emission

Small eco-actions matter.

Final Thesis Project Presentation
Yun(Echo) Liu I 03035897 I May 10th, 2013
Web Design and New Media
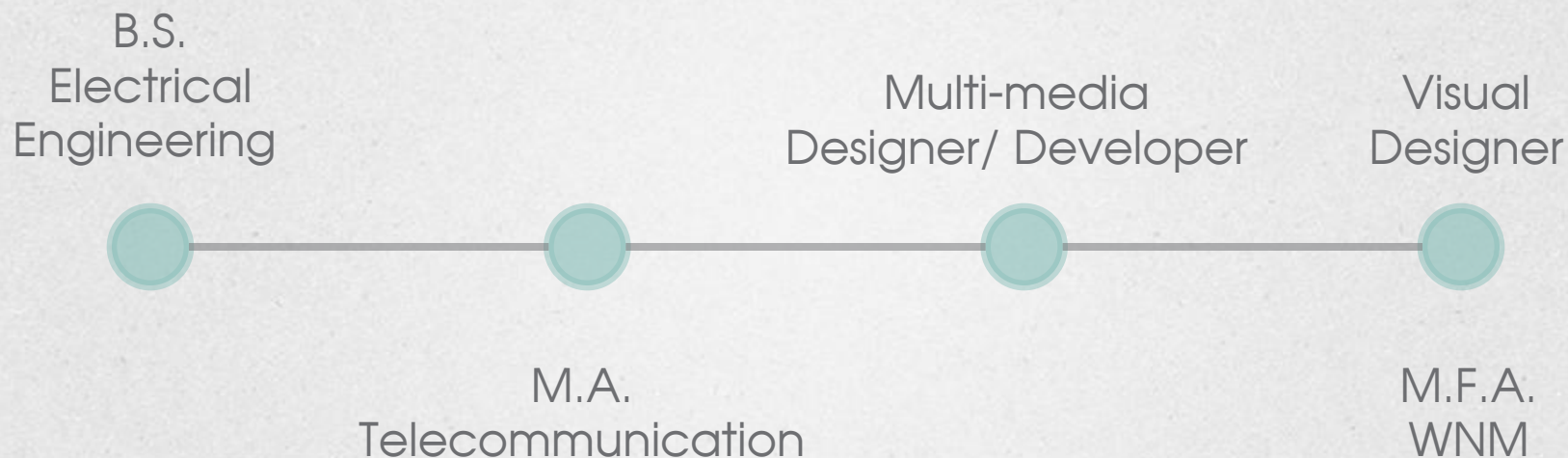Design I Technology

PROJECT OUTLINE

Why?

For Whom?

How?

Process

About Me | Yun Liu (Echo)

B.S.
Electrical
Engineering

Multi-media
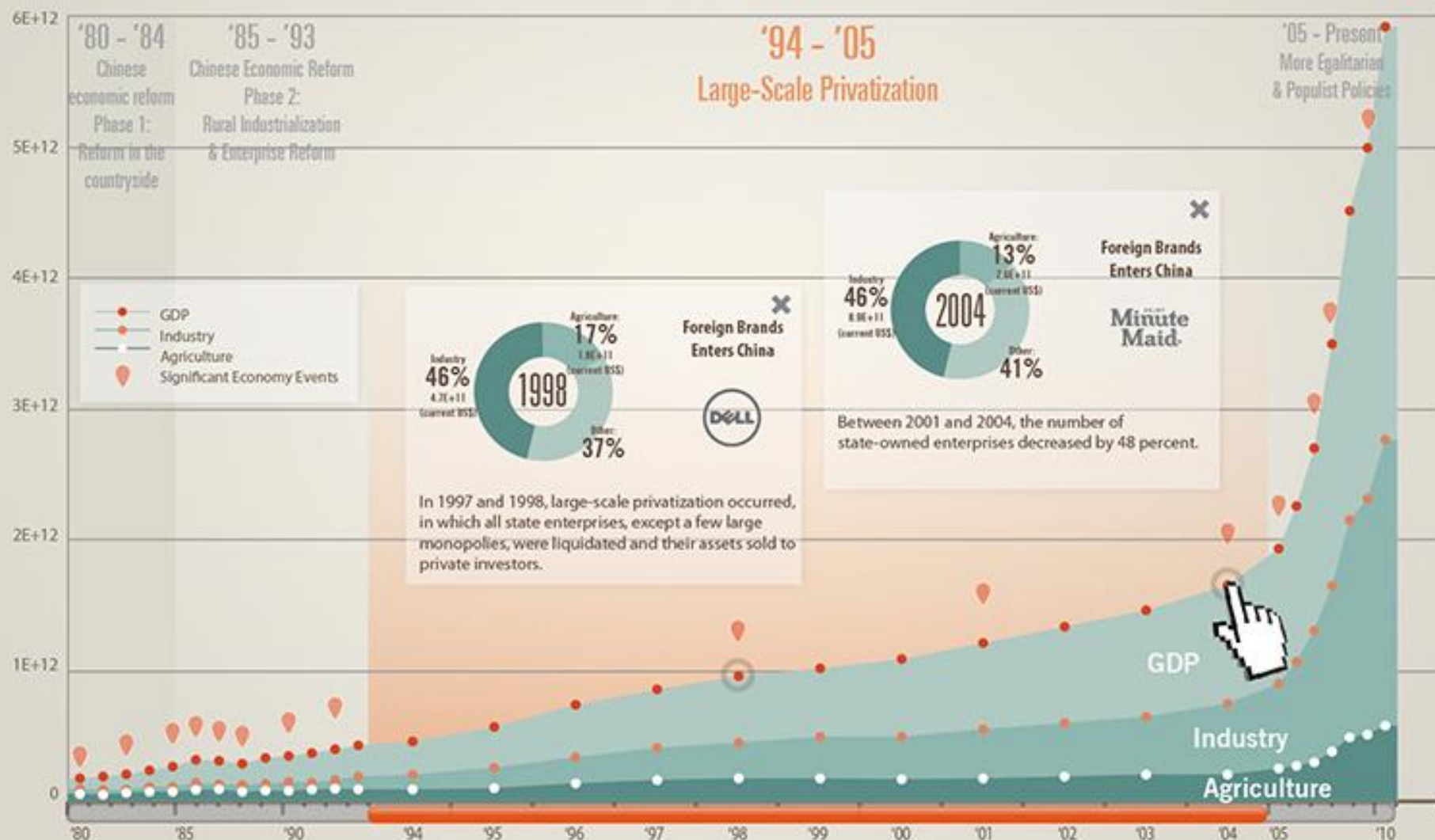Designer/ Developer

Visual
Designer

M.A.
Telecommunication

M.F.A.
WNM

Behind China's Economic Boom

Economic and Political causes of China's economic growth

The dataset and inforgraphic of this project will try to analysis the raise of Chinese economy through the GDP data from the past 30 years, find out the behind events that caused this boom.

'80 - '84
Chinese economic reform Phase 1: Reform in the countryside

'85 - '93
Chinese Economic Reform Phase 2: Rural Industrialization & Enterprise Reform

'94 - '05
Large-Scale Privatization

'05 - Present
More Egalitarian & Populist Policies

Legend:
- GDP
- Industry
- Agriculture
- Significant Economy Events

1998
- Industry 46% 4.7E+11 (current US$)
- Agriculture 17% 1.8E+11 (current US$)
- Other: 37%

Foreign Brands Enters China
DELL

In 1997 and 1998, large-scale privatization occurred, in which all state enterprises, except a few large monopolies, were liquidated and their assets sold to private investors.

2004
- Industry 46% 8.8E+11 (current US$)
- Agriculture 13% 2.6E+11 (current US$)
- Other: 41%

Foreign Brands Enters China
Minute Maid

Between 2001 and 2004, the number of state-owned enterprises decreased by 48 percent.

GDP
Industry
Agriculture

Y-axis: 0, 1E+12, 2E+12, 3E+12, 4E+12, 5E+12, 6E+12

X-axis: '80, '85, '90, '94, '95, '96, '97, '98, '99, '00, '01, '02, '03, '04, '05, '10

Where does our food come from?
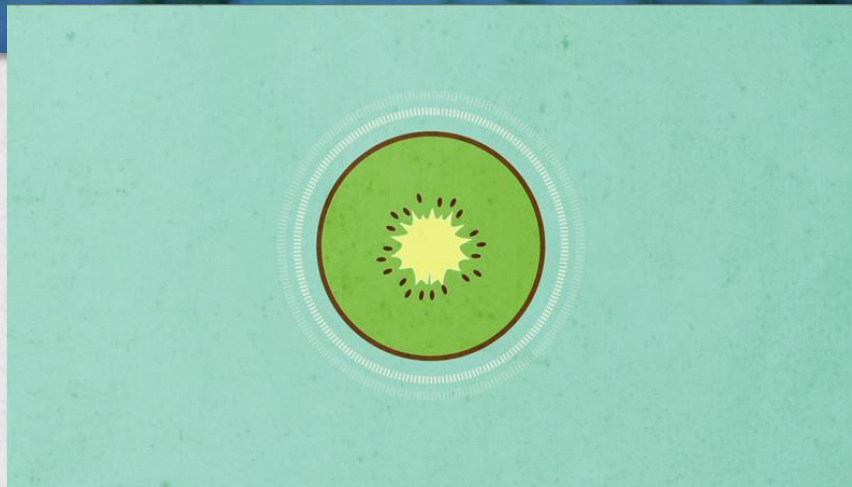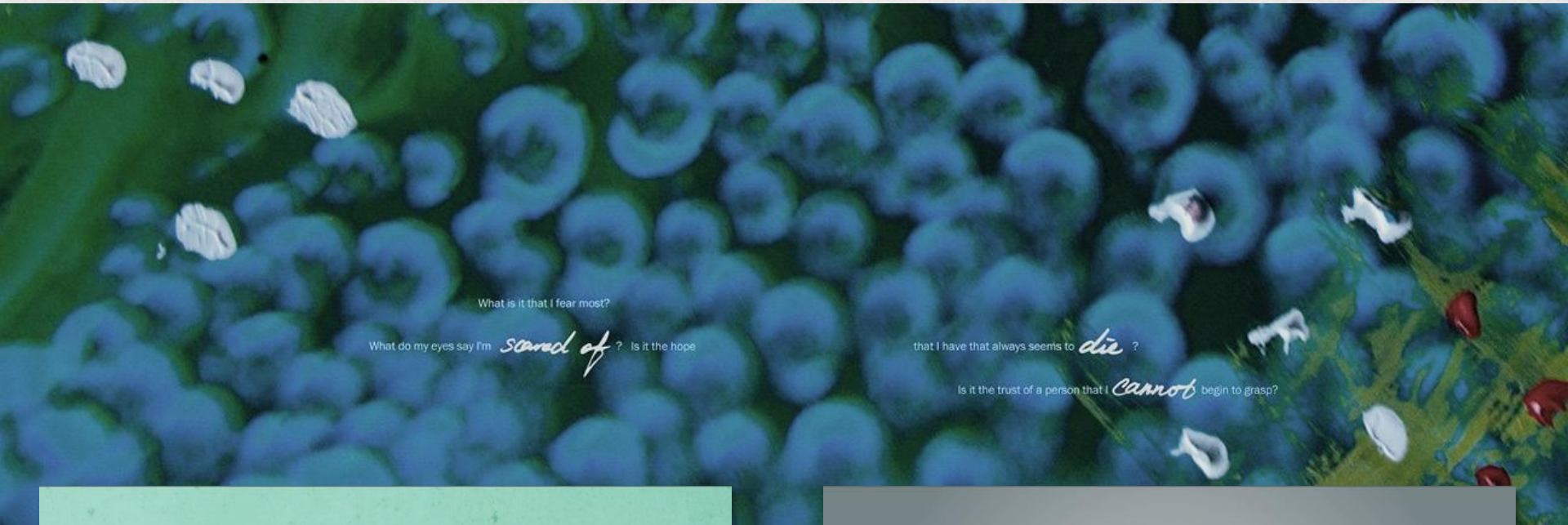Examining U.S. Food Import Patterns from 1998 to 2007

Using import data from the U.S. Census Bureau, this study examines patterns of U.S food imports for fiscal years 1998-2007. Results indicate faster import growth trends for consumer-ready foods, such as fruit, vegetables, meats, seafood, and processed food products.

- ☐ Total Imports
- ☐ Vegetable Oils
- ☑ Dairy and Dairy Products
- ☐ Grains and Grain Products
- ☐ Meat
- ☐ Fish and Seafood Products
- ☐ Sugar and Confectionery
- ☑ Spices
- ☐ Cocoa and Cocoa Products
- ☐ Tea
- ☑ Coffee
- ☐ Vegetables and Vegetable Products
- ☐ Fruits and Fruit Products

2001

Canada

Netherlands
France
Italy

China

India
Vietnam

Guatemala
Colombia
Peru
Brazil

Indonesia

Australia

Imports of Total Food (Million US$)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
41242	42391	45051	45060	47161	52799	59778	65479	71483	77840

Why develop eMission?

Project Summary | Problem

Daily Electricity Consumption Per Capita

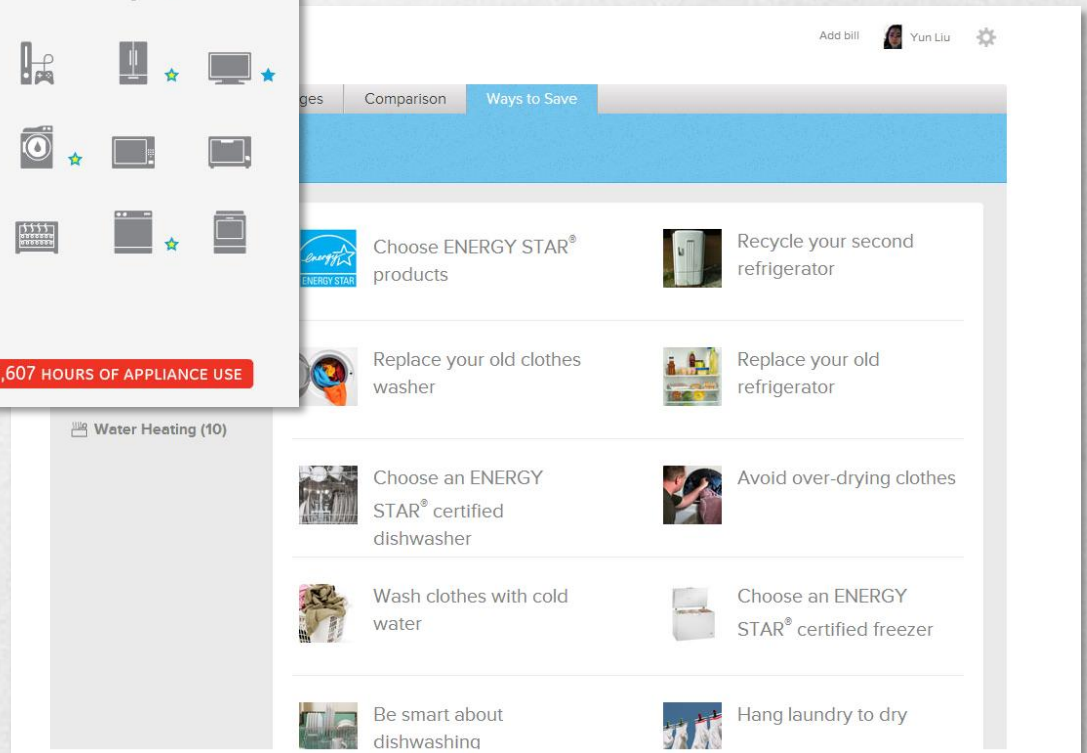USA: 39.25
China: 7.04

Daily kWh per capita
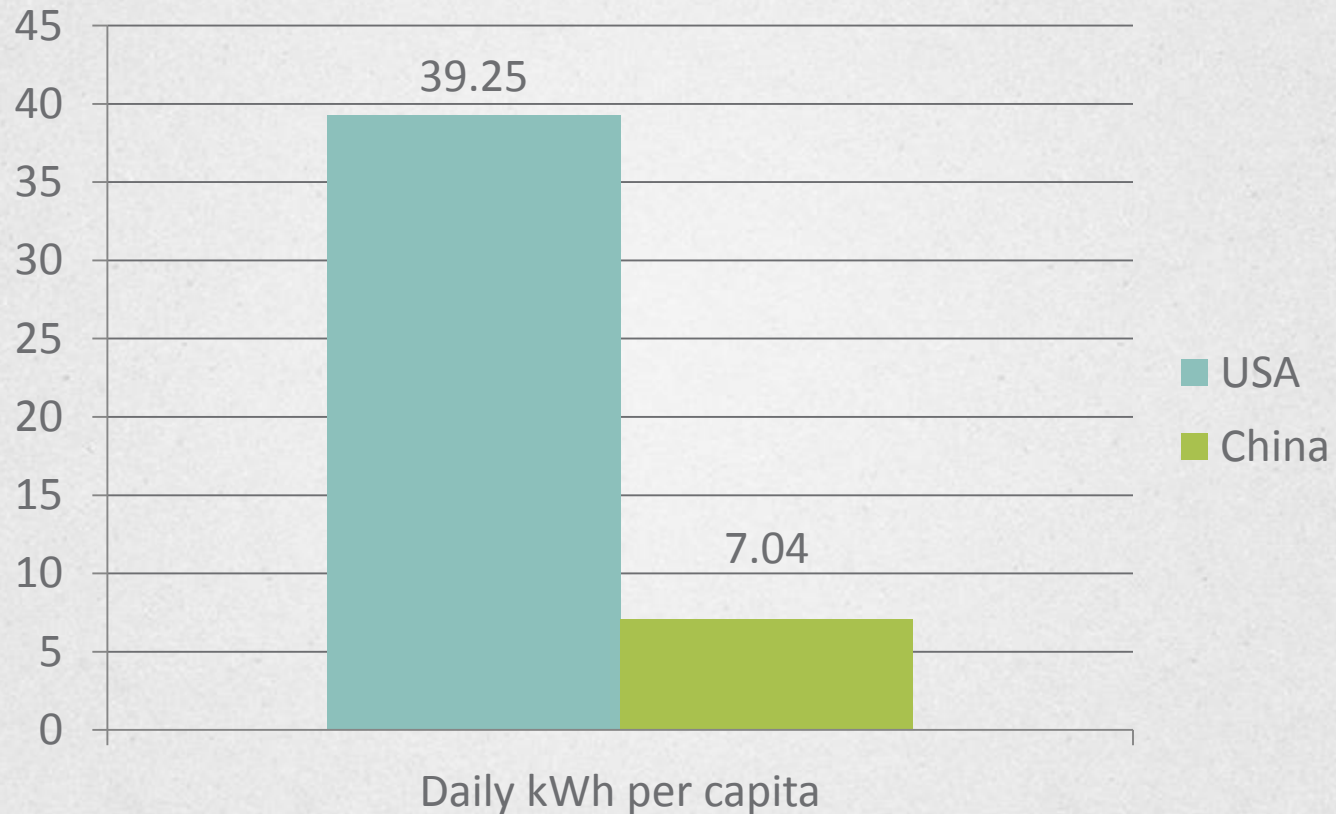
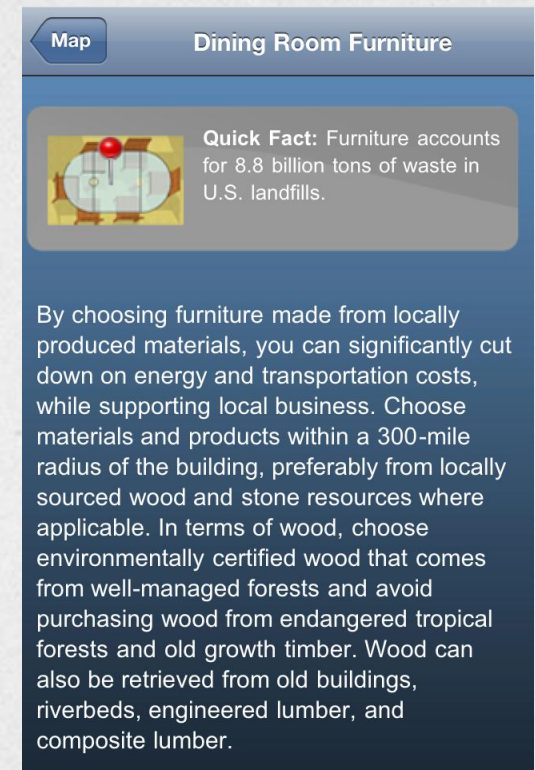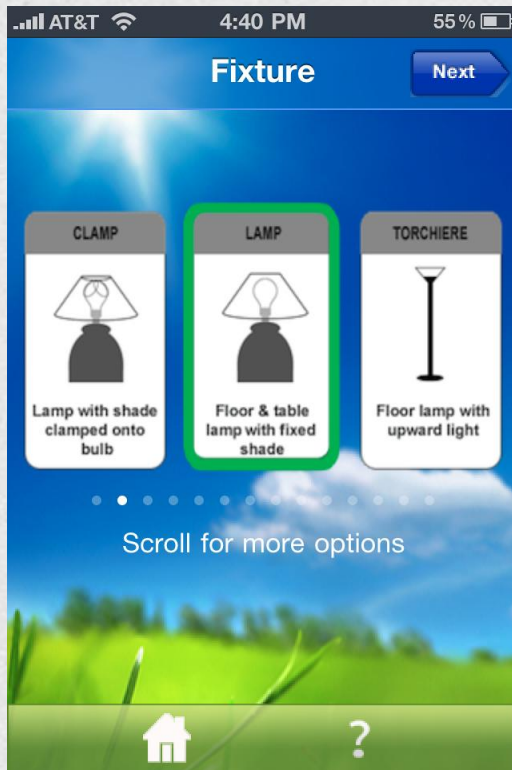# Project Summary | Competitive Analysis
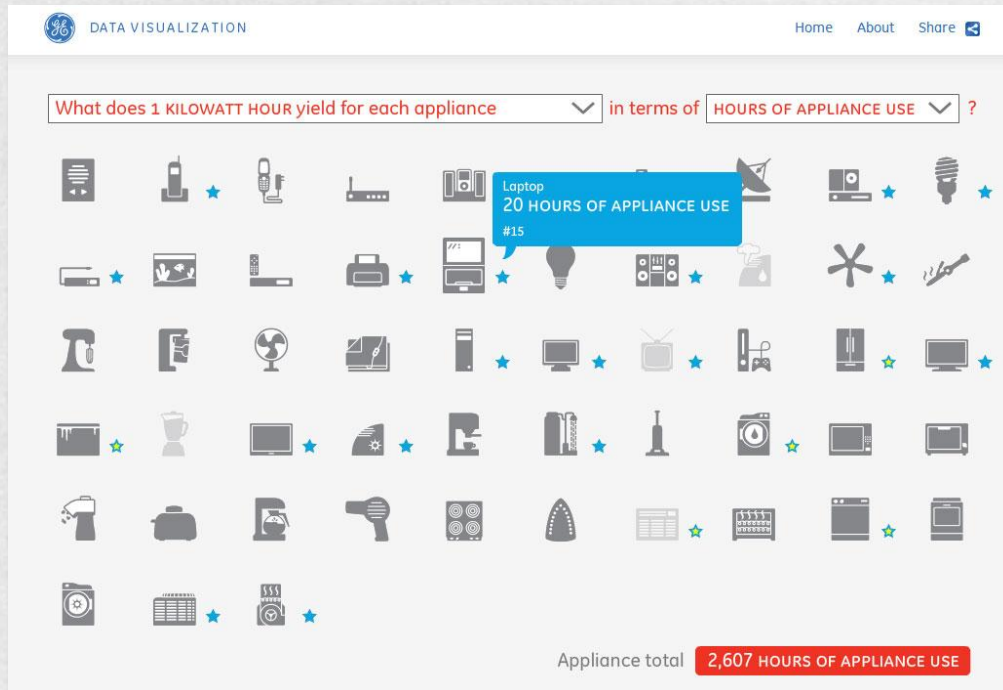
Static information provider.

User got overwhelmed by the long list of saving tips.
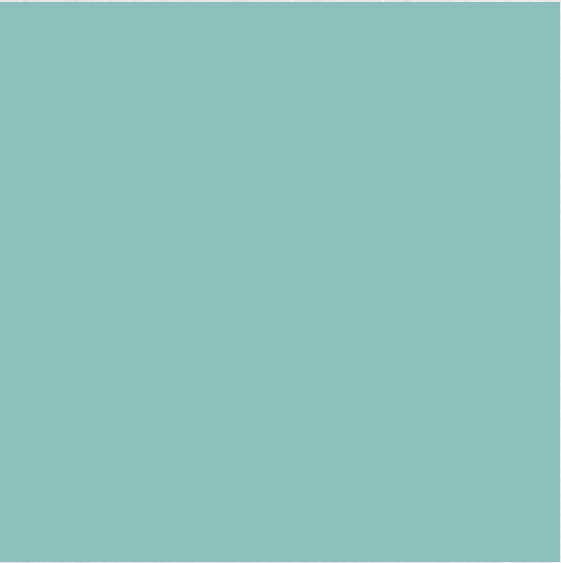
Project Summary | Competitive Analysis

No way to encourage user save energy continuously.
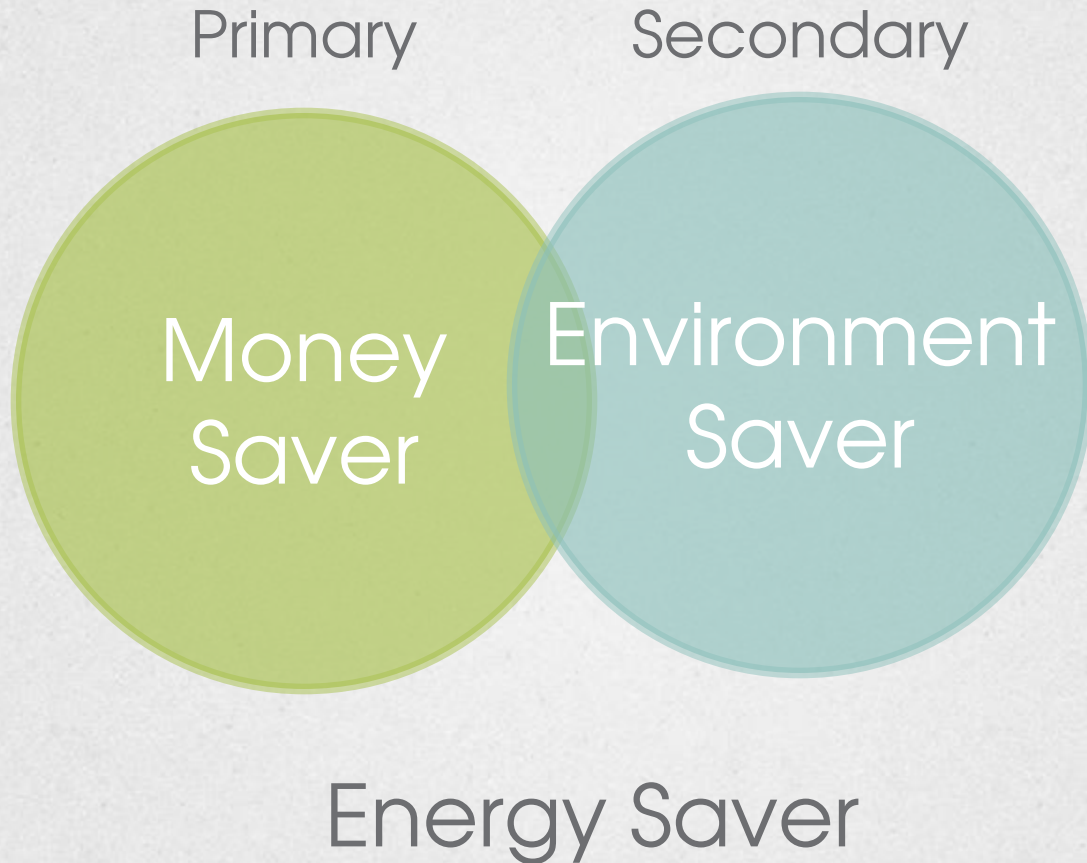
Project Summary | Solution

eMission is an interactive web app that helps user analyze their power usage and provide them customized energy saving tips.

The goal of the app is to spread the awareness of energy saving and encourage user to save energy.

Who is using eMission?

Project Overview | Persona

Project Overview | Persona

How to use eMission?

Project Overview | Interaction Mode

Overview

Analyze

Track

Share
saving actions with friends

Heating
& Cooling

Laundry & Bathroom
Appliance

Lighting

Entertainment
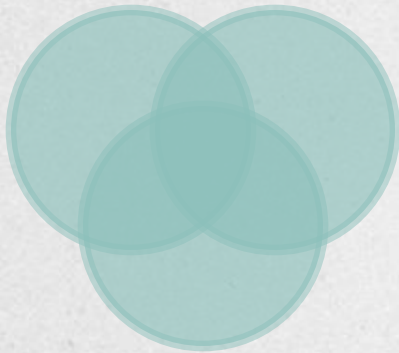& Home Office

Kitchen
Appliance

Project Overview | User Journey
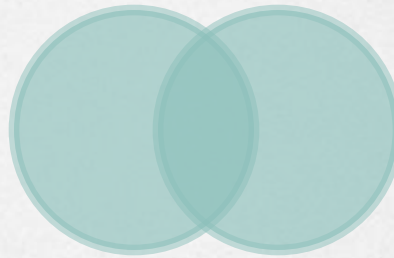
How is eMission developed?

Development Process | UX
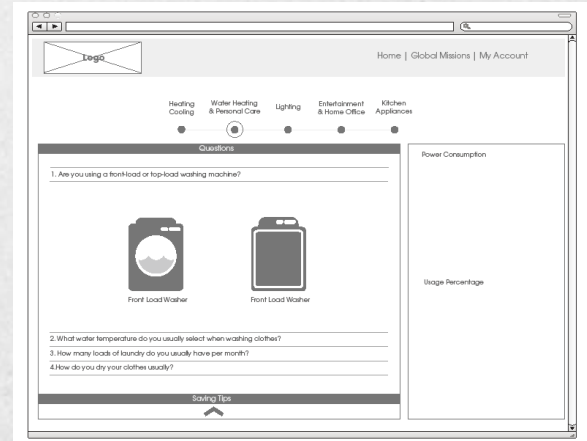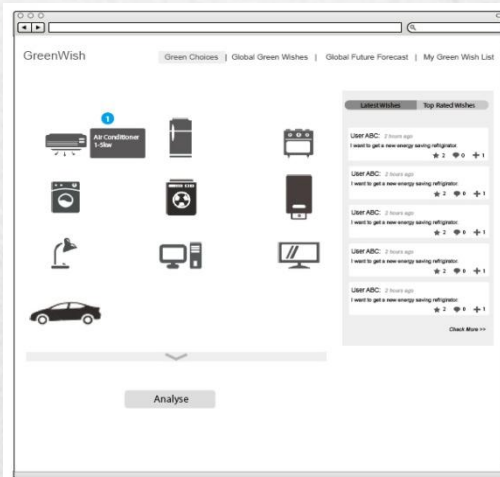
Narrow down the topic, solve one problem at a time.

Green Actions

Energy and Water Saving

Power Saving

Development Process | UX Research

Interview and Surveys

Paper Prototype

Card Sorting

WNM 800 User Experience Final thesis Project "365 Eco Circle" Interview

Our Academy of Art University graduate research class (WNM800) has been assigned as a class project to conduct interviews or surveys with individuals about their attitudes about green life and internet/cell phone application usage.

The survey will take about 10~20 minutes of your time. You will be benefiting a fellow student by helping us complete this project. You may find some of the questions interesting. You may find some questions annoying. You are free to decline to answer any question.

When I take notes and when I report findings in my project report, I will use a made up first name (and no last name). You will not be identifiable in any report of research findings. Your privacy will be protected to the maximum extent. Thanks a lot for your help. If you have any questions, please feel free to contact me at lluyun83@gmail.com or 650-793-5081.

Survey Questions:

Name: Steven To   Age: 4?   Gender: Male

1. What's your current occupation?
   soft ware engineer

2. How you think about being green?
   a. I don't care about it at all.
   b. I am interested in it, but don't know how to start.
   c. I try to be eco-friendly when possible.
   d. I know a lot of green tips and totally understand what to do.
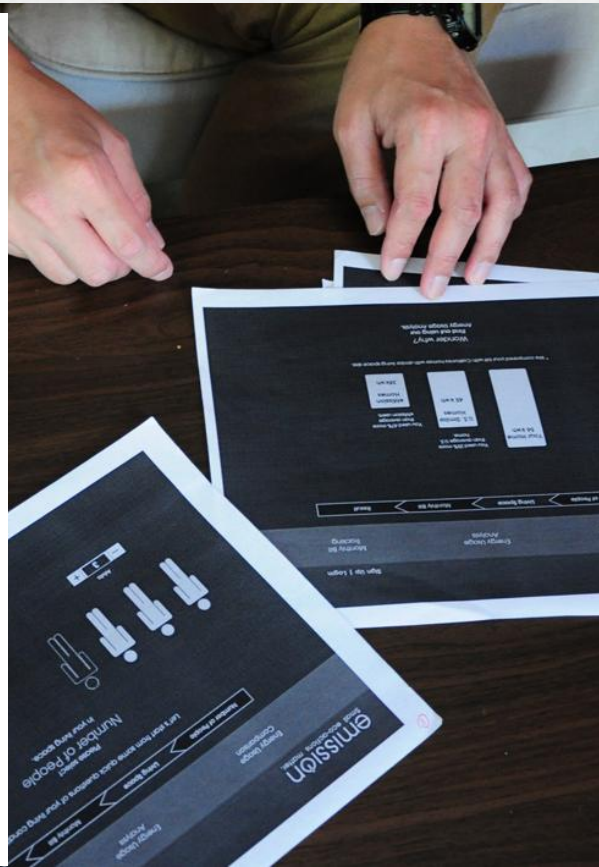
3. Do you have kids? a. Yes b. No
   If yes, how old are they?
   a. <5 b. 5-9 c. 10-14 d. 14-18
   a. <5 b. 5-9 c. 10-14 d. 14-18
   a. <5 b. 5-9 c. 10-14 d. 14-18

4. Is there any green club or environmental related program in your children's school? If so, have they attended any of them?
   No.

5. Do your kids have any environmental related question for you? If so, can you give some examples?
   No.

electric devices closed card sorting new

6 Responses + 2 Abandoned

Overview | Participants | Questions | Cards | Categories | Results Matrix

The popular placements matrix attempts to propose the most popular groups based on each corresponding category.

	Heating and Cooling	Home Office and Entertainment	Kitchen appliance	Laundry	Personal Care
Central Heating	100%				
Space Heater	100%				
Window or Room Fan	100%				
Central Air Conditioner	100%				
Window Air Conditioner	100%				
Ceiling Fan	83%	17%			
Shower(Water Heater)	67%				33%
Bath(Water heater)	67%				33%
Computer(desktop)		100%			
laptop		100%			
TV		100%			
Projector		100%			
Home theater with Audio		100%			
XBOX		100%			
Play Station		100%			
Wii		100%			
Refrigerator			100%		
Oven			100%		
Microwave Oven			100%		
Dishwasher			100%		
Stove	17%		83%		
Washer				100%	
Dryer				100%	
Razor					100%
Hair Dryer			17%		83%

Project | User Testing

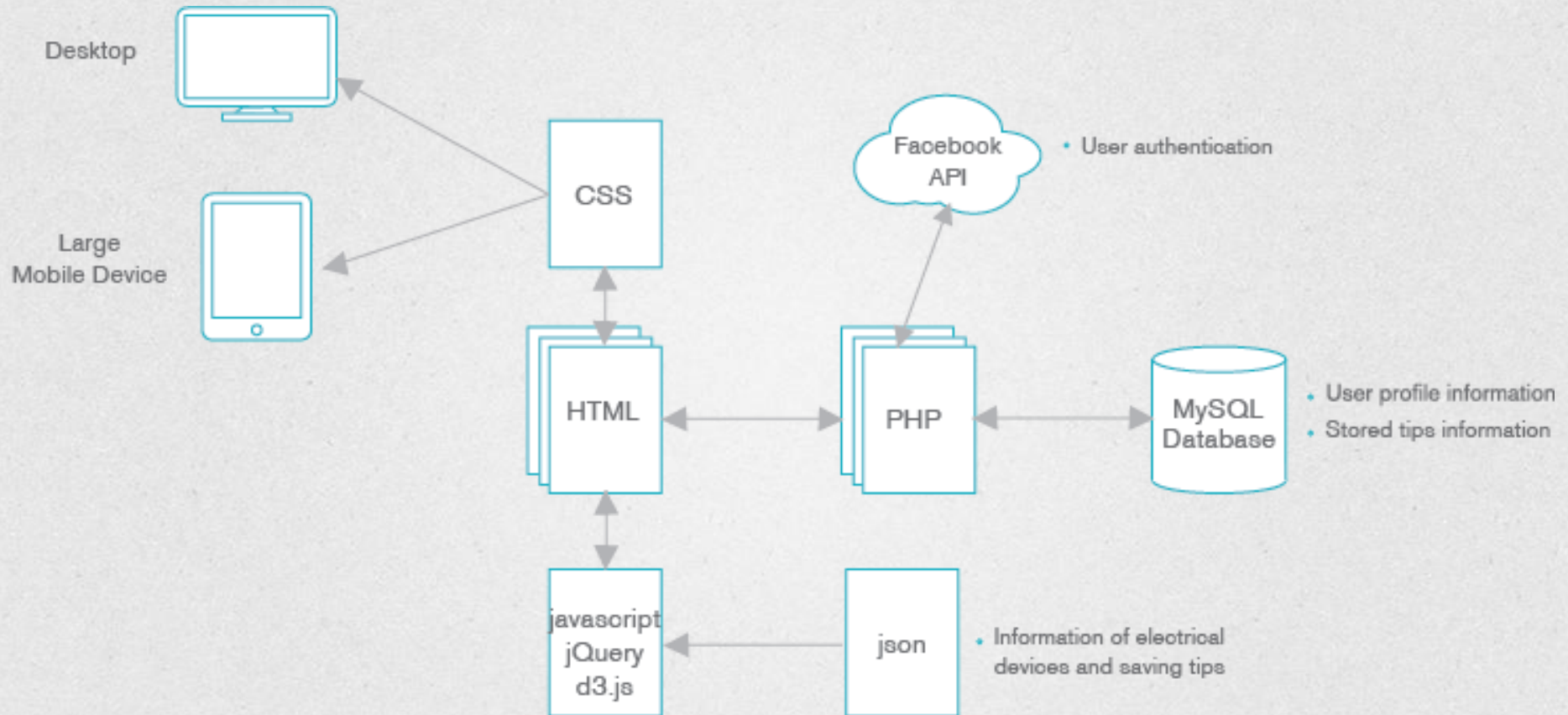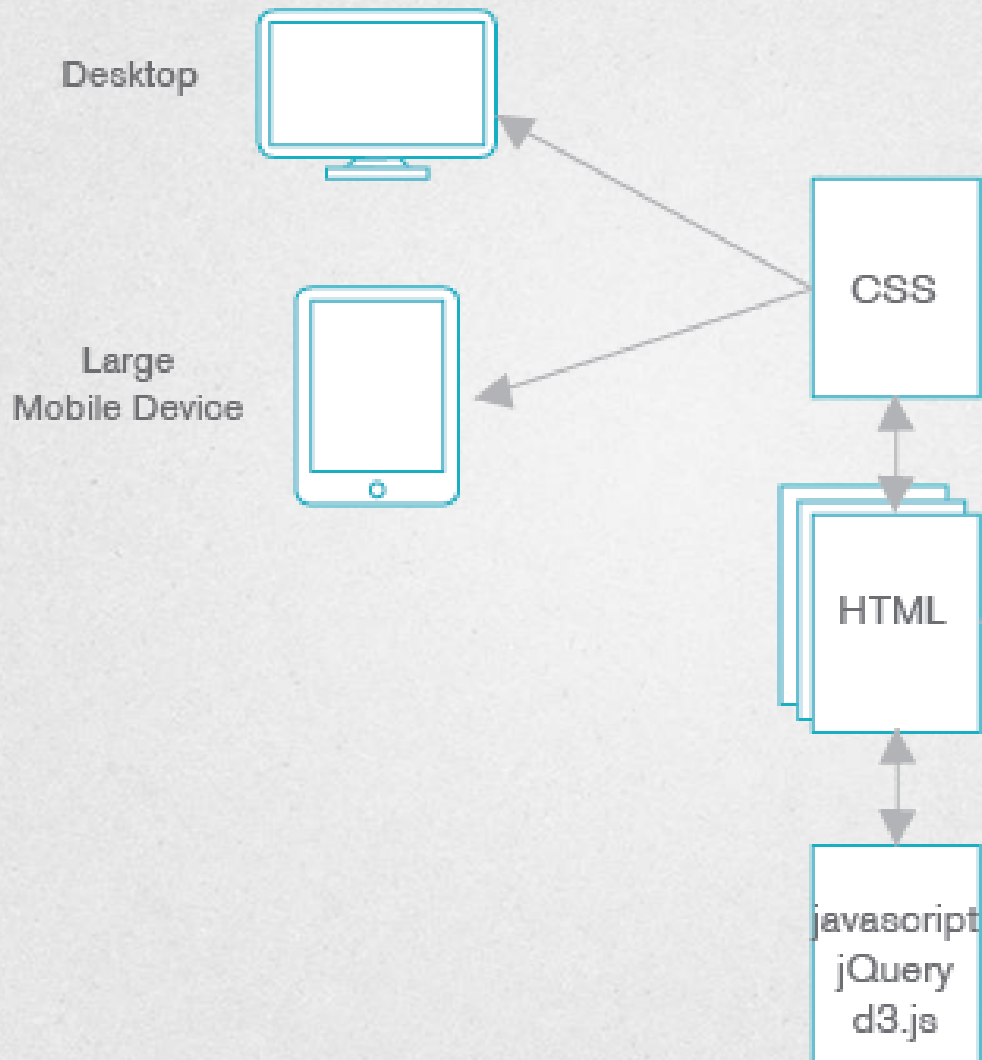**Gorilla Testing**

Formal Testing
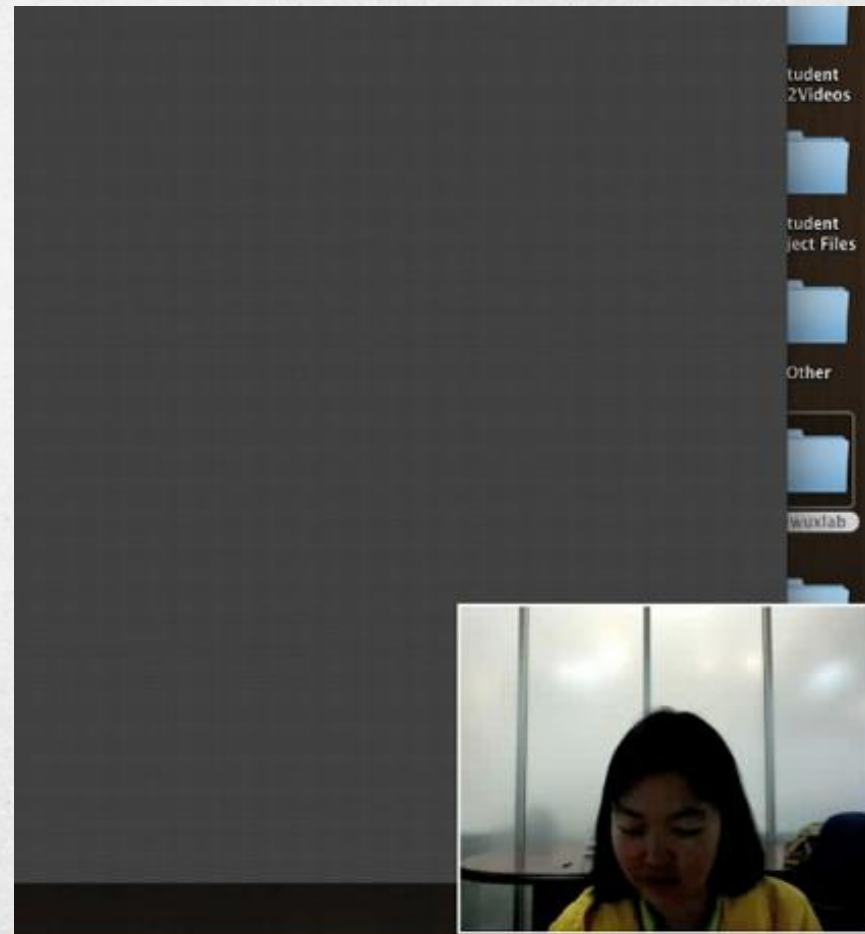
Development Process | Visual

Development Process | Coding
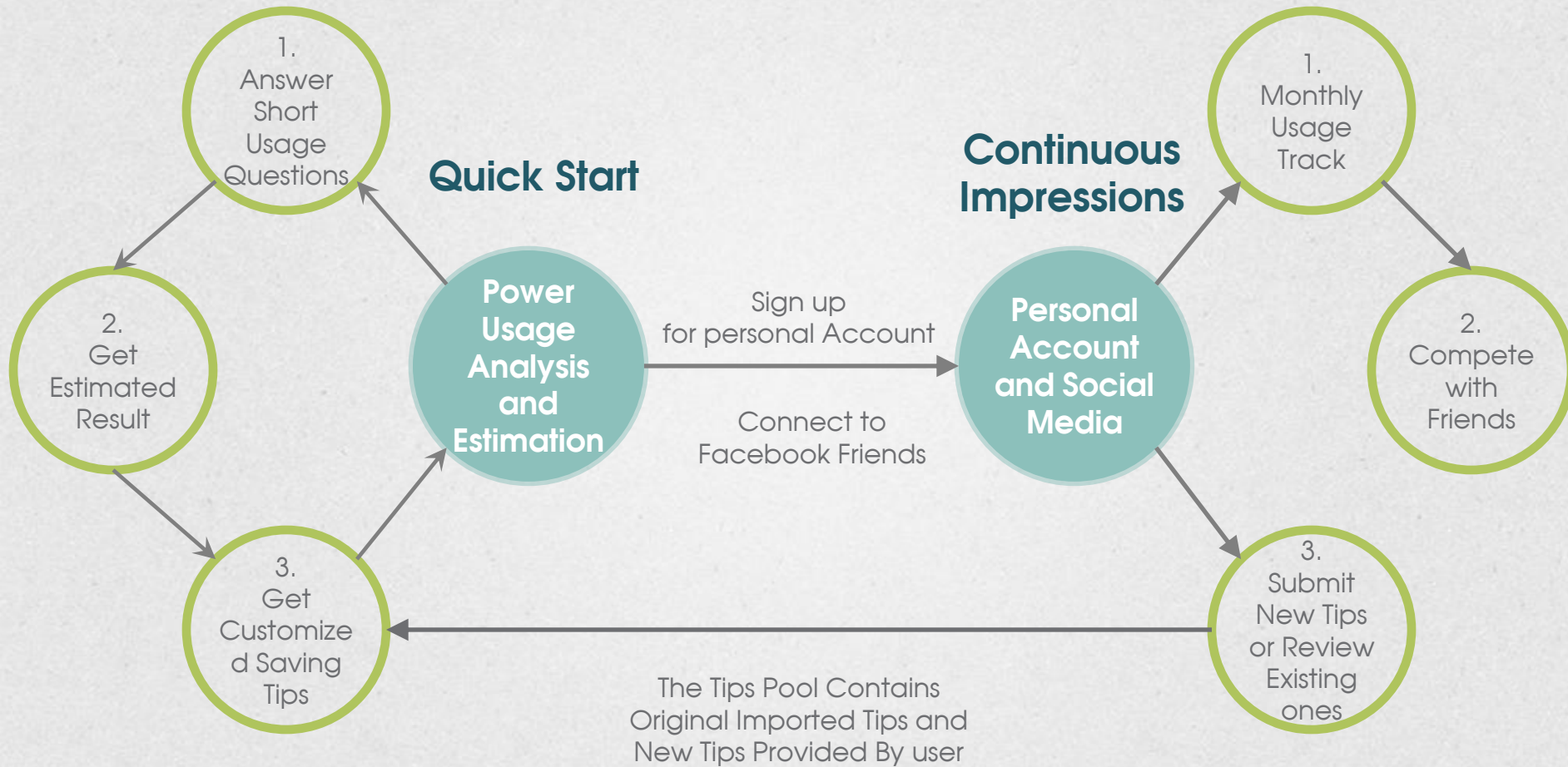
Next Steps

1. Make the site responsive for tablets and smart phones.

2. Continue building the backend of the site.
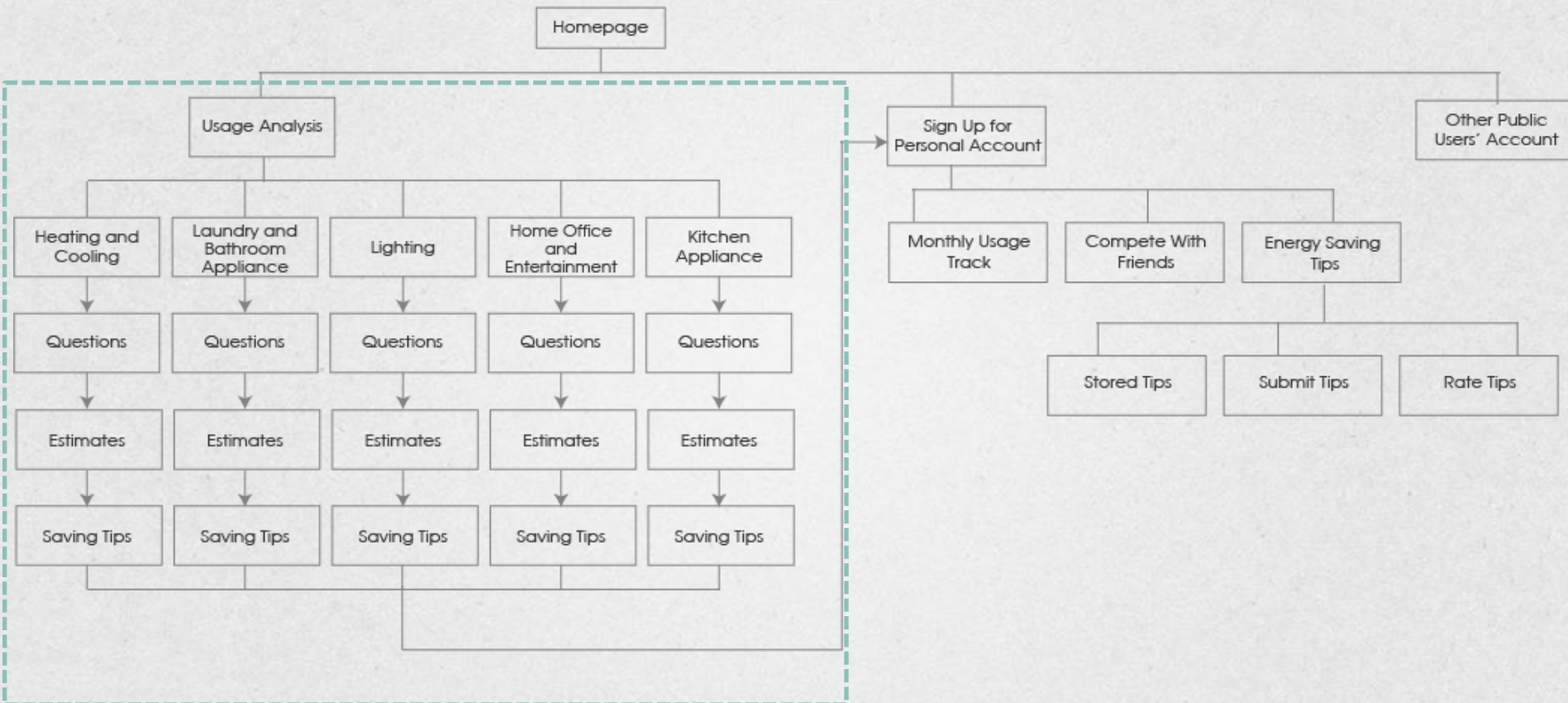
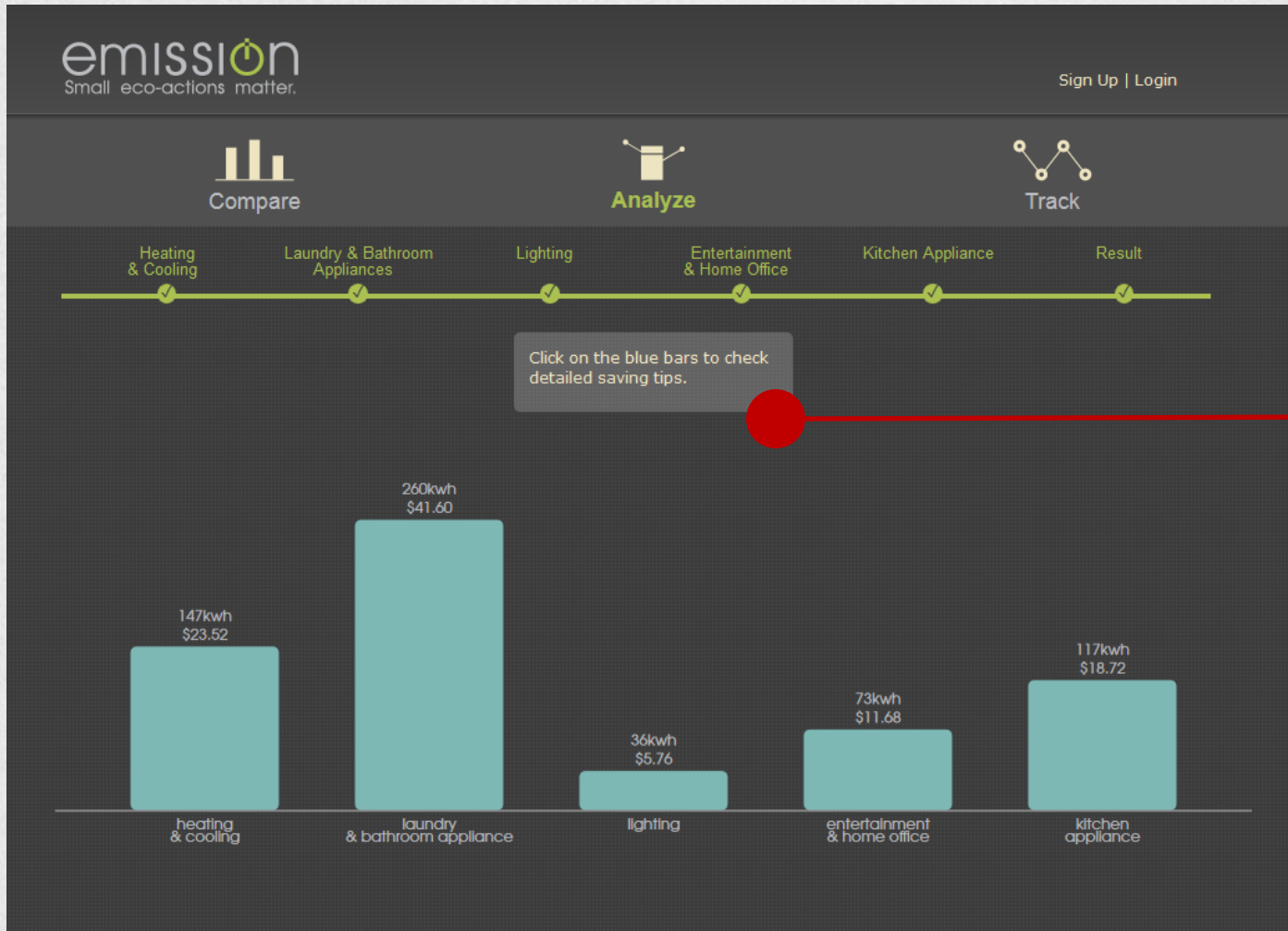# Challenges and Achievements

1. C

Thank you.

INTERACTION MODEL

Quick Start

Continuous Impressions

1. Answer Short Usage Questions

2. Get Estimated Result

3. Get Customized Saving Tips

Power Usage Analysis and Estimation

Sign up for personal Account

Connect to Facebook Friends

Personal Account and Social Media

1. Monthly Usage Track

2. Compete with Friends

3. Submit New Tips or Review Existing ones

The Tips Pool Contains Original Imported Tips and New Tips Provided By user

Project | IA

Project | UX Research

People don't read, if it's too subtle.

Project | UX Research

PROJECT OUTLINE

About Me

Project Summary

Why develop eMission
Problem | Competitive Analysis
Solution

Who is using eMission
Target Audience | Persona

How to use eMission
Design/Interaction Model
User Concept Journey Video

How is eMission developed
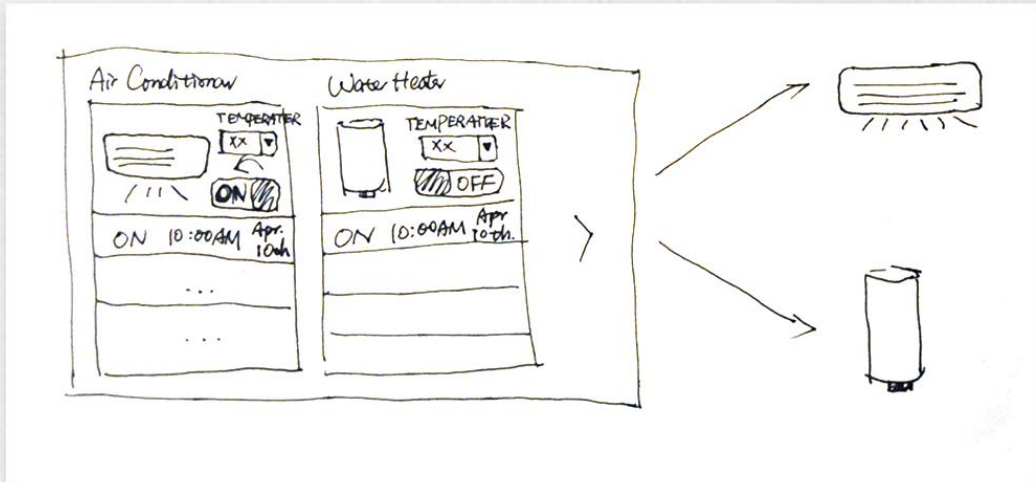UX | Visual | Technical
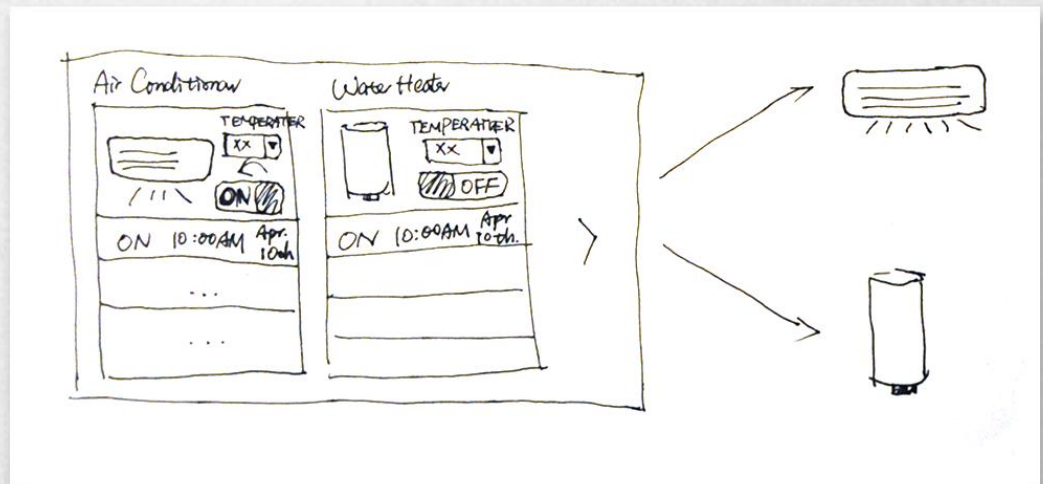
Next Steps

Challenge and Achievements

FUTURE EXPANSION

1. Use the app to control electric devices remotely.

Before go to sleep, user can double check the devices' status, and control them remotely.

When you go out for travel, you can put devices to "OFF" status, and have them turned on and ready for you to use before you arrive home.

FUTURE EXPANSION

2. System learn your lifestyle and help adjust your devices' status.