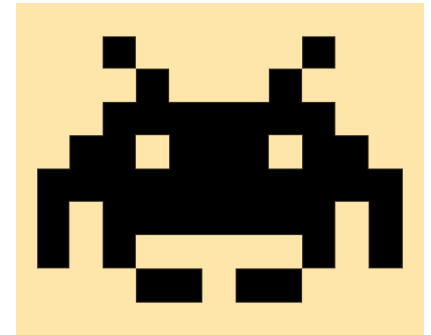# CSCI 1106
Lecture 10

Game Polish

Announcements

- Game show-and-tell this Thursday/Friday in lab
  Documents due in class next Monday
- Today's Topics
  - Why polish?
  - What is polish?
  - Types of polish
  - Prioritizing polish

Sell Games and Influence People

- What makes a game good?
  - Idea behind the game
  - Unifying theme
  - Story line
  - Game mechanics
- What makes a game great?
  - The small details
  - The look of the game
  - The game effects
  - The interesting quirks
  - The lack of annoying quirks

Many are Called but Few are Chosen

- A polished game is
  - More compelling and immersing
  - More likely to be played longer
  - More appealing to new players
- A polished game will
  - Get better reviews
  - Get more praise on social media and word of mouth
  - More likely become popular
  - Likely sell more copies
- It's in our interest to make sure that games are as polished as possible!

What is Game Polish?

- A process to reduce the number of minor issues associated with the game
- This involves
  - Fixing minor bugs and anything that detracts from the consistency of the game
  - Touching-up graphics
  - Refining game mechanics
  - Adding minor features and special effects

Scheduling Game Polish

- Schedule game polishing as part of your overall development plan
  - Don't assume you will have extra time to do this after you finish the main development
- Game polish is not the same as debugging or fixing major problems
  - You should budget time for this as well
- Should be done throughout the game development cycle
  - Typically kicks in once the game is stable and working
- Done in concert with playtesting

Types of Game Polish

- Resolution of issues (1st priority)
  - Stability
  - Consistency
  - Playability
  - Understandability
- Refinement of the game mechanics (2nd priority)
  - Realism, environment, and actions
  - Graphics
  - Audio
- Additional features (3rd priority)
  - Special effects
  - Side stories and bonus rounds
  - Easter eggs
  - Special objects

Resolution of Issues

- Stability issues
  - Bugs
  - Memory usage
  - Hardware optimization
- Consistency issues
  - Story line
  - Game mechanics
  - Unifying theme
- Playability issues
  - Game mechanics (Rules, Environment, Actions, Chance (Randomness), Skills)
  - Game control (mouse, keyboard, text, buttons)
  - User interface layout

Resolution of Issues II

- Understandability Issues
  - Game manual
  - Presentation of information during the game
  - Demonstration of how to play the game
  - Recommended controller use

- How are these issues discovered?
  Playtesting!

Refinement of Game Mechanics

- Realism
  - Physics simulation
    - Projectile behaviour
    - Object motion
  - Character behaviour
    - E.g., the more a character is carrying the slower it is
  - Character rendering
    - Ancillary objects: hair, clothing, etc
  - Character motion
    - Natural motion: walking, running, jumping, etc

Refinement of Game Mechanics II

- Graphics
  - Detail
    - Photorealism
    - Graphic design
- Audio
  - Fidelity
    - Sound effect/action pairing
    - Interaction (voice)

Additional Features

- Special effects
  - Explosions
  - Transitions
  - Intermissions
- Side stories and bonus rounds
  - Additional miniquests for the players
  - Additional levels
  - Backstory

Additional Features II

- Easter eggs
  - Secret features
  - Activated by clicking on specific objects on the screen
  - Allows developers to add more of their own creativity into the game

- Special objects
  - Give the character additional powers
  - Do not affect the general play of the game

Polish vs Playtest Priorities

Prioritizing polish

1. Resolve issues
   a. Stability issues
   b. Consistency
   c. Playability and Understandability
2. Refine game mechanics
   a. Physics and controls
   b. Character motion
   c. Character rendering, graphics, and audio
3. Add features
   a. Special effects
   b. Side stories and bonus rounds
   c. Easter eggs and special objects

After the Playtest

- Keep track of all the players
  - You can invite them back for additional playtests
- Collect and organize your notes
- **Categorize your observations**
  - **Bugs (high priority)**
  - **Playability Issues (high priority)**
  - **Understandability issues (high priority)**
  - **Suggestions (low/medium priority)**
  - **Other feedback (informational)**
- Address the bugs and the issues
- Playtest the game
- Repeat until game is awesome