



Game Logic

Project 4

Due date: Wednesday, September 27th




WORCESTER POLYTECHNIC INSTITUTE



Introduction

- Third in a series of related projects
 - Will build towards working game
- Focuses on
 - Development of game objects
 - Game logic
- Using Game Maker



WORCESTER POLYTECHNIC INSTITUTE



Motivation

- At core of game are the rules
 - Such as rules on gameplay (ie- payoff matrices)
- More than that
 - Hit points
 - AI for computer-controlled objects
 - Obstacles
 - Interface objects ...
- Begin prototyping the game
 - Gain experience implementing and testing game logic



Overview

- Work in same group
- Use the treatment from Project 2
- Use the art from Project 3
 - Intent is *not* to more art or design (but can add - art is not "frozen").
- All effort on implementing a variety of objects
 - in Game Maker
- Evaluated based on
 - object activity
 - object interactivity
 - user interactivity
 - AI/reactivity
- Options
- Informal README with flexible grading





Details (1 of 4)

- At least 10 Game Maker Objects
 - Next project on Level Design so consider choices
- Each should have somewhat unique behavior
 - More than a copy or sub-class of another
- As a whole, your objects will meet the following criteria:
(Specific criteria next slide)



Details (2 of 4)

- Object Activity - Change state, reflected to the user in some fashion.
 - Ex: change in location (motion)
 - Ex: change in appearance (damaged object)
- Object Interactivity - interaction with other objects (i.e. - at least one changes state)
 - Ex: collision between two objects causes rebound
 - Ex: collision between two and pickup other item
- User Interactivity - respond to user input
 - Ex: arrow key presses move avatar
- AI/Reactivity - "intelligent" behavior in reacting to objects around it. Adapt as situation changes.
 - Ex: Object pursues hero once awake





Details (3 of 4)

- For testing, create 1+ Game Maker Rooms
 - Not meant to be playable levels (that's proj5)
 - Do not spend much time on the rooms themselves
 - Rather, use to test your objects (grader will use to evaluate),
 - Use as many rooms and as many copies as needed
- Write a short README (text file)
 - Describes the objects, behaviors, and which objects fill which criteria.
 - List the members of group
 - Grading criteria (next)



Details (4 of 4)

- Options screen/buttons
 - At least two options to influence game world
 - Ex: number of lives, health, game speed, difficulty...
- Tell how options work (how affect world and objects) in README





Grading Guidelines

<u>Criteria</u>	<u>Weight</u>
Object Activity	15%
Object Interactivity	15%
User Interactivity	15%
AI/Reactivity	15%
Options	5%
README	5%
Flexible	25%
- Distribute across 2-3 criteria, above	



Submission

- Turnin (see Web page for instructions)
- Game Maker .gmd file
 - Will have art, audio content embedded
- README Document

