



ALERT SENSE

NEVER LATE
ALWAYS SAFE

meet the team



COOPER ROBERTSON
Software and Application Development



COLLIN BEECH
Vibrational System



THACH NGUYEN
Bluetooth System



JOSH EDOFF
Door Sensor/Fire Detection

meet the team



CODY MCDONIEL
Lighting System



JALEN NOLES
Control Box



Dr. John Ball
Advisor [2]

USER PERSONA



NAME	Daniel Gallego
AGE	35
LOCATION	Los Angeles
OCCUPATION	Electrical Engineer
MARITAL STATUS	Single
KIDS	No
ANNUAL INCOME	\$70.000

INTERESTS	Travelling, cooking, sports, reading books, psychology.
CHALLENGES	Has a hearing impairment which causes him to have trouble finding a way to wake up in the face of danger or in general.
STEPS TAKES TO FIX THAT	Purchase the alert sense system that has not only a light to alert his eyes, but also has a vibrational system to ensure his safety.
GOALS	Easier ability to wake up in the morning for work, and also to lessen his fear of danger during the night.
MOTIVATION	Safety and reliability.

TARGET MARKET

Who is our customer?



PEOPLE WITH AUTISM

People with autism or sensory problems may have challenges with determining or knowing if a dangerous situation is occurring. [8]



HEARING IMPAIRED

People with hearing impairments may have difficulties with hearing signs of danger during the night. [9]



HEAVY SLEEPERS

Some people may struggle to wake up with a standard alarm, and this system would solve that problem. [7]

PROBLEM: SAFETY

[6]



Impairments

Our primary safety concern is the safety of people with hearing impairments during the night.

Fire Hazard

A person with a hearing impairment may not hear a fire alarm during their sleep.

Intrusion

A person with a hearing impairment may not hear a burglar or an intruder enter their home or room during their sleep.

SOLUTION

Our solution is creating a bed that would detect danger during the night via fire alarms and door sensors, and utilize vibrational motion as well as an overhead light to awaken a person with a hearing impairment.

1

RESEARCH

We start by researching different ways that we can solve problems with waking up due to dangerous situations.

2

INNOVATION

We innovate by creating a bed that will shake at different intensities during the night based on the level of danger occurring.

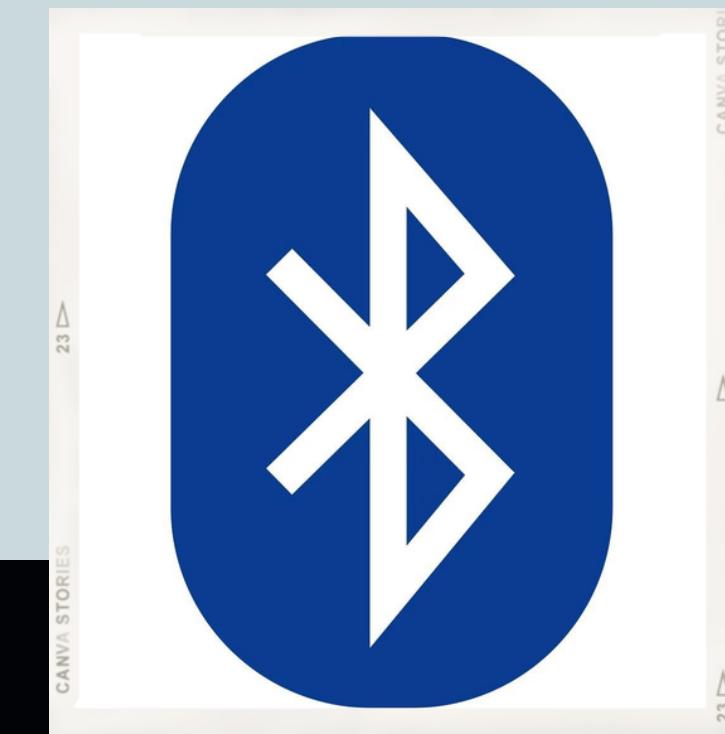
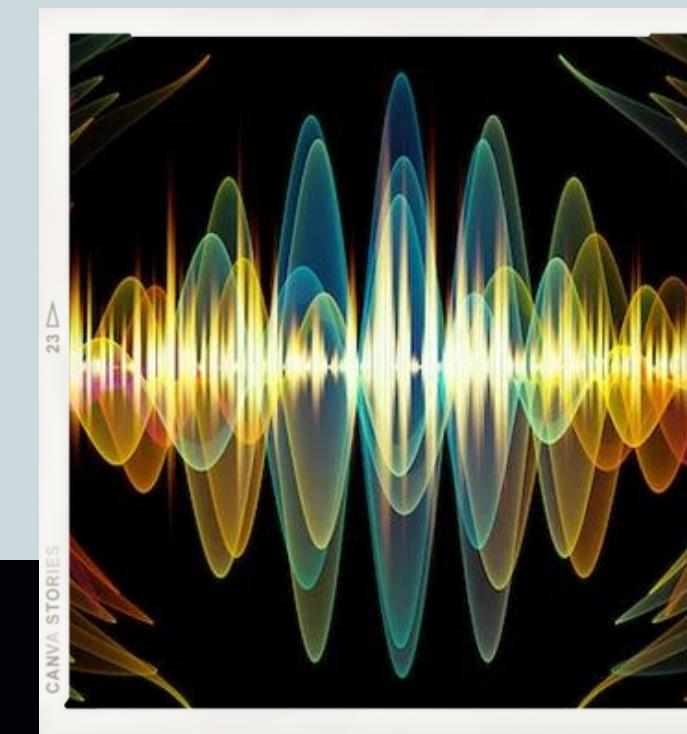
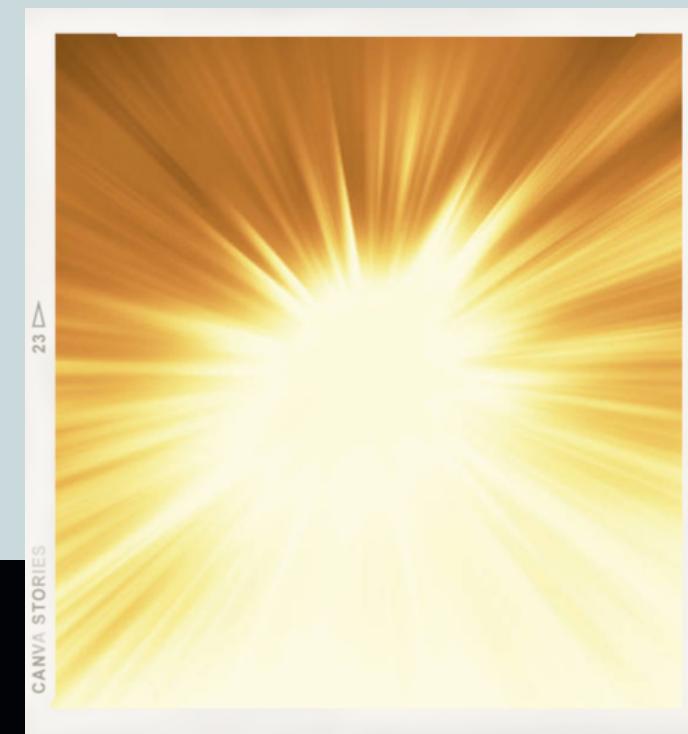
3

DESIGN

We design a bed that connects via Bluetooth to a phone, will shake the bed, and will activate a bright light if danger is detected.

COMPETITIVE ADVANTAGE

Most standard alarm systems for people with a hearing impairment include a light shining in their eyes during the night! Our design would integrate that system with a dimmer light for eye safety, but also with the addition of vibrational movement.^[1]



LIGHT

[5]

VIBRATION

[4]

BLUETOOTH

[3]

CITATIONS

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- [2] "John E. Ball," May 20, 2014. <https://www.ece.msstate.edu/people/faculty/dr-john-e-ball/> (Accessed Sep. 06, 2023).
- [3] How to remove items from the macOS Bluetooth menu," Macworld. <https://www.macworld.com/article/229147/how-to-remove-items-from-the-macos-bluetooth-menu.html> (Accessed Sep. 06, 2023).
- [4] T. Hunt, "The Hippies Were Right: It's All about Vibrations, Man!," Scientific American Blog Network, Dec. 05, 2018. <https://blogs.scientificamerican.com/observations/the-hippies-were-right-its-all-about-vibrations-man/> (Accessed Sep. 06, 2023)
- [5] "Gold illustration. Perfect light striped background Stock Illustration," Adobe Stock. <https://stock.adobe.com/au/images/gold-illustration-perfect-light-striped-background/266670642> (Accessed Sep. 06, 2023).
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- [9] A. Lisitza, "This Deaf Woman Perfectly Illustrated What It's Like For Deaf People To Watch Videos Without Captions, And It's A Wakeup Call," BuzzFeed. <https://www.buzzfeed.com/alexalisitza/deaf-video-caption-simulation> (Accessed Sep. 06, 2023)

