

## Final Project

Due Date: **3/17 11:59pm**

- Submit program to perform in your student directory
  - Sub directory called: /BattleBots\_Final/...
  - Or place a readme text on where to find it

### Description:

You will create an AI driven bot for the battle bot game. You must have your bot search and destroy the other enemy bot in the game. There are drops in the game as well that can help you defeat the other bot.

Note you don't have to finish this to work on the project, but you must complete it to get credit for Homework 5.

### Problems:

Now at the bare minimum your bot must search and destroy the other bot. So you could do this by any means, even a state machine. How the bot is implemented is up to your own creativity. However we have discussed concepts in class that can improve your bots skill in battle!

Recommend Strategies to Implement, (Not Required for turn in, but is required for the homework 4 & 5)

- Build Navigation Graph and a Search Algorithm for your bot to use to find the Enemy bot or items in the game
- Build a Goal Driven Bot
  - Implementing goal driven behavior to seek and destroy the enemy

### Validation:

*Simple check list to make sure that everything is checked in correctly*

- Program compiles and runs without crashing?
  - Program warning free?
  - Make sure program build without errors or level warnings
  - Project should be able to run without crashing
- Did you write your pdf file?

- Your code needs to be a 2013 solution and project
  - Check MINIMUM files
    - Suggest a cleanme.bat
    - No - \*.pdb, \*.suo, \*.sdf, \*.user, \*.exe, \*.log, ...
      - If it gets generated, do not submit it to performe
    - No - /Debug dir, /Release dir, /ipch dir
    - Seriously do not include \*.sdf or ipch directory
    - Make sure what's checked in works and runs!
  - Only validating Debug mode (I'm ignoring Release Mode)
    - Cleaning project triggered from the IDE
    - Rebuilding project triggered from the IDE
- see Performe on how to verify what I see when evaluating your project
  - All I'm going to do on my side
  - Download your student directory
  - Start the IDE by clicking your sln file
    - Clean solution
    - Build solution
    - Run as stated above

### Troubleshooting:

- Baby steps
  - You'll be in trouble if you don't
- This is so slow and painful, takes forever to get working.
  - You cannot escape the agony of this part
  - Just do it.
- Hard to debug print for this project
  - Suggest using stream or sprintf to a buffer