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/propertyyou.html
Initial Paper Prototype

Smart Water Bottle
Initial Paper Prototype

Task 1 - Set Up Smart Reminders
Initial Paper Prototype
Task2 - Record Water Intake (1/2)
Initial Paper Prototype

Task 2 - 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

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)
Purpose of syncing calendar unclear

Unnecessary “back” and “done” buttons
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 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)
- Reminder settings page too cluttered (Test 3)
Testing Process and Results

Refinements after Usability Testing 3

Confused about menu bar

Reminder settings page too cluttered
Final Paper Prototype

Task 1 - Set Up Smart Reminders (1/2)
Final Paper Prototype
Task 1 - Set Up Smart Reminders (2/2)
Final Paper Prototype

Task2 - Record Water Intake
Digital Mockup

Task0 - Application Introduction

AQUEOUS
Your water drinking expert

Record Your Drink

- Record your drinking ice constantly
- Set up your profile and smart reminder
- Track your water drinking history
- MyLog
- Record
- Settings
Digital Mockup

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

Personal Profile

Reminder Setting

About this app

Reminder

From

To

Repeat

Every 1 hour

Import Calendar

When your calendar is imported and enabled reminding notifications will be cancelled if your status is busy on calendar.

ACCOUNTS

Outlook

Inactive

Add Account

MyLog  Record  Settings

MyLog  Record  Settings

MyLog  Record  Setting
Digital Mockup

Task 1 - Set Up Smart Reminders (2/2)
Digital Mockup
Task2 - Record Water Intake (1/3)
Digital Mockup

Task2 - Record Water Intake (2/3)
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
Thank you!
Questions?