, coordinating actions into user stories, and keeping tracks according to projected road map for delivery dates. They are in touch with stakeholders to pivot as necessary, keeping stakeholders informed and happy, delivering items that are in scope and determining releases. All previously mentioned tracks convey their projected tasks in the form of sprints with trackable tasks to project managers.

# UX STRATEGY BLUEPRINT

## Challenges

*What problems are we trying to solve?*

*What obstacles must we overcome?*

- ▶ General Evaluation
- ▶ Problem Identification Outline
- ▶ Stakeholder & Customer Feedback

## Aspirations

*What are the ideal desired outcomes?*

*What do we want to achieve?*

- ▶ Competitive Research
- ▶ Researching UX Trends
- ▶ Stakeholder Wish-List

## Guiding Principles

*What rules of thumb will we follow?*

*How will we overcome the challenges?*

*What specific mantras will guide teams?*

- ▶ Heuristic Evaluation
- ▶ Usability Principles Outline
- ▶ 508 Compliance
- ▶ User Personas

## Activities

*What types of activities solve the problems?*

*What is the scope of the strategy?*

*What will we focus on for the most impact?*

- ▶ SCRUM/Agile Methodology
- ▶ User Workflows & Diagrams
- ▶ Storyboarding
- ▶ Wireframes & Research
- ▶ Sitemap
- ▶ Design System Implementation
- ▶ Branding & Theming
- ▶ Delivery of SCSS/CSS to team

## Measurements

*What types of measurements will we employ?*

*What metrics will be used to gauge success?*

- ▶ KPIs (Key Performance Indicators)
- ▶ Behavioral Analytics & Survey Data



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# CHALLENGES

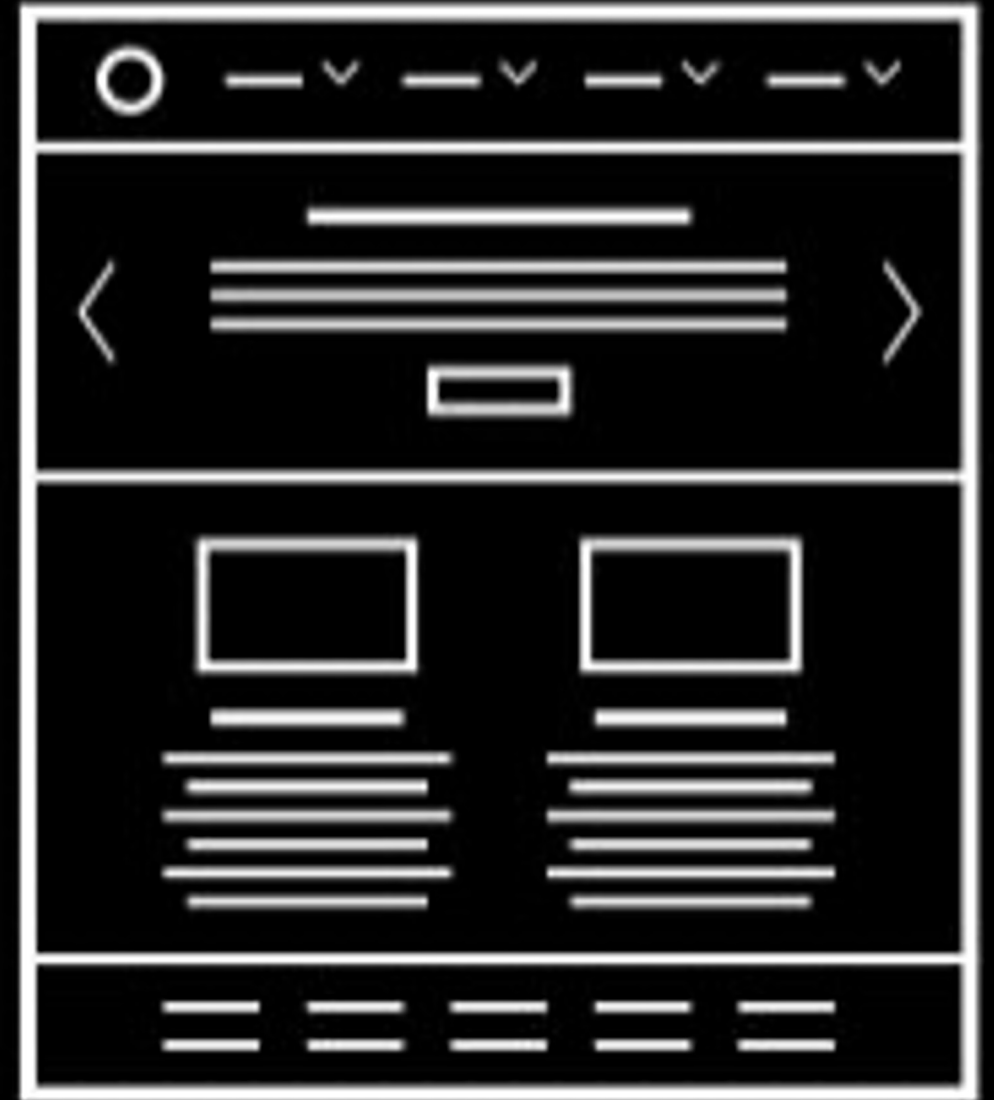
*What problems are we trying to solve? What obstacles must we overcome?*

In order to create a better product, we must first understand what the major challenges are. We figure these challenges out by conducting the following:

- ▶ General Evaluation
- ▶ Stakeholder & Customer Feedback
- ▶ Problem Identification Outline
- ▶ The 5 "W"S



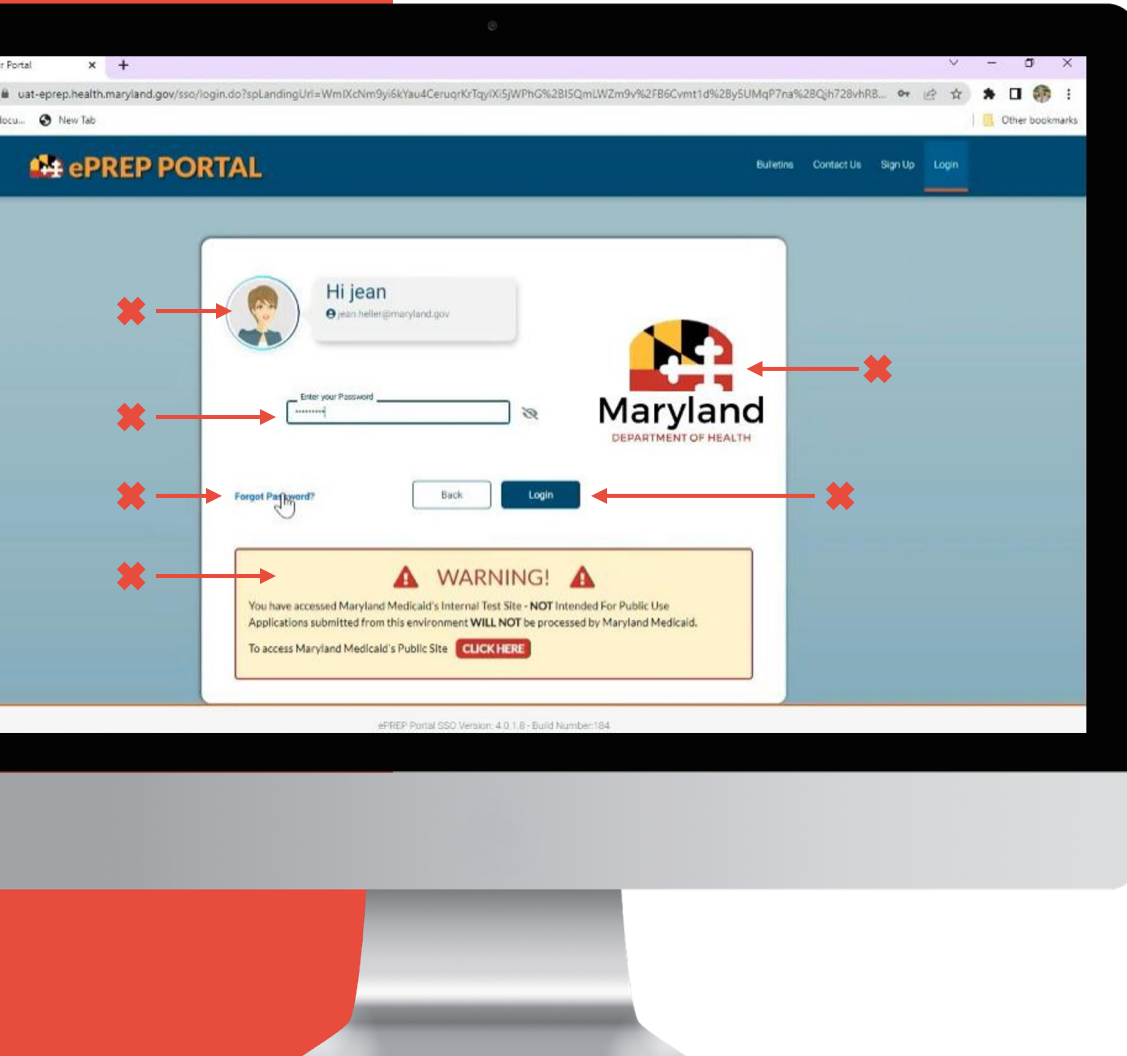
# Bad UX



# GENERAL EVALUATION

The following is a general synopsis of the existing state of the portal, through the lens of UI/UX specialists:

- The portal doesn't adhere to any design system, so there are inconsistencies in components
- Lucy is too large and overpowering from page to page
- Maryland logo on landing page too large
- All fonts are a bit too small and don't adhere to WCAG guidelines
- There are too many navigation bars and progress bars; it's hard for the user to know how much of the application process remains
- There is alignment inconsistency between pages; sometimes things are centered, other times right/left aligned, and other times there's a mix of alignment on the same page
- There is too much orange used throughout the page (i.e. icons, buttons)
- There is no hierarchy of color usage (i.e. red typically means danger or warning, but the reds and oranges are used loosely throughout the platform)
- Call to Action (CTA) needs to be better represented with the language and usage
- Overuse of icons
- [View Evaluation: Part 1 \(URL Undisclosed for Company Privacy\)](#)
- [View Evaluation: Part 2 \(URL Undisclosed for Company Privacy\)](#)



# CUSTOMER FEEDBACK

The following is a collection of real feedback from various providers:



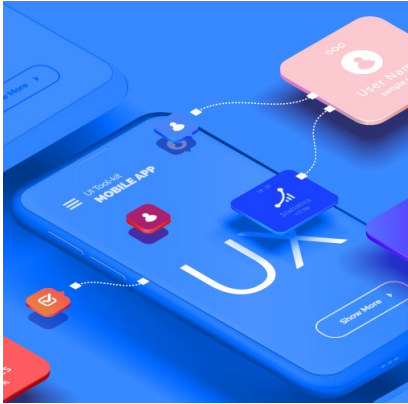
- Difficult trying to figure what was required with uploading the documents
- Tedious uploading or deleting the documents one at a time
- The website is complicated
- It is not very self-explanatory
- Very confusing on what needs to be done. It would be good if there was a video giving basic guidance about what needs to be done.
- This was incredibly difficult. There were several times when I couldn't move to the next step and could not figure out why
- Make easier and less time consuming
- Please have a pop-up that clearly explains what needs to be done for each item
- It was very difficult to figure out how to navigate this portal.
- The help section was not helpful, I had to figure things out myself with trial and error
- Not very clear on what to do next in the process
- Portal is too slow
- So hard to navigate
- Way too cumbersome
- Please make it user friendly
- [View More \(URL Undisclosed for Company Privacy\)](#)



<b>Competitive Audit</b>	<b>Goal:</b> Compare the user experience of each competitor's website				
	<b>General information</b>				
	<b>Competitor Type</b>	<b>Location</b>	<b>Product offering</b>	<b>Website</b>	<b>Target audience</b>
	New York state	New York state	Health coverage to people with limited income	<a href="https://my.ny.gov/LoginV4/login.xhtml">https://my.ny.gov/LoginV4/login.xhtml</a>	Providers who provide medical services
	Georgia	Georgia	Health coverage to people with limited income	<a href="https://www.mmis.georgia.gov/portal/PubAccess.Home/tabId/2/Default.aspx">https://www.mmis.georgia.gov/portal/PubAccess.Home/tabId/2/Default.aspx</a>	Providers who provide medical services
California	California	Health coverage to people with limited income	<a href="https://provider-portal.apps.prd.cammis.medical.ca.gov/email">https://provider-portal.apps.prd.cammis.medical.ca.gov/email</a>	Providers who provide medical services	
Peach State Health Plan	InDirect competitor	Atlanta	Health coverage to people with limited income	<a href="https://www.pshpgeorgia.com/about-us.html">https://www.pshpgeorgia.com/about-us.html</a>	Physician driven

# PROBLEM IDENTIFICATION OUTLINE

After an extensive evaluation of the external portal, conversations with stakeholders, and the collection of customer feedback, we have determined the major problems categories to be:



## Not Intuitive

Most websites come with a set of assumed ideas that people gravitate to for ease of use. Most users know that the logo in the top left corner will always navigate to the home page, disabled links are a shade of gray, the footer will have helpful links and copyrights, etc.



## Intrusive Virtual Assistant & Lack of Education of Portal Use

It's no secret that users hate Lucy. It's one of the top complaints. She's on every page and seems like more of an important feature than anything else on the page. While there are helpful videos throughout the portal, they're scattered and hard to find.



## Reducing redundancy and increasing consistency

Decrease duplicated design solutions. Redundancy in the navigational paths through an information architecture.



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# GUIDING PRINCIPLES

"**Guiding principles**" are the broad philosophy or fundamental beliefs that steer an organization, team or individual's decision making, irrespective of the project goals, constraints, or resources. There are a few universal UX principles a product needs to be truly successful. Additionally, since this is a governmental portal, we are also striving to be inclusive and have outlined accessibility principles that we will be following as well. The next few slides outline what our team's guiding principles consist of.



# THE 5 "W"'S

UX designing has a lot of similarities with journalism when it comes to investigation and discovery. The 5 Ws are about the discovery and clear conveyance of information to validate words and ideas as we design, revise and repeat.



## Who?

Who are we designing for? As we answer this question we have defined and captured our audience demographics in User personas.

## What?

What kind of tasks and goals will our audience be accomplishing as they use our Website? Our website is for **health professionals who provide health care services** to enroll in and successfully submit an application in our portal.

## When?

When will our targeted audience use our website?  
When health care professionals wish to enroll in the Maryland portal to be part of Medicaid services

## Where?

Where will our target audience be using our product? Our target (provider) audience will predominantly be using iPads and tablets during their site visit. Our super users will primarily be using desktop computers/laptops.

## Why?

Why is our audience choosing to use what we have designed and what drives their behavior? In this context our audiences are the providers who want to enroll in the Medicaid portal and provide their services.

# 10 UNIVERSAL USABILITY PRINCIPLES



Visibility of System Status

1



Match Between System & Real World

2



User Control And Freedom

3



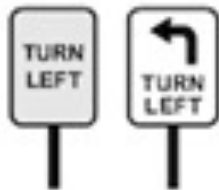
Consistency And Standards

4



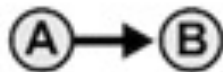
Error Prevention

5



Recognition Rather Than Recall

6



Flexibility And Efficiency of Use

7



Aesthetic And Minimalistic Design

8



Help Users With Errors

9



Help And Documentation

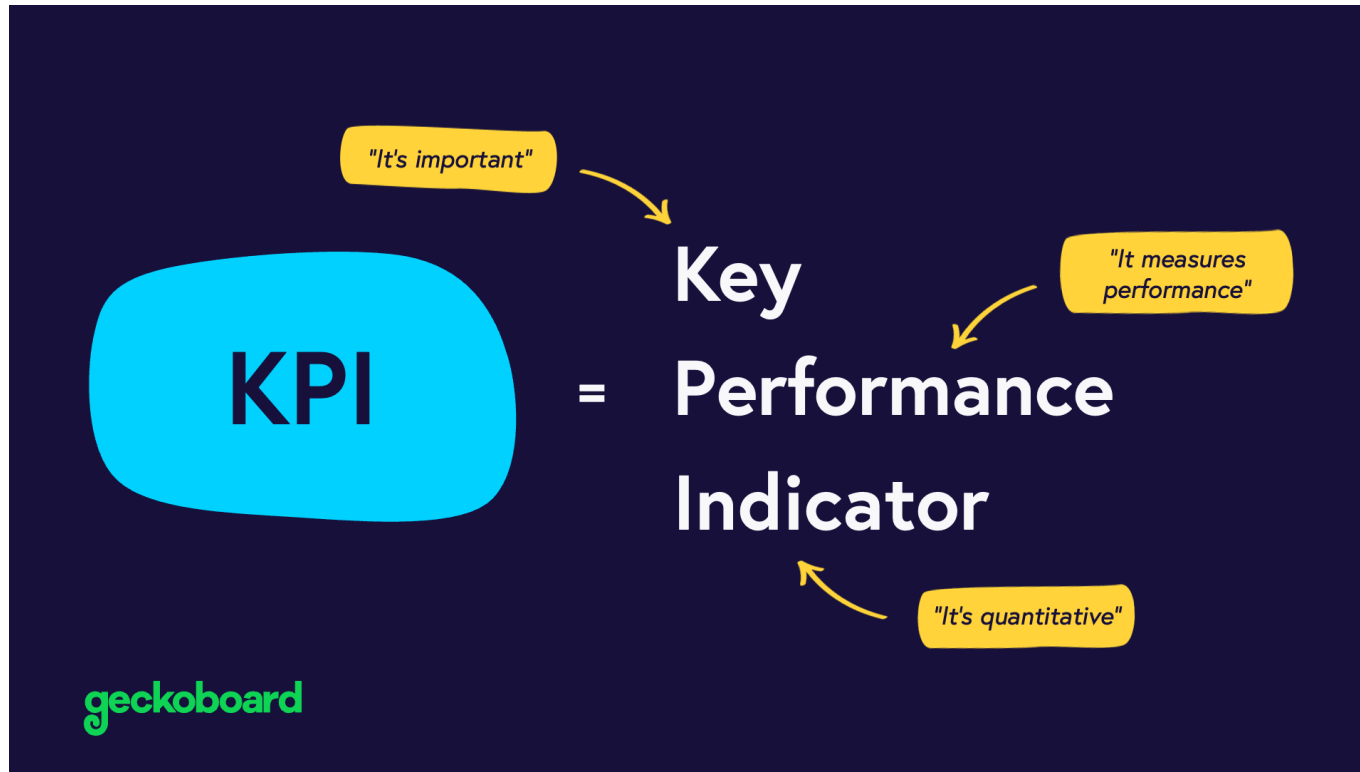
10

# ACCESSIBILITY GUIDELINES



[View Full List of WCAG/508 Compliance Standards \(URL Undisclosed for Company Privacy\)](#)

# Key Performance Indicators (KPI)



KPIs (or Key Performance Indicators) are the key targets you should track to make the most impact on your strategic business outcomes. It helps to keep the team focused on what's most important. Do we want to reduce the number of customer service calls and emails? This is an example of a KPI worth tracking. Establishing a few key metrics will help us to measure the success of our hard work.

To measure the success of this project, we have determined the major KPIs as being:

- **Reduced time on task**
- **Reduced drop-off rate**
- **Reduced customer emails**

[View Full KPI Research Documentation \(URL Undisclosed for Company Privacy\)](#)

# EXTERNAL USER PERSONAS

A User Persona is the fictional representation of our ideal user. A Persona is generally based on the research and incorporates the needs, goals, and observed behavior patterns of our target audience.





SUPER USER

# SAMANTHA



## STATS

Age: 45

Occupation: MDH Enrollment Specialist

Location: Maryland



## BIO

Super User Samantha is the external user who is authorized with all the superpowers in order to successfully submit the application. She has the power to assign other users as admins, approve requests, and approve/deny applications.



## MOTIVATIONS & GOALS

- To improve the user experience to the providers at the start of the application process to the submission of the application.
- To have complete control with regards to access, as it is an in-house application.



## FRUSTRATIONS

- She has to contact the third party for certain access controls in the application process, such as assigning other super users
- Lots of usability issues while navigating through the application; it isn't intuitive.



## TECH

- Internet ● ● ● ● ●
- Social Media ● ● ● ● ●
- Data Entry ● ● ● ● ●



“I need to make a lot of admin accounts, and don't want to consult a 3rd party to do so. I need immediate access and intuitive workflows.”

ADMIN

# ALICE



## STATS

Age: 35

Occupation: Office Manager

Location: Maryland



## BIO

As an admin, Alice enables a user to access a portal.



## TECH

Internet	● ● ● ● ●
Social Media	● ● ● ● ●
Data Entry	● ● ● ● ●



## MOTIVATIONS & GOALS

- Easy-to-use portal with Quick help
- Ability to upload or download files
- More responsive/intuitive portal
- Clear dashboard display of all providers
- Able to view and manage shared applications
- Provider should be identified by NPI/tax id
- Should be able to send referral links to providers, which redirects to self portal
- Ability to capture user activities



## FRUSTRATIONS

- Slow response times
- Inability to upload/download files
- Need help to navigate the portal
- Difficult to use portal in small screen devices such as mobile device
- Virtual assistants(VA) are irritating



“I help keep the office in order and need a quick, intuitive way of access our office information.”

## SIGNATORY

# STEVE



### STATS

Age: 40

Occupation: Doctor

Location: Maryland



### BIO

Signatory Steve is a busy doctor with his own practice. His administrative assistant has set up his account, and he now needs to add an extra layer of authorization by supplying his signature to the application to finalize documentation.



### TECH

Internet



Social Media



Data Entry



### MOTIVATIONS & GOALS

- Needs a clear dashboard displaying main functions. (Applications that got approved , resubmitted and return to provider )
- Provider needs dynamic tabs based on specific roles (Ex : DEA certificate ( file uploads) should not displayed for physical therapist)
- Need clear summary of the application
- Want to use Mobile, ipad and Tablet



### FRUSTRATIONS

- Current Address inputs are confusing .
- Asking different types of address, when provider has only one)
- File uploads time consuming
- Extensive time spent on application process
- Virtual assistants (VA) is irritating.
- Unnecessary input request (Example: Lab permit number can be avoided)



“I’m a doctor and spend most of my time seeing patients. I don’t have a lot of time to tinker around with a self-service portal.”

VIEW-ONLY

# VANCE

## STATS

Age: 45

Occupation: Assistant Call Center Manager

Location: Maryland

## BIO

Group provider / solo provider who can only view other provider details in the portal.

Scenario: "I'm Dr. Vance, but I want to see my competitor, Dr. Bikram's information in the portal. Because I'm not an administrator for his office, I only have access to view his information, and not edit."

## MOTIVATIONS & GOALS

- Should have admin access /super user access to view the other provider details
- Verification of the other provider details are correct and relevant
- To fill details for third party users
- Have ability to Search any Provider's Applications.

## FRUSTRATIONS

- Inability to give notes to other provider( if something is incorrectly filled data)
- Difficulty in searching/viewing large group of providers
- No update capability in the system.

## TECH

Internet	● ● ● ● ●
Social Media	● ● ● ● ●
Data Entry	● ● ● ● ●



"I have a private practice, but I'm interested in viewing information on a doctor from another practice."



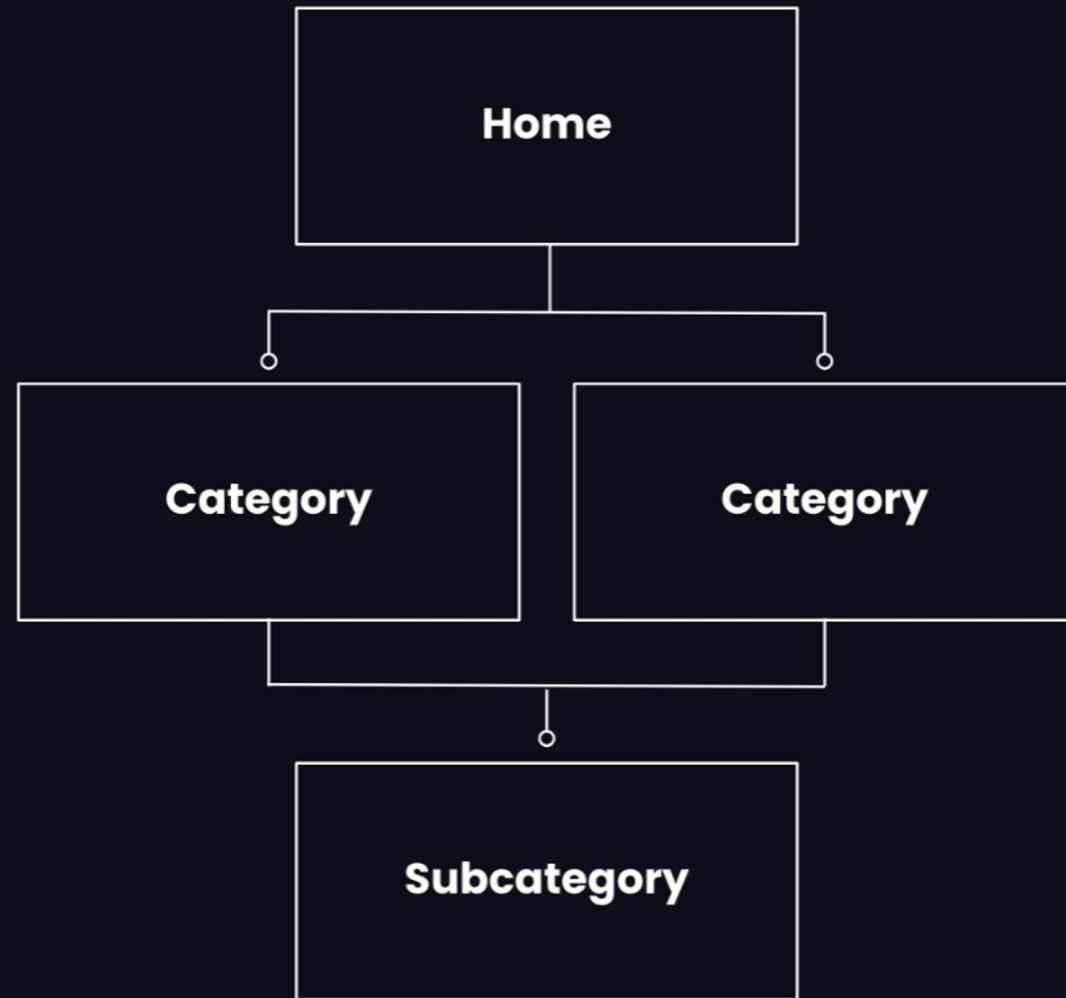
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# SITEMAPS & DIAGRAMS

A sitemap is essentially a guide that outlines the main pages on a site and their relationships to each other, showing how they're connected and where each page fits into the bigger picture.

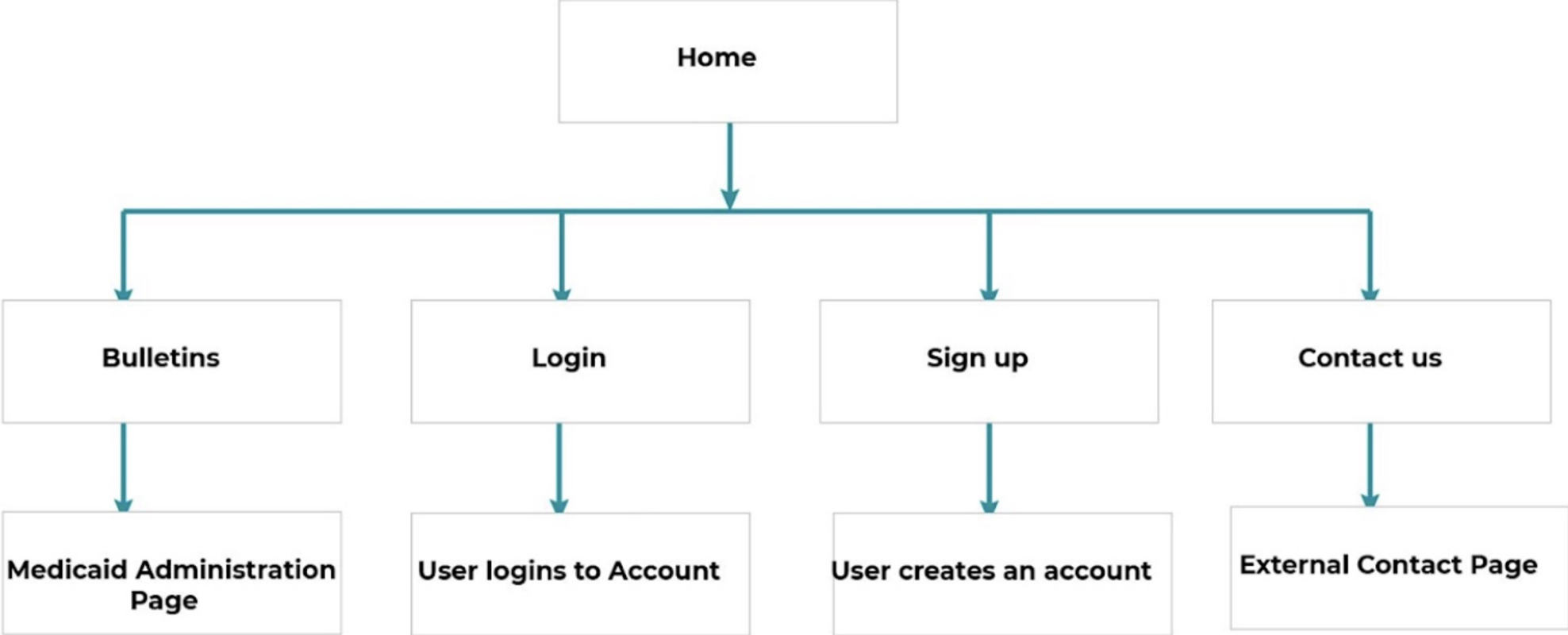
Creating UX sitemaps and user workflow diagrams are an important step in developing an online presence. It ensures you've covered all areas of your site and helps us think about what needs to be done, and potential gaps that may exist.

[View More \(URL Undisclosed for Company Privacy\)](#)



# Sitemap: Login Page

Scenario: Current State

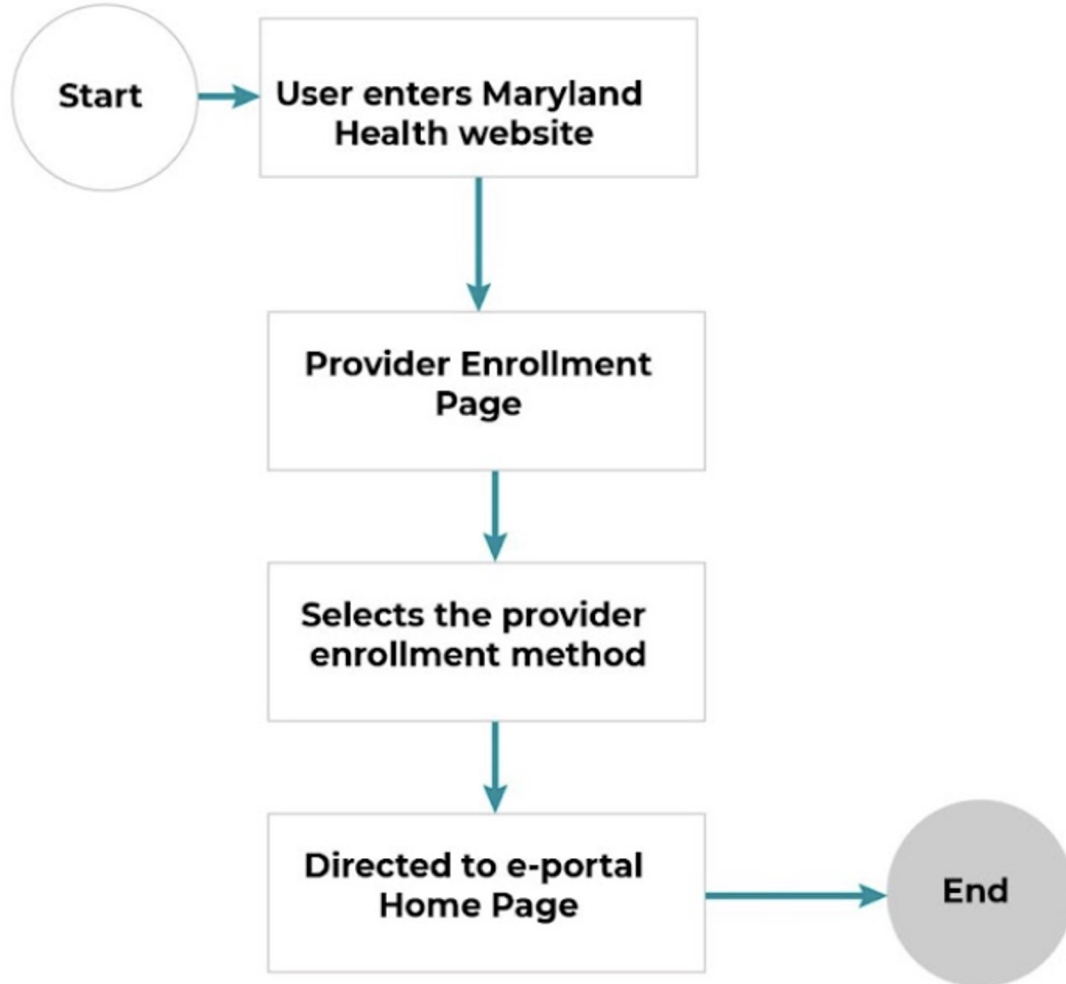




## Entry point

All Users

Scenario : Entry point for all the users

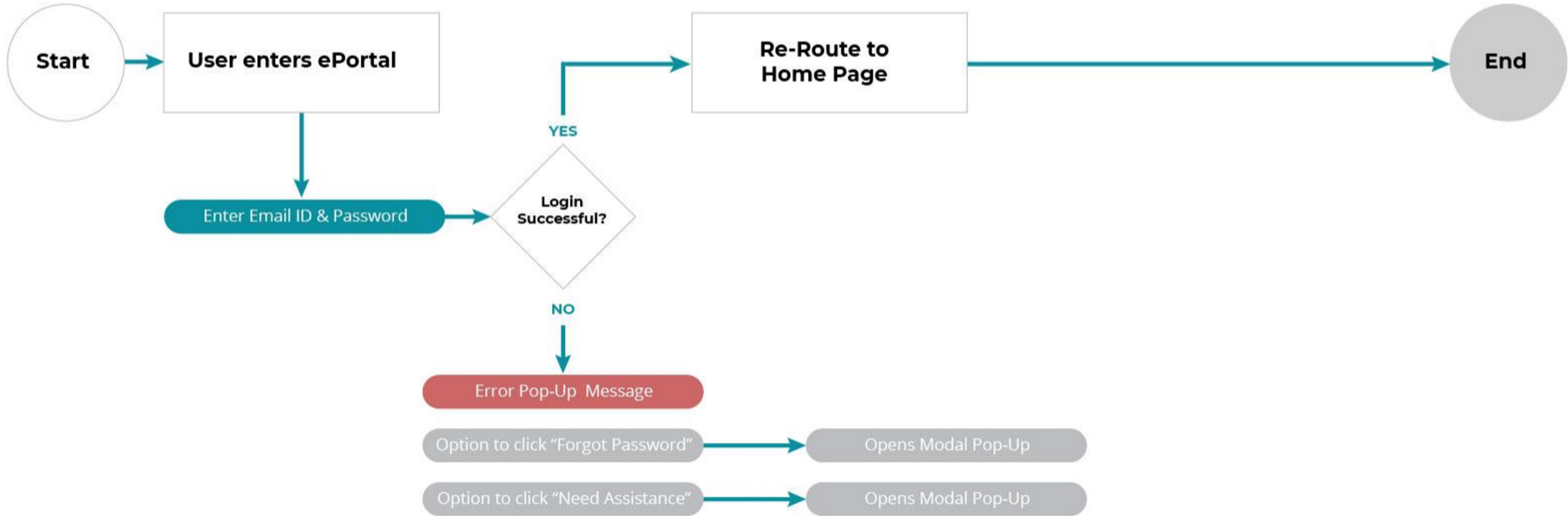




# Login

All Users

Scenario 1: Newly Registered User



[See Diagrams ▶](#)

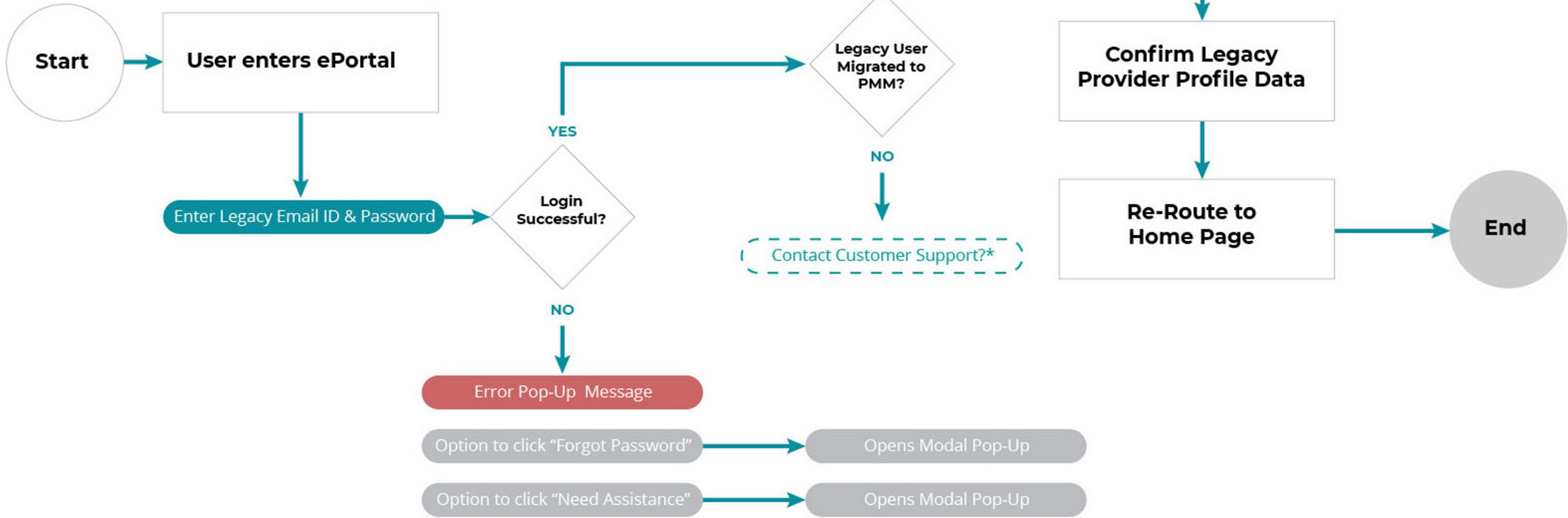




# Login

All Users

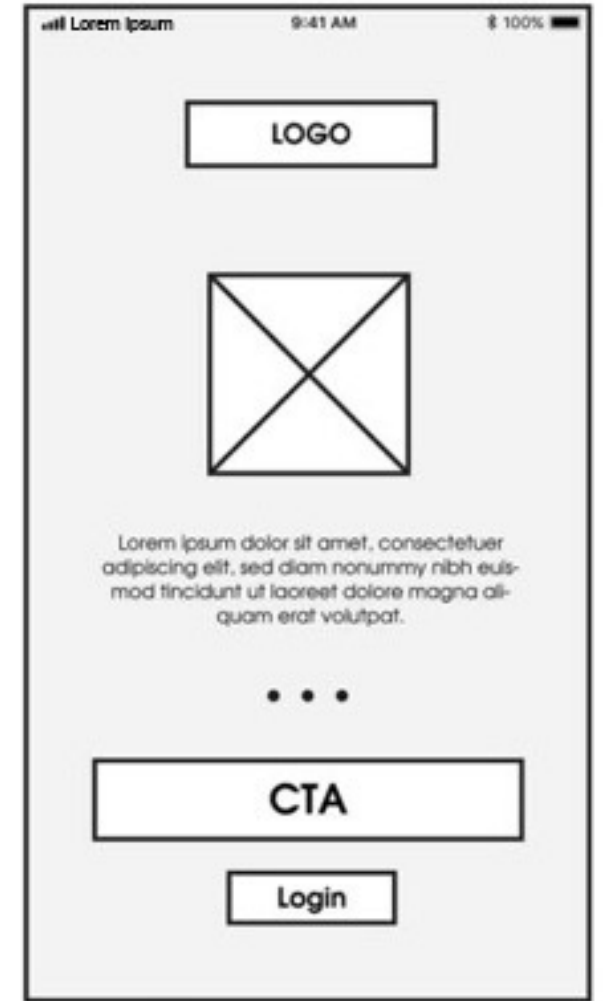
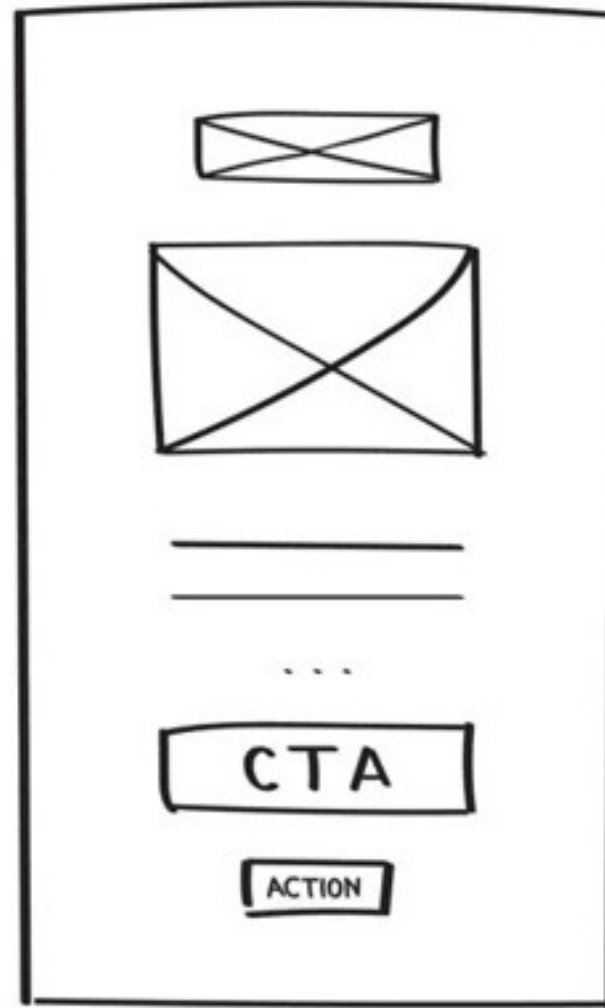
## Scenario 2: Legacy User



[See Diagrams >](#)

# WIREFRAMES

Now that thorough evaluations have been conducted, we can now take our ideas and translate them into wireframes. Phase one of this design process consisted of group discussions and “Low-Fidelity Wireframes” (black and white sketches) to determine the desired layout and feel of the new website. The next phase is “Medium Fidelity Wireframes” to breath a bit more life into the black and white sketches. The final stage is “High-Fidelity Wireframes” and simulations with the help of Axure prototyping.





## Login

Please enter your login details

User ID ⓘ

Please use your gov ID

Password ⓘ

[Terms & Conditions](#)

[Forgot password?](#) | [Need Assistance?](#)

LOGIN

Don't have an account?

REGISTER

### Promoting lifelong health and wellness for all providers

- ✓ Provider Revalidation
- ✓ Enrollment Portal
- ✓ Reenrollment
- ✓ Revalidation
- ✓ Account updates
- ✓ Demographic changes

## MEDIUM FIDELITY WIREFRAME

A medium fidelity wireframe is a step up from its low fidelity counterpart. Medium wireframes will have more detail — including accurate spacing, headlines, and buttons. They might even be displayed together in a sequence called a wire-flow that shows exactly how the web pages will work together. Our UX Team used Figma to achieve this project's Medium Fidelity Wireframes.

View Medium Fidelity Wireframe Directory:

- [Admin Configuration](#)
- [RBAC](#)
- [Signatory](#)
- [Add Affiliation](#)
- [Provider Profiles](#)
- [User Profile Management](#)
- [Account Unlock](#)
- [Registration \(New User\)](#)
- [Registration \(Legacy User\)](#)
- [Password Expired](#)
- [Login](#)
- [Logout](#)
- [Dashboard](#)
- PLACEHOLDER

Need some help? [Visit our Help Center](#) (Opens in a new window\*) or call 1-800-My-portal

201 W. Preston Street Baltimore, MD 21201-2399



## Login

Please enter your login details

User ID\*

Enter the email address associated with your account

Password\*

Please enter your password



Remember Me

By continuing, you agree to the Maryland Department of Health's [Terms of Use](#)

Login

[Forgot User ID?](#) | [Forgot Password?](#) | [Help Center](#)

Don't have an account?

Register

Promoting lifelong health  
and wellness for all  
providers



- ✓ Provider Revalidation
- ✓ Enrollment Portal
- ✓ Reenrollment
- ✓ Revalidation
- ✓ Account updates
- ✓ Demographic changes

[Local Health Departments](#)

[MDH News and Updates](#)

## HIGH FIDELITY PROTOTYPE

A well-composed prototype is one of the first major steps in the Software Development Life Cycle (SDLC).

A prototype is a simulation or sample version of a final product, which UX teams use for testing before launch. The goal of a prototype is to test and validate ideas before sharing them with stakeholders and eventually passing the final designs to engineering teams for the development process. Our team used Axure to achieve this High-Fidelity Prototype.

► [View Axure Prototype/Simulation](#)



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# DESIGN SYSTEM

A design system is a collection of reusable components, guided by clear standards, that can be assembled together to build any number of applications. Design Systems are really just *Pattern Libraries*: a big box of UI Lego pieces that can be assembled in near-infinite ways. Given that projects normally have multiple software developers, establishing a design system will help ensure that while each contributor works independently, the final result will look unified.

[View Design System \(URL Undisclosed for Company Privacy\)](#)

