Social Computing Systems

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EECS 498, Winter 2016
(http://tiny.cc/socsClass)
Pre-Class Notes

- Mobile and interaction dataset: http://crowdsignals.io/sample-dataset.html
Games!
Genres
More Genres…
Ex.: Click Bad

Batches (purity is *Deadly*)

0
0 per second (net)
0 per second (gross)

**COOK!**

Cash Money ($0.50 ea)

$0
$0 laundered
$0 per second

**SELL!**

You have a nearly impossible chance of a DEA raid (0%)
You have a nearly impossible chance of an IRS audit (0%)

Game saved 11 seconds ago

♫ Welcome to Clicking Bad, bitch.

Storage Shed

$20 — A cheap shed with electricity

Cooks 0.2 per second; 5% risk
Games can be “Addictive”
Today

- Social gaming
- Gamification / serious games
SOCIAL Games
Multiplayer Games
Cooperative Games
Competitive Games

[ something without shooting? ]
In-Person Multiplayer

SPACE TEAM
Game Elements
Challenge

- Games have to be challenging!
  - Without needing effort, rewards aren’t rewarding

- But not TOO challenging

- Types of challenge:
  - Mental/sensory (puzzles, strategy games, Tetris)
  - Dexterity (reflex games, first-person games, etc.)
  - Team coordination (Space Team, recent Mario games)
Measures of Success

- Scores
- Rankings / leaderboards
- Levels
- Achievements / badges
Status Sharing

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Art
Uniqueness

- Story/setting elements
- Gameplay elements
- Team/multiplayer elements
- In-game items / interactions
- Atmosphere
- ...
Uniqueness

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- Gameplay elements
- Team/multiplayer elements
- In-game items / interactions
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- ...

[Image of a game scene]
More About Game Design


*Intro to Game Design, Prototyping, and Development*

Other readings (also borrowed from Prof. Bond):

*Game Programming Patterns* by Robert Nystrom

*The Art of Game Design* by Jesse Schell

*Game Design Workshop* by Tracy Fullerton & Chris Swain

*Characteristics of Games* by Elias, Garfield, and Gutschera

*Fundamentals of Game Design* by Ernest Adams
Why Games?
Gaming

- Interactive storytelling (making it a sharing medium)
- Supports enjoyable (casual) interaction
- Skills practice (teamwork, dexterity, etc.)
Gaming

- Interactive storytelling (making it a sharing medium)
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- ...

- Games *engage* us.
Serious Games
Techniques for Gamification

- Leveling
  - Numeric levels
  - Badges
  - Points / scoring

- Add an underlying story

- Aesthetic appeal (visual/art)

- Goal + challenge
  - E.g., puzzle, mission, etc.
Games with a *Purpose*
ESP Game

Provide a label for what you see…

that your partner will agree with (without being able to chat with you)
Squigl

Annotate the part described in text...

with a bonus based on how well you agree with your partner
Tag a Tune (‘Input Agreement’)

Identify if you’re listening to the same music as your partner…

based only on their descriptions of the same audio / music

(“input agreement”)
FoldIt
Duolingo
Galaxy Zoo
Planet Hunters
WildCam Gorongosa
Identify animals in trail camera images from Gorongosa National Park!
Get Started

Galaxy Zoo: Bar Lengths
Measure the engines of evolution in disk galaxies.
Get Started

Whales as Individuals
Help us identify individual Humpback Whales by cueing our computer algorithms to patterns on their tails
Get Started

Season Spotter Image Marking
Help keep an eye on changing seasons by marking images!
Get Started

Chimp & See
Discover the secret life of chimpanzees. We need your help to study, explore, and learn from thousands of videos.
Get Started

AnnoTate
Help transcribe documents from the Tate collection, and reveal the secret lives of artists.
Get Started

Science Gossip
Uncover the history of citizen science. Help us to classify their drawings and map the origins of citizen science.
Get Started

Wildebeest Watch
Explore collective intelligence in wildebeest!
Get Started

Galaxy Zoo
Get Started
Cyclone Center
Classify over 30 years of tropical cyclone data. Scientists at NOAA’s National Climatic Data Center need your help.

Disk Detective
Find the birthplace of planets. Help comb our galaxy, looking for stars that could harbour planet-forming disks.

Milky Way Project
How do stars form? Help us find and draw circles on infrared image data from the Spitzer Space Telescope.

Ancient Lives
Study the lives of ancient Greeks. The data you'll gather helps scholars study the Oxyrhynchus collection.

Old Weather
Model Earth's climate using historic ship logs. Help recover observations made by US Navy and Coast Guard ships.

Asteroid Zoo
Help us discover near-Earth asteroids: protect Earth, find potential future resources, and understand our Solar System.

Worm Watch Lab
Track genetic mysteries. We can better understand how our genes work by spotting the worms laying eggs.

Orchid Observers
Help measure the effect of climate change. Photograph and classify orchids to assist climate research.

Planet Four: Terrains
Help planetary scientists characterize surfaces on Mars by examining images taken with the Context Camera.

Penguin Watch
Spy on penguins for science. Tag penguins in remote regions to help us understand their lives and environment.
Planet Hunters
Find planets around stars. Lightcurve changes from the Kepler spacecraft can indicate transiting planets.
Get Started

Snapshot Serengeti
Go wild in the Serengeti! We need your help to classify all the different animals caught in millions of camera trap images.
Get Started

Sunspotter
Sorting out sunspots. Help us organize images by complexity to better understand the Sun's magnetic activity.
Get Started

Cell Slider
Analyse real life cancer data. You can help scientists from the world's largest cancer research institution find cures for cancer.
Get Started

Seafloor Explorer
Help explore the ocean floor. The HabCam team and the Woods Hole Oceanographic Institution need your help!
Get Started

Space Warps
Help astronomers find elusive gravitational lenses to help us understand the universe.
Get Started

Snapshot Supernova
Help in the hunt for supernovae, live!
Get Started
Today (recap)

- Social gaming
  - Supports enjoyable, casual interaction between groups of people

- Gamification / serious games
  - Help solve real tasks using ideas from games that make interaction more enjoyable
Next Class

- Lecture Topic:
  - Game theory and [incentive] mechanism design

- Readings (for this week):
  - [http://dl.acm.org/citation.cfm?id=985733](http://dl.acm.org/citation.cfm?id=985733) (ESP Game)
  - (available on the class website)

- Assignments:
  - Team Assignment A — [DUE TODAY, Feb. 16th, 11:59 PM (ET)]
  - See course web page for details