

An abstract graphic on the left side of the slide, featuring a dense, vertical cluster of thin, glowing lines in white, yellow, and blue. These lines appear to be light trails or data paths, creating a sense of movement and complexity. The background is solid black.

Programming and Problem Solving Final Project

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Table of contents

01

Introduction

02

Summary

03

Real-World
Applications

04

Design
Approach

05

Solution
Design

06

Open
Questions



The background of the slide is a dark blue field filled with a complex network of glowing, thin lines. These lines are primarily blue and white, with some orange and red lines interspersed, particularly on the right side. The lines form a dense, web-like pattern that suggests a network or a complex system. The overall effect is a sense of dynamic energy and interconnectedness.

01

Introduction

The left side of the slide features a series of colorful, ethereal light trails in shades of white, blue, and yellow, resembling long-exposure photography of light or digital data streams. These trails are set against a solid black background.

Introduction

The elderly and the disabled community are not being properly incorporated in our community. Those who do not have family or the resources for someone to care for them are in the dark. Whether this be around others, in their own home, or during events happening in their community. If someone does not have a cell phone or television, they may not have insight on what might be going on around them, good or bad.

This problem interests me because I have been around the disabled community almost all of my life. Anything that can help them and their families is something that will be revolutionary in their eyes. The elderly also may not have the same resources as the everyday person. Some older people do not know how to operate a phone or television and they may not have someone to show them.



02

Summary

Summary

There are various softwares out there that help with various drawbacks. This includes text-to-speech, voice assistants, and video conferencing tools. Text-to-speech is especially useful for those who have trouble reading or seeing words on a page. Voice assistants help those who have trouble navigating a phone or smart device. Video conferencing tools help those who cannot keep up with whatever is being said in a video call and need captions to understand. I have discovered that there are many solutions to many problems, but not enough to support those in need of immediate information in their community. My immediate alert smart watch proposal will assist those in need of knowledge and help.



03

Real World
Applications

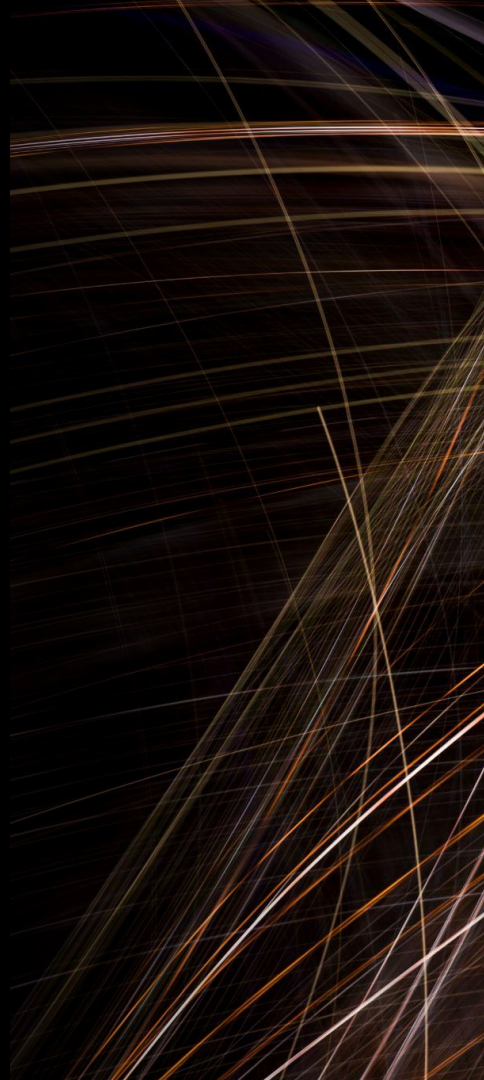
Real World Applications

This program will help those in various real-world scenarios. If someone is in their home with no family or care provider and something is happening in their community that can be dangerous, how would they know to flee or stay put? This watch could have a team constantly updating it that can alert someone if something is wrong. The watch can also alert someone if the weather is dangerous in their area. This immediate alert watch will have similar qualities to an apple watch, but without texting or calling abilities.

The user's interaction is key to the purpose of the watch. The user would have a choice of different informative applications on the watch that can give them weather updates, 911 alerts, neighborhood alerts, evacuation or stay-home updates, or an interactive authority alert system. Depending on what they need to stay updated on, they can interact with that specific app.

04

Design Approach



Design Approach

The pseudocode needed for this device would be somewhat simple. The watch itself could have similar coding styles to other watches out there, without the calling and texting software. The applications would be automatically downloaded and able to receive alerts in real time. The app that can alert the authorities if it is pushed needs to have interactive abilities with the user using a complex coding format.

05

Solution Design



Solution Design

This basic software solution would benefit various communities by alerting someone about what is going on in their community. As some people do not have access to a television or cell phone, they may not know what is going on in the world around them, specifically in their neighborhood or in their community. This watch would be coded with a live system that can be updated with alerts that one may need to know about. Updates like evacuation alerts, alerts to stay in your house, or even weather alerts would benefit those in need. This watch would have apps including a neighborhood alert app, weather app, and a 911 alerting app. This idea may sound a little like an apple watch, but can be a cheaper alternative option. The watch I am proposing will not have calling or texting abilities, but can alert the authorities if an app on the watch is interacted with. This watch can be an on the go version of the app "Citizen." The app citizen is a personal safety network that gives you access to real time 911 alerts. The immediate alert watch would be distributed through grocery stores or doctors offices, as these are places that everyone attends at some point. If someone has a care provider, that provider can pick it up for them.

The background of the slide is a complex, abstract pattern of thin, overlapping lines in shades of purple and white. These lines form a dense, web-like structure that fills the upper half of the image, with some lines extending downwards like rain. The overall effect is a sense of dynamic movement and interconnectedness.

06

Open Questions

Open Questions

While doing research, I found lots of tools that can help the disabled and elderly community. However, I did not see many tools that kept people safe when they do not have anyone to provide for them. Two questions that I have include:

1. If someone does not have a care provider or television, how do they get evacuation and 911 updates?
2. If someone needed help and did not have a phone, how would they get it?

07

Citations





Citations

“11 Examples of Software to Support People with Disabilities.”
BairesDev Blog: Insights on Software Development & Tech Talent,
6 Mar. 2023,
www.bairesdev.com/blog/software-support-people-with-disabilities/.

“Citizen: Keeping You Safe & Informed.” www.citizen.com
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