Health Behavior Change

@SCALE

Persuasive Urban Systems
Healthy and Sustainable Routines (MAS.60) Fall 2015

Instructors – Agnis Stibe, Neja Favre
Advisors – Kent Larson, Rosalind Picard, Ryan Chin, Kevin Slavin

Class Description — We all live and work in an urban environment. Oftentimes, we are not aware of how hugely our behavior is influenced by the environment. For example, if stairs are inconveniently located, we take an elevator. If bicycle lanes are dangerous, we prefer to drive a car. Future cities will alter human behavior in countless ways. Persuasive urban systems will play an important role in making cities more livable and resource efficient by addressing current environmental problems and enabling healthier routines.

In this course, we will work on reshaping our current environments and designing future spaces to help people become healthier and to acquire sustainable lifestyles. We will explore how good urban design might be combined with socially influencing systems to encourage healthy behaviors (such as walking, bicycling, stair-use) at scale. We will study how quality of life and the health of the individual and communities might be improved through the creation of persuasive cities, streets, buildings, homes, and vehicles.

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Class Days – Tuesday, 4-5:30pm (E14-633), Thursday 2-3:30pm (E15-359) – First Class September 10th
Important Dates

• MIT Media Lab – Members Week
  • **Oct 21** – Final posters (digital)
  • Oct 27 – Wellbeing talk (Me?)
  • **Oct 29** – Posters (out of class)

• Persuasive Technology – Conference
  • **Nov 13** – Submission Deadline for Research Papers
  • Jan 29 – Submission Deadline for Posters, Demos
Class 5 – Oct 8

- Framework for **SIS**
- Computer-**Supported** Influence
- Reviewing Student Projects: **Story Boards**
- Assignment 5
Class 5 – Oct 8

- Framework for SIS
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COMPUTER-SUPPORTED INFLUENCE
Persuasive design

Dynamic design

Dynamic content

User behavior

User content

COMPUTER – HUMAN (CHU)

COMPUTER – MODERATED (CMO)

COMPUTER – MEDIATED (CME)

FACE–TO–FACE (FTF)

INTERPERSONAL

INFLUENCE
<table>
<thead>
<tr>
<th>Content</th>
<th>Design</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fixed</strong></td>
<td><strong>(FC)</strong></td>
</tr>
<tr>
<td>Preset by developers and owners</td>
<td>Preset by designers</td>
</tr>
<tr>
<td>Supports <strong>CHU</strong> influence</td>
<td>Supports <strong>CHU</strong> influence</td>
</tr>
<tr>
<td><strong>Dynamic</strong></td>
<td><strong>(DC)</strong></td>
</tr>
<tr>
<td>Generated by users</td>
<td>Evolving through user behavior</td>
</tr>
<tr>
<td>Supports interpersonal <strong>CME</strong> influence</td>
<td>Supports interpersonal <strong>CMO</strong> influence</td>
</tr>
</tbody>
</table>
Stanford
Sunny
Jogging: 374

Now 3PM 4PM 5PM 5:08PM 6PM 7PM
19 21 19 17 Sunset 15 14

Today: Sunny currently. The high will be 21°. Clear tonight with a low of 10°.

Sunrise: 7:23 AM
Sunset: 5:06 PM
Chance of Rain: 0%
Humidity: 53%
Wind: N 8 kph
Feels Like: 19°
Precipitation: 0.0 cm
Pressure: 1,021 mb
Visibility: 16.1 km
UV Index: 1

Eindhoven
Rain
Jogging: 12

Now 2PM 3PM 4PM 4:48PM 5PM 6PM
8 8 9 8 Sunset 8 7

Today: Rain conditions with 26 kph winds out of the southwest. The high will be 9°. Clear tonight with a low of 5°.

Sunrise: 8:41 AM
Sunset: 4:48 PM
Chance of Rain: 30%
Humidity: 100%
Wind: ssw 26 kph
Feels Like: 4°
Precipitation: 0.6 cm
Pressure: 1,018 mb
Visibility: 6.4 km
UV Index: 0

Chicago
Clear
Jogging: 0

Now 7AM 7:18AM 8AM 9AM 10AM 11AM
-14 -17 Sunrise -17 -18 -17 -18

Today: Clear conditions with a wind chill of -28° and 47 kph winds out of the northwest.

Sunrise: 7:18 AM
Sunset: 4:35 PM
Chance of Snow: 0%
Humidity: 48%
Wind: nw 47 kph
Feels Like: -28°
Precipitation: 0.0 cm
Pressure: 1,035 mb
Visibility: 14.5 km
UV Index: 0
Eindhoven
Rain
Usually: 82

Friday
7
2
Saturday
6
2

Today: Rain conditions with 26 kph winds out of the southwest. The high will be 9°. Clear tonight with a low of 5°.

Sunrise: 8:41 AM
Sunset: 4:48 PM
Chance of Rain: 30%
Humidity: 100%
Wind: ssw 26 kph
Feels Like: 4°
Precipitation: 0.6 cm
Pressure: 1,018 mb
Visibility: 6.4 km
UV Index: 0

Chicago
Clear
Usually: 20

Wednesday
-3
-8
Thursday
-3
-9
Friday
-5
-6

Today: Clear conditions with a wind chill of -28° and 47 kph winds out of the northwest.

Sunrise: 7:18 AM
Sunset: 4:35 PM
Chance of Snow: 0%
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Class 5 – Oct 8

• Framework for SIS

• Computer-Supported Influence

• Reviewing Student Projects: Story Boards

• Assignment 5
Class 5 – Oct 8

• Framework for **SIS**

• Computer-**Supported** Influence

• Reviewing Student Projects: **Story Boards**

• **Assignment 5**
Assignment 5

- **Draft Poster** for the ML Members Week
  - Poster should convey the key idea of your project
  - Deadline – Oct 21 – Digital

- **Advance Story Board** of your Project Idea
  - Sequence of Images (or Animation)
  - Exemplify / Illustrate your Envisioned Urban Intervention
Student Projects

• Demo
  • Computer Animation
  • Video
  • Animated Visuals

• User Study
  • Recruit Participants
  • Experiencing Demo
  • Questionnaire / Interview