Design:
Pervasive Game Design Strategies
Mobile and Ubiquitous Games
ICS 163
Donald J. Patterson

Content adapted from:
Pervasive Games: Theory and Design
Experiences on the Boundary between Life and Play
Pervasive Game Design Strategies

• Games Telling Stories
  • First Person Story
    • A game that focuses on one person
  • To make it work
    • Appeal to the narcissism of the player
    • Minimize role-playing
    • Personalize the story
Pervasive Game Design Strategies

- PacManhattan
- Tangible Experience Design
- The Magician’s Curtain
- Runtime Game Mastering
- Games Telling Stories
- General Issues of Game Design
- Disruption
Pervasive Game Design Strategies

- PacManhattan
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Pervasive Game Design Strategies

• General Issues

• Sustaining Critical Mass
  • Limit the time and space of play
  • Reward extensive play (e.g., staying online)
  • Provide single-player content
    • (e.g., maintenance work, resource allocation)
  • Provide two-player content
  • Conceal the lack of critical mass
    • If players don’t know the mass isn’t there yet, they won’t abandon the game as fast
Pervasive Game Design Strategies

- General Issues
  - Pacing the Game
    - Test and iterate
    - Allow for variable pacing
    - Make it foolproof
      - Don’t let one player’s delay ruin the game
    - Prepare for dedicated players
Pervasive Game Design Strategies

- General Issues
- Business Model
  - How this thing is funded has a big impact on the design
- Dragonbane
  - 1 million euro
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Pervasive Game Design Strategies

- Disruption

- Goal
  - to physically demonstrate the threat of decentralized action, inspired by Maneki-Neko, Distraction

- Players: Brea-Olinda High School students
  - Split into four teams

- Time frame
  - 2 hours

- Technology
  - text messages, GPS, paper
Pervasive Game Design Strategies

Wait for the printer to print a piece of paper with four pictures on one side and "A" on the other (1:3)

Take an envelope from Prof. Patterson's mailbox and write a large "A" on it. Put a copy of "Software Engineering Notes" in it. (1:2)

Go to the 5th floor mailroom (1:1)

DZ

Go to Location (33.643324 -117.842282) (2:2)

Find the words "Drop Zone" on the ground. (2:2)

Find the words "Launch Pad" on the ground. Stand on them. Do not climb on the ledge. Do not try and look over the ledge. (1:6)

As loud as you can, sing "You are my Sunshine" (1:7)

Start

Go to Donald Bren Hall Room 5084 (3:1)

Go to Donald Bren Hall Room 4084 (4:1)

Find and take an envelope marked "C" (3:2)

Catching Envelope "A" when the singers throw it to you (2:4)

Proceed to TPC

Catch the envelope labeled "A" when the singers throw it to you (2:4)

Drop the Envelope over the edge of the building closest to you. Do NOT try and look over the edge (too dangerous) (1:8)

Go to the fifth floor mailroom (1:9)

Go to the sixth floor outdoor patio (1:5)

Cut the four pictures apart and place in the envelope. Seal the envelope with the pictures and magazine in it. (1:4)
Pervasive Game Design Strategies

Take an envelope from Prof. Patterson's mailbox and write a large "A" on it. Put a copy of "Software Engineering Notes" in it. (1:2)

Go to the 5th floor mailroom (1:1)

Go to Location (33.643324 -117.842282) (2:1)

Find the words "Drop Zone" on the ground. (2:2)

Wait there and listen for someone singing "You are my sunshine" (2:3)

Catch the envelope labeled "A" when the singers throw it to you (2:4)

Go to Location Donald Bren Hall Room 4084 (4:1)

Find and take an envelope marked "D" (4:2)

Proceed to (33.644271 -117.841201) (2:5)

Travel to (33.642531 -117.839763) (4:3)

Post Envelope "C" on the bulletin board (3:3)

Obtain an envelope marked "C" (3:2)

Go to Location Donald Bren Hall Room 5084 (3:1)

As loud as you can, sing "You are my Sunshine" (1:7)

Drop the Envelope over the edge of the building closest to you. DO NOT try and look over the edge (too dangerous) (1:8)

Go to the 6th floor outdoor patio. (1:5)

Find the words "Launch Pad" on the ground. Stand on them. Do not climb on the ledge. Do not try and look over the ledge. (1:6)
Pervasive Game Design Strategies

- Find and take an envelope marked "D" (4:2)
- Proceed to (33.644271, -117.841201) (2:5)
- Travel to (33.642531, -117.839763) (4:3)
- Post envelope "D" on the bulletin board located next to the wood post next to that GPS point (4:4)
- Travel to (33.643492, -117.84050) (4:5)
- Take an envelope from Prof. Patterson's mailbox and write a large "B" on it. Put a copy of "Software Engineering Notes" in it. (1:10)
- Wait for the printer to print a piece of paper with four pictures on one side and "B" on the other. (1:11)
- Cut the four pictures apart and place in the envelope. Seal the envelope. (1:12)
- Go to (33.643492, -117.84050) (1:13)
- Lie on the ground in a star shape. (1:14)
- Form a single file line and march in a large circle around that GPS point (2:6)
- Until someone immediately and run to the 33.642531 (2:7)
- Go to the fifth floor mailroom (1:9)
- Wait there and listen for someone singing "You are my sunshine" (2:3)
- Drop the envelope over the edge of the building closest to you. Do NOT try and look over the edge (too dangerous) (1:8)
Pervasive Game Design Strategies

Form a single file line and march in a large circle around that GPS point (2.6)

Travel to (33.642531 -117.839763) (4.3)

Post envelope "D" on wood post next to the bulletin board located next to that GPS point. (4.4)

Travel to (33.643492 -117.84050) (4.5)

Look for a human star and sing "Twinkle Twinkle Little Star" to them. (4.6)

Bring envelope "C" back to home base and tape the contents to the white board in the indicated manner (2.9)

Bring envelope "C" back to home base and tape the contents to the white board in the indicated manner (3:11)

Find and take an envelope marked "C" (1:17)

When you hear that song, scream, leave envelope "B" behind on the ground and run to the "Go Study Abroad" Bulletin Board at (33.644633 -117.840651) (1:16)

Continue lying on the ground until you hear someone sing "Twinkle Twinkle Little Star" (1:15)

Lie on the ground in a star shape. (1:14)

Go to (33.643492 -117.84050) (1:13)

Cut the four pictures apart and place in the envelope. Seal the envelope. (1:12)

Wait for the printer to print a piece of paper with four pictures on one side and "B" on the other. (1:11)

organizer: Print "B"

Immediatly and run to the 3.642531 (2.7)

Take an (marked 2:8)
Pervasive Game Design Strategies

Start

Go to Donald Bren Hall Room 5084 (3:1)

Obtain an envelope marked "C" (3:2)

Travel to (33.644633 -117.840651) Find the "Go Study Abroad" Bulletin Board (3:3)

Post Envelope "C" on the bulletin board located there (3:4)

Travel to (33.644271 -117.841201), Look for a line of soldiers and attack them with finger guns loudly shouting "bang" (3:5)

Take envelope "A" (3:6)

Start

Go to Location Donald Bren Hall Room 4084 (4:1)

Find and take an envelope marked "D" (4:2)

Proceed to (33.644271 -117.841201) (2:5)

Catch the envelope labeled "A" when the singers throw it to you (2:4)

Form a single file line and march in a large circle around that GPS point (2:6)

Travel to (33.642531 -117.839763) (4:3)

BBUH

Continue marching until someone pretends to shoot you. Immediately drop your envelope "A" and run to the bulletin board at (33.642531 -117.839763) (2:7)

Post envelope wood post near bulletin board next to that GPS point (4:4)

Find and take an envelope marked "D" (2:8)

Wait there and listen for someone singing "You are my sunshine" (2:3)
Pervasive Game Design Strategies

- Go to the Bren Hall sixth floor outdoor patio. (3:7)
- Find the words "Launch Pad" on the ground. Do not climb on the ledge. Do not try and look over the edge. (3:8)
- As loud as you can, sing "You are my sunshine" (3:9)
- Catch an envelope labeled "A" from the singers (4:11)
- Proceed to (33.643324 -117.842282) (4:8)
- Wait and listen for someone to sing "You are my sunshine" (4:10)
- Bring envelopes "A" and "B" back to home base and tape the contents to the white board in the indicated manner. (4:12)
- Find the words "Drop Zone" on the ground. (4:9)
- Return to Home Base (3:11)
- Bring envelope "D" back to home base and tape the contents to the white board in the indicated manner (2:9)
- Pick up envelope "B" (4:11)
- Look for a human star and sing "Twinkle Twinkle Little Star" to them. (4:6)
Pervasive Game Design Strategies

- Disruption
- Game Design
  - Training in GPS the day before
  - Hint sheets for locations pre-made
  - Control room watching movements
  - Team play
- A little social expansion
- Not much temporal expansion
- Heavy focus on linked mysterious tasks