



Lensy

Amy Shah, Julija Pettere, Max Ding

Overall problem

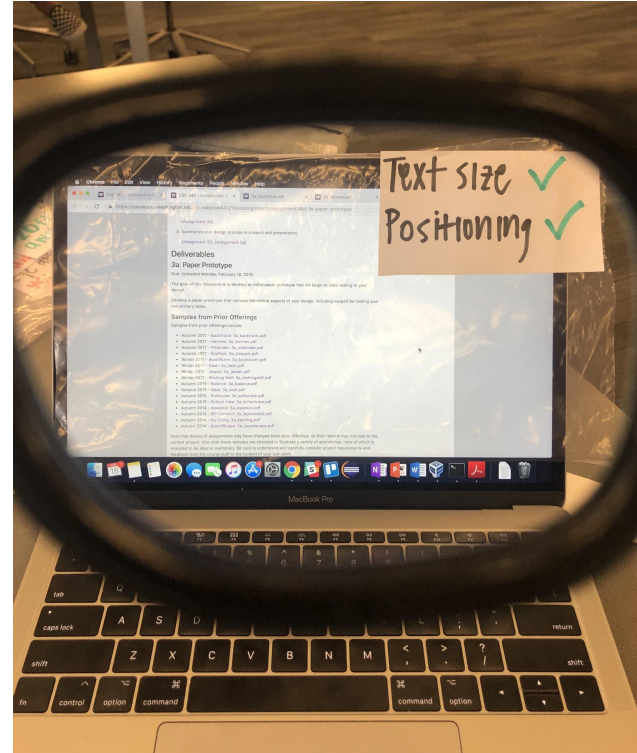
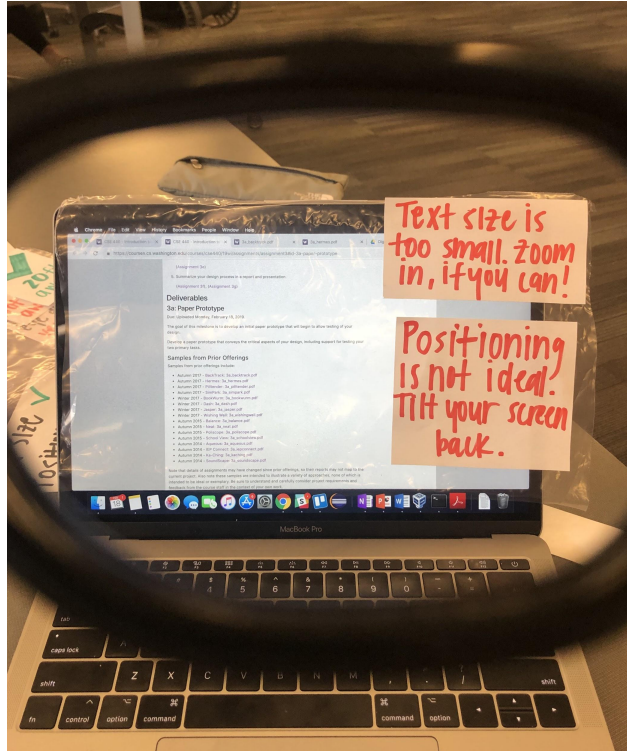
“American adults spend more than 11 hours per day watching, reading, listening to or simply interacting with media”

We are tied to our devices, but our eyes cannot cope. As our eyes begin to suffer, our ability to work for long periods of time decreases.

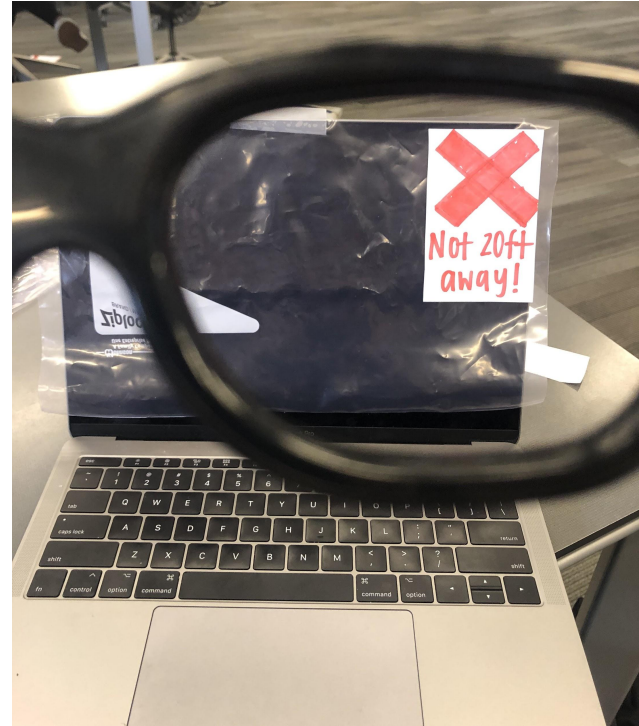
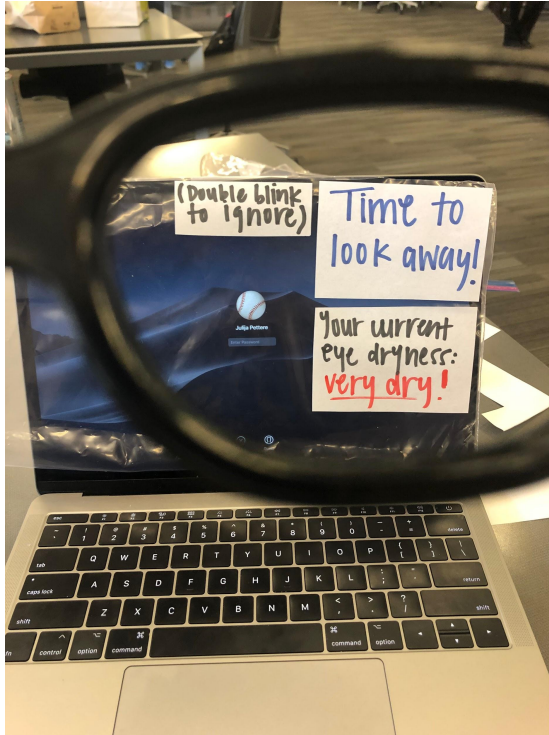


Initial Paper Prototype (Task 1)

Scan Environment



Rest eyes reminder (1)

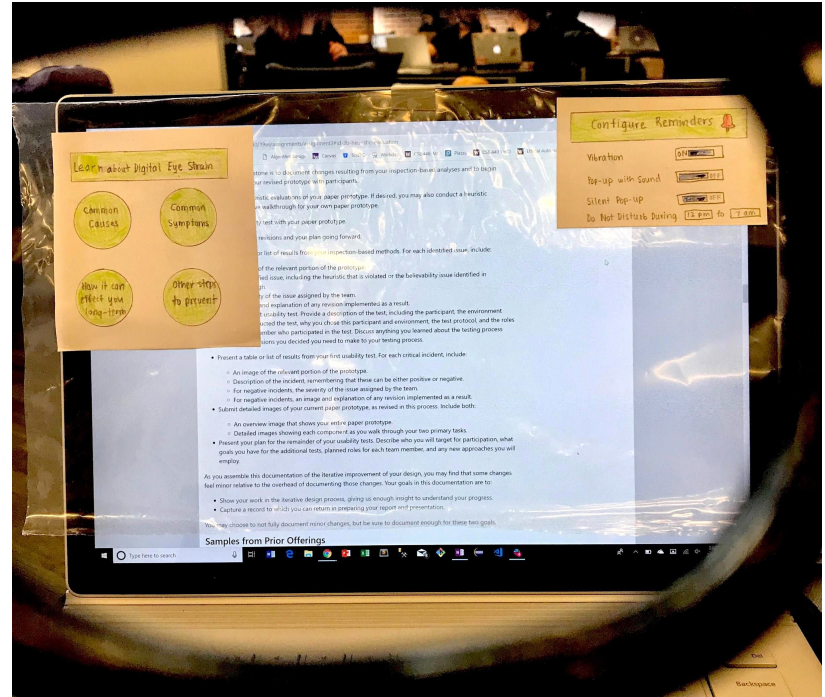
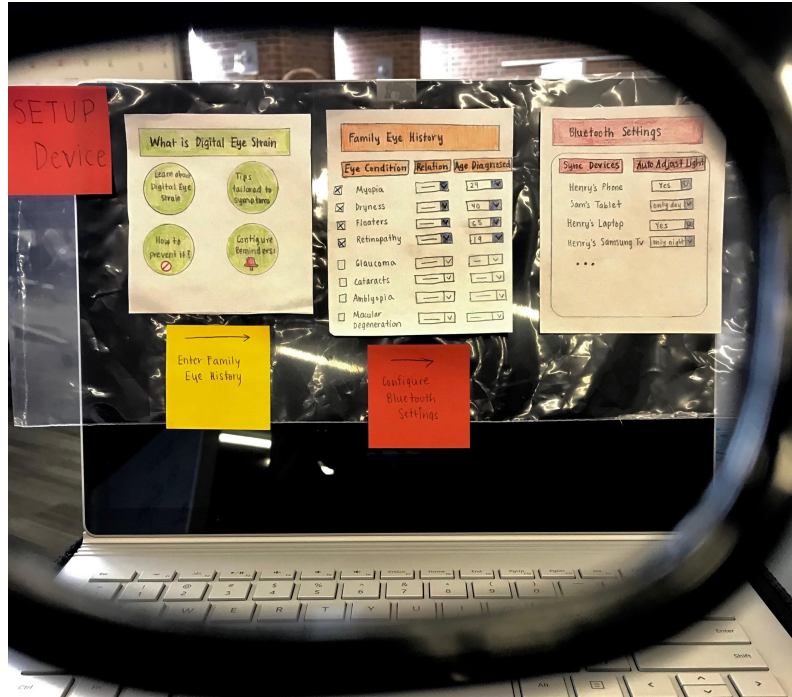


Rest eyes reminder (2)

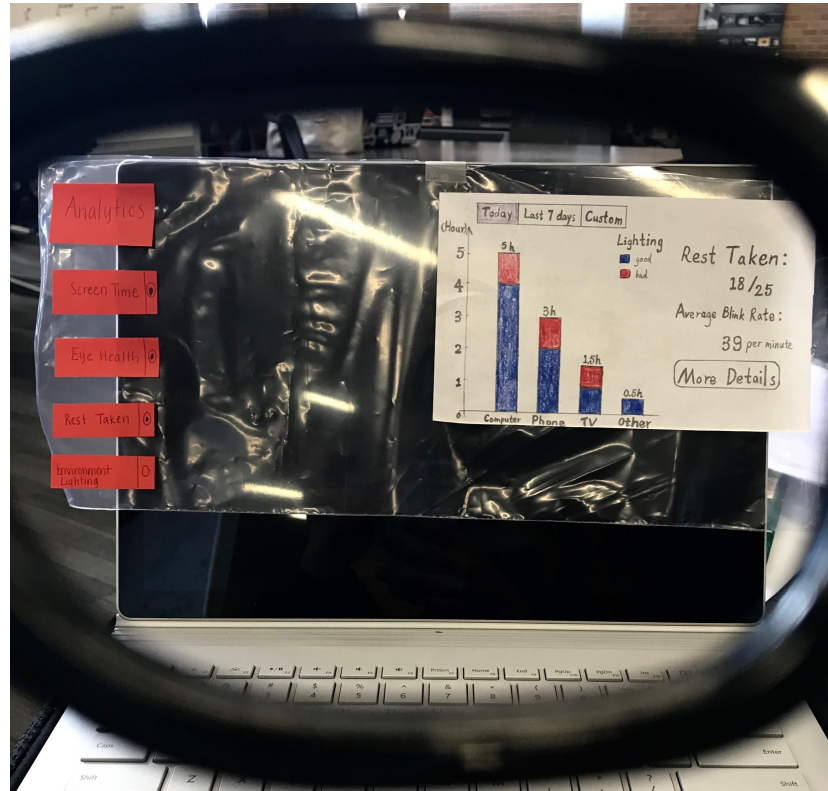


Initial Paper Prototype (Task 2)

Setup



View analytics



Testing Process

3 heuristic evaluations



3 usability tests

- Individuals suffering from digital eye strain
 - Varying tech savviness

Testing Results - Heuristic Evaluations

No means to exit/close the page
(Severity: 4)



- Home button
- Exit button / double blink to exit

Family eye history
(Severity: 3)



- Multiple people and symptoms

Too much text in reminders
(Severity: 2)



- Shorter text
- Tappable reminder for details

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Testing Results - Usability Tests

Unsure of what homepage was and how to get there



- Menu button
- Sections shown on startup

No means to know current power state of glasses while on



- Power and battery button on top right corner

Unable to understand user can select buttons on screen



- “How to Navigate” pane on setup and “Help” section

Assumed basic knowledge of DES and how Lensy helps



- Explain Lensy on Startup
- Guide people to “Learn” section

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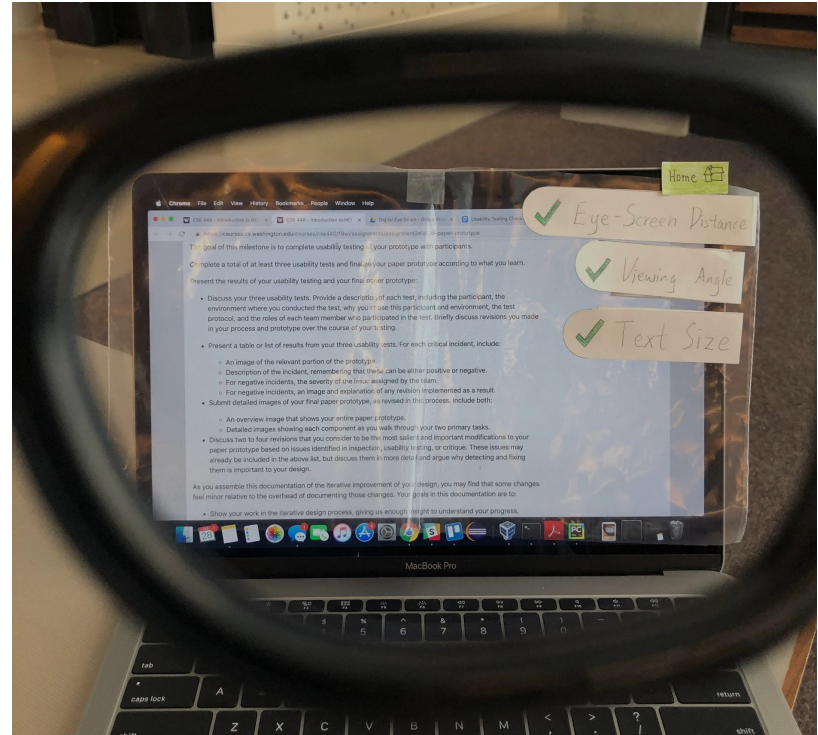
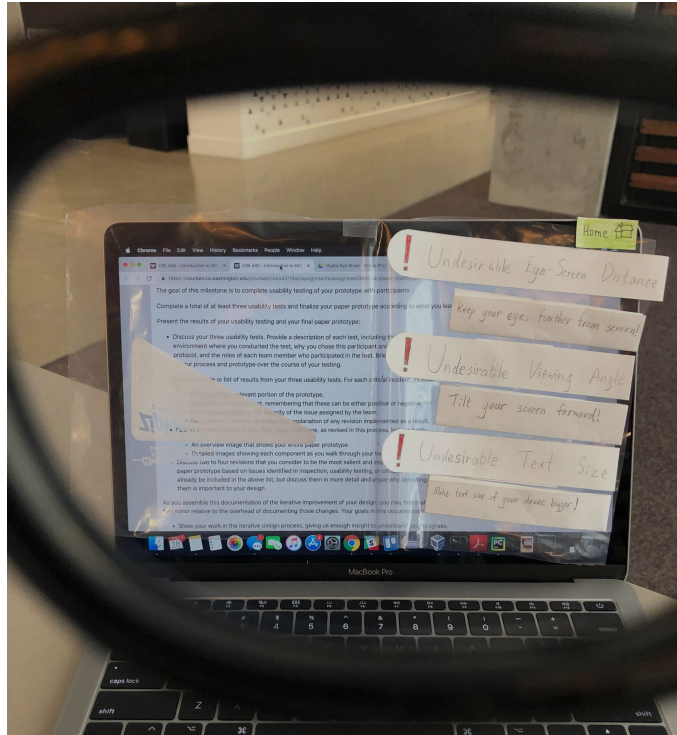
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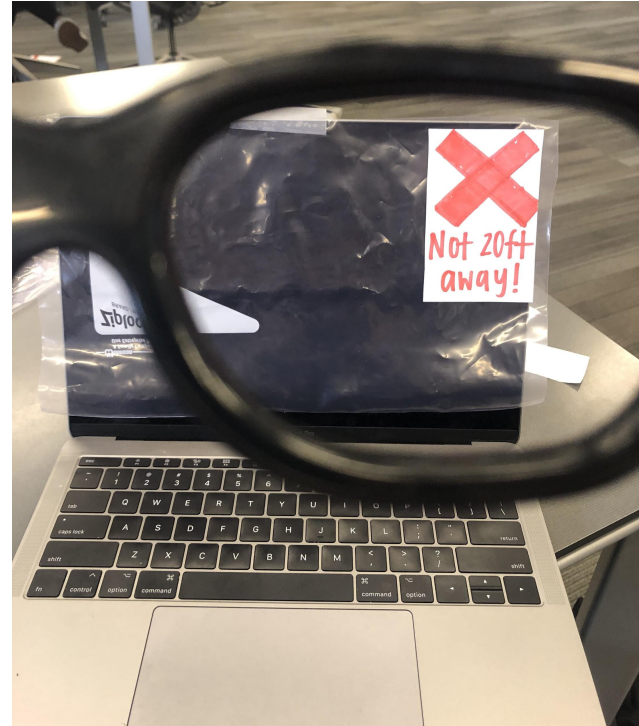
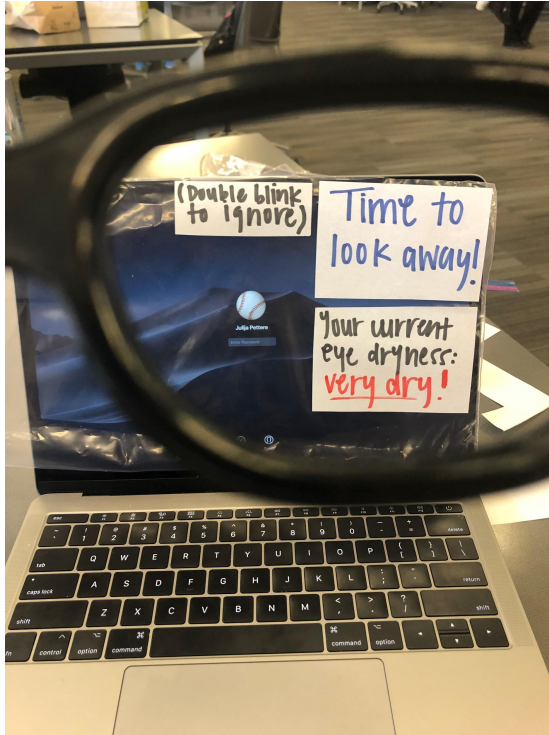
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Final Paper Prototype (Task 1)

Scan Environment



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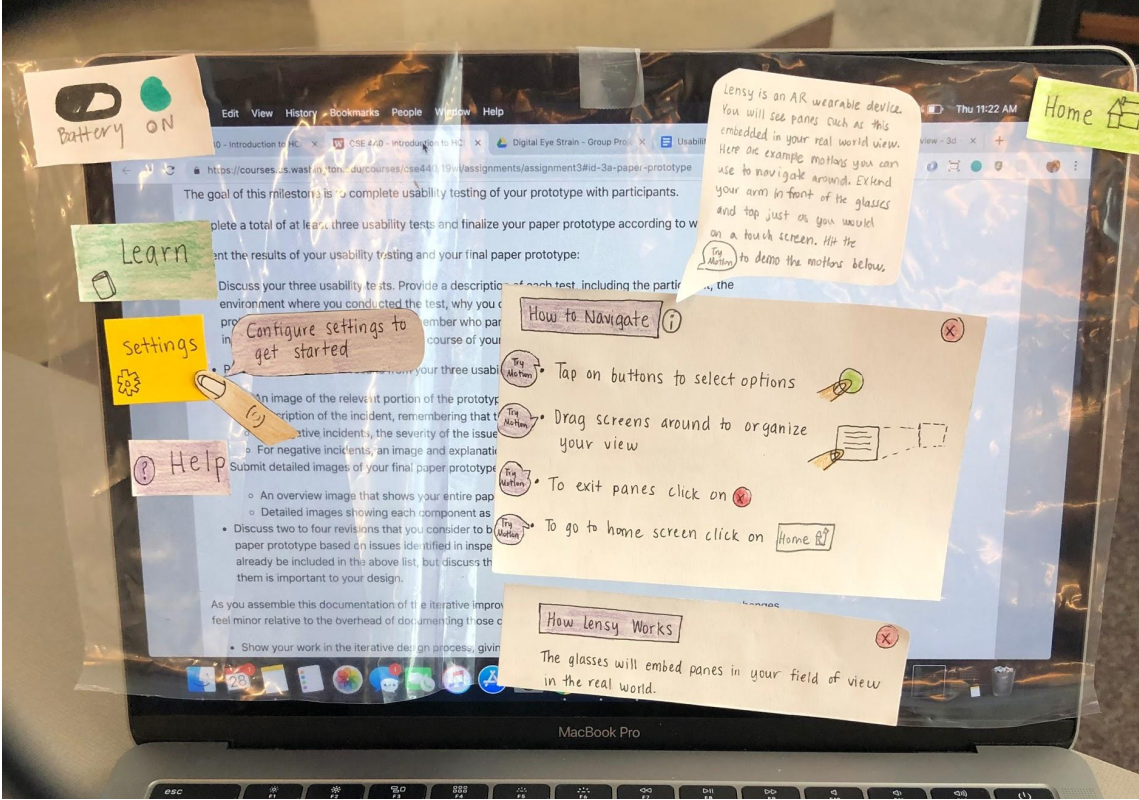


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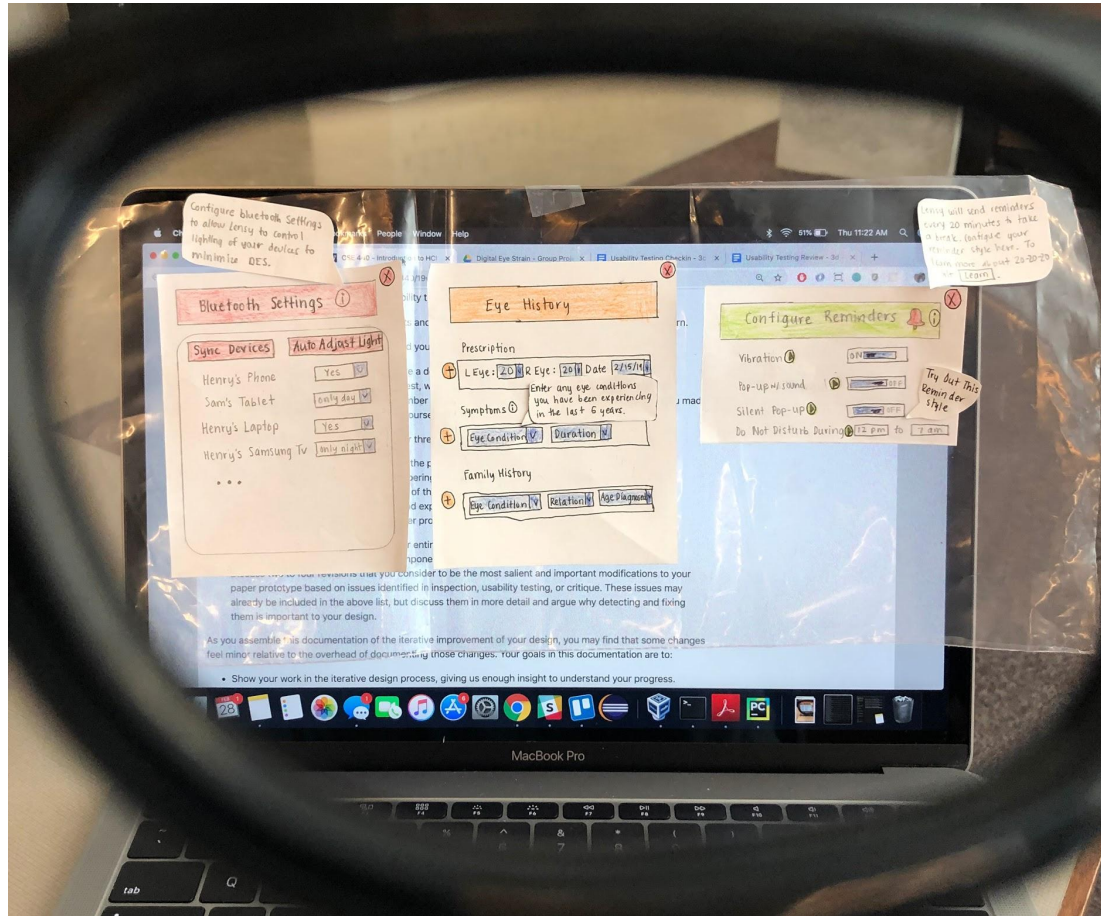


Final Paper Prototype (Task 2)

Home



Setup



Analytics

The image shows a MacBook Pro screen displaying a course page for 'Analytics'. The page content includes a title 'Analytics', a goal statement, and a list of tasks. A hand-drawn bar chart titled 'Screen Time of Digital Devices' is overlaid on the right side of the screen. The chart shows screen time in hours for four categories: Computer (5h), Phone (3h), TV (1.5h), and Other (0.5h). The bars are stacked with blue for 'good' and red for 'bad'. A sticky note on the right provides details on rest taken and eye health. On the left, a vertical column of orange sticky notes lists 'Screen Time', 'Rest Taken', 'Eye Health', and 'Instrument Lighting', each with a checkbox.

Analytics

The goal of this milestone is to complete usability testing of your prototype with participants. You will complete a total of at least three usability tests and finalize your paper prototype accordingly. Present the results of your usability testing and your final paper prototype.

- Discuss your three usability tests. Provide a description of each test, including the environment where you conducted the test, why you chose this participant and protocol, and the roles of each team member who participated in the test. Erik in your process and prototype over the course of your testing.
- Present a table or list of results from your three usability tests. For each critique:
 - An image of the relevant portion of the prototype.
 - Description of the incident, remembering that these can be either good or bad.
 - For negative incidents, the severity of the issue as graded by the team.
 - For negative incidents, an image and explanation of any resolution attempt.
- Submit detailed images of your final paper prototype, a revised one in the process.
 - An overview image that shows your entire paper prototype.
 - Detailed images showing each component as you walk through your two primary tasks.
- Discuss two to four revisions that you consider to be the most salient and important modifications to your paper prototype based on issues identified in inspection, usability testing, or critique. These issues may already be included in the above list, but discuss them in more detail and argue why detecting and fixing them is important to your design.

As you assemble this documentation of the iterative improvement of your design, you may find that some changes feel minor relative to the overhead of documenting those changes. Your goals in this documentation are to:

- Show your work in the iterative design process, giving us enough insight to understand your progress.

Screen Time

Rest Taken

Eye Health

Instrument Lighting

Screen Time of Digital Devices

Device	Good (h)	Bad (h)	Total (h)
Computer	4	1	5
Phone	2	1	3
TV	1	0.5	1.5
Other	0.5	0	0.5

Rest Taken:
18.25 total notifications
Eye Health:
Average blink rate: 10 per min
Normal range: 15-20 per min

More Details

Digital Mockup (Task 1)

Scan environment (1)



Scan environment (2)



Scan environment (3)



Rest eyes reminder (1)



Rest eyes reminder (2)



Rest eyes reminder (3)



Rest eyes reminder (4)



Digital Mockup (Task 2)

Home



Help on navigation



Setup



Analytics



Summary

- Just because it is clear to us how to use it doesn't mean it is clear to anyone else
- Users are hesitant to interact with AR
 - Need guided tutorial
- People want to feel *safe* using the glasses
 - Need a way to exit at all times
 - Need access to homepage and menu

Thank you

Contribution Statement

Amy Shah: 33%; added elements for overview, summary, and tasks of prototypes

Julija Pettere: 33%; Laid out base presentation and added all prototype/mockup elements

Max Ding: 33%; added elements for tasks of prototypes and wrote the overall problems