

AIDVISOR

Personal Advisor for Disasters

CASE STUDY

AIDVISOR

We provide advisors for those who in need of aid

> "My biggest concern after a disaster is not knowing what the next steps are."

"Who I can even talk to who understand my needs and keeps me comforting, telling me that everything will be alright."

> "Requesting a loan is difficult enough, how is it possible to apply for a loan to begin building a roof for my family?"

"We all wish to be brave and strong in the face of disaster. We all wish to be looked up to for our endurance and efforts to help others" - Clarisa Estes -

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Embracing the heartbreaking yet realistic limitations as the victims painfully wait to be reached out to after a disaster happen. Is waiting and feeling lost the only thing they can do? How can we bring advisors from different fields to those victims in need? AidVisor aims to solve this problem.

Often times after disasters, while government and volunteers are trying their best to help each person and to rebuild their homes and get through the hardship, many more are suffering from the delay of aid. It is almost impossible to find enough volunteers in the area where the disaster happened, to help all the victims recover in time, and sometimes the time difference can make a great impact. On the other hand, there are numerous empathetic professionals all over the world who are willing to lend a helping hand, but cannot do so due to their work, limitation of time, lack of financial ability, etc.

Our design intends to link the professionals from all over the world with the victims of disasters, so that whenever a victim needs help or guidance, they can find a resource in the quickest time possible. For the victims who have their phone or tablet with them, they can access AidVisor through their devices, and for others who don't, they can use the portable booths provided that are designed to be able to conveniently brought to temporary shelters, and can also give users the necessary space and privacy. We recognize the limitation and the possibility of the lack of internet and cellular service on site, but we've chosen to make the assumption that there is service in the area where our design is implemented, to control the scope of our work.

Meet AidVisor, "We provide advisors for those in need of aid."

According to our survey, approximately 72% of Washigton State residents do not know what actions to take right after a disaster. This is extremely concerning and many of them din't even consider losing their homes, loved ones or their mental wellnes. The foundation for AidVisor is built upon these tragedies that one could experience in their life

All of our team members presented different ideas - one dealing with drones, one with charity, and one with mental health - and couldn't come into agreement. It took us a long time of discussion within the team and with Beck about the pros and cons of each idea, to finally decide on the mental health topic. However, we had in mind a lot of possible improvements to the original idea that we could do, but the amount and broadness of our ideas stopped us from moving forward again.

After receiving valuable feedbacks from our mentor, we were finally able to narrow down the focus on what aspects we wanted to include on our design and what kind of services we wanted to provide to our users, and were also able to figure out the clear path for our tasks, as well as how the design would look like. It took us a lot of effort to merge into one direction and optimize our design, but it was all worth it. AidVisor application will provide numerous benefit for people in need, and volunteering which can be done home or at a collaborative environment at any time. No one will be left behind or waiting for aid with our services at their fingertips.



Ideation





The Red Cross currently has hundreds of professional advising volunteers ready to give mental health advising to victims at shelters/campsites after a disaster hits.

Limitations:

- Many professionals that want to help but physically can't due to living hundreds of miles away
- Only provides one type of advising (Mental health) despite financial and funeral advising being equally as important to many victims

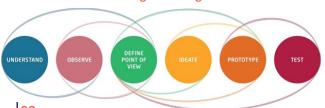
We wanted to come up with an idea that allowed professionals from any of these fields to volunteer and be able video chat with victims at the shelter to provide real-time advising from anywhere in world. The shelters would also have AidVisor Booths set up for victims to discuss their issues in private with their AidVisor.







Design Thinking



Our primary users will be victims who have experienced a disaster and are in need of advising for help and recovery, specifically those with questions concerning home loss, financing, mental health, and grief.

Our users will also include past victims who would like to know more about certain areas, or had to wait for a while until they could start the progress on recovery. Due to the difficulty of seeking recent victims, the users we we asked to do user testing on were all victims in the past. We made observation of these kind individuals in the field by making sure we didn't interrupt them, and clearly paying attention to how they process the information they were given and how efficiently they got to the resources and chat page. The questions we asked the users were:

When was the last time you experienced a disaster?

What kind of disaster did they experience?

What were your feelings right after the disaster?

Have you ever needed to deal with home loss, financing, mental health, or grief after a disaster? If so, how long after the disaster did you start dealing with it? How long did the entire progress take?

(After utilizing prototype) How quickly did you feel like you were able to get help on what you needed?

(After utilizing prototype) Was there any lack of necessary information that you think you would need? If so, what is it/are they?





Evaluation & User Testing

We are focusing on users that either has experience with disasters or has expertise in one of the subjects provided by our application.

Cameron D.

Age: 21

Tech Literacy: High Tested the software

When was the last time you experienced a disaster? About 3 years ago

What kind of disaster was it? Earthquake

What were your feelings right after the disaster? Confusion and extreme stress

Have you ever needed to deal with home loss/finance, mental health, or grief after a disaster? If so, how long after the disaster did you start dealing with it? How long did the entire progress take?

Fortunately, I did not experience any of these.

(After using prototype) How quickly did you feel like you were able to get help on what you needed?

It was extremely easy for me to get the information I needed. There were only a few steps needed to reach the page I wanted.

(After using prototype) Was there any lack of necessary information that you think you would need? If so, what is it/are they?

It would be nice to have a map that showed the different locations for the camps that provide AidVising.

Chris Hadfield

Age: 57

Tech Literacy: High Tested the software

When was the last time you experienced a disaster? Hurricane Farl

What kind of disaster was it? Hurricane with deadly rip-currents

What were your feelings right after the disaster?

I tried to keep my calm. I received orders to stay at NASA until disaster is over

Have you ever needed to deal with home loss/finance, mental health, or grief after a disaster? If so, how long after the disaster did you start dealing with it? How long did the entire progress take?

No I have never personally experienced this. Both my family and property is in Canada and we dont get much disasters up there.

(After using prototype) How quickly did you feel like you were able to get help on what you needed?

Finding the information for the mental section was very quick and intuitive. The information provided on this section was also very accurate and helpful for mental advisors or doctors to give effective advice.

(After using prototype) Was there any lack of necessary information that you think you would need? If so, what is it/are they?

The only thing I can think about is the color scheme. The idea is intuitive and in desire need during a disaster but I dont think your user's will find ideal to stare and read into a bright screen with faint text colors.





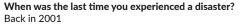


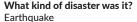
Evaluation & User Testing

Justin M. Age: 21

Tech Literacy: High

Tested the physical prototype





What were your feelings right after the disaster?

I was very young so I did not understand the severity of the situation

Have you ever needed to deal with home loss/finance, mental health, or grief after a disaster? If so, how long after the disaster did you start dealing with it? How long did the entire progress take?

Not that I know of

(After using prototype) How comfortable did you feel using the prototype?

I feel that the booth was the perfect size and I felt comfortable using an

I feel that the booth was the perfect size and I felt comfortable using an tablet inside it.

(After using prototype) Was there any improvements that you believe needs to be addressed?

I feel that for an increased sense of privacy, the sides should be made out of soundproofing material.



Suzan M.

Age: 53 Tech Literacy: Low

Tested the physical prototype

When was the last time you experienced a disaster? March of 2008

What kind of disaster was it? Earthquake

What were your feelings right after the disaster?

It was very stressful because everyone in my family was in different locations

Have you ever needed to deal with home loss/finance, mental health, or grief after a disaster? If so, how long after the disaster did you start dealing with it? How long did the entire progress take?

I did not have to deal with any negative consequences after the disaster so we were very lucky

(After using prototype) How comfortable did you feel using the prototype? It was very comfortable and easy to use. One negative was that it was very dark inside.

(After using prototype) Was there any improvements that you believe needs to be addressed?

An addition of lighting in the inside would be a plus. I would also like the height to be lowered so we could sit as we chatted with advisors.







User Personas

Alexandra B.

Age: 24

Tech Literacy: High Tested the software

When was the last time you experienced a disaster? Never

What kind of disaster was it? N/A

What were your feelings right after the disaster? N/A

Have you ever needed to deal with home loss/finance, mental health, or grief after a disaster? If so, how long after the disaster did you start dealing with it? How long did the entire progress take?

No I have never personally experienced this.

(After using prototype) How quickly did you feel like you were able to get help on what you needed?

Finding the information for the financial section was very quick and intuitive. The information provided on this section was also very accurate and helpful for financial advisors to give effective advice.

(After using prototype) Was there any lack of necessary information that you think you would need? If so, what is it/are they?

There are many helpful resources available from financial organizations so I think you should have a page that gives links and contact information.



After listening to different responses from our interviewee, we decided to make some adjustments on our prototype to address the common issues. One of the feature that we added was a page that included a map with different pins that locate each of the location for the camps that are available. This would allow users who are involved in a disaster to find a location that will provide them with a booth to talk to an advisor. Another feature that we added was an additional tab on each topics page that gave a list of the different organizations in the country that would give them extra information for their needs. Each topic will have it's own personal list of references that relate to that specific topic.

Behavioral Change - Mariam





Gender: Location: Occupation:

Relationship:

Female Mariam Williams Bellevue, WA Programmer: \$110k

Caring

Married

Bio:

Mariam has a 6 year old daughter who has been acting differently since the 7.8 earthquake they experienced recently. Also, she and her family are all Christians, but she has noticed her daughter's doubt and concern over the religion ever since the disaster.

She wants to figure out what's wrong with her daughter and how serious the problem is, help if necessary. She wants to rebuild her daughter's confidence in herself and her religion.

Mariam doesn't know how and where to access information and resources to check for her daughter's problem quickly. Along with that, she suspects that her daughter has sensed some things too, but every time she tries to communicate with her daughter, her daughter seems to be embarrassed about her problems and thus is very unwilling to share her feelings or anything regarding her behavioral changes, Lastly, she doesn't know how to efficiently find an advisor that meets her specific requirement and share the same beliefs as them, which in this case would be a Christian advisor.

Kev Goals:

- Access mental information through easy steps.
- · Able to identify mental disorders and find coping.

· Find and meet with and advisor who can diagnose.

· No advisor that focuses on their religions.

Frustrations David has:

There is no app that offers mental health guidance.



User Personas





Online Feedback

Recently Widowed - David





Gender: David Smith Location: Seattle, WA Pilot; \$95k Occupation: Relationship: Widowed

Stressed

Unfocused

David recently learned from the authority that his wide passed away from a building collapse caused by a 7.8 Magnitude earthquake.

He is looking for a resource that can guide him through the steps necessary for dealing with death. Even though he flies complicated airplanes David is not proficient with technology therefore he prefers to talk to a real person.

David has no previous experience with the procedure of planning a funeral. He is also under immense amount of stress and unfortunately the local resources are scarce due to the size of the disaster.

Key Goals:

- Accessible from App-Store and on site location.
- · Understanding and coping assistance
- · Clean and simple user interface

Frustrations David has:

- · Planning for funeral is complex and indirect.
- · Demand is high and physical resource is low.



Extrovert

Lost Home - Benjamin





27

Age: Gender: Name: Location: Occupation:

Redmond, WA Designer; \$82k Relationship: Married Loving Confident Creative

Bio:

Ben and his family completely lost their house and nearly all of their property in the recent 7.8 earthquake. On top of that his job site is damaged and will not be able to work until months due to repairs and rebuilding. He wants to find a new one through Disaster Unemployment Assistance

He wants to move forward and take out a federal disaster loan and mortgage in order to provide shelter and food for his family. Ben also wants to connect with a financial advisor on site or through one-on-one telecommunication.

He never took out any loans from the government before so he has no idea about the procedure. He does not have a device that could assist him doing all of the financials. Lastly, he only had two jobs in the past 12 years and he doesn't really know where to start or how he can work in a completely unique environment.

Key Goals:

- · Find someone who can help him get a house loan. · Get helps from a financial advisor and rebuild home.
- · Connect with DUA in order to get a temporarly job.

Frustrations David has:

- . There's too many inefficient steps to get loan.
- . There's no site that saves financial informations.

Personality:



Extrovert

One survey, 64 helpful participants

Do you think your community is well prepared for a disaster?

Relatively Weak

experienced a disaster before?

How many times you

At least 3x

Do you know where to go to request aid after a disaster?

73% said NO

Would you talk with an expert advisor after a disaster?

91% said YFS

Do you believe that disasters can cause PTSD?

68% said YFS

What were your feelings right after a disaster?

- -Stressed
- -Nervous
- -Alone

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Material Palette - Colors & Fonts





Creating Color Palatte and Font Pangram allowed our project to be incredibly organized from the start. By having these guideline tools it allowed us to be consistent, in an effort to provide a quality experience to our users. Its essential that we are consistent, it truly separates a haphazard experience from a polished one. By placing elements we show the way to reduce our users to be suprised and create reliable expectations.

Creating Moodboards were incredibly helpful to brainstorm ideas. Gathering ideas and inspiration before we actually start designing can streamline the design process and cut down the time that we spend staring at a blank screen. It also gives us a sense of how many applications we have to compete with and how we can be unique in our own creative way.

Project Color Palette #FAFAFA #F4F4F4 #F6F6F6 25% 25% #3B3B3B 25% #2C2C2C #7A5F90 25% #3B3156 #3R315A

Project Font Pangram - Lato

The quick brown fox jumps over the lazy dog The quick brown fox jumps over the lazy dog

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Iterations & Improvements





Iterations & Improvements

From Sticky Notes to Reality

Just like with every project, our first spark begins with sticky notes and passion then thinking about the user's need, and of course careful design process with some eliminations. The first couple of weeks we spent finding unique and efficient design that provides to many after a disaster. We all had different solutions in mind but as a creative team we managed to get all of our ideas from the Design Board to Reality.

Our design intent to link professionals from all around the world with the victims of disasters, so that whenever our victim needs help or guidance they can find a resource in the quickest time possible. We provide "advisors" for those who in need of "aid". hence the name.









Redesigned Forms and Surveys

The reason we created a survey for the user to fill before being able to contact a advisor is because we wanted to interaction between the victims and the adviser to be smooth and informative. Many of the questions required on the survey are specific to each individual topic and helps the advisor a better understanding of the victims situation before actually speaking to them. With more information, the advisers are better prepared to give the most effective and personalized advice to the users.





Iterations & Improvements



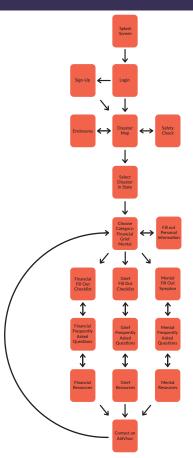


Prototyping - Wireframe

Redesigned Checklists and Informational Tabs

The topics of mental, financial, and funeral planning are dense and complicated fields that could not be completely included on the few pages of the application that we had. This is why we decided to include a resource tab. This tab gave the user extra information from different organizations that specialize in these fields and provided a more thorough explanation of different situations. We wanted our app to be a one stop location that compiled information from different sources to give the user a more complete understanding.





Process of the Application

We have a strict rule of keeping our application crisp and simple to use. Our users will most likely be under extreme amount of stress and discomfort therefore we had to make sure that they can get to their specific needs as soon as they can.

The first thing they will see is the login page. Here they can use their already existing profile or create a new account which only asks minimal questions in order to make the registration process quicker.

From here they can choose between Enclosure, which shows AidVisor Camps around their area. Safety Check that allows them to request help from responders or check in if they are safe. Then select the location and the disaster area to request Financial, Grief and Mental Aid from AidVisors

First they have to complete a quick survey about their requested aid to give our AidVisors a better understanding of their needs. They a helpful checklist, frequently asked questions and resources will be provided to them which they can find out more information about and start the application of a loan, therapy session or funeral process. At all times they can request an AidVisor to talk to and help them walk through the steps that they requested. This step also gives them chance to talk to a helpful yet calm individual for comfort.

Physical Prototype Rationale





Implementing Virtual Reality

We suspect that most of the primary users would be in a mentally unstable condition, scared or panicking, and would be relatively desperate to contact the advisors, so we want to provide a path that's quick and easy, and won't cause them any more stress than they already have. The feel of the application would also be calming enough to match the function of the application and to give a certain amount of comfort to users. Apart from those, our design would also be intuitive, since the primary users include those who aren't as tech savvy.

The physical component of the design - the booths, in our mind, would be simple enough to set up anywhere in the shortest time possible, yet would still provide space and privacy for people to talk to advisors without any concern.



Left picture represents our inspiration for the booth. The picture on the right represents our physical prototype which is improved by having implementing curtains that would cover the user to provide a warm personal space. We also installed soundproof panels on the inside in order so our patients can have a secure conversation. Last but not least there will be optional chairs provided at the site and different sizes of booths will be provided if one requires more space.

Immersive Environment



Using Virtual Reality to design our camps to virtually help and aid people all around the world.

It helps us simulate any disasters ranging from tsunamis, earthquakes, tornadoes or even social outbreaks.

Pre-programmed scenarios can be applied in no time into the HTC Vive, Oculus Rift and the Microsoft Hololens.

Using AI as our AidVisor Agent who will be distributed to the virtual sites and provides general information and helps with pathfinding.

We are also focusing on treating PTSD that develops after a disaster by making Virtual Reality available for the patients to check in with their therapists and sooth their memories by using immersive, and calming simulations.





AidVisor Camps

AidVisor Booths in VR

Both of these pictures were created, and designed in Virtual Reality

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AidVisor Application





AidVisor Application















Login

Sign Up

Select Location Area

Safety Check Feature

Aid Chapters



Eclosure Locations



Disaster Nation Map



[Disaster Nation Map] Dropdown Menu



[Finance] Required Information



[Finance] Checklist



[Finance] Dropdown Menu

AidVisor Application





AidVisor Application







[Finance] Organizations - Resources



[Finance] AidVisors



[Grief] Required Information



[Grief] Checklist



[Grief] Frequently Asked Questions



[Grief] Organizations - Resources



[Cognitive] Required Informations



[Cognitive] Symptoms



[Cognitive] Frequently Asked Questions



[Cognitive] Organizations - Resources



[Cognitive] AidVisors

Link for AidVisor Study Case Video:

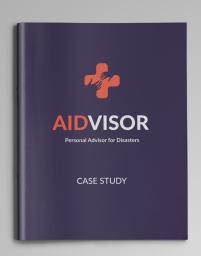
https://www.youtube.com/watch?v=wULx7lo5F5g&t=1s



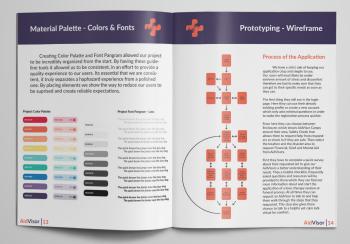












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Cameron D.

Age: 21 Tech Literacy: High Tested the software

When was the last time you experienced a disaster? About 3 years ago

What kind of disaster was it? Earthquake

What were your feelings right after the disaster? Confusion and extreme stress

Have you ever needed to deal with home loss/finance, mental health, or gird after a disaster? If so, how long after the disaster did you start dealing with at How long did the entire progress take?

Fortunately, I did not experience any of these.

(After using prototype) How quickly did you feel like you were able to get help on what you needed?

It was extremely easy for me to get the information I needed. There were only a few steps needed to reach the page I wanted.

(After using prototype) Was there any lack of necessary information that you think you would need? If so, what is it/are they?

It would be nice to have a map that showed the different locations for the camps that provide AidVising.

Chris Hadfield

Age: 57 Tech Literacy: High Tested the software

When was the last time you experienced a disaster? Hurricane Earl

What kind of disaster was it? Hurricane with deadly rip-currents

What were your feelings right after the disaster?

Itied to keep my calm, I received orders to stay at NASA until disaster is over

Have you ever needed to deal with home loss/finance, mental health, or grief after a disaster? If so, how long after the disaster did you start dealing with it? How long did the entire progress take?

No have never personally experienced this. Both my family and property is in Carada and we don't get much disasters up there.

Merusing prototype) How quickly did you feel like you were able to get help

Philing the information for the mental section was very quick and intuitive. The information provided on this section was also very accurate and helpful for mental advisors or doctors to give effective advice.

(After using prototype) Was there any lack of necessary information that you hinkyou would need? If so, what is it/are they?

The only thing I can think about is the color scheme. The idea is intuitive and in deire need during a disaster but I dont think your user's will find ideal to stare and read into a bright screen with faint text colors.























dVisor 08



