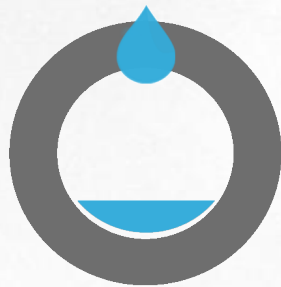


Thursday, June 2nd  
CS377E - Spring '15



Drop

Helping you save California  
one drop at a time

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# Outline

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## Problem

- Needfinding
- Parallel Prototypes
- POV

## Our Solution

- Overview
- Video presentation
- Design evolution
- Final design
- Expansion idea

## Summary

A woman wearing a brown hat and a dark top is looking through a pair of black binoculars. She is in a field of tall green grass, and the background is a bright, slightly blurred outdoor setting. A white speech bubble with a scalloped edge is overlaid on the left side of the image.

Problem and  
Need finding

# Problem

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Students care about the water crisis, but they're busy and thinking about many things. Saving water doesn't come to mind when they're at home and using it.



# Needfinding

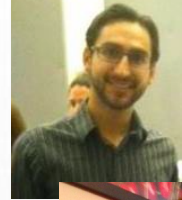
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## Interview with

- People involved with Stanford Sustainability
- Stanford students

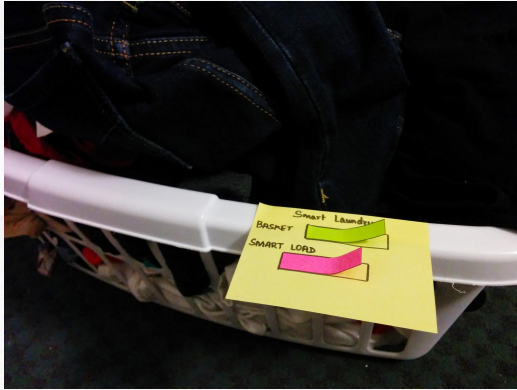
## Surprise

- There are people who don't think about saving water
- even if they do, they don't think of it at the moment of use



# Parallel Prototypes

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Smart Laundry



Water collector



Crisis around you

Looking for a solution that doesn't take much of the user's time.



# POV

**We met** Claire, a busy Stanford student

**Who needs** to be reminded of the significance of her choices and be prompted to make environmentally friendly decisions at the right moment

**Because** she is busy and has other priorities and doesn't think about water when it would actually make a difference



# HMW

How might we prompt students to think about their water choices at the moment of making a decision that affects water use, while meeting their need for tools that are unconscious and not distracting?



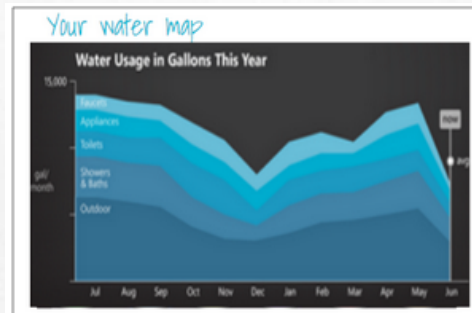
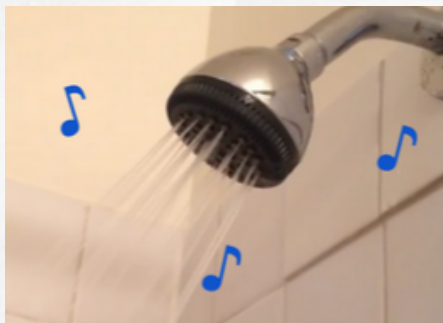


The Solution



# Solution

DROP will help you save California, one drop at a time. You learn about the water crisis, live water usage and your personal progress every time you use water.



# Concept Video



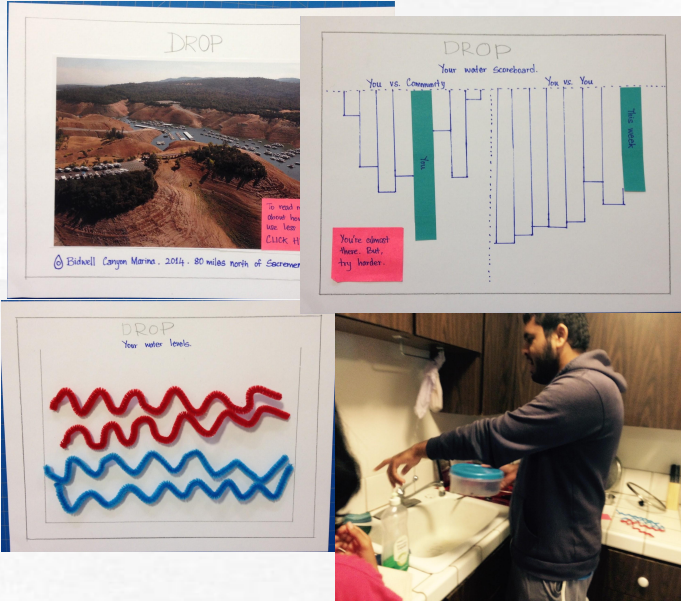
# Initial Design - how it all started



- People quickly moved on from being shocked/surprised by the images.
- The locations chosen were recognized by people.

However, seeing the drought **made them care but didn't give them anything to do.**

# Combining ideas



- Show users live water usage so that they make wiser decisions.
- Show progress to motivate them

We learned that a screen is not always the best solution/interface.

# The talking faucet



- Introduced the talking faucet.
- Wasn't as creepy as we thought.

What should the faucet should alert about - time?  
amount of water? crisis alerts?



## More surprises



"I thought I could finish shower faster by increasing the water flow."

"I really like my music while I shower"



- Alert about the amount of water used, and comparing to the average.
- Introduced music with the alerts.

# Final Design

## 1. Learn about water crisis



# Final Design

2. Learn about live water usage by sound alert







## Tools used

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- Quicktime Player - easy to record.
- iMovie - easy to edit.
- Google slides - familiar to prototype, but had no way to import audio.
- Wizard of Oz techniques - for the data.



# Expansions

- Food and sustainable purchases and their effect on water use.
- Advice on reducing your water use based on other users who've successfully reduced water use (e.g. "your neighbor cut water use by thirty percent by setting their default shower time lower!")

# Summary

## Our key innovation

- The talking faucet ^\_^
- We focused on the moment people are using water

## Our key impact on the world

- We expect that people using Drop will reduce their residential water usage substantially and will save California!

Thanks!



**Any questions?**