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# Overview:

To Do.

# How to build:

## Install Python:

Download and Install Python 3.35 32-bit. This should create a folder named "Python33" on your C:/ drive if installed with default settings. If you installed at a different location you will need to change the include and link settings in the project to point at the custom install location. This is done by changing the include and library directories in the "Common Project Properties" property page. You can find this property page through the property manager in any one of the projects.

## Install Boost:

Download Boost 1.57 from boosts website, and extract it to a directory. Once extracted run the "bootstrap.bat" file this will create "b2.exe" and "bjam.exe". After running bootstrap open command line and change directory to the extracted folder, and run the command "b2 --with-python runtime-link=static toolset=msvc-14.0". This command will build just boost python which is the only thing from the boost libraries that this project uses. If you are having trouble building the boost library it is possible that you may have to add Python to your environment variables path manually.

## Install Game and Mod:

Download and install Doom 3 and Doom 3 ROE, if installed through steam be sure to run the games at least once before changing any settings so there are no issues with product keys. Copy the "buddybots" folder to the directory where the game exe is installed. If downloaded through steam with default setting the location will be "C:\Program Files (x86)\Steam\SteamApps\common\Doom 3\".

# Using the Mod:

After installing the mod and running the game open the console by pressing '~' scroll up past the many warnings until you see "Buddy Bots Initialized" this will let you know that the mod has been installed and loaded properly. You can add bots to multiplayer matches by using the "addBot" command in the console followed by the SpawnClass of the bot you are attempting to spawn, this command can be done before or during the match. Currently the bots rely on the AAS (Area Awareness System) and the only multiplayer maps that have this information built for them are the CTF maps. The mod will crash if you attempt to load other multiplayer maps.

# Building a Bot:

## Creating Bot .def file:

The "YourNameHere.def" file is an essential file to building a bot, it allows the game engine to spawn your bot entity into the match and provides all the necessary information needed to link your scripts to the actual entity in game.  
entityDef DefaultBot {

"inherit" "bot"

"author" "John Wileczek"

"bot\_type" "Script"

"scriptclass" "DefaultBot"

"ui\_name" "Default Bot

}

Only a few pieces of information need to be set in the entity def to create a valid bot:

author - Name of bot author.

bot\_type - Type of bot to run, currently "Script" is the only supported type. Looking to add "DLL", and "Code" in the future.

scriptclass - This needs to match the name of the python class you create for your bot.

ui\_name - What the name of your bot will appear as in game.

## Creating python script file:

The second essential file to creating a bot is a python script containing your bot class that is properly named to match the "scriptclass" in the .def file. The name of the script file that contains the class should also be named accordingly "YourBotName\_main.py".

class DefaultBot(afiBotBrain):

def Think(self,deltaTimeMS):

botInput = aiInput\_t()

return botInput

def Spawn(self,spawnDict):

return

def Restart(self):

return

Additional script files can be created and used for the bot, but the above script file must be present for the bot to be valid. If you do create additional script files when you go to import them use all lowercase in the name (i.e. "StateMachine.py" would be imported as "from statemachine import \*"). This is due to the FileSystem used in the engine when your script files are copied.