Lecture 12:

Playtesting
Next week

- Tuesday = playtesting
- Thursday = postmortem presentations
This will probably go badly
Don’t take it personally!

- People may criticize everything
  - Interface
  - Design
  - Mechanics
  - Art
  - Your most brilliant ideas

- It’s okay!

- Mentally separate yourself from your game

- **Do not** argue with your players

- **Do not** coach your players
Do Not Take it Personally

- People will criticize everything
- It can be sad watching people fail
- But **do not** coach them
  - This will bias your results
Resources

• “Valve’s approach to playtesting: the application of empiricism”
  • Mike Ambinder
  • GDC 2009

• “Successful instrumentation: tracking attitudes and behaviors to improve games”
  • Ramon Romero
  • GDC 2008
• What makes a game fun?

• How do we measure this?
Traditional methods

- Direct observation
- Think-alouds
- Questions and answers
**Traditional methods**

- Direct observation
- Think-alouds
- Questions and answers
Direct Observation
The Game Design Initiative at Cornell University
Can see what players do
Player’s body language is often not biased
Must interpret behavior
Player might not do what you want
Traditional methods

- Direct observation
- Think-alouds
- Questions and answers
Think-alouds

I don’t know what to do

I keep catching on fire and dying

Why are you making me do this
- Know what player is thinking
- Hard to talk and play at the same time
- Player may ramble
- Biased
Traditional methods

- Direct observation
- Think-alouds
- Questions and answers
Questions and Answers

What happened when you went through the portal?

I can freeze water now
Get more targeted information

Players may not be able to articulate feelings

Still biased
Q: Did you like the game?
A: Yeah!

Q: So which ability was your favorite?
A: Oh, I didn’t understand this part.
Bias

- Testers don’t want to hurt your feelings
- But you need their real opinions
Research on Bias
Interviewer’s video

Competitor video
Playtesting

- Preferred interviewer's video: 103
- Preferred other video: 41
- Thought videos looked the same: 56
Interviewer’s video

Competitor video

Playtesting
Without claiming ownership

- Preferred low-quality video
- Preferred high-quality video
- Thought videos looked the same
Overcoming bias

- Don’t just ask for appraisal

- Did you like the first level?

+ Did you understand how to beat the first level?

- Use quantitative measures
### Survey

How stressful were each of the following? 
(1 = not much, 5 = a lot)

<table>
<thead>
<tr>
<th>Activity</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deciding where to go</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Jumping on platforms</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Defeating enemies</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Solving puzzles</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Using the controls</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
More specific survey

How useful was each ability?
(1 = not much, 5 = a lot)

<table>
<thead>
<tr>
<th>Ability</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freezing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heating</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Flash Freezing</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Flash Heating</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Less biased
More precision
Loss of nuance
Time-consuming
More advanced methods

- Physiological measurements
- Data collection
- Experimentation
More advanced methods

- Physiological measurements
- Data collection
- Experimentation
Physiological measurements

Heart rate

Skin conductance

EEG

Eye tracking

Playtesting
Direct, quantitative measures of engagement

Much less biased

Expensive

Nonscalable

Often invasive
More advanced methods

- Physiological measurements
- Data collection
- Experimentation
Group Activity: Playtesting plan

- Plan for ~8 players
  - What will you do with each of them?

- Revisit three (or more) playtesting questions
  - How, *exactly*, will you answer each of them?

- Come up with a survey
  - ~5 questions
  - Numerical scale
Presentations

- Design question evaluation x2
  - Clearly defined debatable question about player behavior
  - To answer this question, we:
    - asked a question
    - gave a survey
    - asked the player to talk out loud
  - Our results were:
    - Result\(_1\)
    - Result\(_2\)
  - Therefore, we will change
    - Mechanic\(_1\) by adding change\(_1\)
    - Mechanic\(_2\) by implementing change\(_2\)