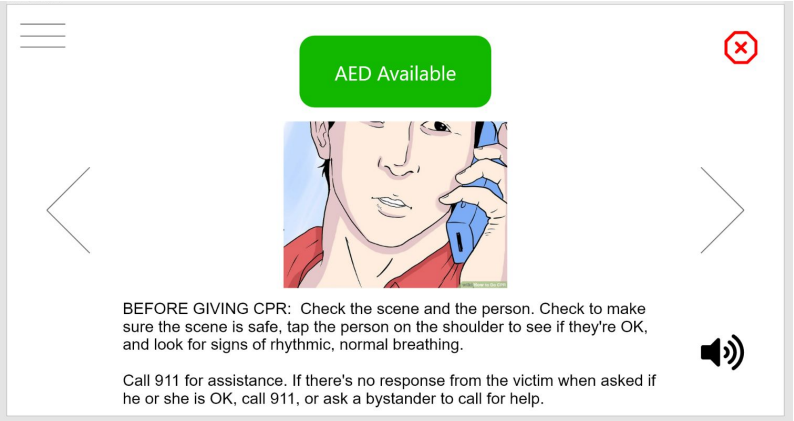
CPR Project

Ben Zautner

Project overview

The product:

The product is an web tool/application that is meant to lead a user through the process of giving CPR to another adult.



Project duration:

July 2022

Google

Project overview

The problem:

When looking for CPR applications/things online, there was many options for CPR, but most require online connection to access.

The goal:

To create a CPR tool that can be downloaded onto a phone via application that would be available offline so anyone could give CPR in an emergency/there’s no one certified nearby.

Project overview

My role:

UX Researcher/Designer

Responsibilities:

User Research

Digital Wireframing

Prototyping

User Testing

Google

Understanding the user

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

User research: summary

My user research started with trying to figure out who would be the most likely to use an application like this. This was made in mind for those who have not taken any CPR Certification courses, so I thought about who would be less likely to have done that.

Persona 1: **Lana Johnson**

Problem statement:

Lana is a college student who wants to have the knowledge to give CPR available whenever because she wants to be able to help anyone at anytime.

Lana Johnson

Age: 18
Education: Freshman in College
Hometown: Albany, NY
Family: Parents at home
Occupation: College Student, Barista

"How can I read and save a life at the same time?"

Goals

- Wants to have the ability to perform CPR in an emergency
- Looking to gain a new skill in general

Frustrations

- Applications they've found so far are all just reading

Lana is a college student away at college for the first time. She wants to be prepared in case someone should collapse in front of her while she's out and about. She wants something that can help her in a practical sense and can follow along with.

Google

Persona 2: **Walter Smith**

Problem statement:

Walter is a concerned partner who wants to be able to give CPR without training so he can help his partner in case of emergency.

Walter Smith

Age: 65
Education: Dropped out of HS
Hometown: Schenectady, NY
Family: Husband, 2 adult children
Occupation: Retired factory worker

"Never hurts to be prepared."

Goals

- Wants to be prepared in case something happens to his family

Frustrations

- Struggles to find information when there's too many options

Walter is a retired factory worker living with his partner in the beginning of their retirement. As he and his partner get older, he wants to be prepared to help his partner in case one of them collapses one night. He also wants to be sure that whatever he uses is straightforward for someone who struggles with technology like he does.

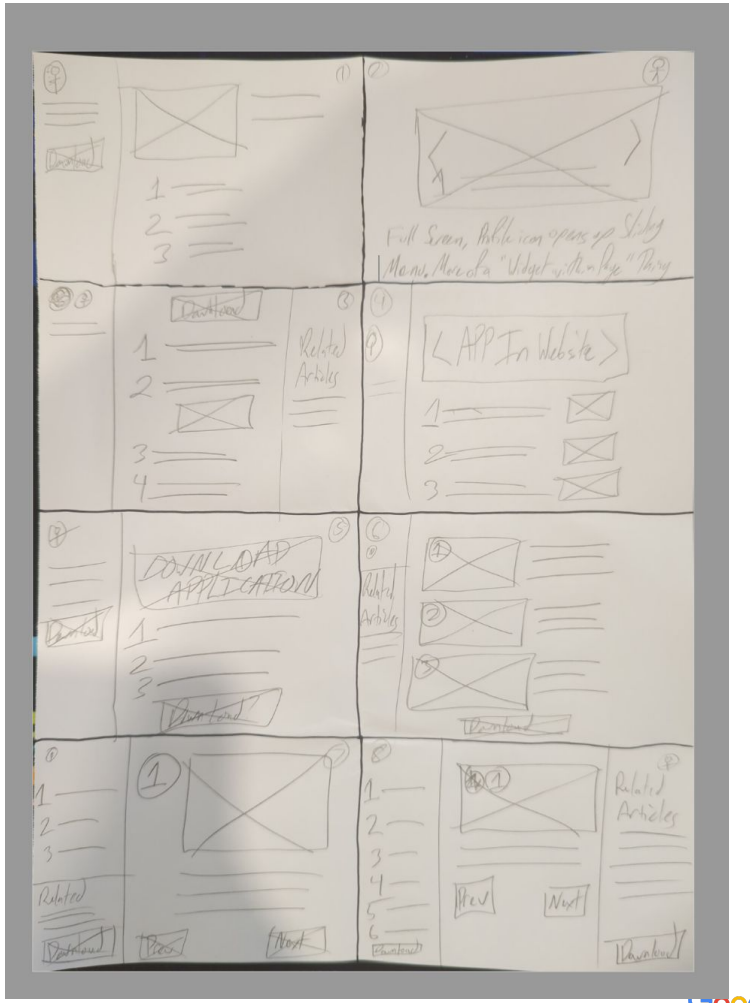
Google

Starting the design

- Digital wireframes
- Low-fidelity prototype
- Usability studies

Ideation

I wanted something that would be very straightforward and easy to understand from a user perspective. Nothing more than some buttons and arrows to guide the user along the flow.



Usability study: parameters

Study type:

Unmoderated usability study

Location:

United State of America, remote

Participants:

4 participants

Length:

15 minutes

Usability study: findings

Insert a one to two sentence introduction to the findings shared below.

1

Finding

CPR can end at any time - so a button to skip right to the end of the flow is needed.

2

Finding

An AED may be available to the user, so adding a button in the application to use an AED is needed.

3

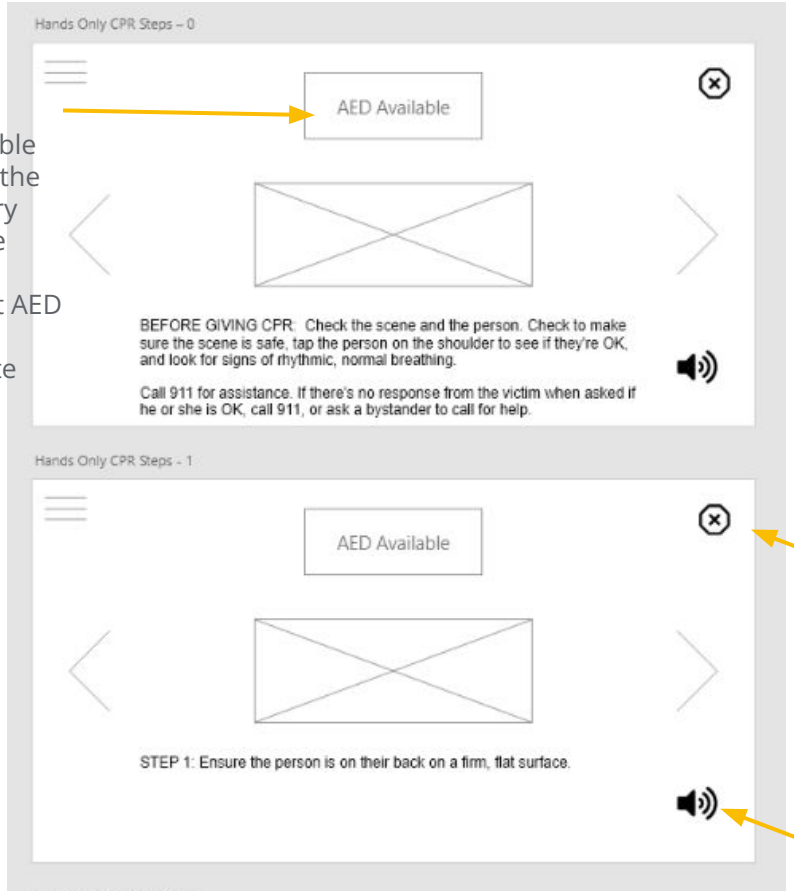
Finding

More obvious text to speech/accessibility options are needed

Digital wireframes

When first creating the application, I wanted to make sure that the user had the clear flow, but then two key points came up, AED availability and CPR doesn't always end at the last step - so I implemented an AED button at the top and a quick end button in the top right. It was also brought to my attention that it was not clear how accessible this application would be, so the text to speech icon was added to insure that the text could be read out loud if need be.

AED available button on the top of every step so the user can implement AED when appropriate



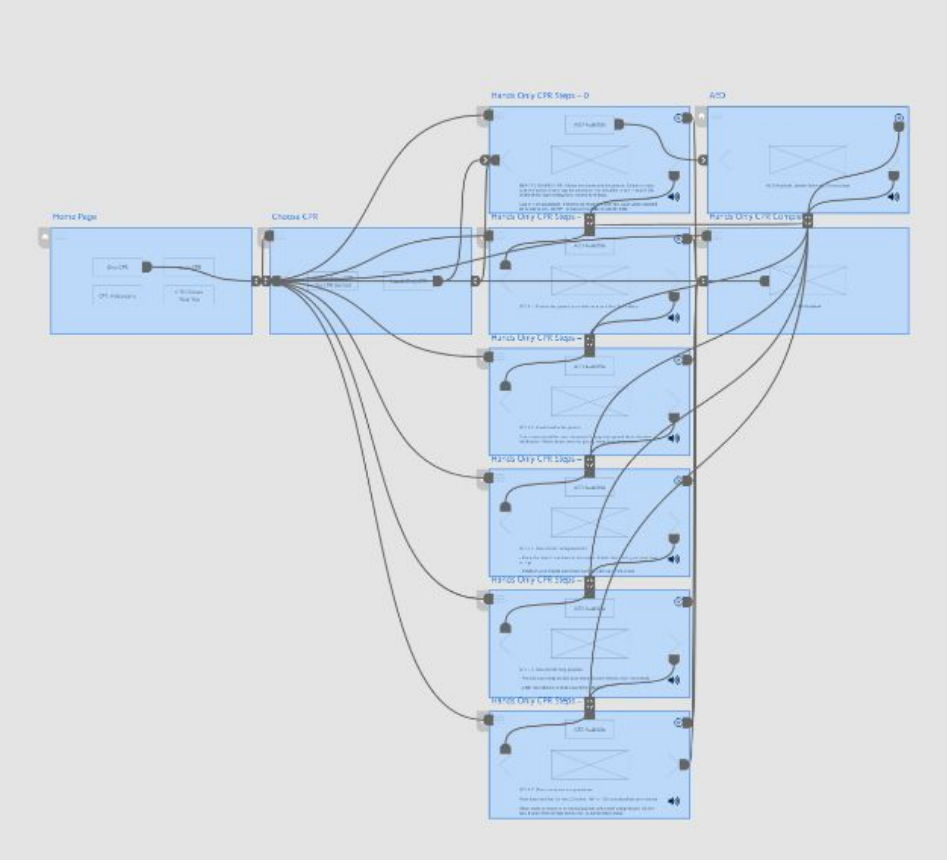
End button to skip right to the end of the CPR how to guide.

More obvious Text to Speech icon

Low-fidelity prototype

https://xd.adobe.com/view/0e1765aa-be2d-4550-8a29-1eb846a894d8-5b44/?fullscreen&hints=off

User would first select to give CPR, then would select “Hands Free CPR” then the application walks them through the CPR process. I added the AED screen to give users the chance to opt into following an AED, and the ability to stop CPR at any moment.



Google

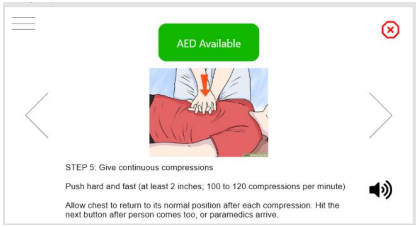
Refining the design

- Mockups
- High-fidelity prototype
- Accessibility

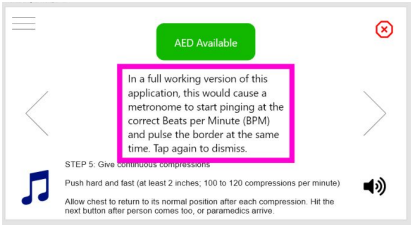
Mockups

I made it more obvious how the metronome would work in a full working version of the application.

Before usability study

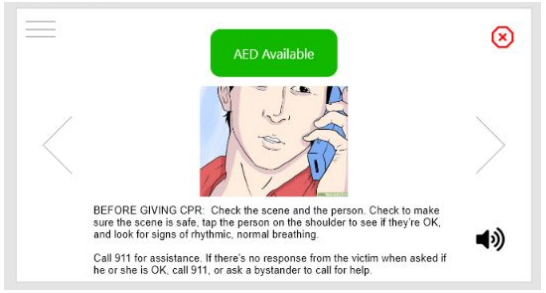


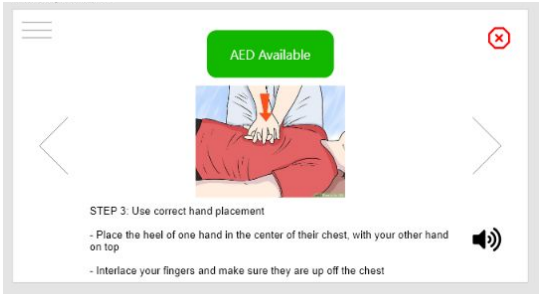
After usability study

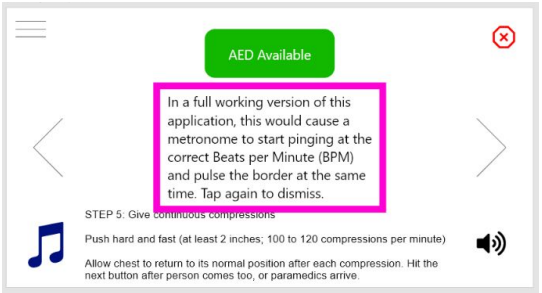


Google

Mockups



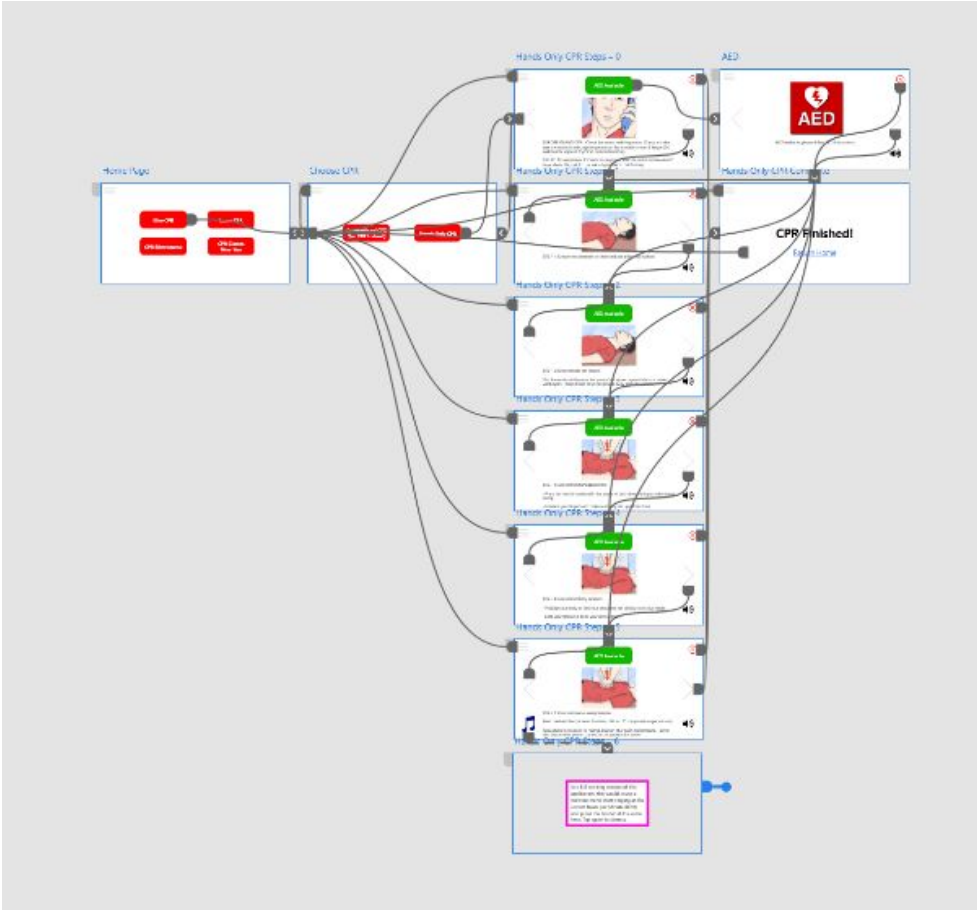




Google

High-fidelity prototype

https://xd.adobe.com/view/1a27cd66-c08b-46be-9ffb-e46082211d78-4f74/?fullscreen&hints=off



Google

Accessibility considerations

1

The text-to-speech button on every page of the CPR process allows the user to hear all instructions.

2

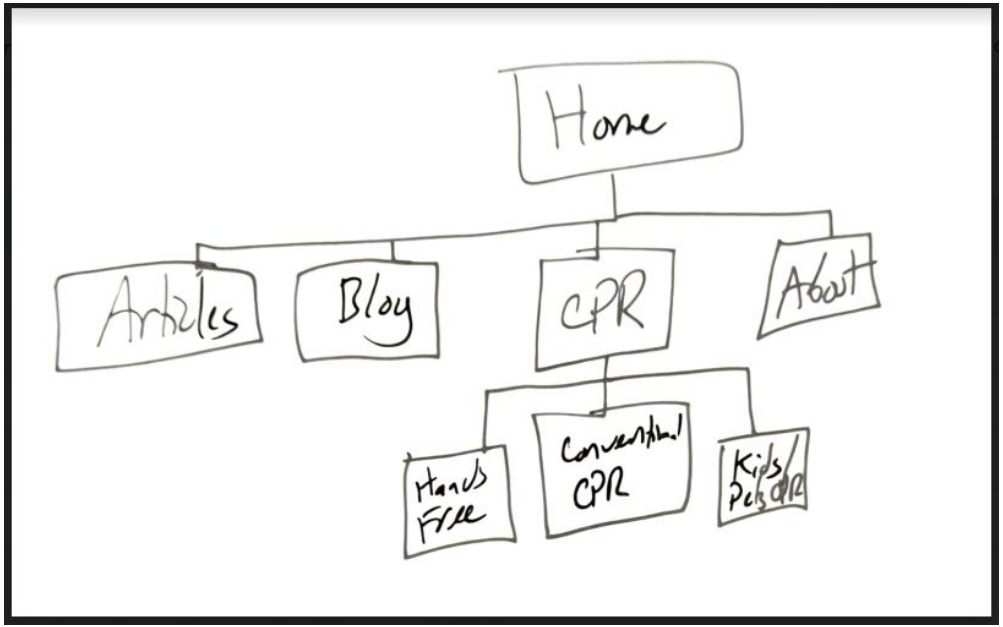
The CPR Metronome on step 5 would flash brightly to the user, which would allow those hard of hearing to see the rhythm that they would need for CPR

Responsive Design

- Information architecture
- Responsive design

Sitemap

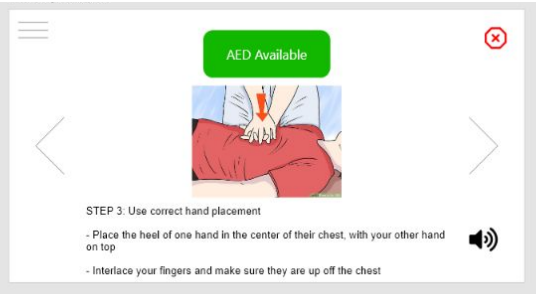
The design process started with the CPR tool first, so the application was the most important aspect to create. With further time and resources, the website would be built out to include articles on CPR and health, and a blog as well.



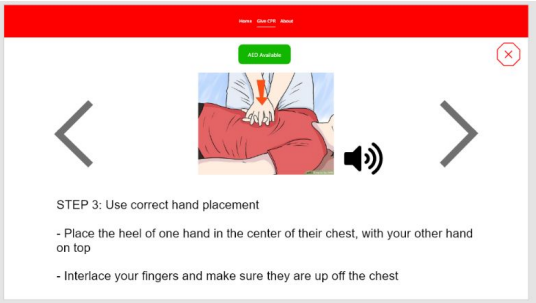
Google

Responsive designs

This application doesn't lend itself to many different sizes, so the tool would resize the website version down to a tablet size, and the mobile version would be its own size.



Mobile



Website/Tablet

Google

Going forward

- Takeaways
- Next steps

Takeaways

Impact:

This application would impact many communities who could use this life saving procedure at home, but cannot access it due to poor internet connection.

What I learned:

I started implementing templates through Adobe XD and different plug-ins, so it definitely taught me how to streamline some aspects of the design process via already created assets.

Next steps

1

Implementation of other types of CPR - Conventional, CPR for Pets, CPR for kids/infants

2

Build out the website to have more content on it, including blog posts and articles pertaining to CPR and health

3

Run another usability test

Google

Let’s connect!

Thanks so much for taking a look at my Case Study! You can reach me by emailing br11zaut@gmail.com, or see more of my work (UX or otherwise) on www.benzautner.net.

Google