

Lensy

• • •

Julija Pettere, Max Ding, Amy Shah

Design Problem

Meet Sara...



Overall Problem

Research Interviews

5 participants with varying:

- Knowledge of digital eye strain (DES)
- Work environments
- Focus levels
- Concern about eye strain symptoms
- Number of devices used



Key Findings

Participants with digital eye strain (DES) often:

Are unfamiliar with
digital eye strain

Forget to take actions
that help reduce
symptoms

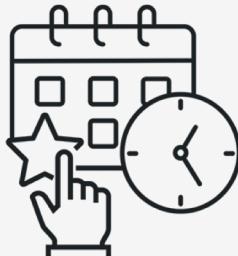
Have no motivation to
take action

Participants are looking for a highly customizable solution that fits with
varying schedules, environments, and current eye health

Design Tasks



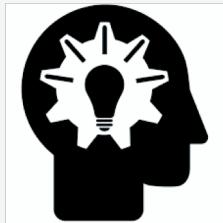
Focus on intensive
screen tasks



Perform less focus intensive
tasks on screens



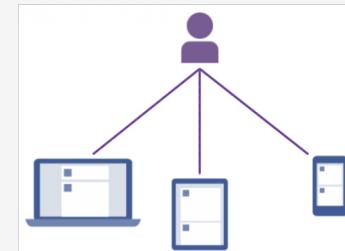
Work at a screen for long
periods of time



Learn about
digital eye strain



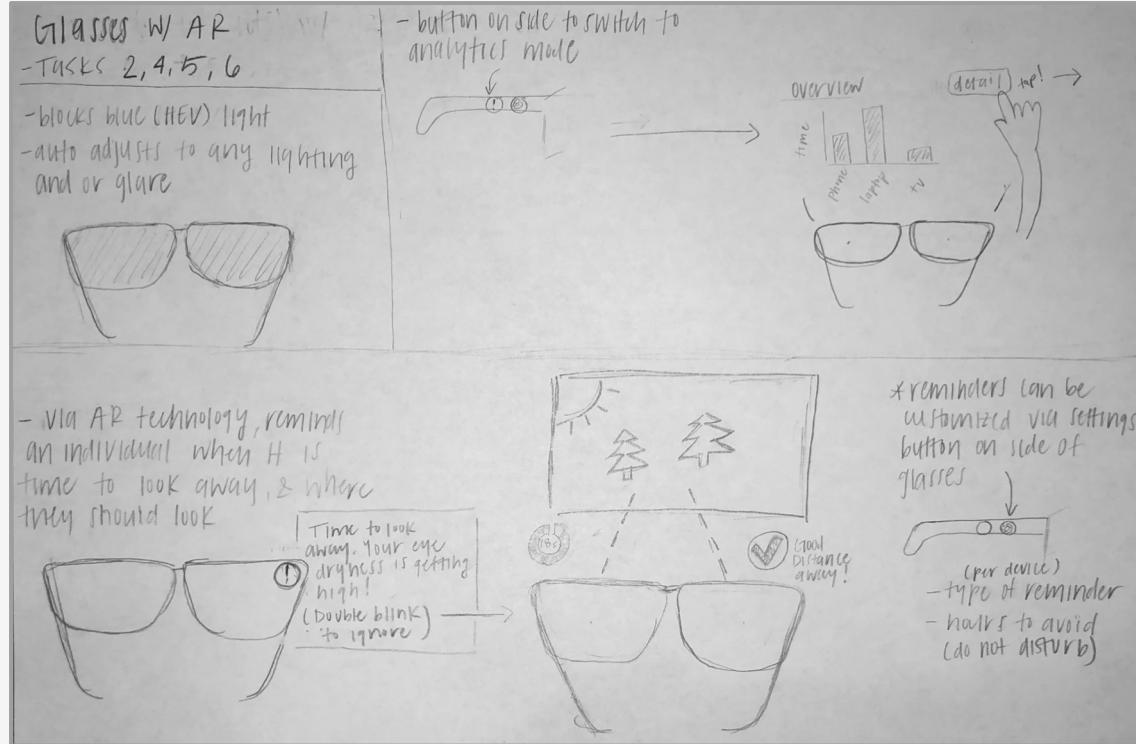
Work at a screen in
various lighting conditions



Work across multiple devices

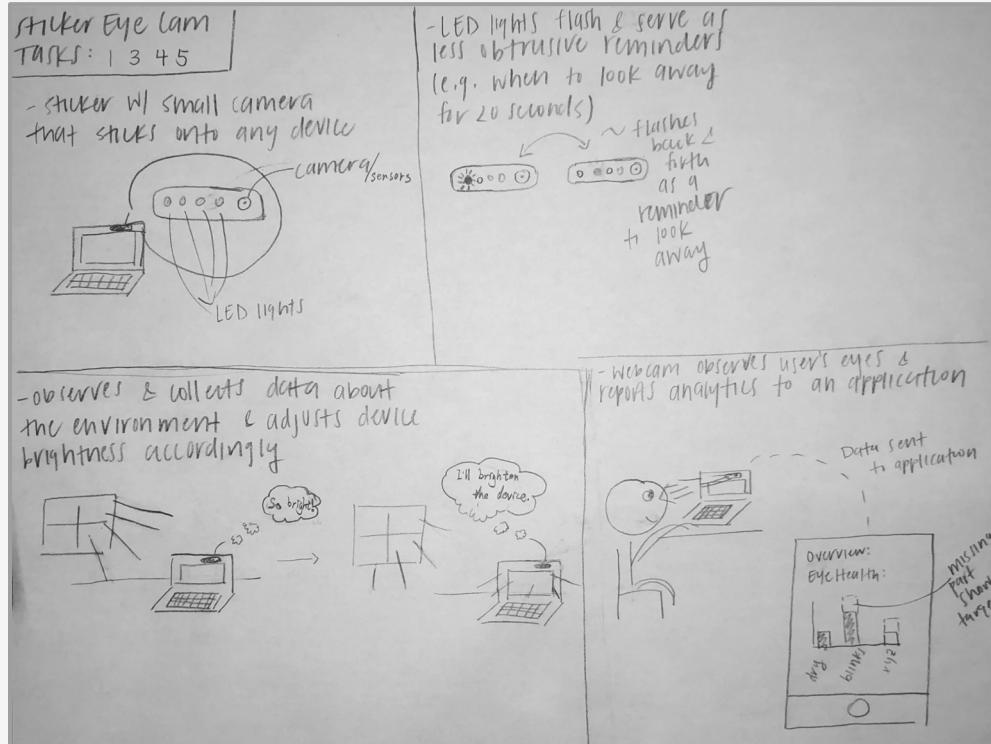
...
Six Tasks

Design 1: Wearable Eyeglasses (AR)



3 Design Sketches

Design 2: Sticker Eye Tracker



3 Design Sketches

Design 3: Contacts Paired With Smart Watcher Device

Contacts + Smart Watcher Device

Smart device captures connects to lighting in room through bluetooth plugs and auto adjusts to reduce eye strain

smart device

mobile phone

smart device

smart device

Bluetooth Plug

The user uses contacts to capture text size, viewing angle, distance, contrast, and brightness of devices, and dryness and blink rate of eyes.

Selected Design - Wearable AR Glasses



Customizable

For a variety of schedules,
focus levels, and current eye
health



Portable

Easy to transfer between
various environments



Motivational

Show analytics of eye health
and device usage behaviors
to motivate better practices

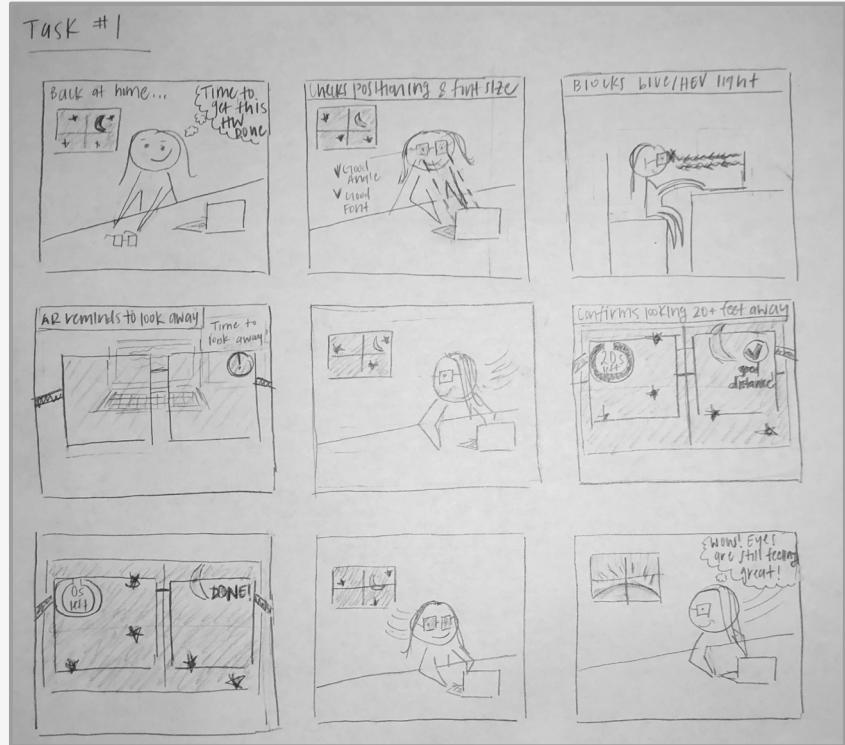
...

3 Design Sketches

Storyboard #1

Task Description:

- Working on a task in a shared space or home for long durations without experiencing DES
- Handle variable lighting
- Highly customizable

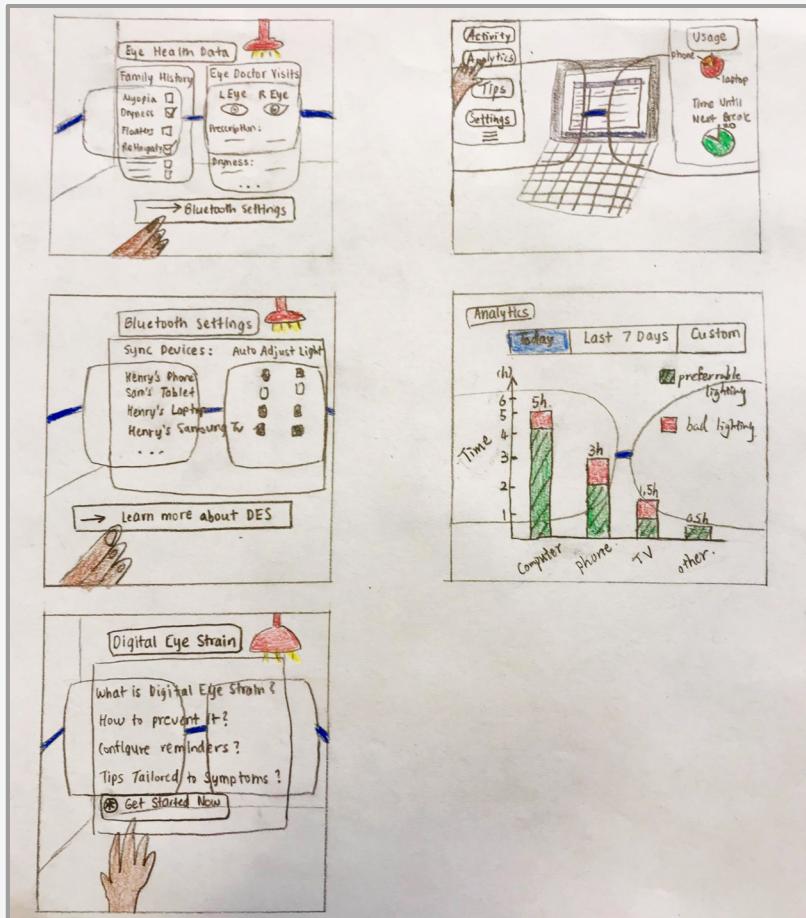


...
Selected Design

Storyboard #2

Task Description

- Educate self about DES
- Understand DES symptoms tailored to user eye health
- See the progress of these symptoms over time
- Monitor Analytics of overall device usage and relative eye health



Selected Design

Lessons Learned in Design Process

- Digital eye strain is developed subconsciously
- Consideration of other priorities is important
- Design needs to be highly customizable
- Motivation is needed to incentivize taking action

...

Summary

Thank you

Contribution Statement

Amy Shah: 40%: Laid out presentation, Summarized key points from final project, added storyboards and design sketches.

Max Ding: 30%; Wrote and redesigned 6 tasks and storyboard #2

Julija Pettere: 30%; Wrote out design problem, storyboard #1 and lessons learned, redesigned a couple slides