

Video Game AI, Spring 2013
HW #2
Due April 16 at 12 midnight

This assignment is to be done individually. The assignment will be turned in via your course SVN account. (via <https://svn.cs.du.edu/courses/comp3703/s2013/>).

Given the example code on the course web site, fill in the behaviors linked to the buttons on the bottom of the page. Some of these behaviors are partially implemented already, but need improvement (e.g. seek sometimes turns the wrong direction and matching heading while wandering currently just matches its heading).

The behaviors and their descriptions are:

- Individual Behaviors

- **Seeking** - seek the given point touched on the iPad interface.
- **Arriving** - seek and arrive at the given point.
- **Flee** - flee from the given point.
- **Wander** - wander around randomly.

- Two-agent Behaviors

- **Seek/Flee** - two agents, where the first seeks the second, and the second tries to run away.
- **Chase/Flee** - like seek/flee, except the chasing agent predicts where the fleeing agent is going to go.
- **Chase/Wander** - like seek/flee, except that the second agent wanders randomly.

- Group Behaviors

- **Match/Wander** - all agents should wander but generally keep the same heading.
- **Separate/Wander** - all agents should wander but try to avoid other agents.
- **Flocking** - agents should generally group together and move in the same direction without getting too close.

All of the changes made to a unit should be made inside the SteeringUnit class.