Screenless is a smart phone case that prompts users to reflect on their device habits with each use. Through a combination of shifting tactile sensors and performance-indicating colors, the case briefly hinders every unlock, subtly reminding users to cut back on screen time.

**problem**
The world is becoming ever more connected through the Internet and mobile technology. The average child now spends 6-9 hours of extracurricular time in front of a screen, which significantly hampers in-person social interactions.

**discovery**
We enquired into the habits and motivations for screen use in children aged 10-13. We found that early teen girls are both cognizant of and want to reduce their unhealthy screen consumption. Kids this age prefer self regulation to parental control.

**raised sensors to unlock phone**
To turn on the screen, users must align each finger to one of five tactile sensors. The case is constructed using microfluidics, enabling sensors to rise anywhere on the surface.

**randomized dynamic positions of sensor**
Sensor locations change every five unlocks to prevent users from acclimating to one configuration. Patterns become increasingly difficult to discourage heavy usage.

**performance indicating colors**
Diffused bicolor LEDs transition the case daily from green to white to red, providing visual indication of performance compared to the previous day’s usage amount.

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**research**
- Literature Review
- Expert Interviews
- Competitive Analysis
- Field Observations
- Focus Groups

**design**
- Primary Persona
- Secondary Persona
- Performative Objects
- Design With Intent
- Storyboards

**prototype**
- Colored Cases
- Colored Stickers
- Transparent Bumpons
- Wizard-of-Oz Video
- Feature List

**evaluate**
- Concept Testing
- Interaction Demo
- Physical Prototype
- Video Review
- Focus Group