

Wizard of Oz Prototyping

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Summary

What is playtesting?

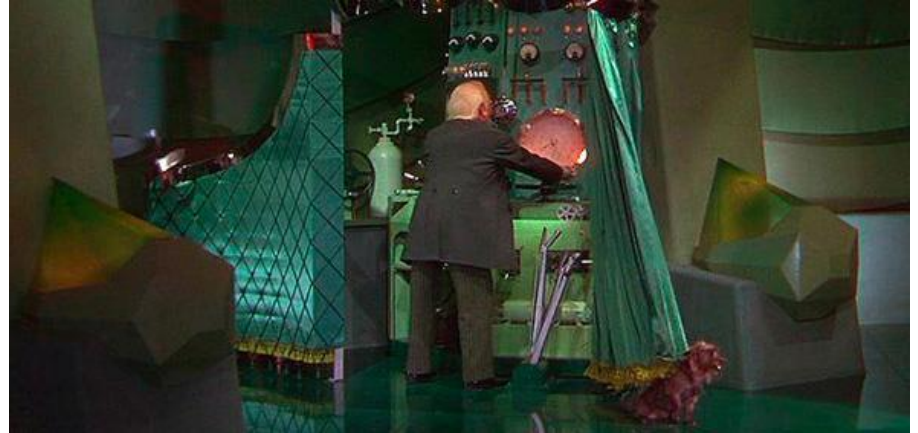
- Understanding how your game works
 - What mechanics might go wrong
 - Intuitive understanding
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Steps for a Successful Playtest

- Recruit your target player
- Do your own testing
- Create a comfortable environment for your playtesters
- Have a survey post-playtest
- Compile your data

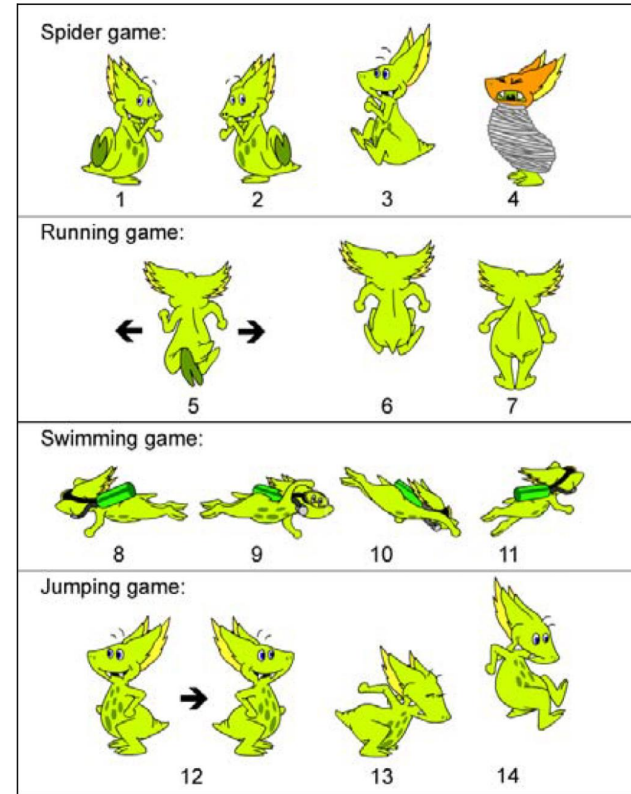
What is Wizard of Oz Prototyping?

- Human wizard and playtester
- Correspond intuitive movements with game's outputs
- Direct control of game outputs by human
 - Much like the Wizard of Oz!

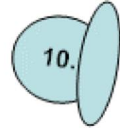
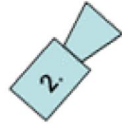
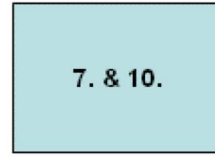
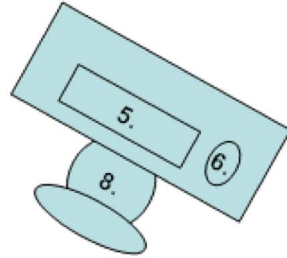
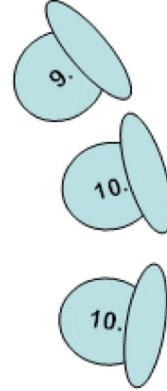
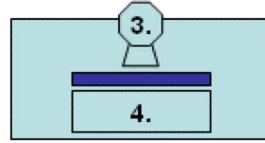


Study using WoZ Prototyping

- 34 children, ages 7-9
- Computer vision action game that took into account player's movements
- Three phases
 - Introduction
 - Play Session
 - Interview



1. DV-camera 1
2. DV-camera 2
3. Webcam
4. Laptop
5. Keyboard
6. Mouse
7. Magic square
8. Wizard
9. Interactor
10. Children



Results

- Children move uniquely, but there are certain movements that were more prevalent than others
 - Swimming game
- Data collected from study helped find best paths for the computer vision technology and the game character's responses



Why WoZ?

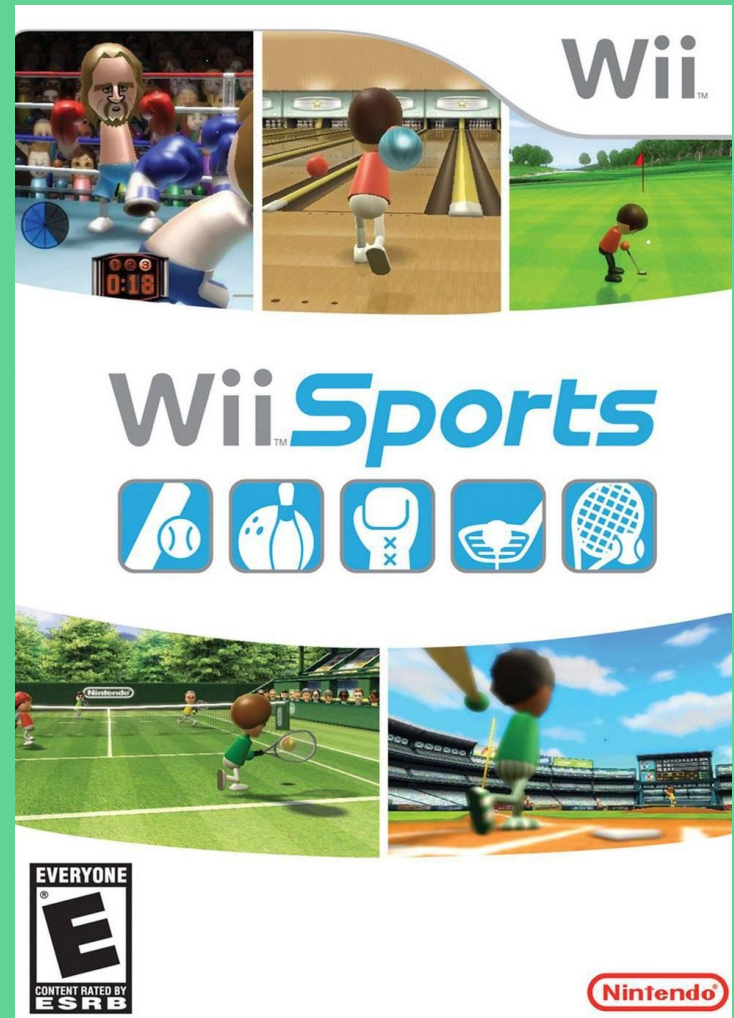
- Discern intuitive movements from players
 - Human controlling the game could account for all movements
 - Wizard has the ability of both observation and simultaneous control, giving immediate feedback
 - Enables for a better developed algorithm for the computer vision system
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Critical Assessment

An assessment of the WoZ method

- While an intuitive way to gauge anticipated output, the method lacks in certain areas
 - The designated wizard's cognitive and motor skills restrict the latency between playtester and the system itself
 - A high level of complexity renders the WoZ setup much more difficult to setup and perform at an adequate level
 - As you increase the number of modalities past simply body motion (ie sound, speech, etc.) it becomes almost necessary to include more wizards in order to keep track of all playtester inputs
- Incredibly limited to games that rely on non-standard inputs (not keyboard and mouse/controller)

Examples of Games





Insights/Tips and Takeaways

Applying Playtesting to the Game Design Process

- All games during the Game Design Process should incorporate some level of playtesting
 - The developers are biased and will have an unfair understanding of the game being naturally more familiar with it
 - It is important to know what previous knowledge is expected from the target audience of the game
 - Is the target audience expected to already know how to navigate a 3D space using mouse and keyboard?
 - How accessible should the game be to players that are not familiar with games in general/games of this genre?

Creating Playtests

- Have a clear understanding of the target audience and their expectations
- Create a environment devoid of variables that could alter the way the player approaches the game
- Aggregate quantitative data from the playtest as well as survey responses from the playtesters themselves
- Ask questions about the “feel” and intuition of the game as well as their enjoyability when playing the game
- Once the data is aggregated, really understand the reasoning behind their survey responses/inputs/way in which they approach the game

Applying Woz Playtesting

- The core concept and idea behind the study is in finding intuitive means of user input
- While the core Wizard of Oz prototyping is not immediately applicable to games that don't use the body as a means of motion, the importance of user input should be studied in similar ways
 - Categorizing sets of expected inputs from surveyed play testers
 - Categorizing sets of expected outputs from surveyed play testers
 - Surveying players for anticipated inputs based off of visual cues and demonstrations
 - Recording the most popular user created key-bindings