

CSE1720

Week 03, **Class Meeting 08** (Lecture 06)

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Second level

Third level

Fourth level

Fifth level

Winter 2013 ♦ Thursday, January 24, 2013



Objectives for this class meeting

- Present voting results
- Conduct field research
- Create design specification



Voting Tabulation

NUMBER OF VOTES	Choice				
	1	2	3	4	5
shooter	13	2	3	1	4
puzzle	5	4	5	4	3
maze	4	5	5	5	1
ball and paddle	1	4	3	4	4
racing	0	3	3	5	4
keyboard targets (typing), string	0	2	2	1	3
trivia game	0	1	2	2	3
solitaire	0	2	1	2	1
paperboy	1	1	0	0	1

24 ballots received

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Results Calculation

	SUBTOTALS (# VOTES * WEIGHT)				
	1	2	3	4	5
shooter	65	8	9	2	4
puzzle	25	16	15	8	3
maze	20	20	15	10	1
ball and paddle	5	16	9	8	4
racing	0	12	9	10	4
keyboard targets	0	8	6	2	3
trivia game	0	4	6	4	3
solitaire	0	8	3	4	1
paperboy	5	4	0	0	1

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Voting Results

.	TOTAL
shooter	88
puzzle	67
maze	66
ball and paddle	42
racing	35
keyboard targets	19
trivia game	17
solitaire	16
paperboy	10

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The Shooter Game Domain

- Characteristics of these games:
 - player/shooter controls **avatar** (player has game world presence)
 - the avatar has **perspective** (first person vs third person)
 - the avatar has **targets** and faces **obstacles**
 - the game world has **physics**
 - ballistics, trajectories, collisions
 - the physics may or may not correspond to the real world
 - Avatar has resources
 - typically ammunition
 - constraints may be imposed

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“Field Research”

- divide into groups, one laptop per group
- group size should be 1-3 students

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Research Task

- read wikipedia page:
 - “Shoot ‘em up” page
- locate an on-line shooter game and play it
 - not a first-person shooter
- Answer question (next page)

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Design Specification

The written answers to the following questions are the beginning of the **design specification** for the game

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Questions

- what is the nature of the task?
- how is the gun controlled?
 - e.g., rotation, linear translation (1d or 2d?)
- what is the nature of the obstacles?
- what is the nature of the target?
- how is difficulty level implemented?
 - how do the characteristics of the obstacles change?
 - how do the characteristics of the target change?
 - how do the characteristics of the shooter change?

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Task

- create UML class diagrams to encapsulate each of:
 - the shooter
 - the obstacles
 - the target
- for each class, identify features that are needed.
 - Indicate whether the feature needs to be public or private