

Video Game AI, Spring 2013

Final Review

The midterm will be a mix of different question types (multiple choice, true/false, short answer, long answer, etc.) Students are responsible to know all material assigned readings in the book, as well as the material covered in the online videos and lectures not found in the book. Following is an overview of major themes not previously covered in the midterm. *The final exam is comprehensive, so it will include material from the midterm review sheet.* More emphasis will be placed on material covered in programming homework assignments.

Pathfinding Representations:

- Grids, Waypoint Graphs, Navigation Meshes
- Major components: Localization, planning, modifications, memory overhead
- Questions in this section will test your recall of properties of representations and evaluation of a representation for a particular task/game.

Behavior Architectures

- Finite State Machines
- Decision Trees
- Behavior Trees
- Scripting (scheme)
- Utility (Dave Mark guest lecture)
- Questions in this section will test your ability to describe how an architecture works, to compare architectures and to use architecture primitives to create behavior.

Other technologies

- Tactics (Influence Maps)
- Tactical Pathfinding
- Learning
- Crowd-sourced behavior/dialog (Jeff Orkin guest lecture)
- Questions in this section will involved recall describing the use of the technologies and when they might be used.

Other

- Style / structure decomposition
- What is this, and how does it apply to AI?