

A woman with dark hair in a ponytail, wearing a white tank top over a dark blue and pink sports bra, is shown in profile drinking from a clear plastic water bottle. She is wearing white earbuds. The background is a clear, bright blue sky. A semi-transparent white box is overlaid on the left side of the image, containing the company logo and tagline.

AQUEOUS

Your Water Drinking Expert

Cindy Fan: Designer

Rick Huang: Web Developer

Maggie Liu: Documentation

Ethan Zhang: Project Manager

Overall Problem

- 60% of human body is water *
- People should drink eight 8-ounce glasses of water each day (8 × 8 rule) **
- People often forget to drink enough water
- Up to 75% of Americans suffer from chronic dehydration ***

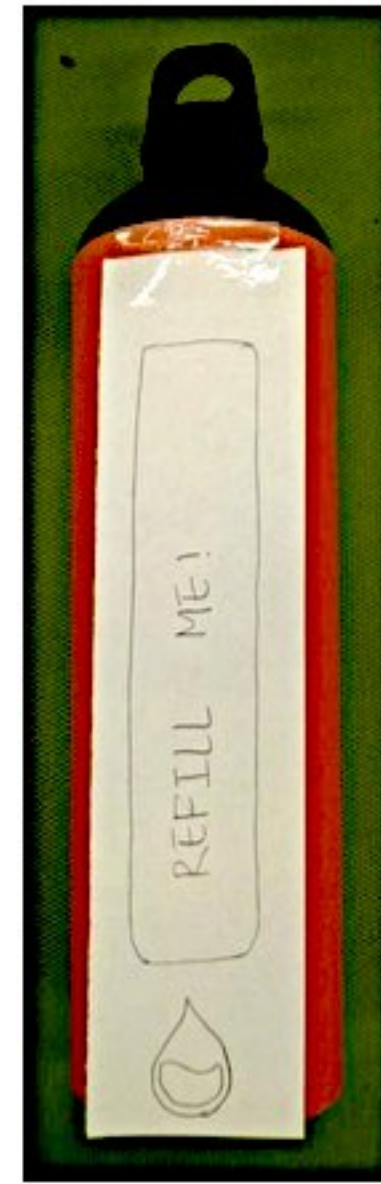
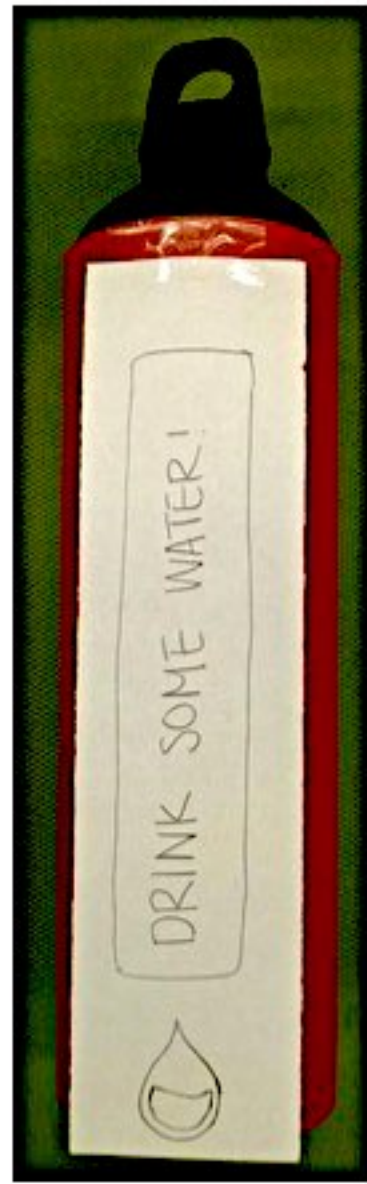
* <http://www.medicaldaily.com/75-americans-may-suffer-chronic-dehydration-according-doctors-247393>

** <http://authoritynutrition.com/how-much-water-should-you-drink-per-day>

*** <http://water.usgs.gov/edu/propertyou.html>

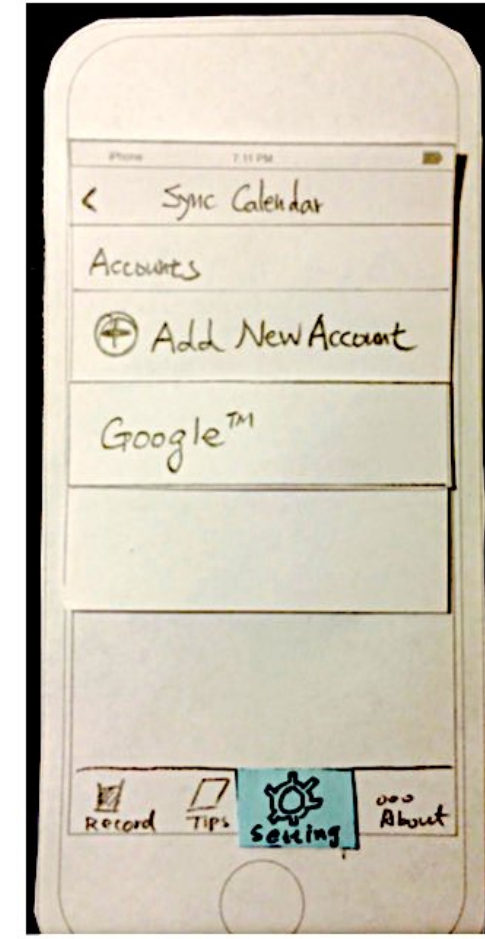
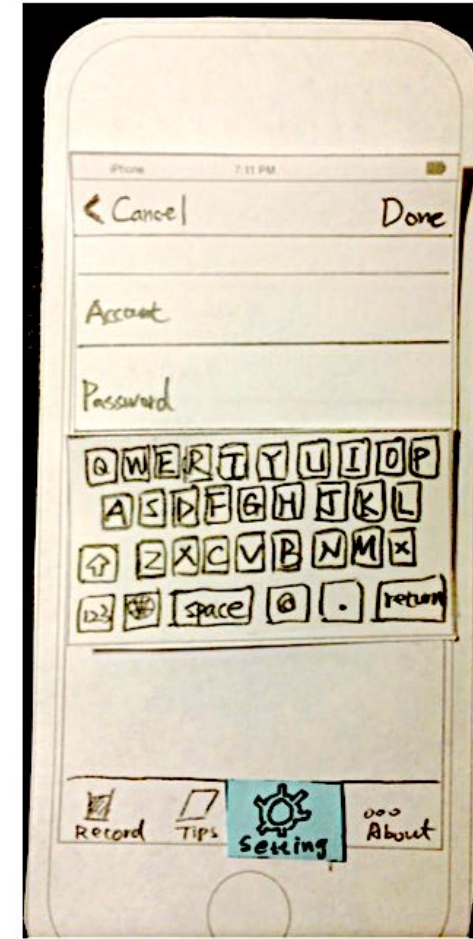
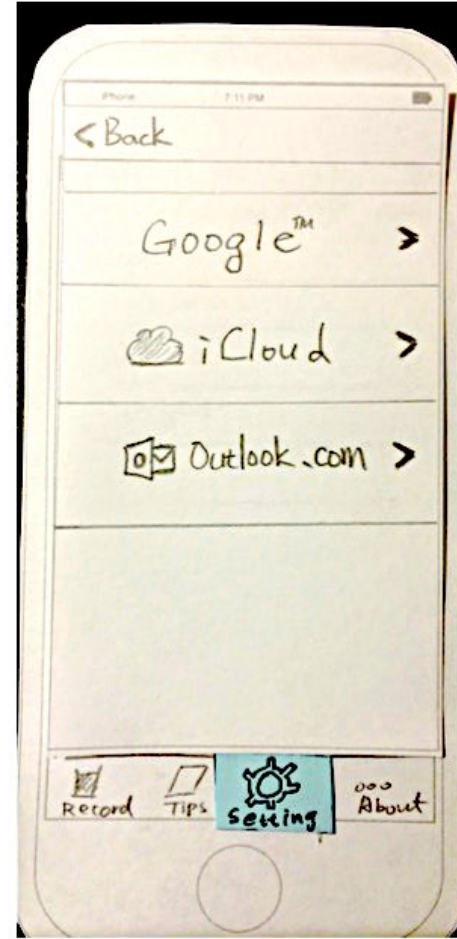
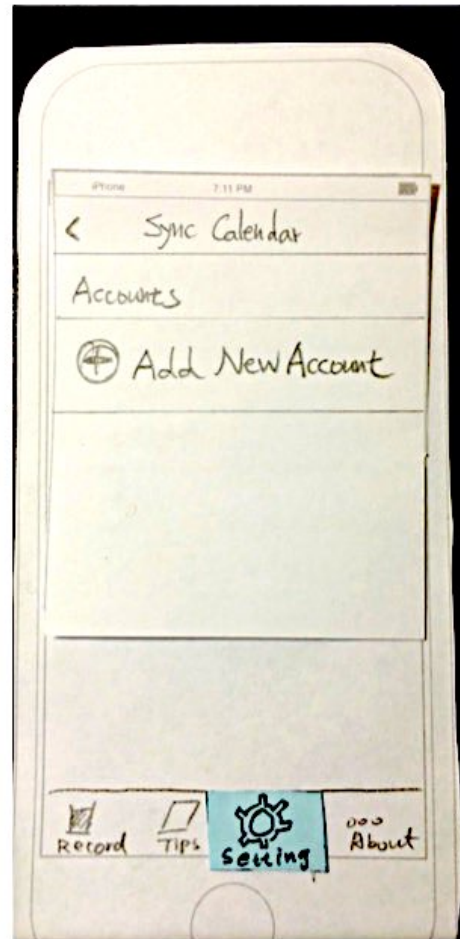
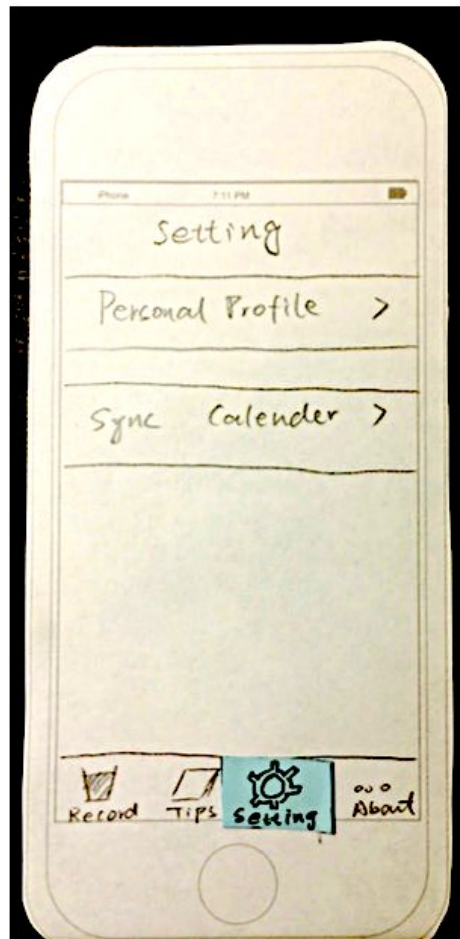
Initial Paper Prototype

Smart Water Bottle



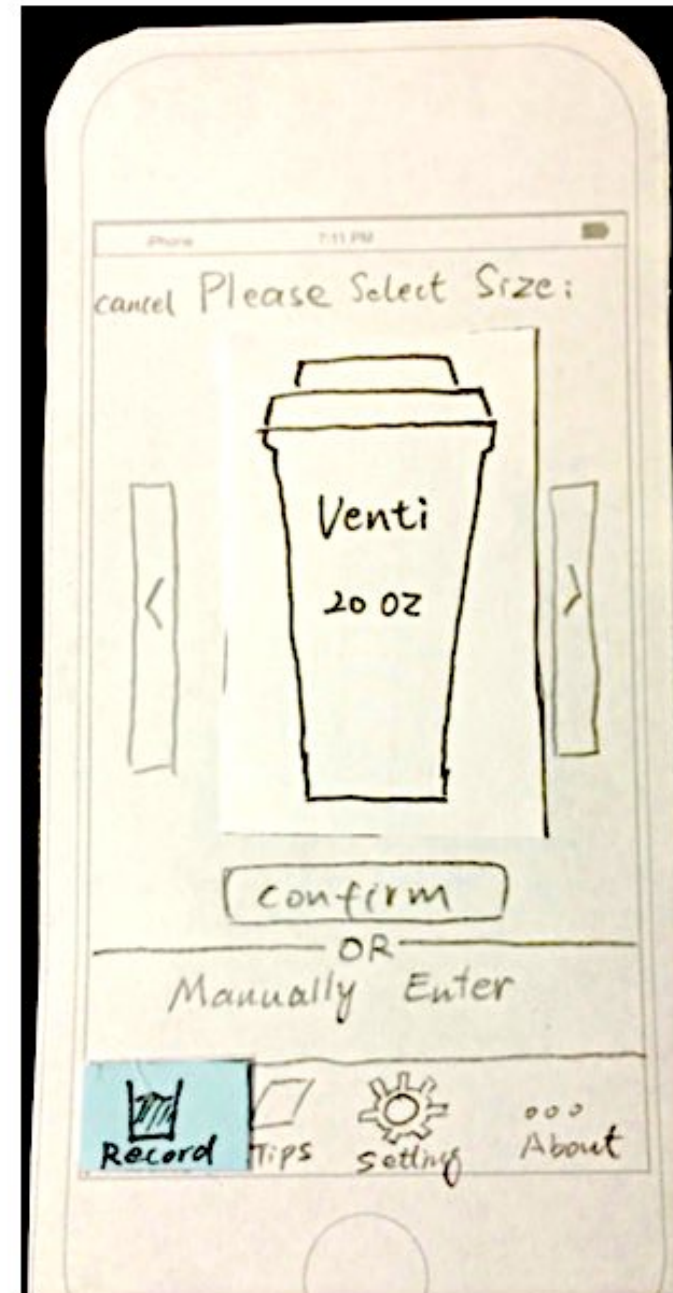
Initial Paper Prototype

Task I - Set Up Smart Reminders



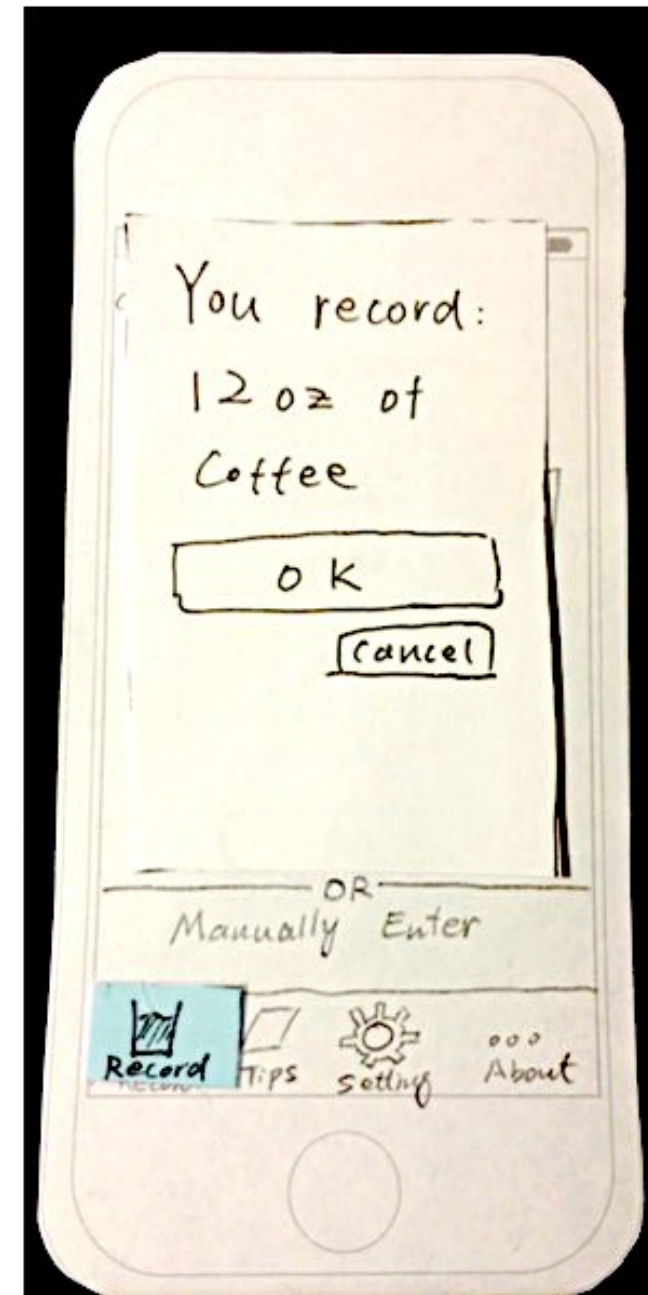
Initial Paper Prototype

Task2 - Record Water Intake (1/2)



Initial Paper Prototype

Task2 - Record Water Intake (2/2)



Heuristic Evaluation

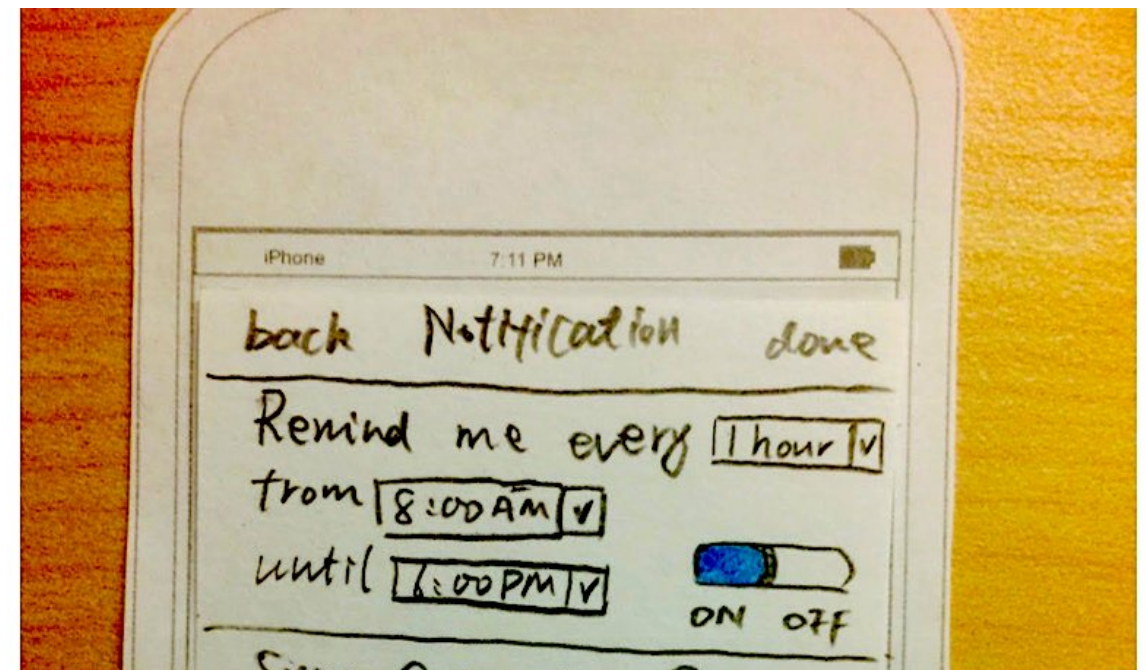
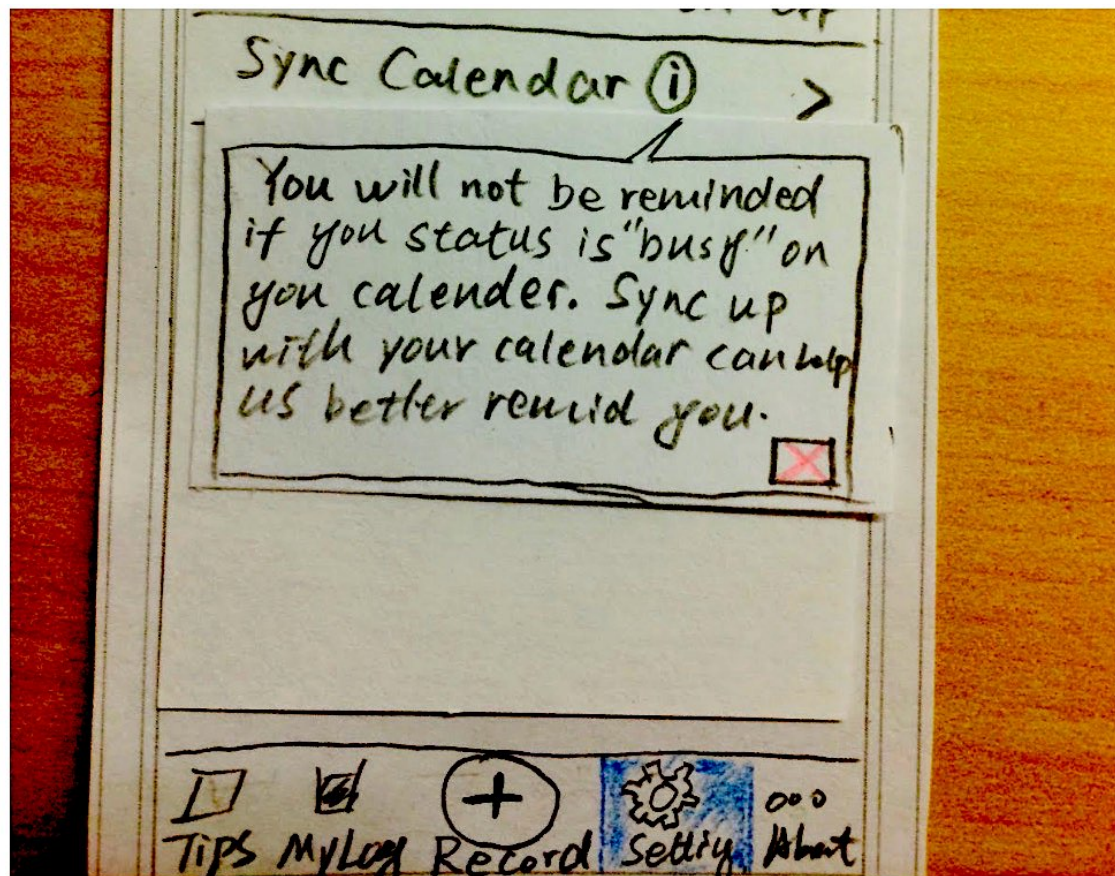
Main violations:

- Purpose of syncing calendar unclear
- Users don't have total control and freedom with the system
- Users don't have visibility of system status
- Match between system and the real world is not good

Testing Process and Results

Refinements after Heuristic Evaluation (1/2)

Purpose of syncing calendar unclear

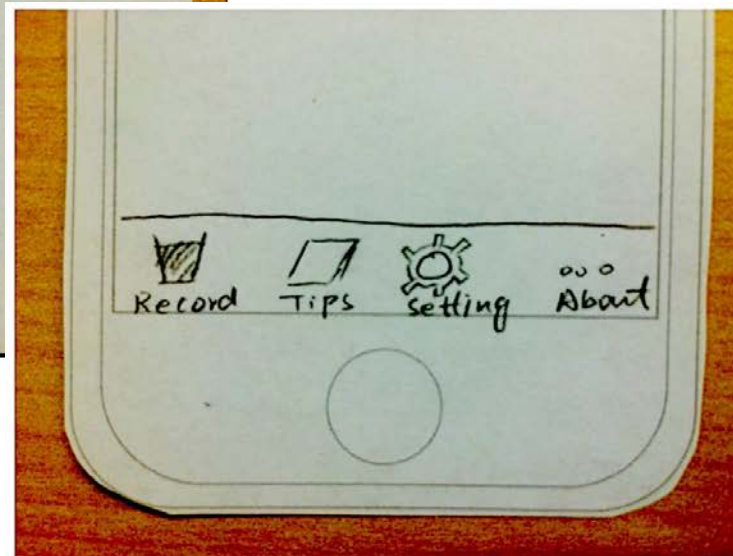
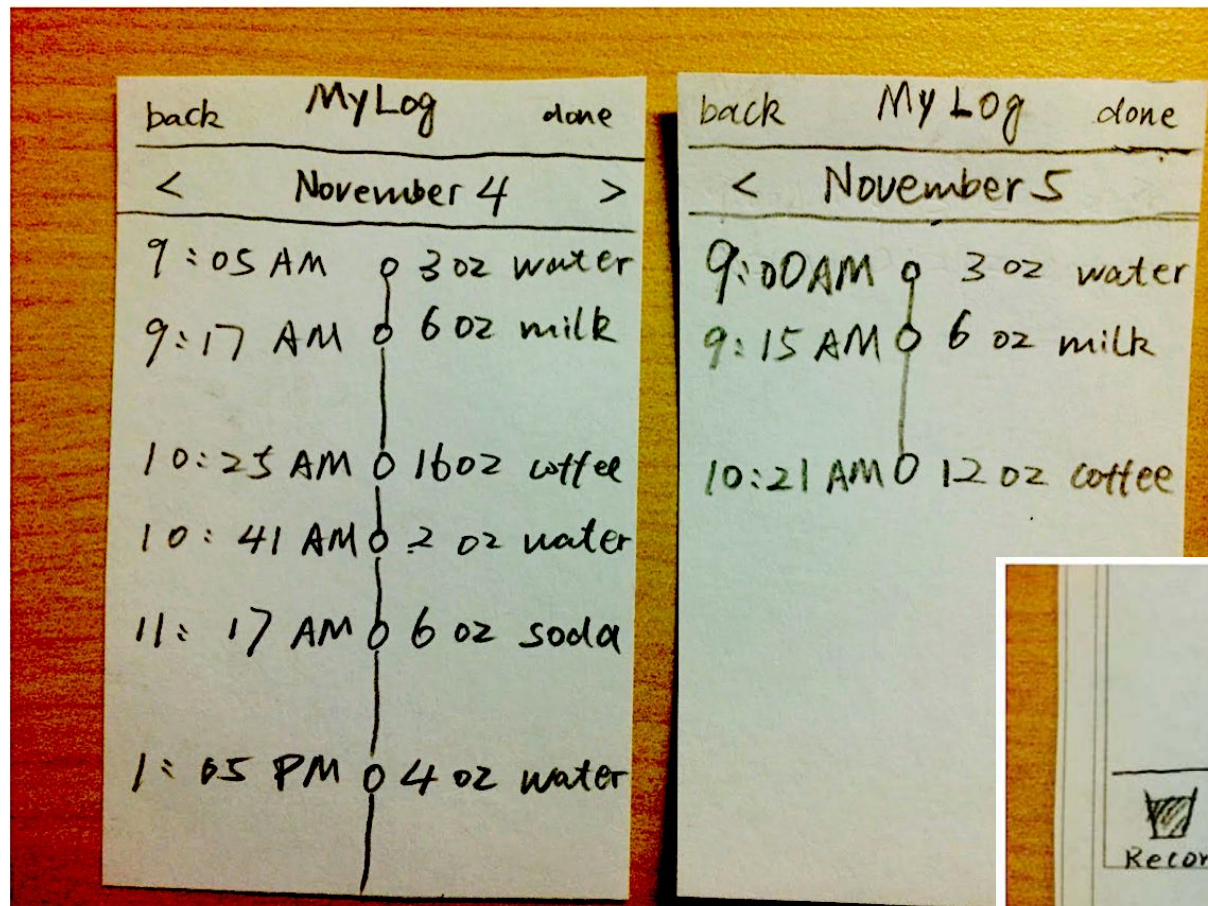


Missing default reminder setting

Testing Process and Results

Refinements after Heuristic Evaluation (2/2)

Missing water log



Before



After

Menu design not match user behavior

Usability Testing

Method

- Did not answer questions or provide help unless absolutely necessary
- Debriefed participants after tests

Summary

- Test 1 - settings page and some UI elements
- Test 2 - settings page documentation and naming
- Test 3 - layout and simplicity

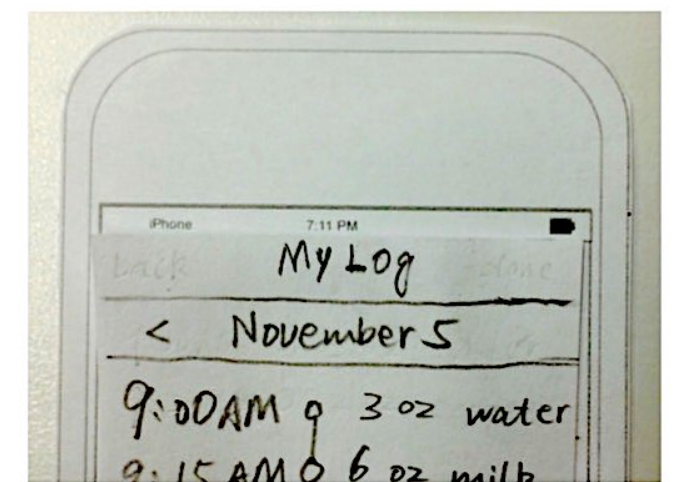
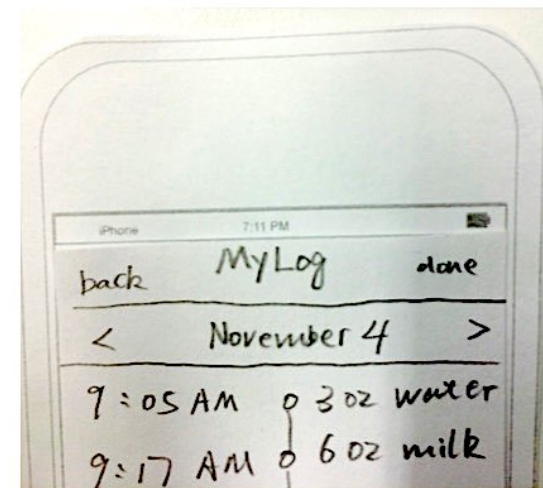
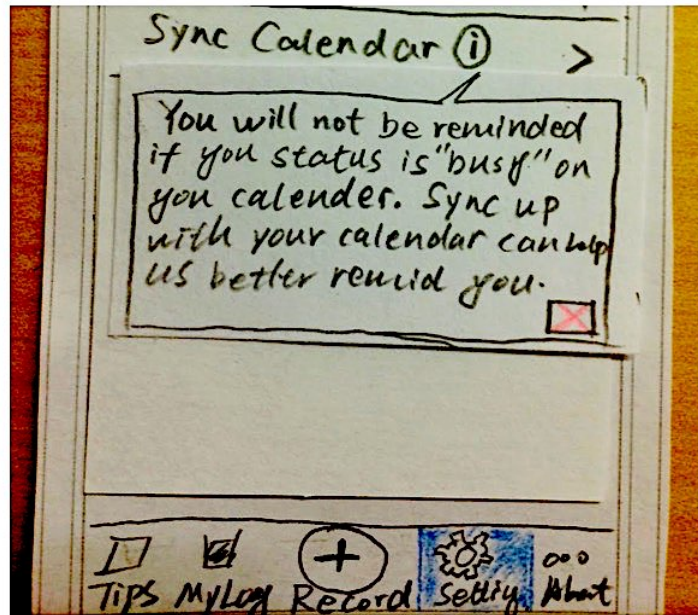
Usability Testing

- Purpose of syncing calendar unclear (Test 1)
- Unnecessary “back” and “done” buttons (Test 1)
- Purpose of syncing calendar unclear (Test 2)
- Confusing default reminders with smart reminders (Test 2)
- Confused about menu bar (Test 3)
- Reminder settings page too cluttered (Test 3)

Testing Process and Results

Refinements after Usability Testing I

Purpose of syncing calendar unclear



Unnecessary "back" and "done" buttons

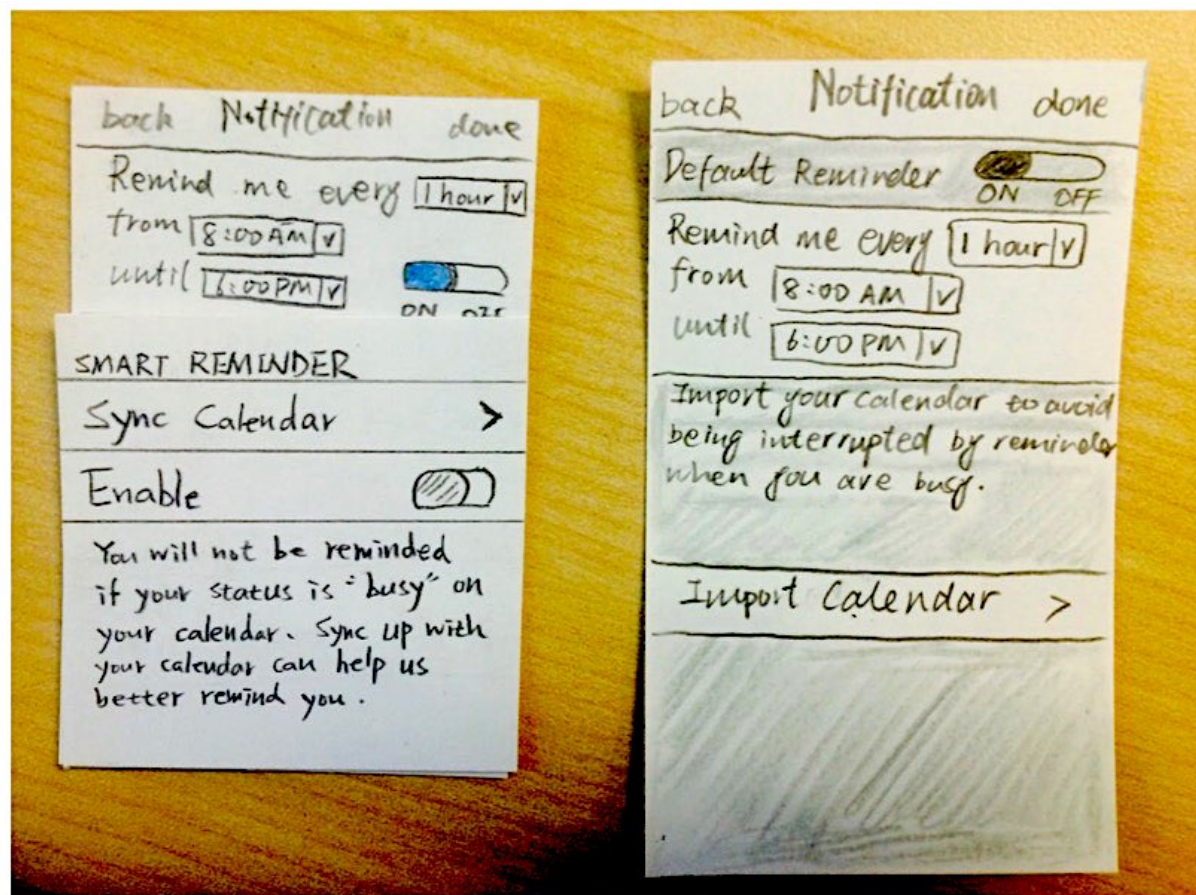
Usability Testing

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Testing Process and Results

Refinements after Usability Testing 2

Purpose of syncing calendar (still) unclear



Confusing default reminders with smart reminders

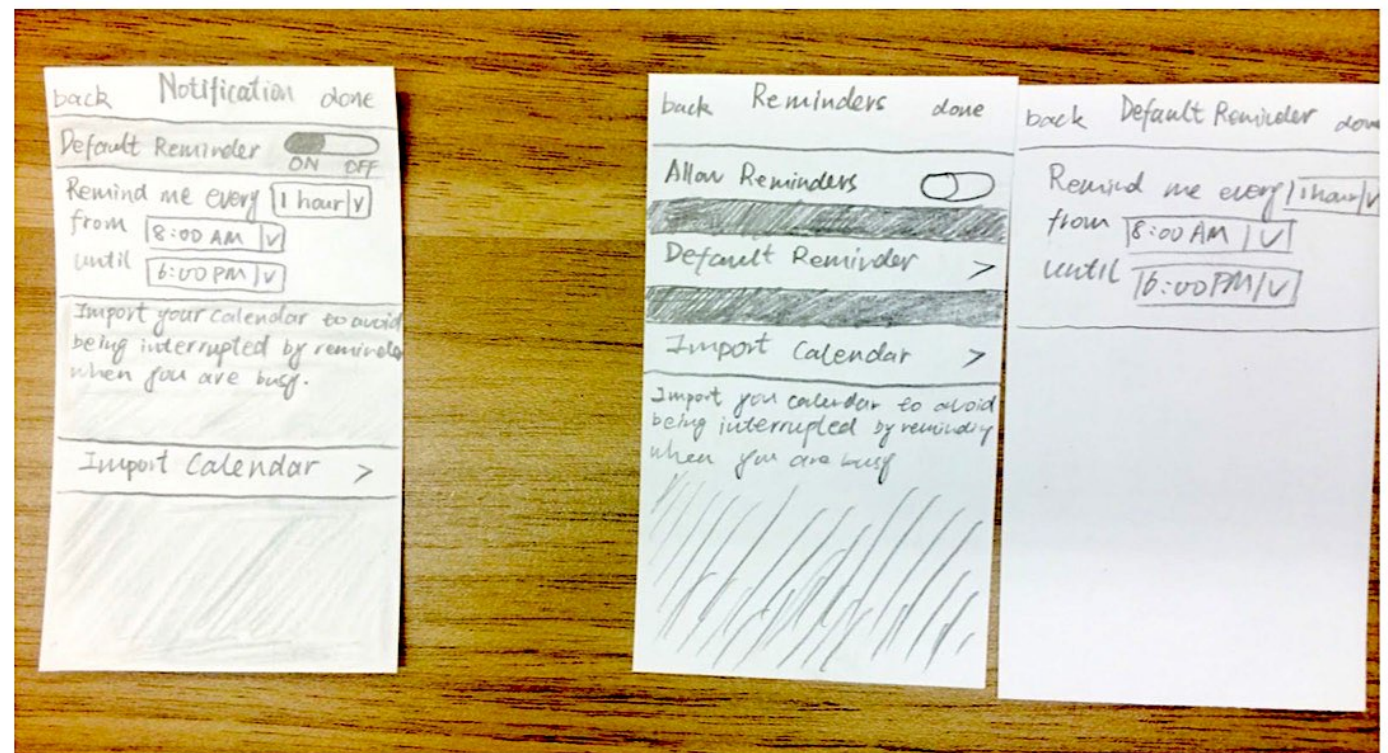
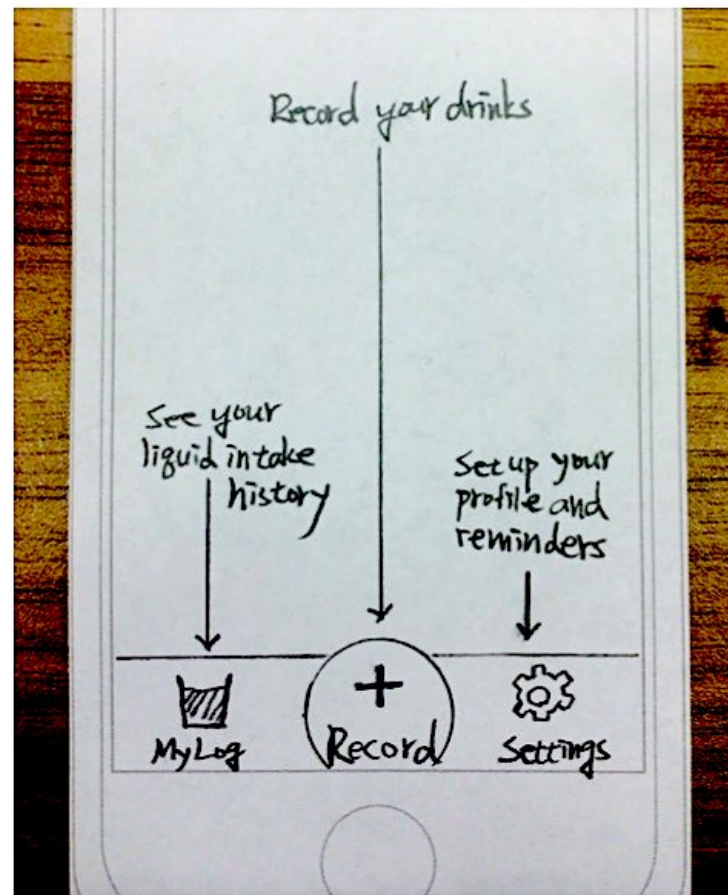
Usability Testing

- Purpose of syncing calendar unclear (Test 1)
- Unnecessary “back” and “done” buttons (Test 1)
- Purpose of syncing calendar unclear (Test 2)
- Confusing default reminders with smart reminders (Test 2)
- Confused about menu bar (Test 3)
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Testing Process and Results

Refinements after Usability Testing 3

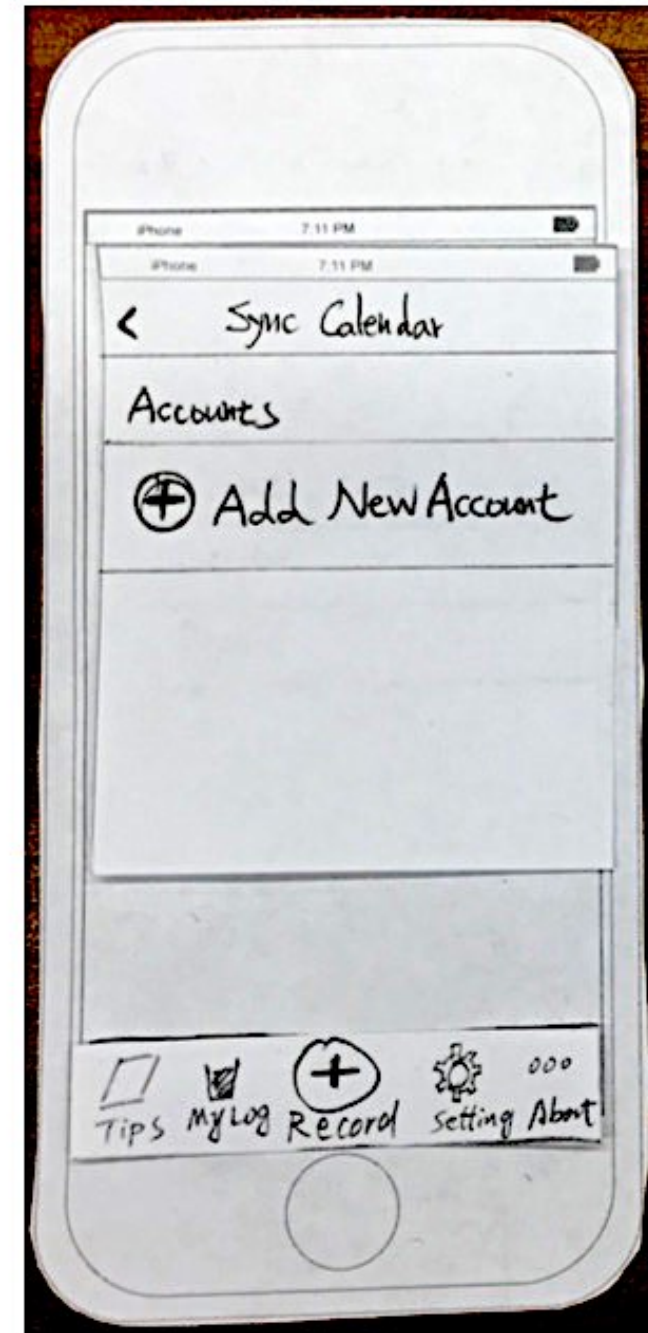
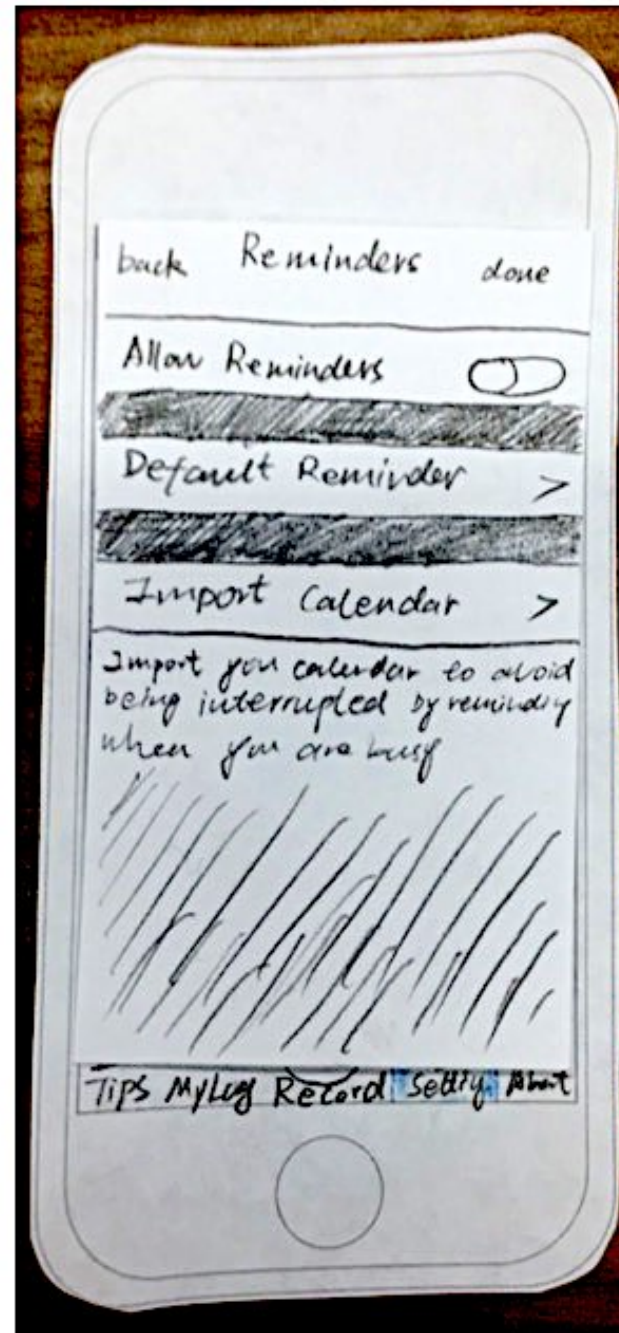
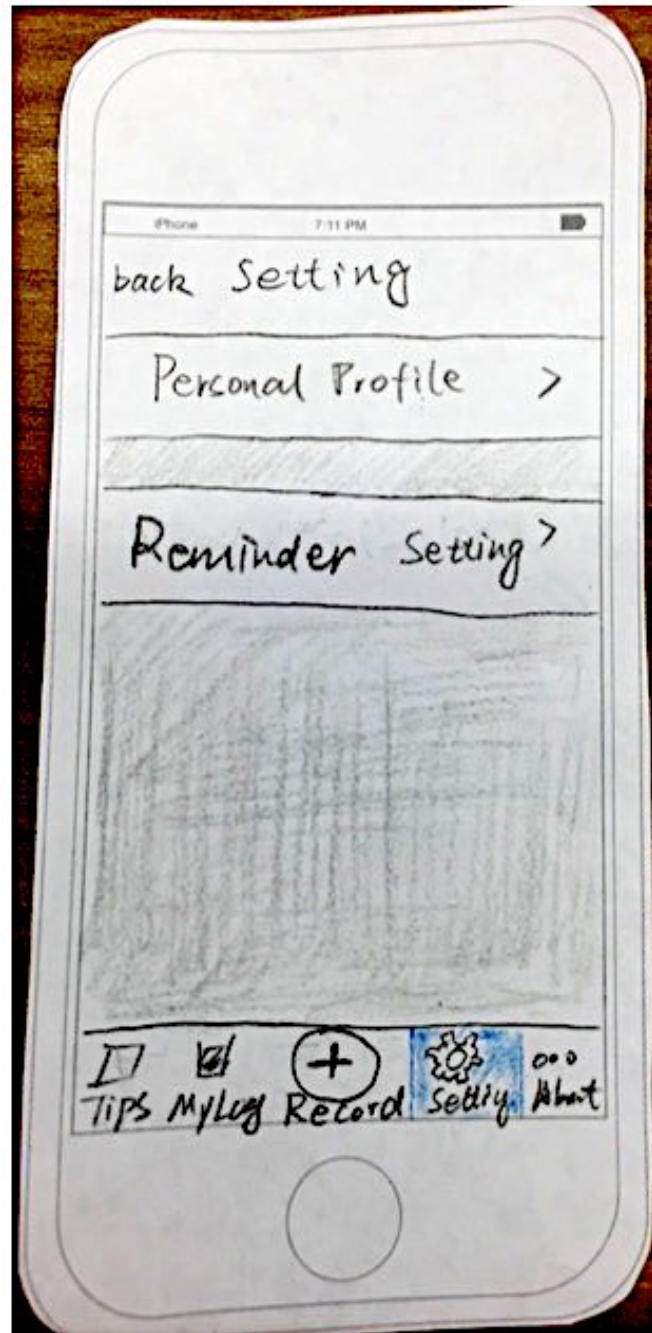
Confused about menu bar



Reminder settings page too cluttered

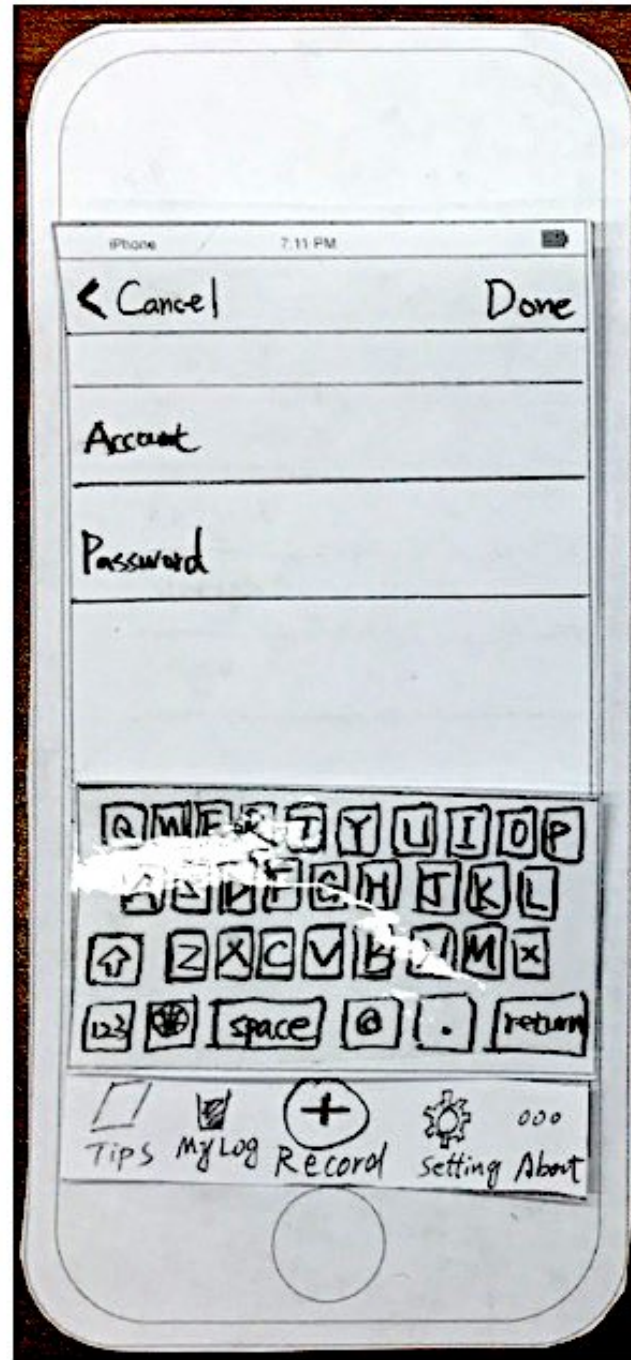
Final Paper Prototype

Task I - Set Up Smart Reminders (1/2)



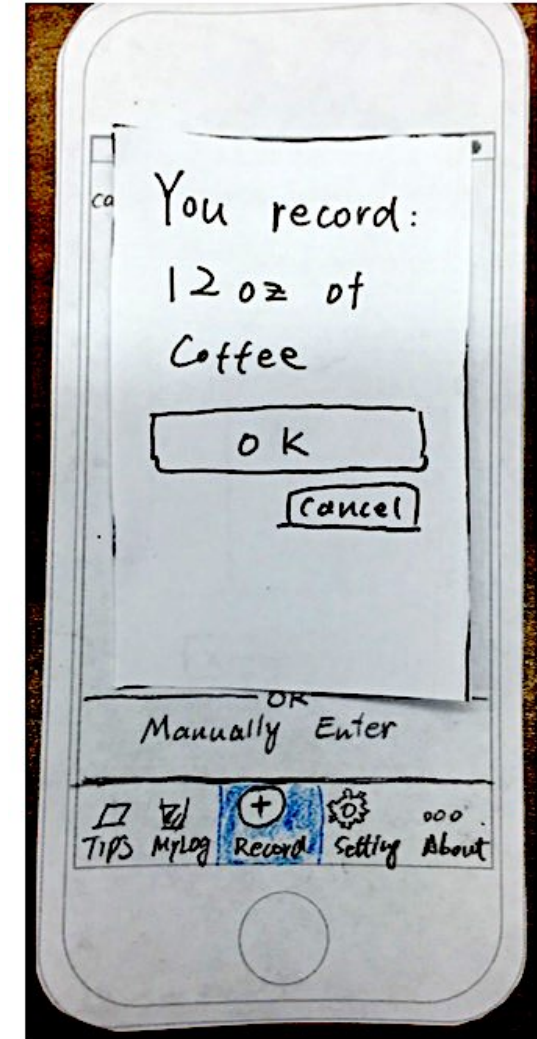
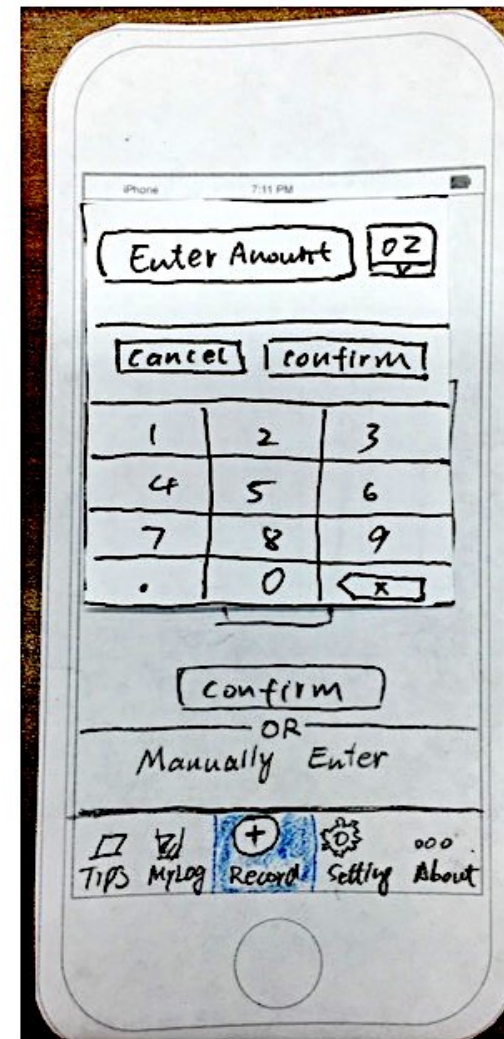
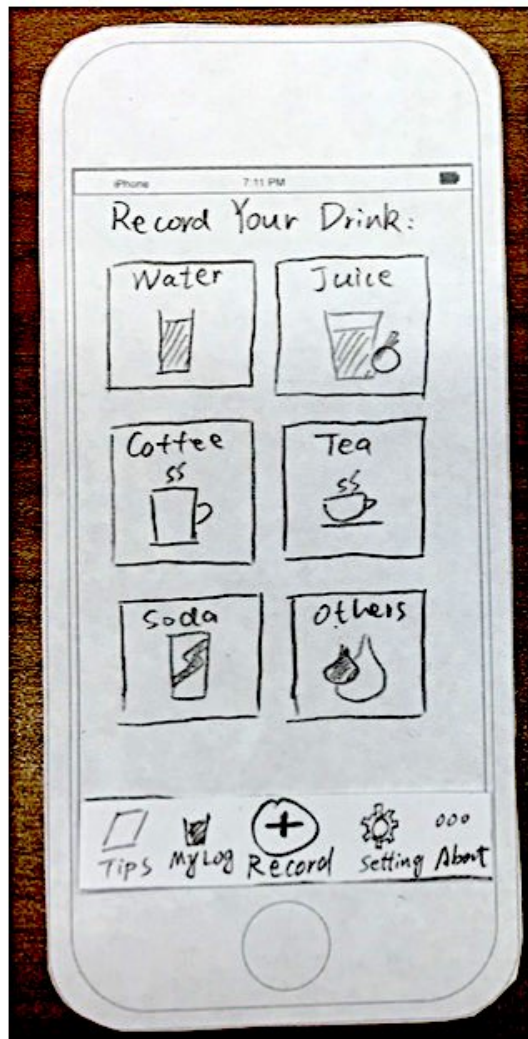
Final Paper Prototype

Task I - Set Up Smart Reminders (2/2)



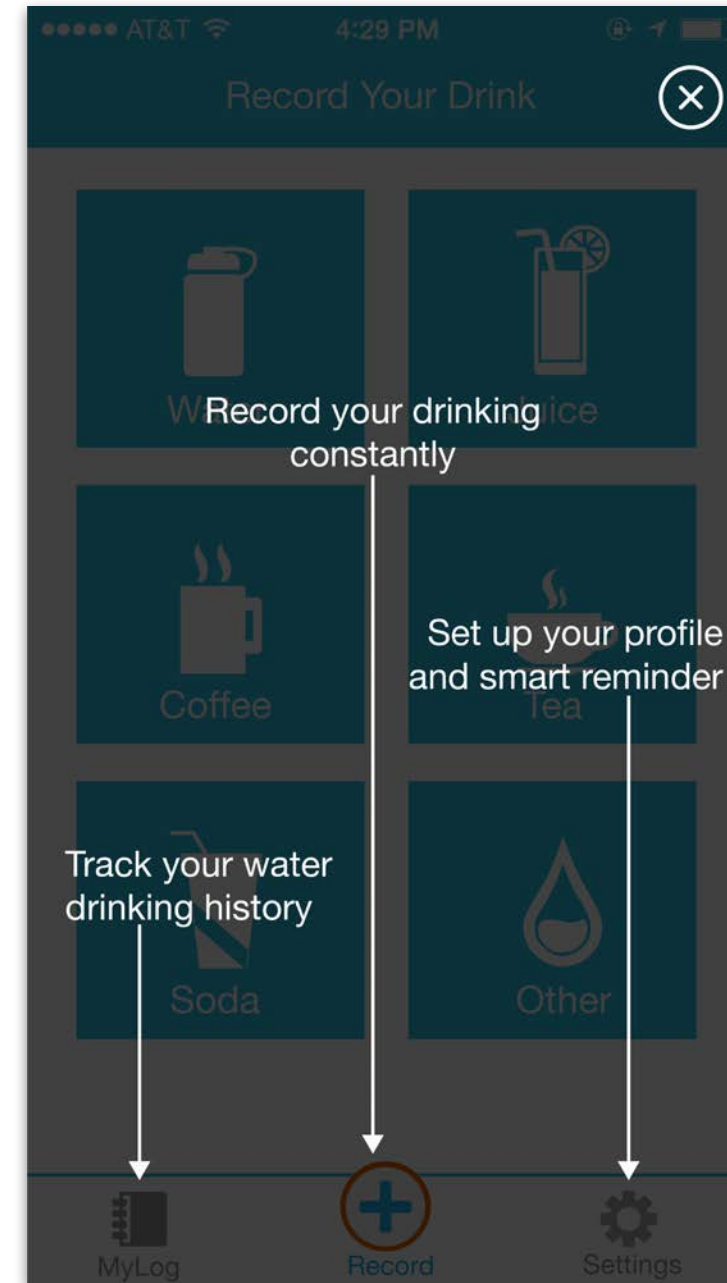
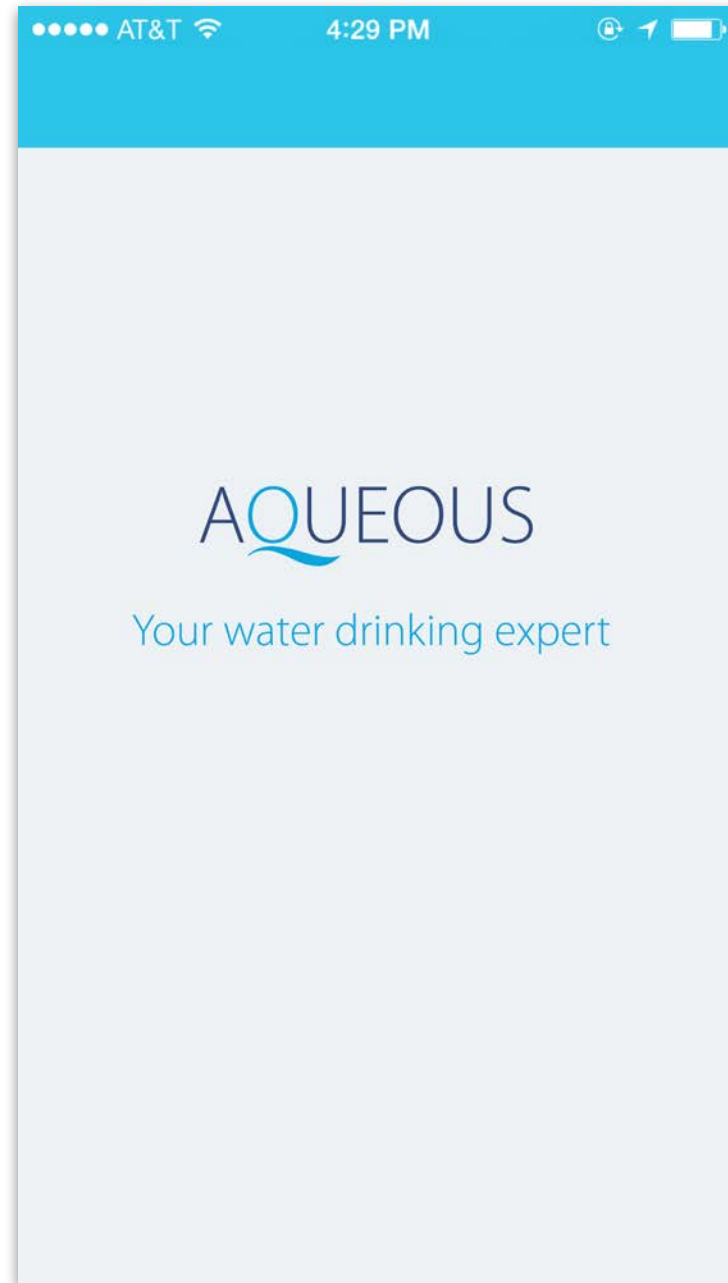
Final Paper Prototype

Task2 - Record Water Intake



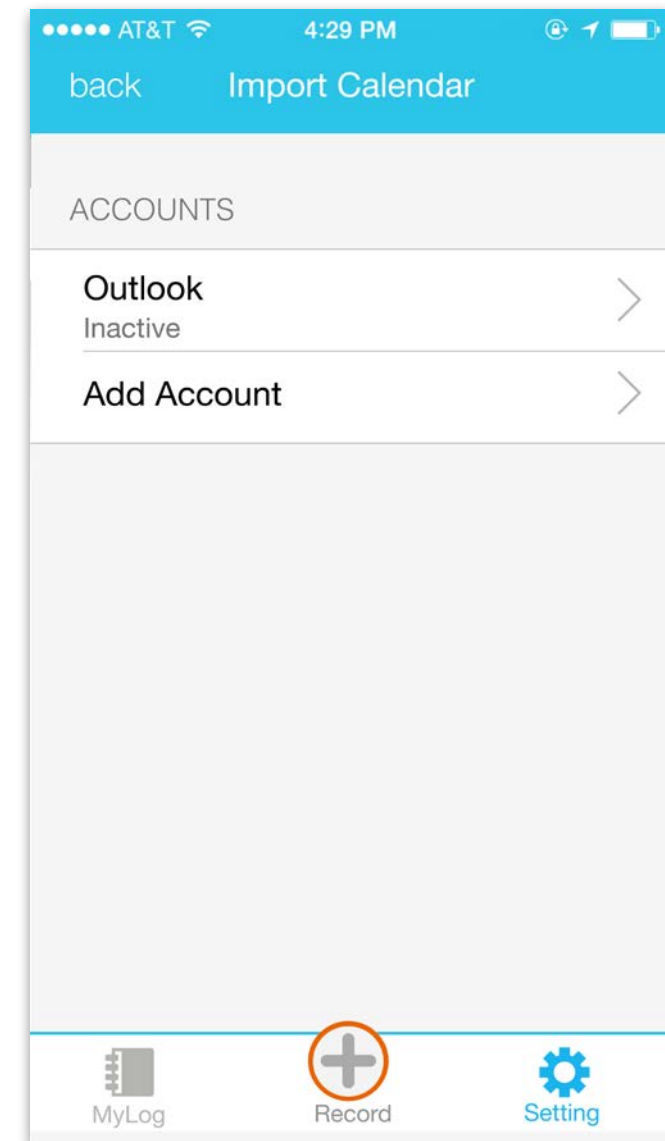
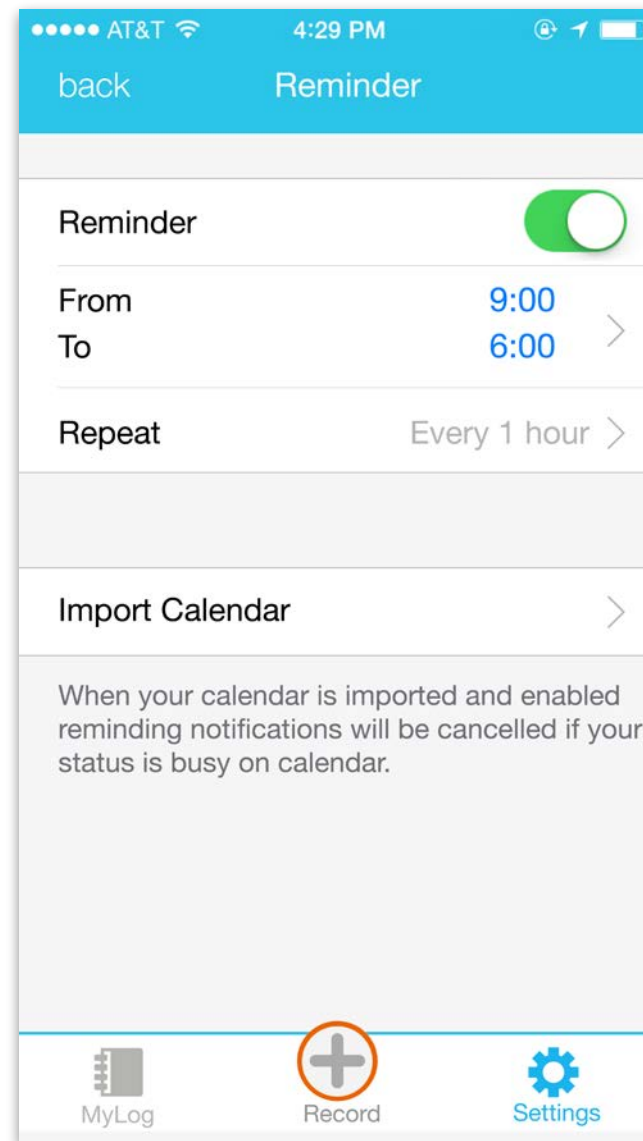
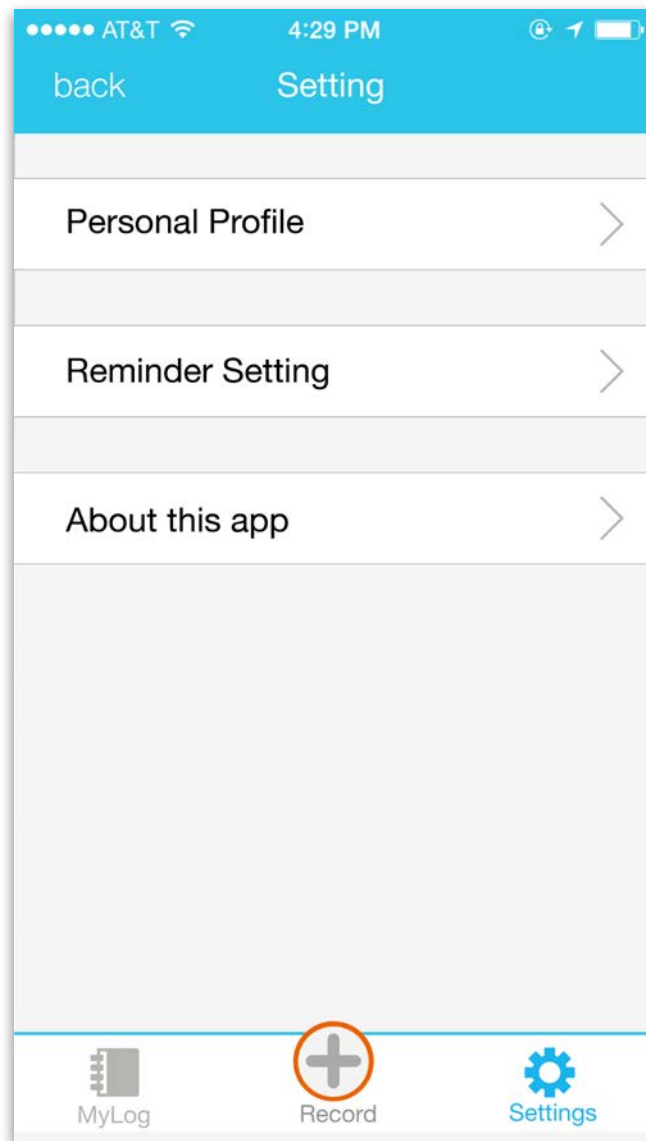
Digital Mockup

Task0 - Application Introduction



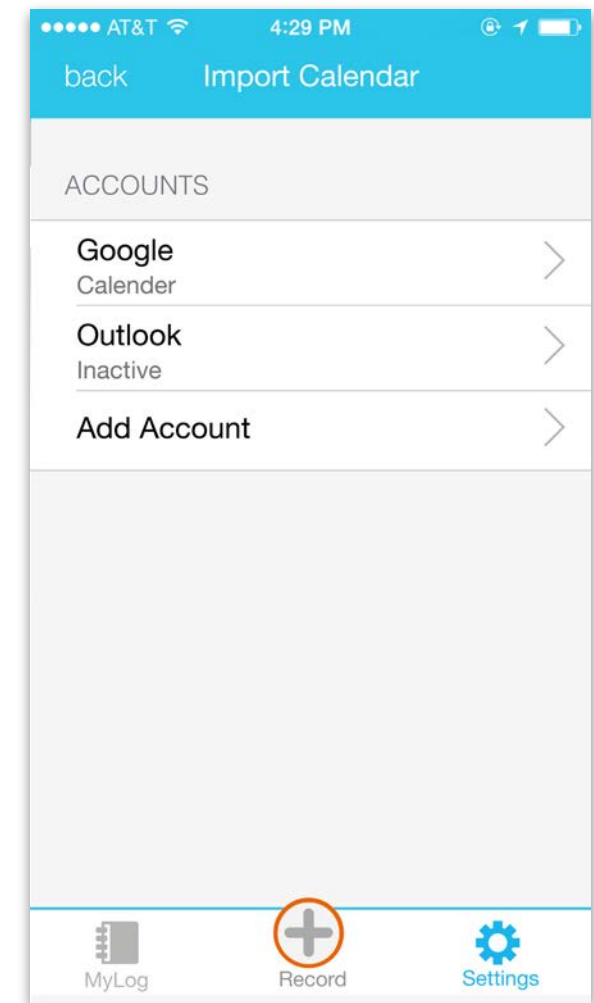
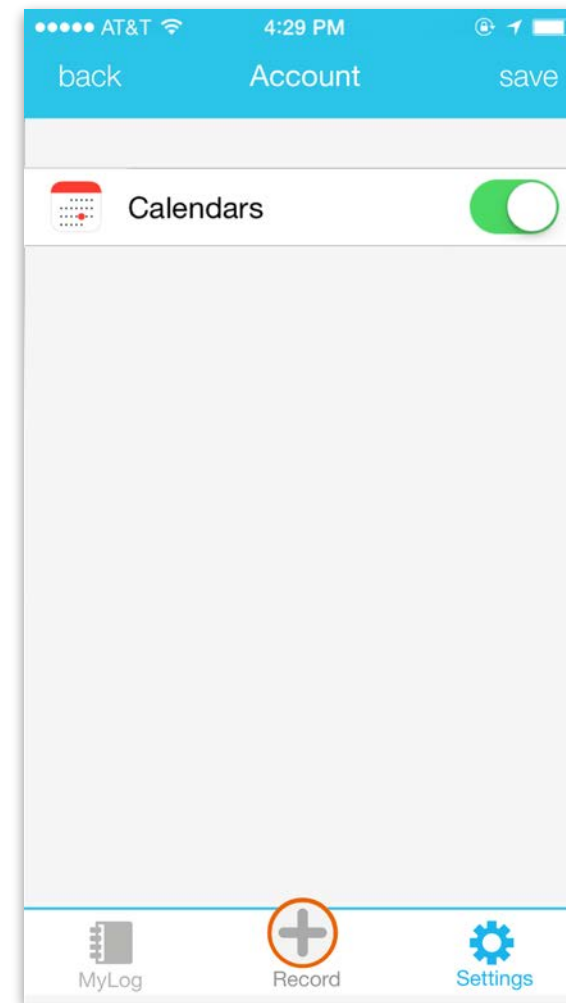
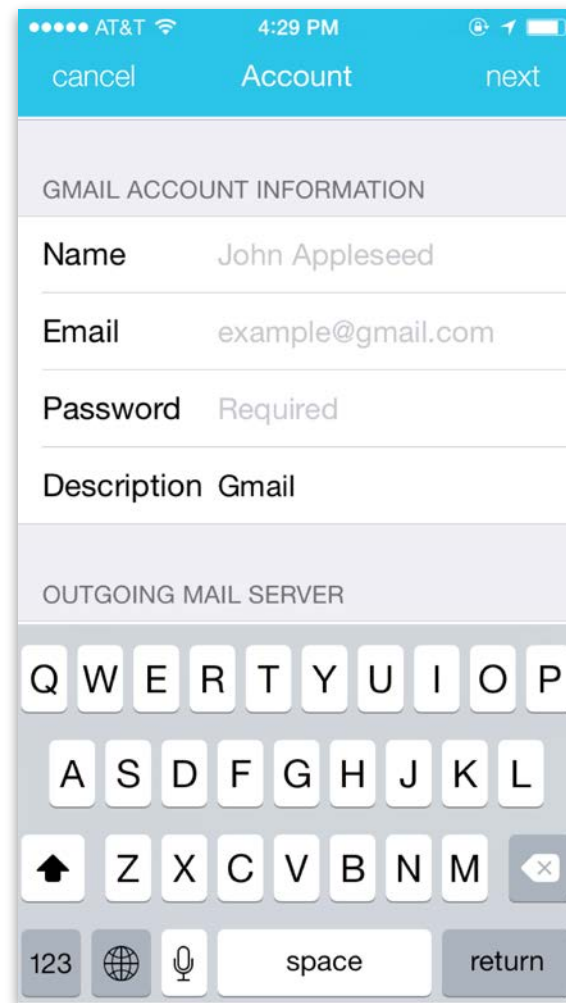
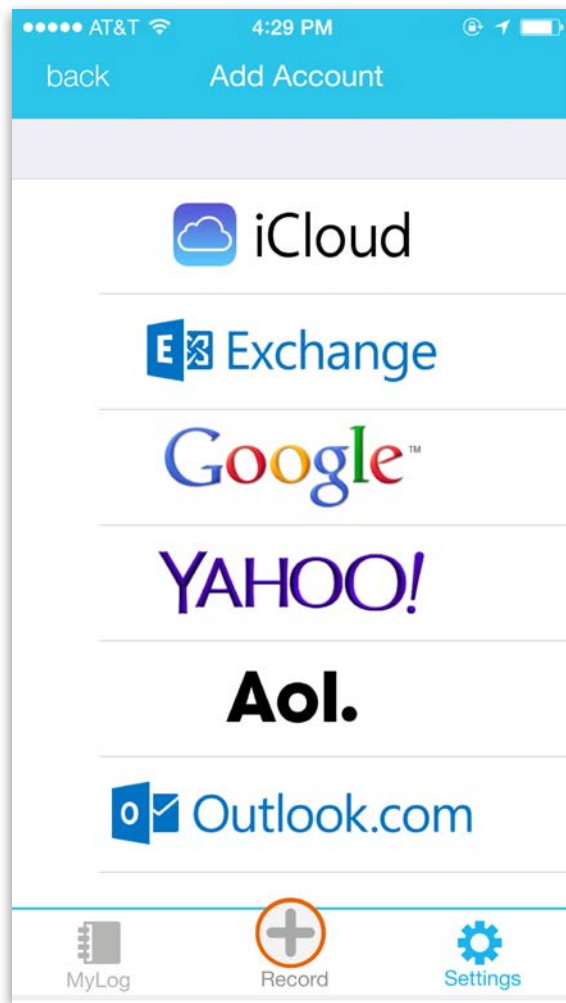
Digital Mockup

Task I - Set Up Smart Reminders (1/2)



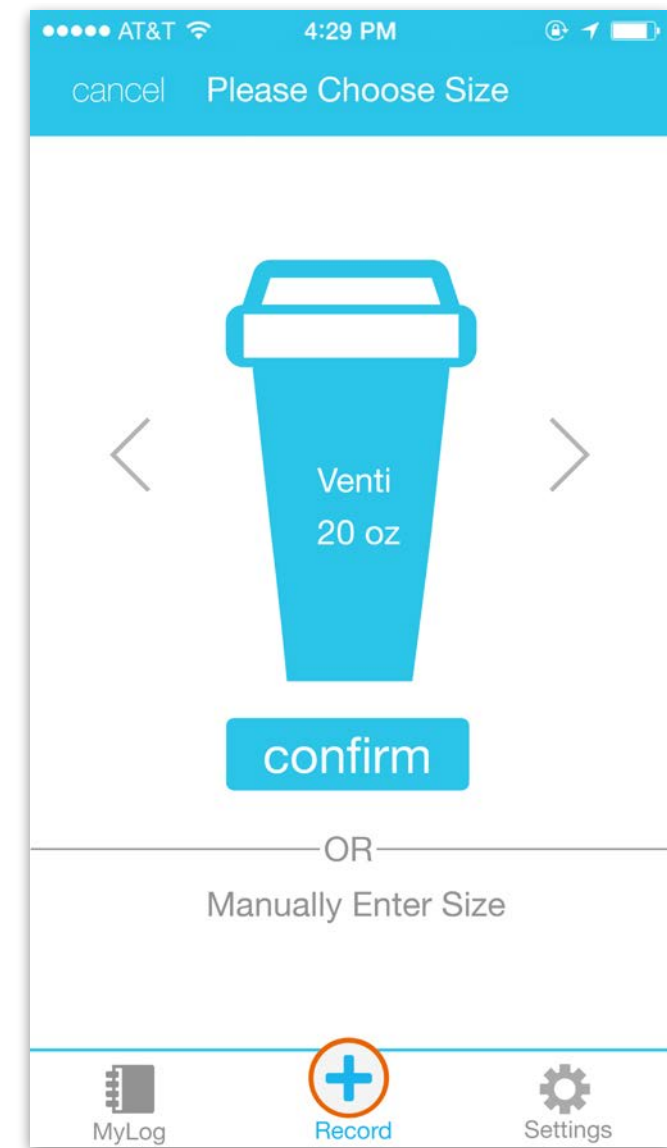
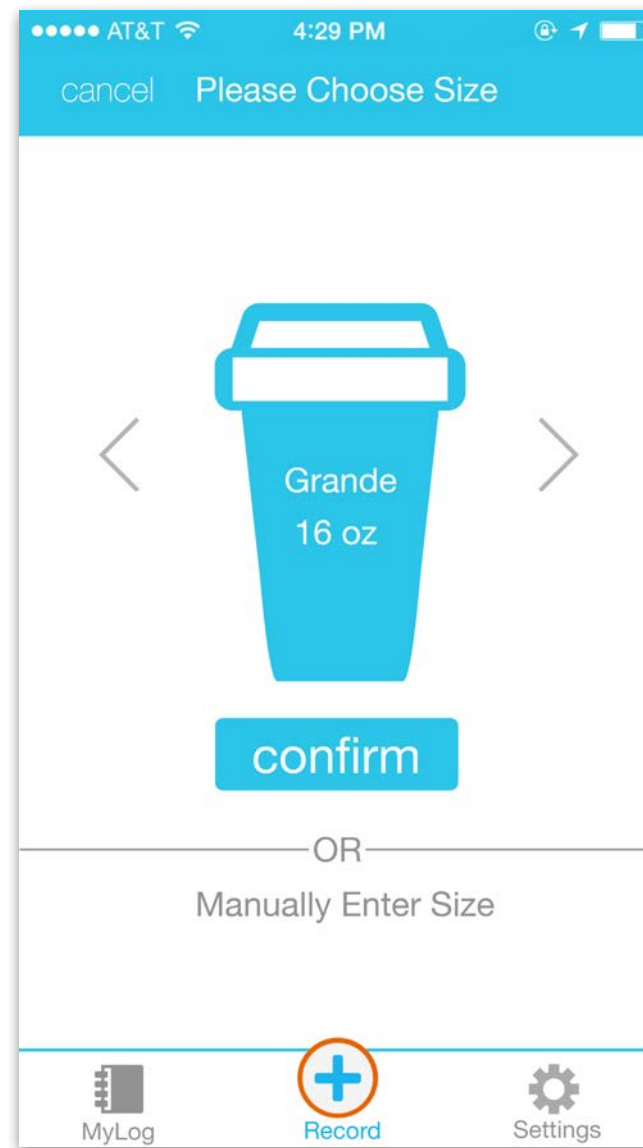
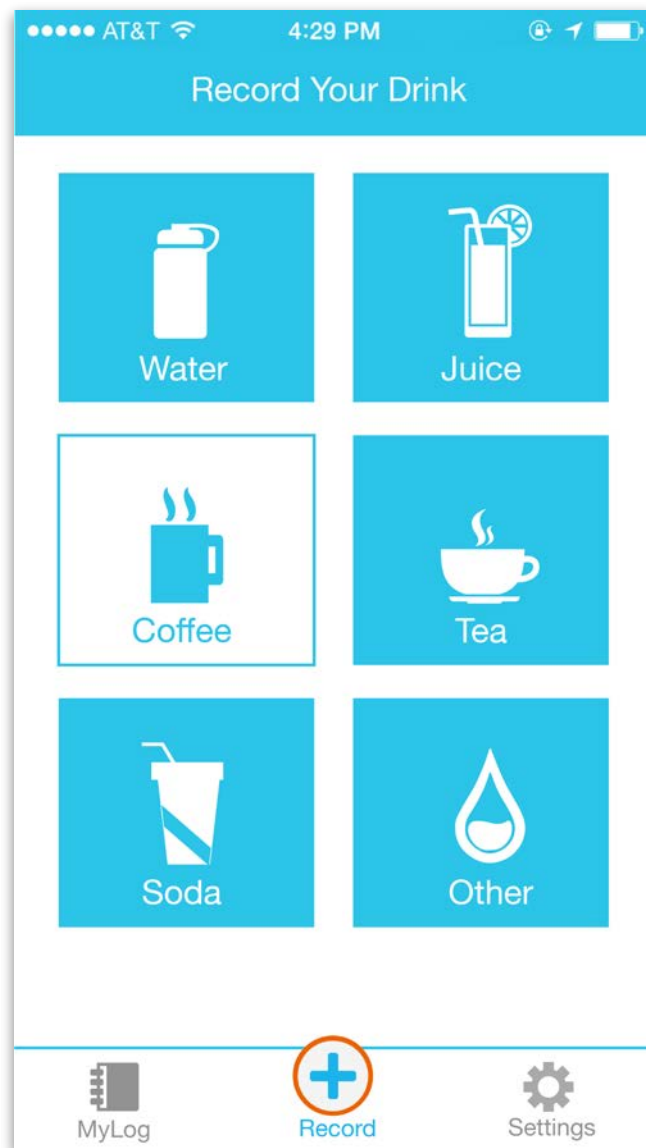
Digital Mockup

Task I - Set Up Smart Reminders (2/2)



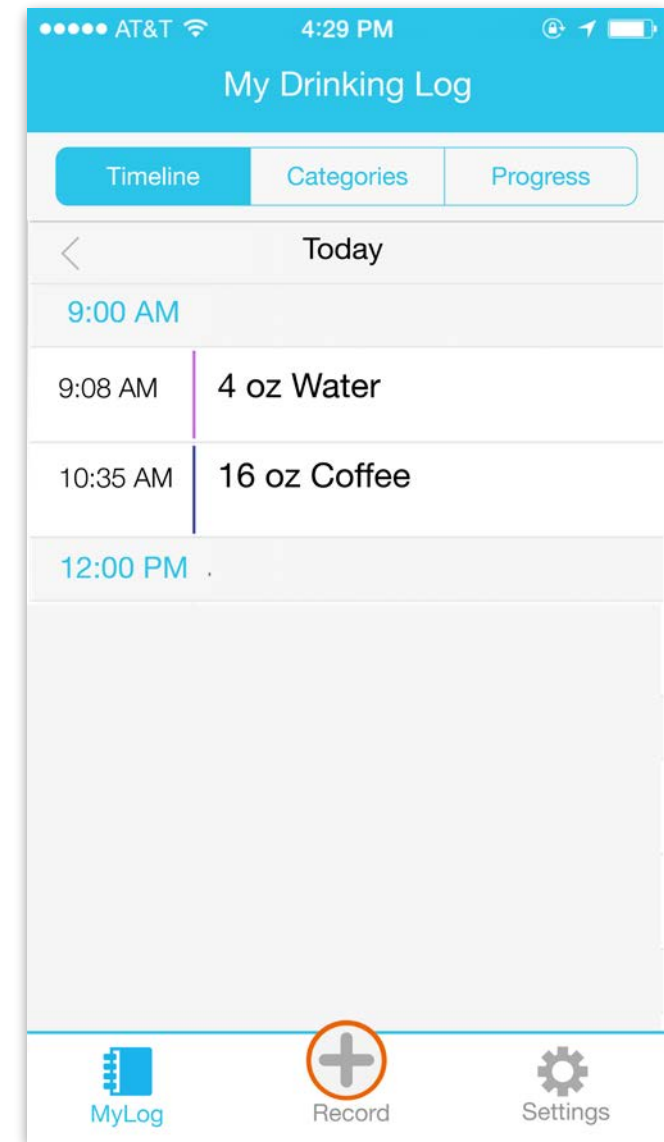
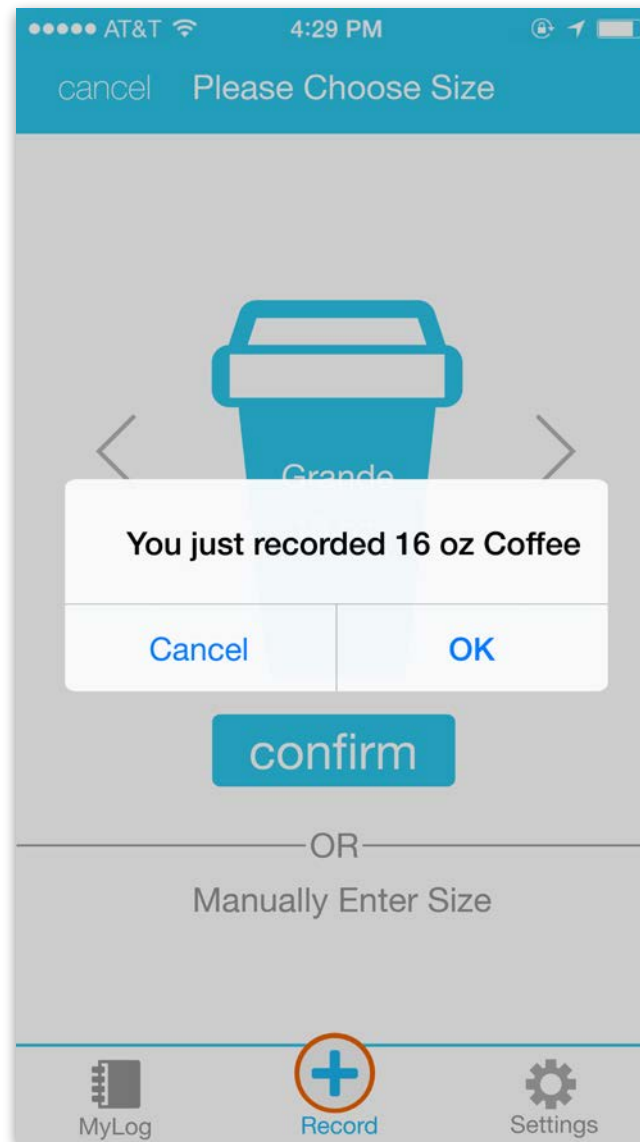
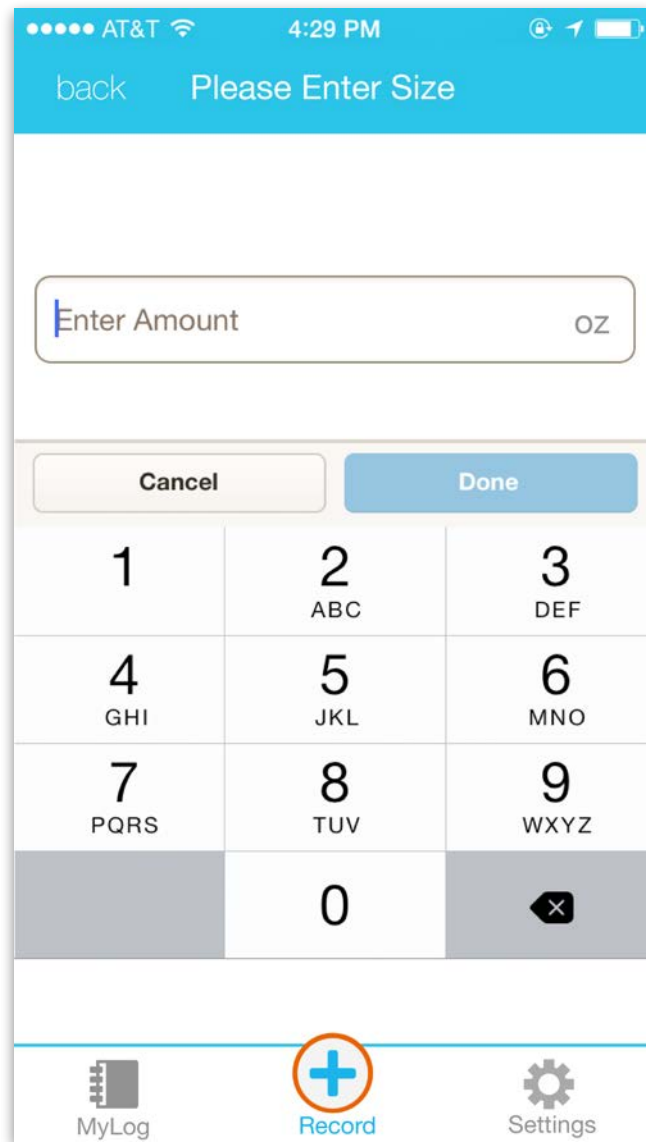
Digital Mockup

Task2 - Record Water Intake (1/3)



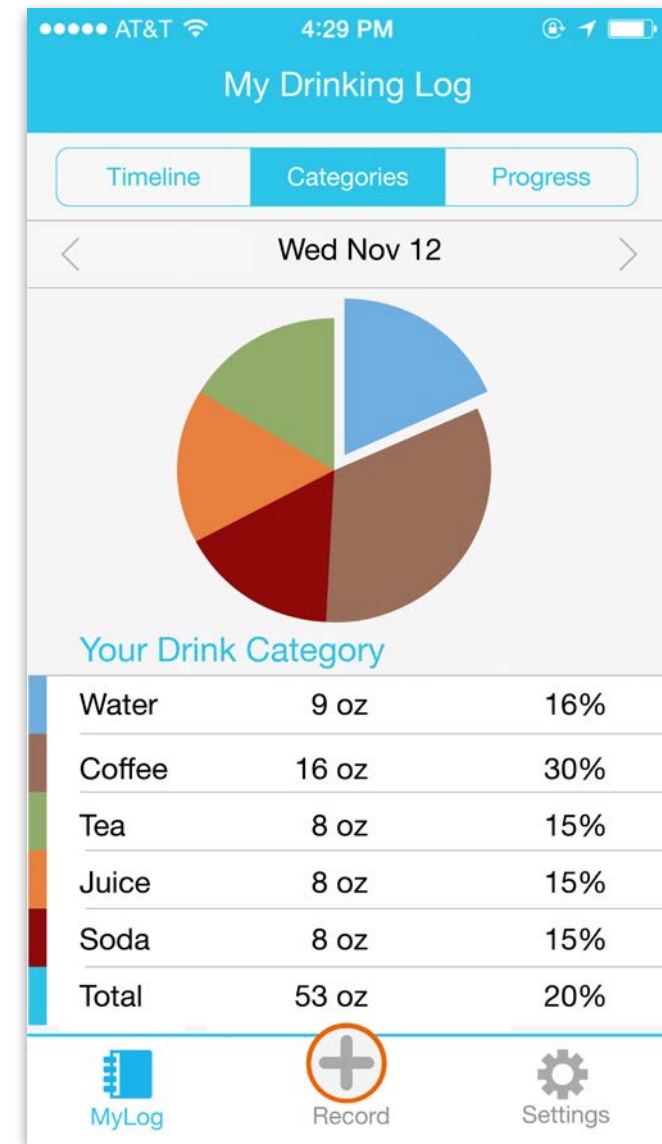
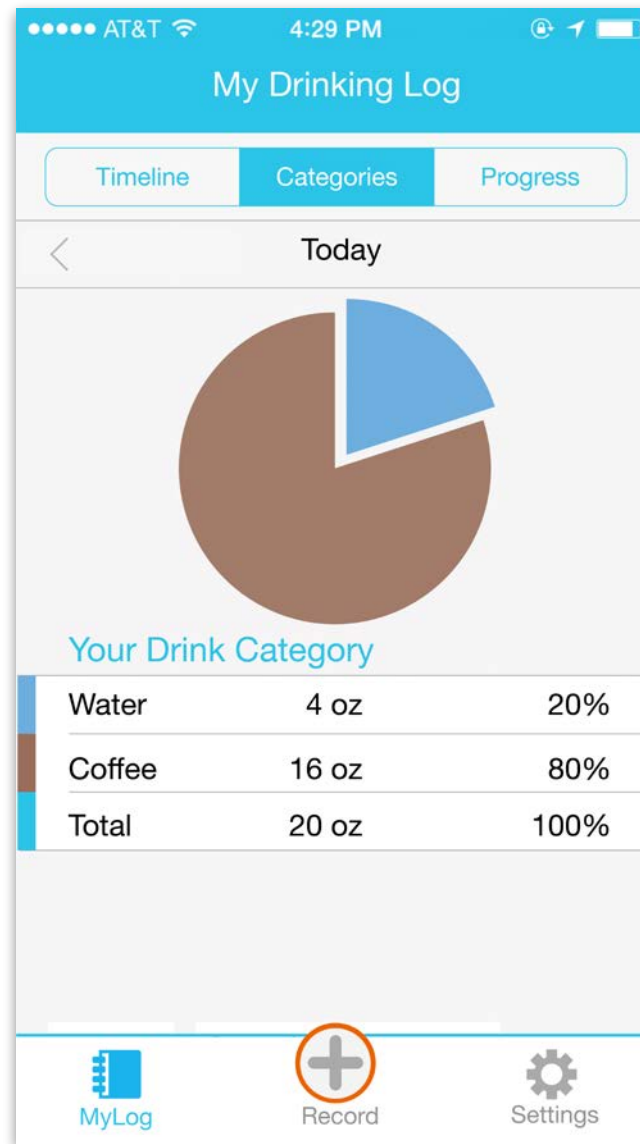
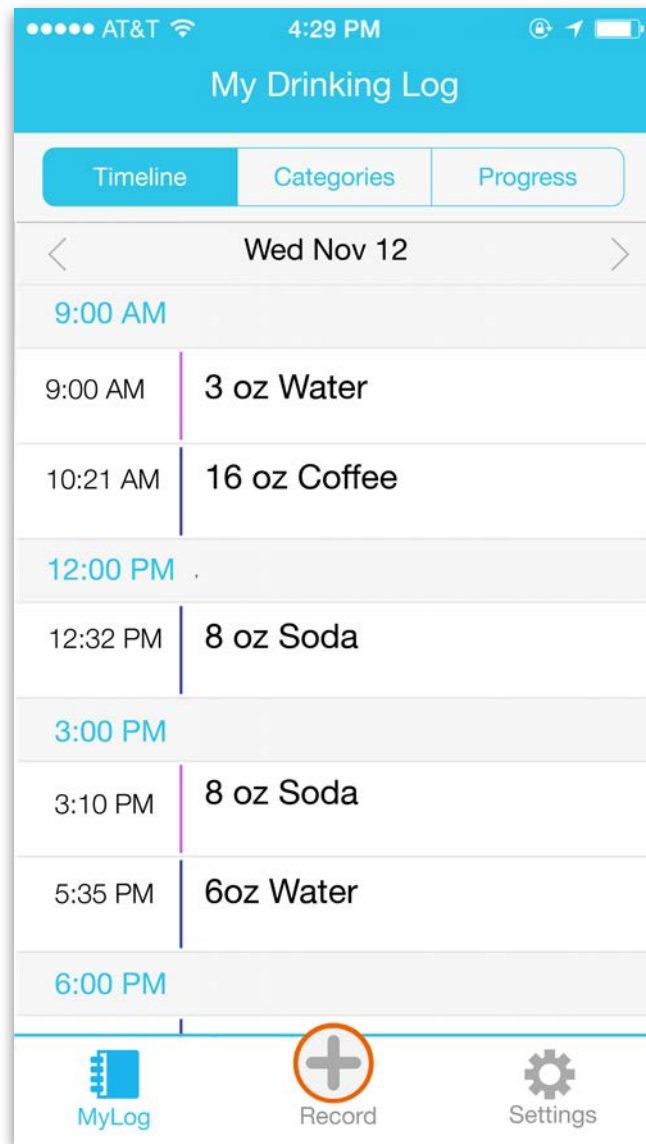
Digital Mockup

Task2 - Record Water Intake (2/3)



Digital Mockup

Task2 - Record Water Intake (3/3)



Summary

- Iterative design is very effective and powerful
- The initial design is always not the best design
- It is important to get reliable feedback from users
- Users **WILL NOT** always understand your design

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Thank you!
Questions?

