BackTrack

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Posture is Impactful

Physical
Health

Mental
Health

Impression

Good posture gives merits to various factors

Posture is Impactful

We are almost always unaware of our posture.

Physical Health

Mental Health

Impression

Good posture gives merits to various factors

Method 1: Fly on the Wall Observations

- ## Locations
    - Seattle Public Library, University District Branch
    - Odegaard Library
    - Grouphealth
    - Husky Union Building
    - Northgate Mall Food Court Center

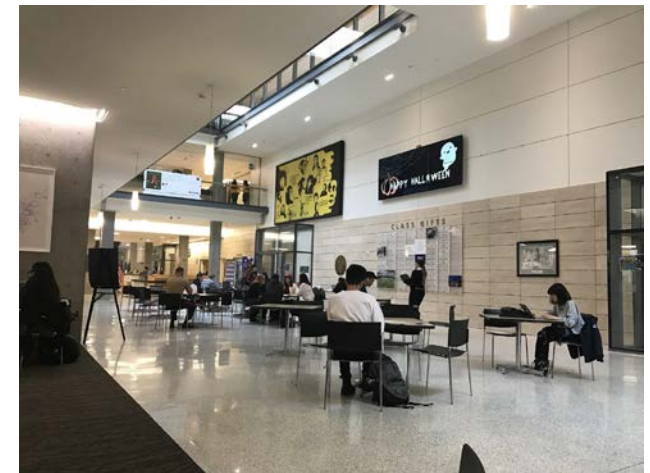Figure 1: Odegaard Library

Figure 2: Husky Union Building

Method 2: Contextual Inquiry

- Participants
  - Male, 29, Software Engineer from Seattle, WA
  - Female, 23, Bioengineering Student at UW

- Procedure
  1. Start recording
  2. Ask participants to do work with their laptop
  3. Tell the true purpose
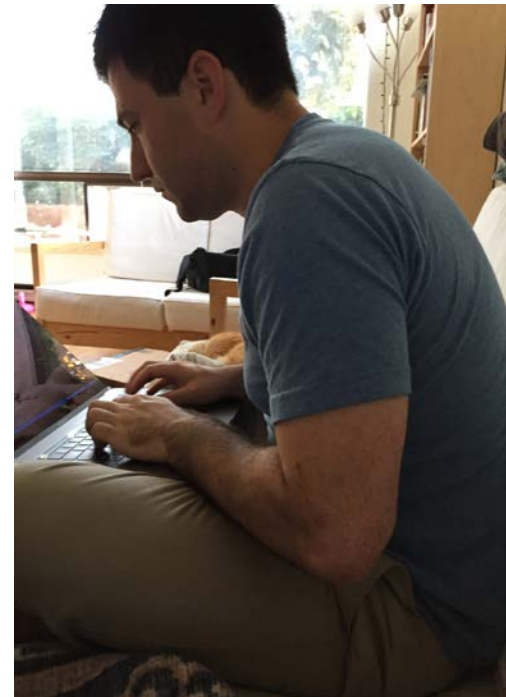 4. Ask questions while watching the record

Figure 3: Participant doing deskwork

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Method 3: Experience Sampling

- ● Participants
  - ○ Female, 26, Medical School Student at Saint Louis University
  - ○ Female, 24, American Studies Student at UW
  - ○ Male, 21, American Studies Student at UW
  - ○ Male, 18, Computer Science & Engineering Student at UW
  - ○ Male, 18, Computer Science & Engineering Student at UW

- ● Procedure
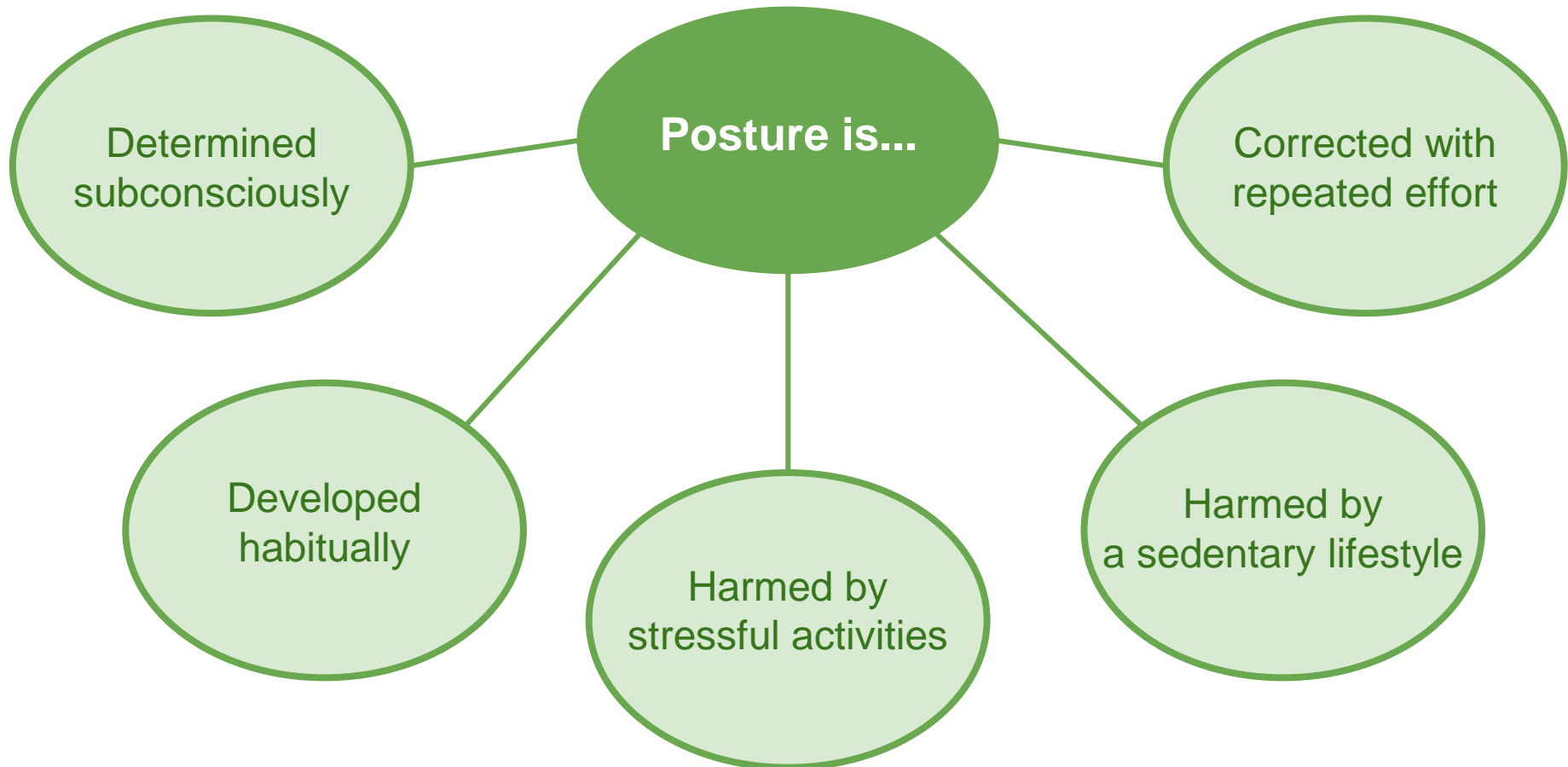 - ○ Send participants 4 texts per day for 2 consecutive days

Hi, this is the UW Posture Group. Please reply with:

(1) your current location

(2) how many people you are with

(3) your current activity

(4) how you would rate your current posture on

a 3-point scale (1=bad, 2=neutral, 3=good).

Five Key Research Findings

Posture is...

Determined subconsciously

Corrected with repeated effort

Developed habitually

Harmed by stressful activities

Harmed by a sedentary lifestyle

Six Design Tasks

1. Wanting to appear more confident with better posture

2. Reducing back pain and stiffness when sitting

3. Trying to be more aware of "posture creep"

4. Discovering which activities trigger posture habits

5. Maintaining a healthy viewing angle with screens

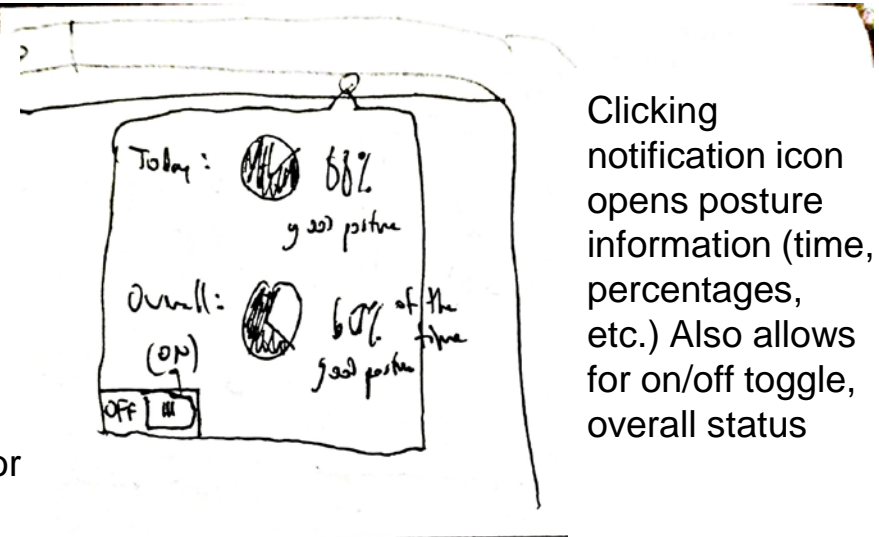6. Transferring good posture between activities

Sketch 1: Laptop Webcam app

Uses webcam input from user's laptop to judge current posture and log it
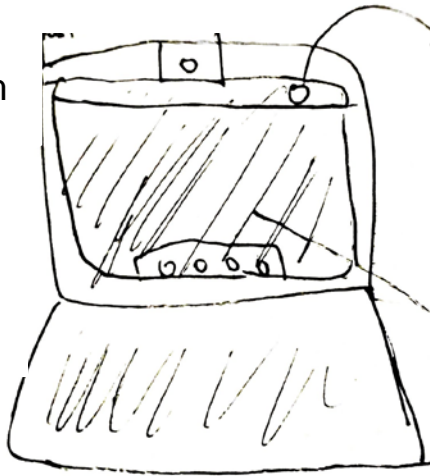
Clickable notification icon for app will display posture report when clicked

Screen dims in response to poor posture

Clicking notification icon opens posture information (time, percentages, etc.) Also allows for on/off toggle, overall status

Figure 4: Laptop Webcam app

Sketch 2: Wearable Device

Figure 6: Wearable Device

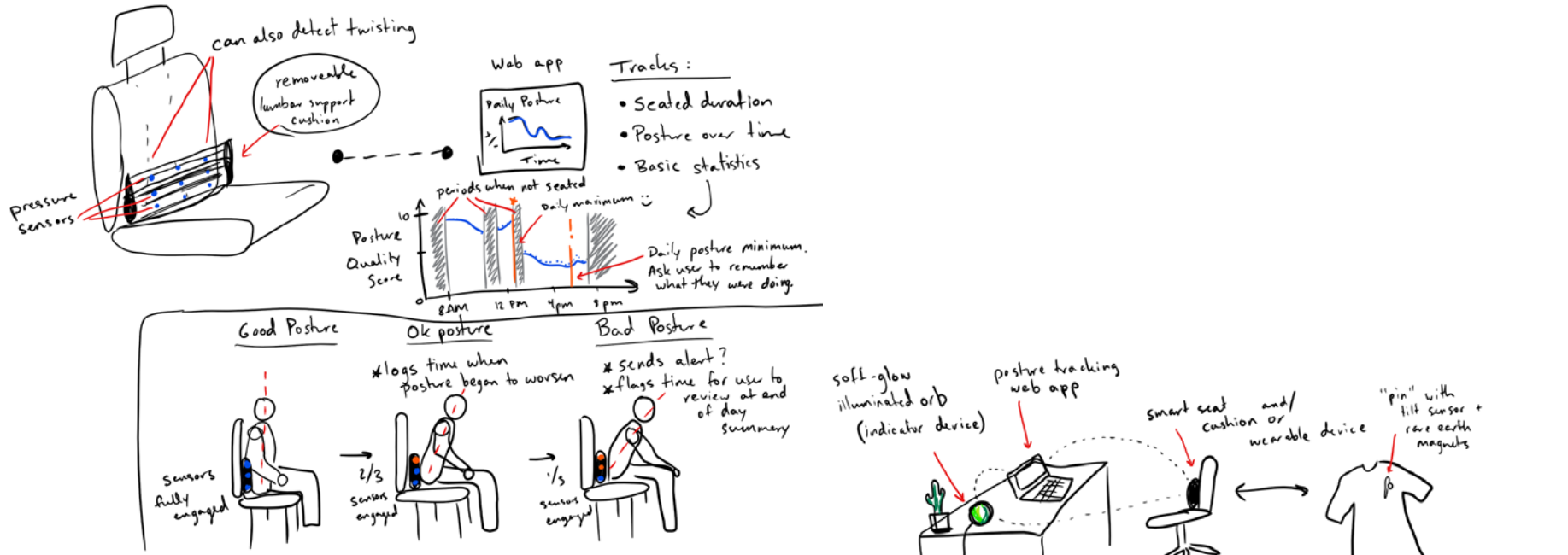# Sketch 3: Posture Light
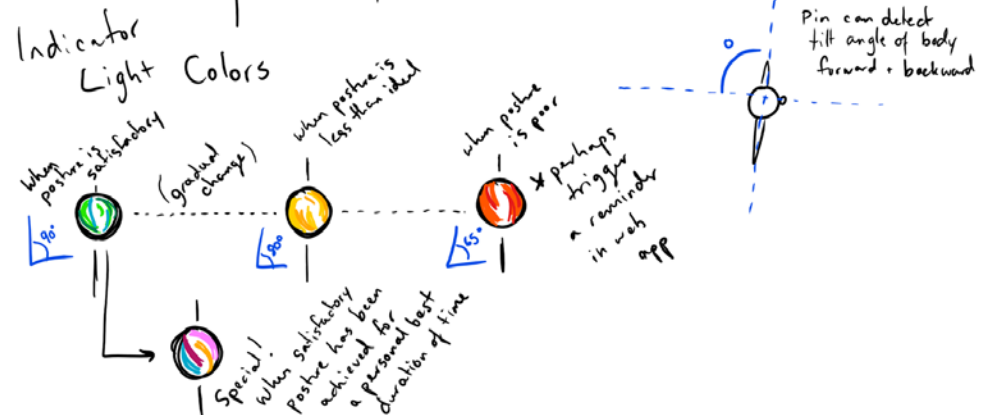

Figure 6: Design of seat with Sensor

Figure 7: Notification Light

Our Selected Design

Why we chose wearable posture reminder?

- Supports BOTH of the two tasks we considered critical for our user group
    - Becoming aware of "posture creep"
    - Adapting to changing activities

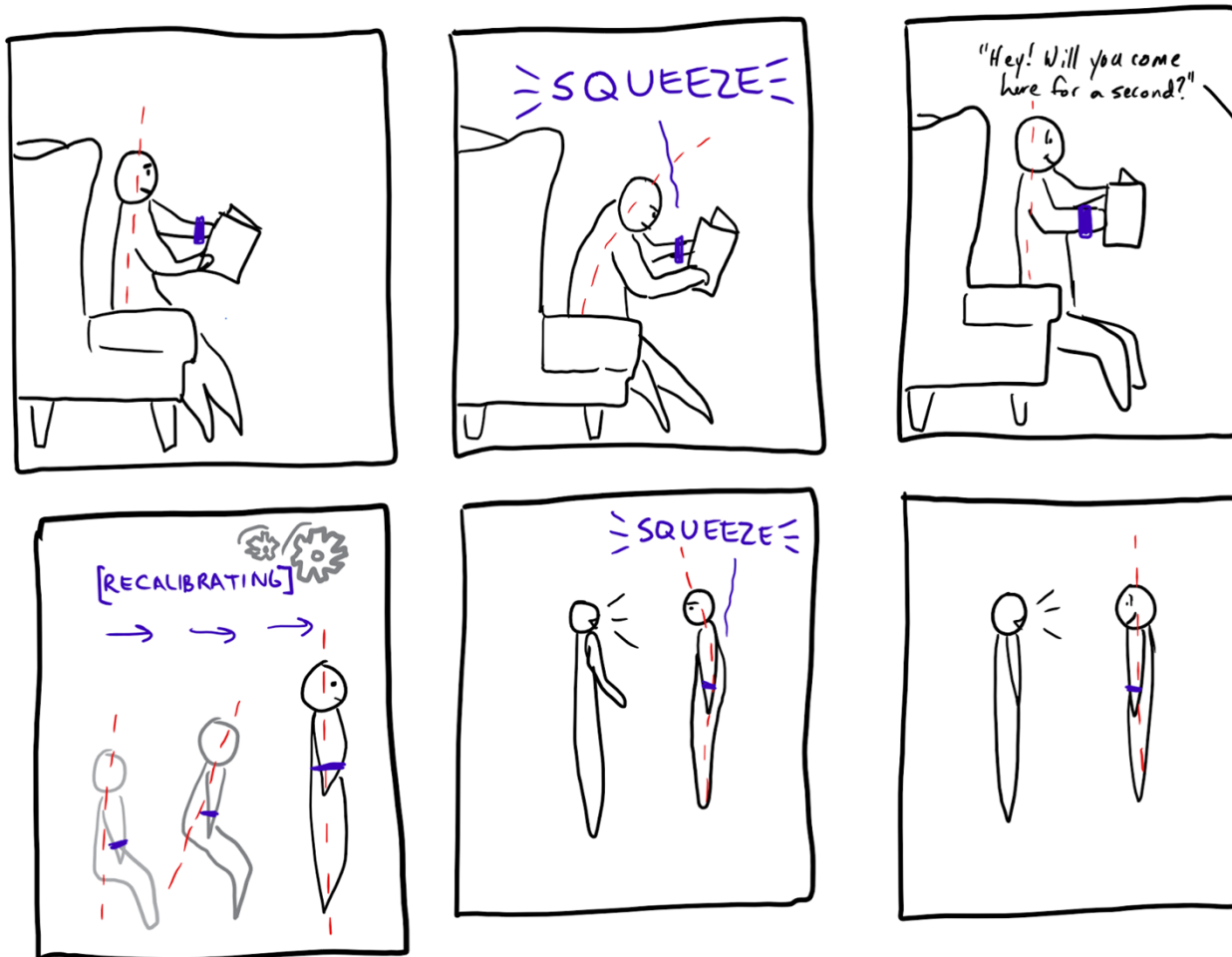- Possibility for integration with existing devices (ex. mobile phones, Apple watches)

Storyboard 1

Becoming Aware of "Posture Creep"

Storyboard 2

Adapting to Changing Activities

Lessons Learned in the Design Process

- It's easier to design for a specific group of people than the entire human population.

- Getting the tasks right is critical in coming up with the right design

- Multiple research techniques allowed us to get better perspective on this open-ended problem