



CONSUMER ENERGY EMPOWERMENT

EMPOWERING THE CONSUMER BY PROVIDING AN EXTENDABLE PLATFORM FOR CONSUMER ELECTRONIC POWER UTILIZATION, MARCH 19, 2012

CLIENT

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BACKGROUND

Consumers today have very little insight into their day to day power usage. Every month, they get a bill from their local utility, and pay it without question. To enable better power usage habits, as well empower the consumer, an extendable platform for collecting and organizing the world's consumer electronic and general household power usage is needed. This project will leverage mobile as well as web technologies, to develop a platform in which the consumer can upload their energy usage across all areas of their household, while in turn, providing an application platform to leverage this data to empower the consumer.

DESCRIPTION

For this project, students will be performing the following:

- 1) Develop a database for storing consumer electronic data
- 2) Develop a Ruby on Rails web application to allow for reading and writing of consumer electronic data
- 3) Develop an iOS application (iPhone, iPad or Universal) and Android application for submitting the consumer electronic data (including photos).
- 4) Leverage HTML5 to present one empowering application of the collected data. HTML5 should target the WebKit web engine to allow for proper visualization across iOS and Android.
- 5) If time permits develop an iOS iPad application that provides an engaging experience for the consumer to better understand their power usage

REQUIRED SKILLS

- 1) Interest in user experience and user interface design
- 2) Familiarity with iOS (Objective-C) or Android (Java) development platforms
- 3) Familiarity with relational databases, e.g. MySQL, SQLite, etc.
- 4) Ruby on Rails web application development
- 5) HTML5 and CSS 3 authoring



LOCATION

Students can work on campus or at a location of their choosing. Daily meetings with Übermind will be held leveraging the free GoToMeeting conferencing client (requires modern browser, and internet connection). Übermind representative will meet with team on campus once a week.