GettingStarted.org

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Contents

1 Getting Started

1.1 Download Packages

Download the appropriate tools_linux.zip/tools_windows.zip and the python_starter_package.zip from blackboard. These will contain everything you need to get started! The python starter package contains some barebone code for you to interact with the environment and the tools.zip file contains some barebone tools that you can use to simulate the game on your local machine!

Some files/folders of interest are:

- python_start_package/MyBot.py: Sample bot.
- tools/sample_bots/python: Some sample bots that are fully functional and your best bet for a quick way to get started.
- tools/play_one_game(.sh/.cmd): Mac/Linux will use the .sh version and Windows users will use the .cmd version. Explanation of how to use this is below.
- tools/maps: Sample maps to test your bots on.

1.2 Running the Code Locally

To get started coding and testing, follow these instructions, we will show you how to get the GreedyBot to control your ants:

- To first see what these files do, run the following line of code:

  cd tools/ ./play_one_game.sh (or double click .cmd in Windows)

- This will play a game of 1000 turns between 4 sample bots and display the game in your browser

- NOTE: When this runs, our browser will give you a bunch of warnings, simply click "Continue"

- In order to change the bots, edit the play_one_game.sh file. It should be pretty clear what parameters are what. But the basics are:

  - turns: the number of turns to run the game before stopping
  - map_file: the file containing the map to use
  - lines with "python sample_bots/<samplebot.py>": this is how the program chooses which bot to run, simply

- To get started, simply copy/paste one of these bots into another file and edit it. We will provide you with more specifics and direction soon!

1.3 Battling your Classmates (Upload to the Server)

When you feel you're ready to test your bot in the "real world" go ahead and upload it to the competition server! Please realize that there is another process running in the server's background that randomly selects bots and then plays them against one another over time. So you will not be able to see your bot play immediately, though we will try to make the server process as many as possible.

- Zip all your files (make sure it's a .zip) and make sure the zipped directory contains a file called MyBot.py that is setup to import from YOUR code. Please refer to the example MyBot.py that came with the package for reference.

- Go to aichallenge.cis.upenn.edu

- Click on "Sign Up" to register an account (please only submit your bot once per team). And be sure to verify your account immediately on the website itself.
- Sign In
- Click on "Upload Your Code" and follow the instructions.
- And wala! Soon your bot will be competing with all the rest!
- NOTE: We will have some random test bots in the crowd for verification purposes and so that you can test your bots against some basic bots in case your classmates aren't yet ready.