DASH

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How many of you have ever engaged in distracting behaviors while driving?
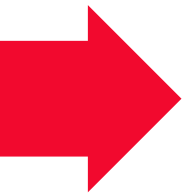
Problem

Distracted driving as a result of:

Texting,

Calling,

Scenery,

Makeup,

Drinking,

Exhaustion...

94% of crashes are driver-related

Leading cause = *recognition error*

***Recognition error* = error due to driver inattention and internal/external distractions**

How bad can it be?

Each day in the United States, over *1,161* people are injured and over *8* people are killed in crashes that are reported to involve a distracted driver.

How can we encourage safer driving habits?

Design Research: Methods

Interviews

Fly-on-the-wall observation

Design Research: Participants

Professional: drive instructor, bus driver

**Casual**: experienced driver, inexperienced driver

Design Research: Takeaways

- Mobile devices are major distractions

- Passengers encourage safer driving

- Drivers are not aware of how much time they are distracted

- Audio and voice controls are not highly distracting

- Users are concerned about privacy

Tasks

1. **Learning** consequences of distracted driving

2. **Receiving** alerts of distracting behavior while driving

3. **Sharing** and **comparing** safe driving habits

4. **Tracking** eye and body movements of driver in real-time

5. **Processing** and **visualizing** data on driving behavior

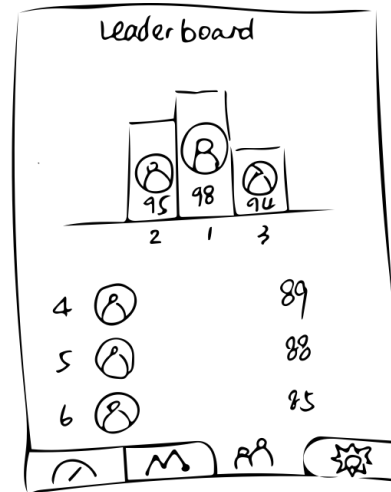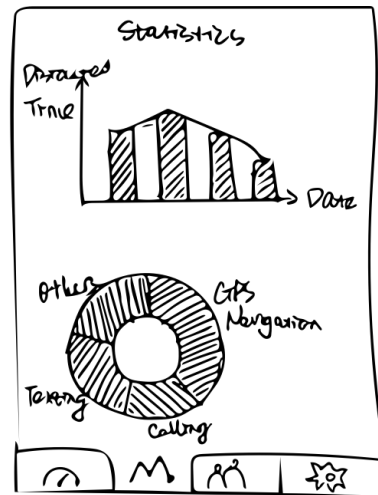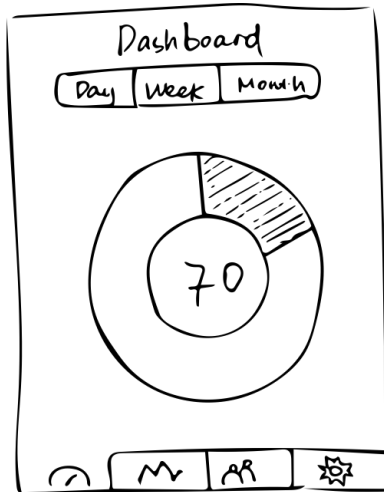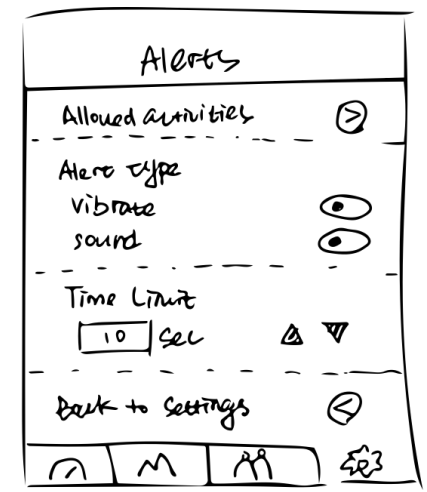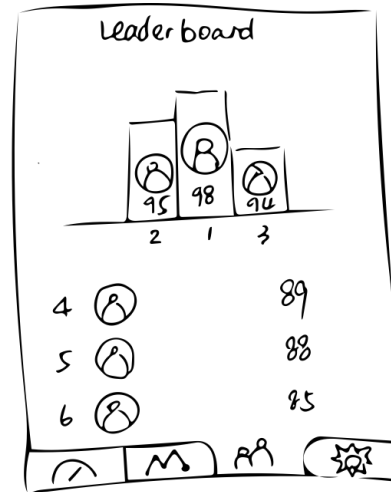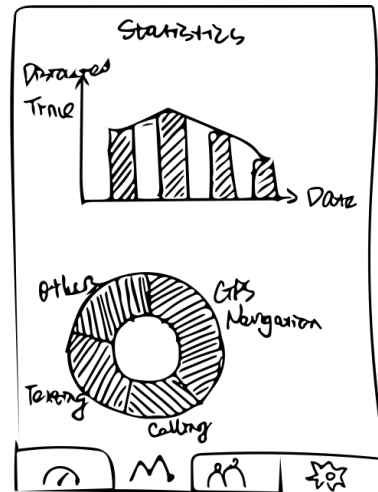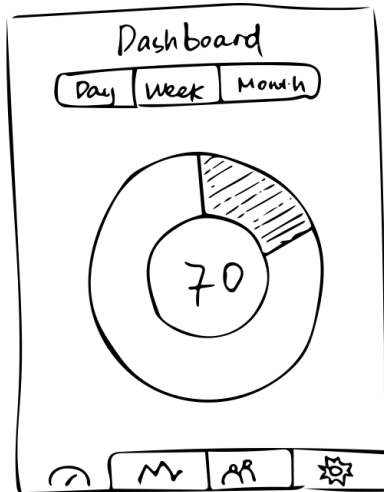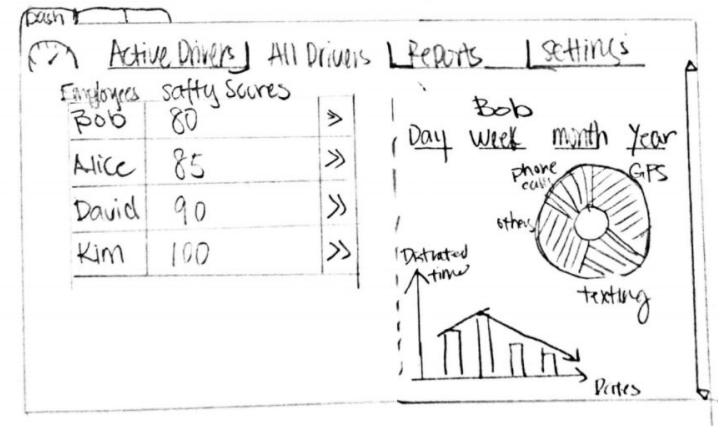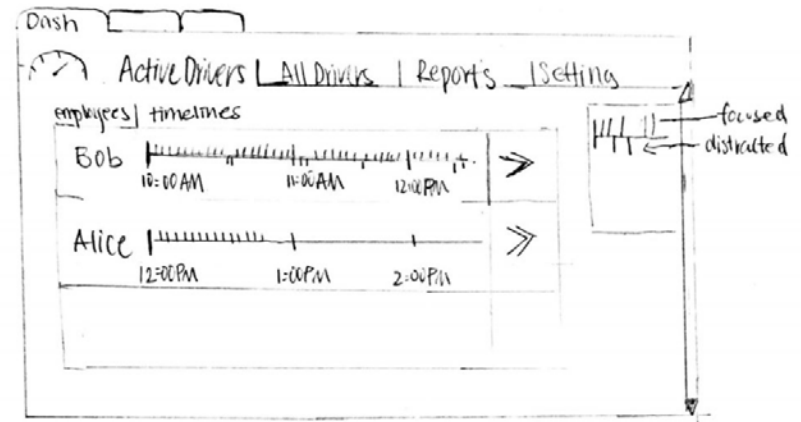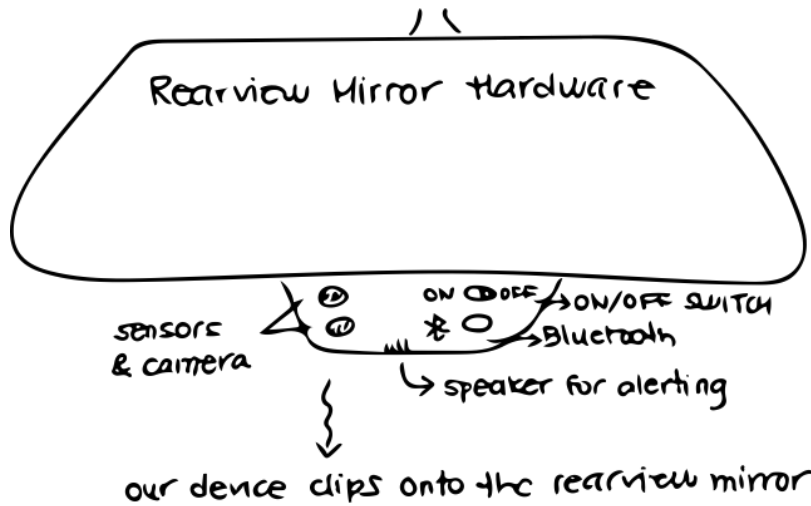6. **Monitoring** driving behaviors in employees/children

Design 1
STAND-ALONE MOBILE APP
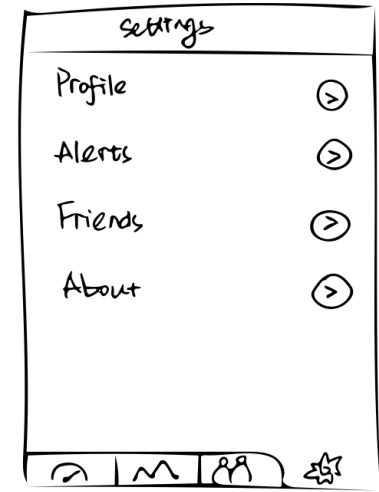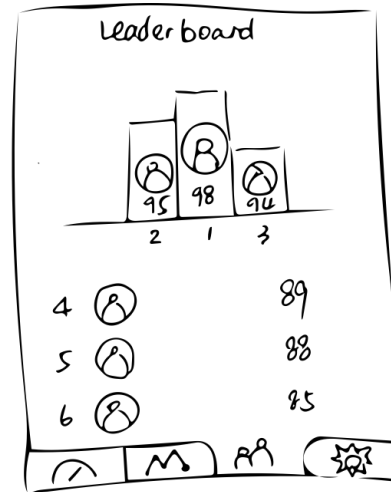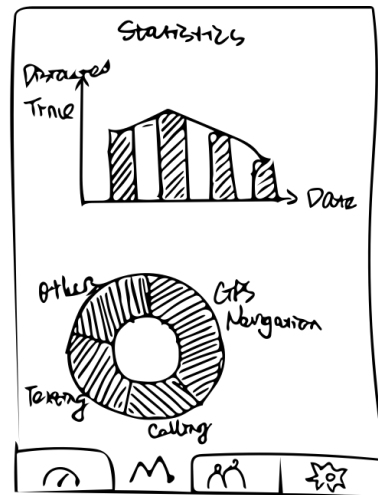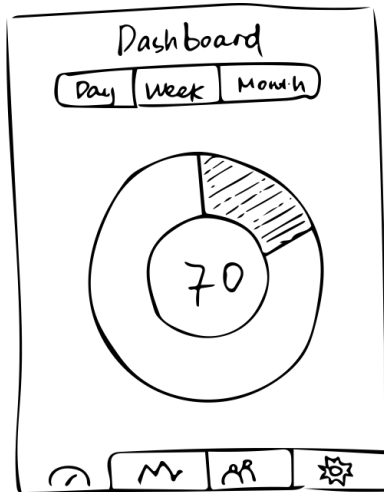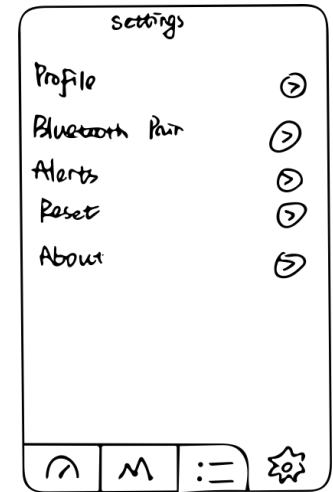
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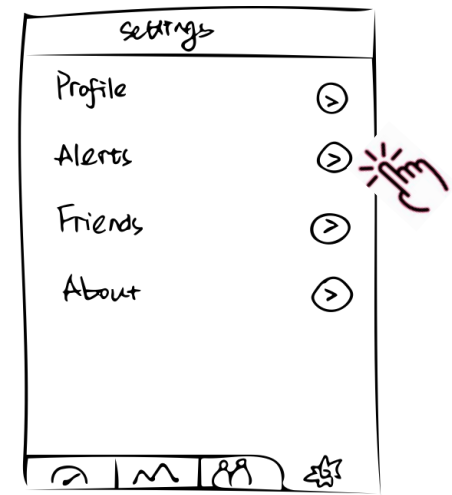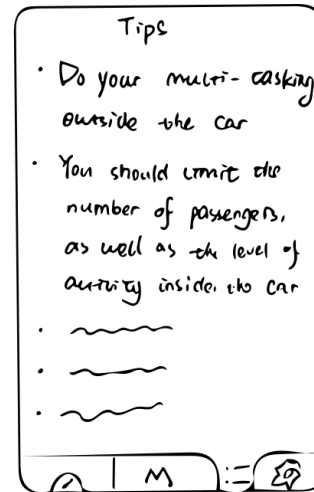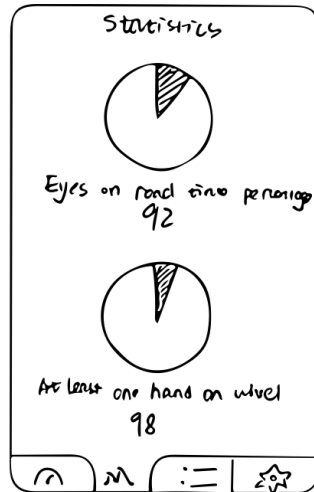
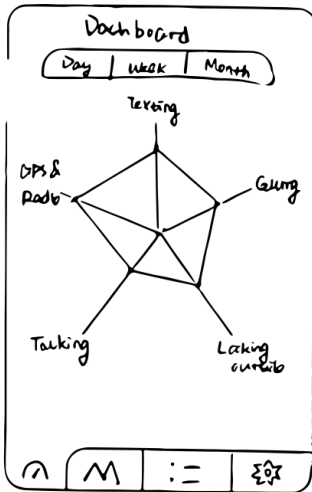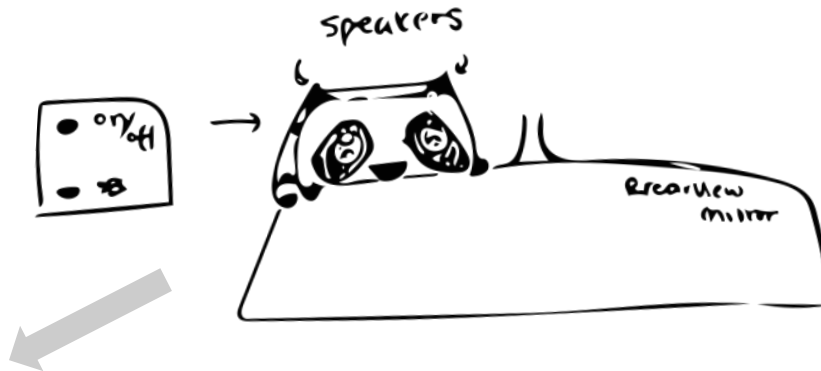# Design 1

STAND-ALONE MOBILE APP

Design 2
MONITORING HARDWARE & WEBAPP

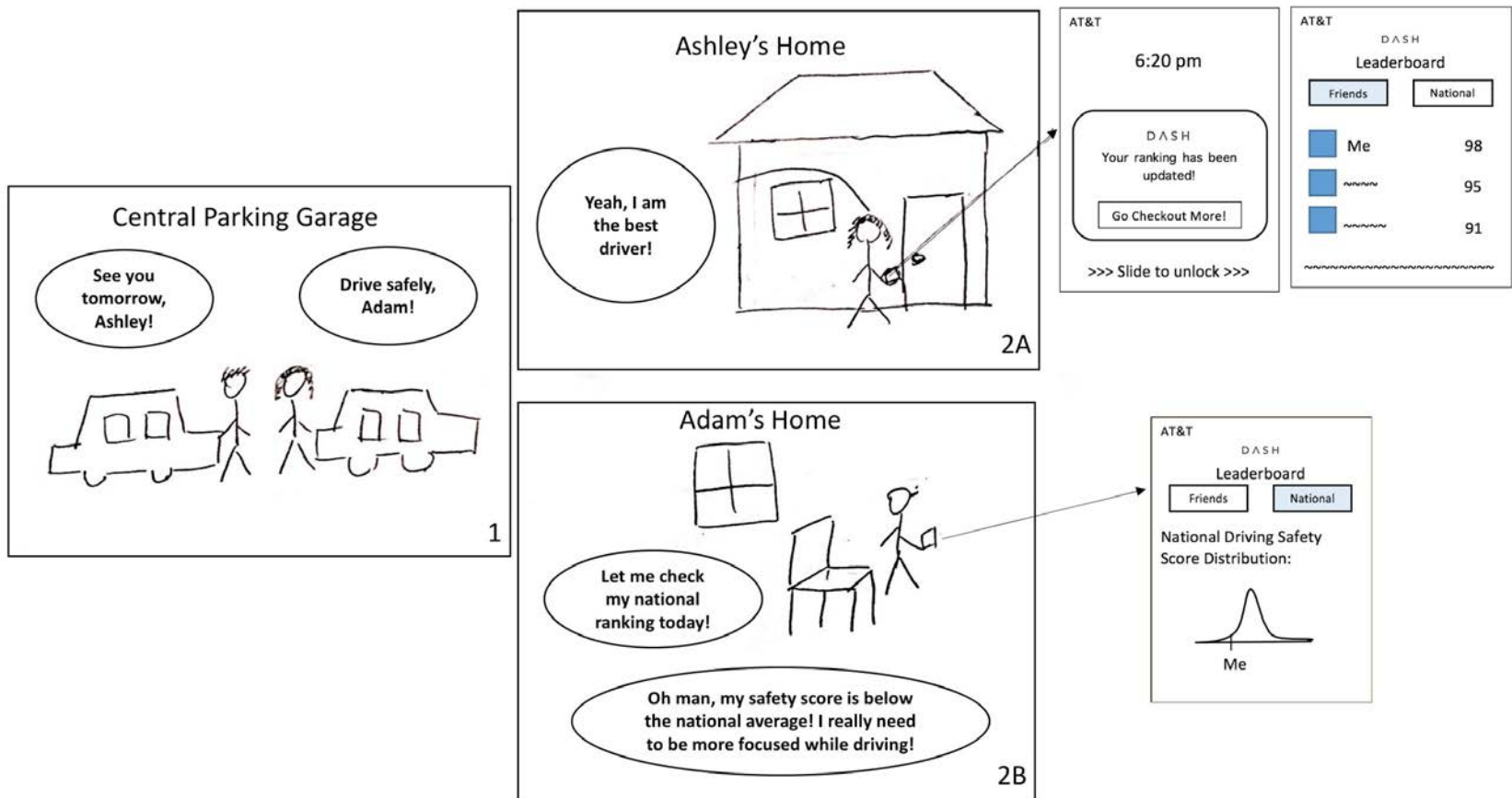# Design 3
TRACKING HARDWARE & MOBILE APP

Storyboard 1
PROCESSING & VISUALIZING DATA ABOUT DRIVING

Storyboard 2
COMPARING & SHARING DRIVING HABITS

Summary

- Flexibility and communication is key for teamwork

- Research before designing

- Iterate through many sketches--evaluate them all!

- Don't sweat the small details about implementation

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Questions?