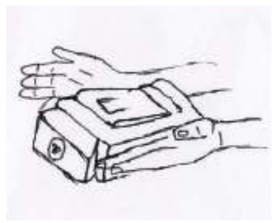
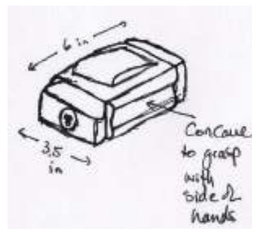
PERSONA

Mary is retired and lives at home with her husband, John. At 65 years old, she is still able to care for herself and live comfortably without requiring aid; however, she suffers from arthritis in her hands, which makes performing some household tasks uncomfortable.

PRODUCT DESCRIPTION

The FlashLite is designed specifically for senior citizens with arthritis. Since arthritis causes pain in one's finger joints, some seniors will avoid using products that require finger-bending actions, such as grasping or pushing buttons. The FlashLite allows seniors with arthritis to comfortably use its functions without having to worry about the limitations of their dexterity.





INTERACTION

Operation of the FlashLite focuses on being accessible despite the physical limitations faced by those with arthritis. The wide, flat design of the light allows it to be picked up with both hands without needing the user to bend their fingers. The smooth concave sides of the light provide additional grip for the user. The light is operated with a large, hand-width button that is easily pushed with the palm.having to worry about the limitations of their dexterity.

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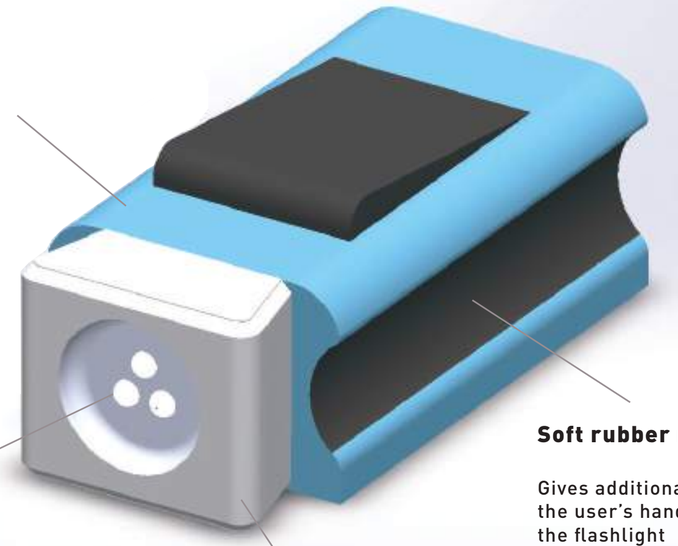
Hygienic and easy to clean

FLASHLITE

Acrylonitrile butadiene styrene (ABS) plastic

Lightweight and easy to clean
Can be easily molded into curved shapes to fit into the hand better



light-emitting diodes (LED)

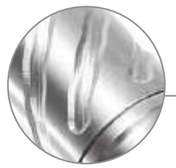
more efficient than incandescent lamps
less fragile than glass lamps

Soft rubber matte grips

Gives additional support for the user's hand when gripping the flashlight

Anodized aluminum

resistant to chipping or peeling
weather-resistant, tarnish-resistant



ALTERNATIVE MATERIAL

Titanium alloy is an alternative material because of its hygienic characteristic, strength and it is rustproof. Titanium alloy does not corrode, and because of the shiny smooth surface the stain can be removed easily.

MATERIAL

The construction of the FlashLite is hygienically-focused, as the elderly often have weaker immune systems, leaving them more vulnerable to bacteria and viruses. Acrylonitrile butadiene styrene, or ABS, is a thermoplastic polymer that can be used to make the main body of the flashlight as it can be easily cleaned, making it a good choice for a health-focused product. ABS is lightweight material, allowing the FlashLite to be easily lifted without requiring the use of one's fingers for additional support. Finally, ABS is easy to machine-form, making it ideal for creating curves and textures to offer additional grip.

SUMMARY

Compared to the contexts of the 6-year-old child and the construction worker, the flashlight for seniors with arthritis is a lot larger and easier to use due to a restriction on finger movements used to pick up, hold, and operate the flashlight.

The flashlight is exposed to hand touch so it is more prone to dirt as we use our hands for various day to day activities. Because our targeted audience suffer from a disease that prevents comfortable hand movement our design involves easy cleaning without excess effort. We chose ABS plastic that its semi glossy finish makes it easy to clean with almost any available cleaner. It is also a safe material; commonly used for children's toys such as Legos which assures us about its harmlessness.

The most interesting thing we have learnt about materials is how important it is to consider the needs and constraints of your targeted audience when picking a material as this makes the product more suited for them. Choice in material also affects how much a product will retail for and therefore we have to consider how much the consumer will be willing to spend on it.