

Making Games with Game Maker – Movement and Rooms

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Non-Video Game Projects

- Grading:
 - Did not meet expectations: 85
 - Met expectations for assignment: 90
 - Occasionally added a 1-3 point bump on this
 - Game of distinction: 95
 - Game of exceptional distinction: 100
- The vast majority “met expectations”
- Most that clearly didn’t meet expectations were returned
 - Several teams neglected to turn in their game play analysis

Games of Distinction

- Last Man Standing
 - Porter Koopas: Adam Tenney, John Stubbs, Paul Leary
- Wicked Pickle
 - Alison Byers, Kim Davis, Jeffrey Hodges
- Arinthe Island
 - Insane Exploding Ninja Robot Chinchilla of Doom!!1!
 - Jemima Thomas, Ben Levy, Ari Seidman
- Delivery Doods
 - David Sims, Kimberly Bohling
- Dice Baseball
 - Gabriel Darone
- DoomKitty, Game of Maximum Power!
 - Chelsea Collins, Katie Seim, Theodore Reid Jr.
- Ninjanomicon Piratependium
 - Brendan Seaman, Eric Carter, Ross Yancey

Game of Exceptional Merit

- ! (Bang)
 - Alexi Productions: Nic Kent, Vasily Koroslev
- Last Man Standing
 - Nick McSpadden, Devon Kelly-Sneed, Jeff Regalia

Movement

- In many games, you want the visual appearance of a game character to change as you move
 - If you move right, face right, etc.
- How can you accomplish this in Game Maker?
 - Make different sprite for each direction
 - Have animation loop for each direction
 - Then, when the character's direction changes:
 - Change sprite
 - Change direction of movement

Movement (con't)

- Moving a player-controlled character:
 - In the character's object, add events for
 - <press Up>, <press Down>, <press Right>, <press Left>
 - Might also want to add a key to stop motion
 - For each of these events, add actions:
 - Change the sprite (to the one appropriate for the new direction – located on “main1” pane
 - Alters the visual appearance for new direction
 - Add a “start moving in a direction” action to change the direction of movement to the new direction
 - Alters the actual movement of the object

Movement Demo

- Switch to Game Maker, and show a demonstration using the Pacman sprites that ship with Game Maker

Paths

- In many games, there are one or more computer controlled characters that move by themselves.
- Simplest way to do this is with a preprogrammed path of motion.
 - Character follows the path.
 - Think Mario Bros, or Castlevania on NES

Paths in Game Maker

- Add -> Add Path
 - Note that this is an advanced (pay version) Game Maker feature
 - Click out the outline of the path
 - Can follow path exactly, or follow a curve created by the bounding polygon
 - Can be useful to have is be a closed polygon, so you can have it repeat
 - Connect the path to an object:
 - Add a Create event for the object to follow the path
 - One of the actions is the follow-path action
 - Specify the newly created path

Rooms

- Rooms in Game Maker represent many things
 - Opening screens
 - Fields of play (levels, rooms, dungeons, villages, outdoors, etc.)
 - Help screens
 - Cut scenes
- As a result, it is important to be able to transition between rooms

Changing Rooms

- There are 4 actions that can change the room
 - Go to the next room
 - Go to the previous room
 - Go to a specific room
 - Restart the current room
- There are also two conditions for rooms
 - If the previous/next room exists
 - More on this later

Changing Rooms (cont'd)

- Since changing rooms are expressed as actions, to actually change rooms, they must be connected to an event
- Example events:
 - Collision with an object (like a door)
 - Going off the edge of the room (as in Zelda)
 - If all of the monsters in the level have been killed
 - If all available things have been collected
 - Last two require use of conditionals (more on this later)

Changing Rooms Demo

- Switch to Game Maker and show a demo of how PacMan colliding with a door causes a transition to another room

Persistent Objects

- By default, all objects are created fresh in each room
 - Health would go back to 100, all collected objects would go away, etc.
- Need a way to hold on to the state of the character across rooms
- Object persistence
 - Click on “object persistent” in object dialog box
- Demo: Make a sound that is played when Pacman is created. Note how the sound is not played in the new room when the Pacman object is persistent.