User Research 2
Wednesday, February 15, 2012
Instructor: Jon Froehlich
TA: Kotaro Hara
KNOWING YOUR FOOD BETTER, KEEPING YOUR BODY HEALTHIER

Win: Mark system ideas you want to pursue.
Target Audience: Restaurant, Household, Grocery Stores.
Anyone who helps food processing.

Envision a system that can help track and manage food inventories, using technology like RFID and blockchain. Discuss potential solutions and approaches.

- Database (IoT, sensors, etc.)
- Database

Players

Friends/Team

Project List

Tech Skills

Tools

Implementation

Notes
EVERYONE GRAB AN ODD-SHAPED PIECE OF FOAM AND SIT DOWN.

WE'LL CONTINUE THE DESIGN PROCESS BY POINTING TO THESE BRAINSTORM NOTES AND MAKING INSIGHTFUL OBSERVATIONS.

THE NOTES ARE ALL YELLOW.

SWEET JEEPERS!!! YOU'RE ALL ENGINEERS!

[http://dilbert.com/strips/comic/2001-12-12/]
Hall Of Fame/Shame
Two submissions from CMSC434 Student Nita Sutreja
Write down every human-computer interaction you see in this video.
Hall of Fame/Shame

[Minority Report, 2002; Directed by Steven Spielberg based on a short story by Philip K. Dick]
BRAVE NUI WORLD

DESIGNING NATURAL USER INTERFACES FOR TOUCH AND GESTURE

DANIEL WIGDOR
DENNIS WIXON

MORGAN KAUFMANN
Is the Minority Report UI a type of *Natural User Interface*?
Hall Of Fame/Shame

[Minority Report, 2002; Directed by Steven Spielberg based on a short story by Philip K. Dick]
Midas Touch
MidasTouch - InAction
How can we avoid the Midas Touch problem?
Team Projects

KNOWING YOUR FOOD BETTER, KEEPING YOUR BODY HEALTHIER

Win: Make system ideas even viable

Target Audience: Restaurante, Household, Grocery Stores

Anyone who helps food processing

Win: Market system ideas even viable

Target Audience: Restaurant, Household, Grocery Stores

Anyone who helps food processing

RFID

Food Dishes

Stores

Interactive Feedback
Team Assignment Deadline

Team Project Proposal

Due: Sunday, February 19th, 2011

@ 11:59:59PM

CMSC 434

Introduction to Human-Computer Interaction

Wiki Home  Pages and Files  Members  Recent Changes  Manage Wiki

Search Wiki

home

Instructors

Dr. Jon Froehlich
Assistant Professor
Email: jonf@cs.umd.edu
Webpage: http://www.cs.umd.edu/~jonf
CS Office: 3137 AV Williams
HCL Office: 2117F Hornbake
Office Hours: By appointment

Kotaro Hara
Teaching Assistant
Email: kotaro@cs.umd.edu
Webpage: http://kotaro.hara.com
CS Office: 3270 AV Williams
Office Hours: Wednesdays from 4-5PM

Course Overview

This is the only course in the undergrad computer science catalog with the word human in its title. This is not insignificant. In this course we will reposition ourselves to think about computer science not just in terms of algorithmic performance and technical sophistication but in terms of how technology can be perceived, used, and adopted by people. By placing humans at the center of our design focus rather than technology, our concerns shift in interesting and, hopefully, illuminating ways. For example, there are many ways to design and build a user-facing application—how do we know which path is the right one? What methods and guidelines can we apply to maximize our chances that our design is the most useful, usable, and enjoyable? In this class, you will learn to ideate, critique, prototype, evaluate, design and refine interactions, interfaces and applications for people.
project teams

Example Project

A Rotten Tomatoes for Tomatoes: Supporting Local Organic Food Markets
Campus and Neighborhood Safety
Enabling Consumers to Choose More Environmentally-Friendly Products
Encouraging Citizens to Create Jobs by Suggesting Local
Encouraging High School Students Towards Science, Math and Engineering Fields
Improving Parental Involvement in Education
Knowing Your Food Better, Keeping Your Body Healthier
Personal safety information in GPS device during travelling
Reaching Out to LGBT and Other Youth in Trouble
Taking the Game Outside: A Mobile Device Meta-Game that Rewards Children to Play Outside
Volunteerism
Volunteerism

TEAM MEMBERS
Jose Medina
Vicki Li
Michael Ohr
Kevin Egner

Volunteerism is the idea of having the two groups involved in volunteering to have an easy and efficient way of finding and interacting with each other. A mobile/web application with an easy to use interface that can tie together these ideas would be beneficial to help people, help people.

Deliverables
Proposal due Sunday February 19th
Project Opportunity?

OAKWOOD SCHOOL

ABOUT US

Oakwood School, founded in 1971, is a private, non-profit, co-educational day school for elementary and middle school students with mild to moderate learning differences. Our students are of average to above average potential and exhibit a discrepancy between their potential and their current level of achievement.

Some of our students may have been diagnosed with learning disabilities. Some may also have attention difficulties. Others may have dyslexia, language or visual processing deficits, or difficulty with math. All of our students find in Oakwood School a small, nurturing environment with knowledgeable, trained staff. We work hard to help each student recognize and meet his or her potential.
Project Opportunity?

Governor O’Malley’s 15 Strategic Policy Goals

1. Create, Save or Place Residents into 250,000 Jobs in Maryland by End 2012
2. Improve Student Achievement, and School, College and Career Readiness in Maryland by 25% by End 2015
3. Increase the Number of Marylanders Who Receive Skills Training by 20% by End 2012
4. Reduce Violent Crime in Maryland by 25% by End 2012
5. Reduce Violent Crimes Committed Against Women and Children by 25% by End 2012
6. Make Maryland the National Leader in Homeland Security Preparedness by End 2012
7. Restore the Health of the Chesapeake Bay by 2025
8. Double Transit Ridership in Maryland by End 2020
9. Reduce Per Capita Electricity Consumption in Maryland by 15% by 2015
10. Reduce Maryland’s Statewide Greenhouse Gas Emissions by 25% by 2020
11. Reduce Maryland’s Statewide Greenhouse Gas Emissions by 25% by 2020
12. End Childhood Hunger in Maryland by 2015
13. Establish Best in the Nation Statewide Health Information Exchange and Electronic Health Records Adoption by End 2012
14. Reduce Infant Mortality in Maryland by 40% by End 2012
15. Expand Access to Substance Abuse Services in Maryland by 20% by End 2012

Introduction
Governor Martin O’Malley ran for office in 2006 with a commitment to make government work again for the people of our State. Since then, Governor O’Malley has instituted StateStat – a system of performance-based management – to make our State government more accountable and efficient.

In 2009, Governor O’Malley created the Delivery Unit as an extension of StateStat to work with state agencies to align state and federal resources around 15 strategic and visionary goals to improve the quality of life in Maryland. The goals are broadly categorized into four key areas – health, security, sustainability and education – reflecting the challenges and opportunities we face as a state in the 21st Century.

Background
The Governor’s Delivery Unit is modeled after Prime Minister Tony Blair’s Delivery Unit developed in the United Kingdom. The Prime Minister’s Delivery Unit was created in 1997 to help oversee reforms in health, education, transportation and criminal justice.
Homework

1. Piazza response to Blomberg and Burrel *An Ethnographic Approach to Design* due Monday, February 20th by 12PM (noon)


3. Team project proposals are due Sunday, February 19th at 11:59:59PM

4. Starting thinking about and planning your in-class project proposal presentation due February 22nd
Proposal Presentations

75 minute class
11 teams
4 minute presentations + 2 minutes Q/A

Each presentation must include:
1) A title with tagline
2) Problem motivation
3) Problem description
4) A short review of past solutions to problem
5) Your proposed solution and what makes it unique
6) Your target users and how they will benefit from your specific solution
Experience Prototype

NOW: Quickly prototype a concept using available materials and use it in order to learn from a simulation of the experience using the product.

WHY: This is useful for revealing unanticipated issues or needs, as well as evaluating ideas.

The IDEO team built a working interactive model of a digital camera to understand the experience of different interaction design solutions.
Observe People

Fly on the Wall  A Day in the Life  Shadowing  Personal Inventory
Work With Users

Collage

Conceptual Landscape

Card Sort

Cognitive Maps
Empathy tools  Scenarios  Informance  Prototyping

Create And Test Prototypes
Gather And Analyze

Flow Analysis

Cognitive Task Analysis

Affinity Diagrams
InClass Activity

Using the **Method Cards**, come up with **two methods** that could be useful in each of the following contexts, and two that would not be useful for each of the two design scenarios:

1. Helping air traffic controllers communicate with pilots
2. Helping older adults communicate with their young grandchildren over a distance

[Cards are on the wikispaces schedule page]
InClass Work

Discuss and work on team project proposals!

I will come around to each team to help you outline and think about your proposal.