

Cain, Billy

From: Hughes, Jason
Sent: Wednesday, February 19, 1997 10:52 PM
To: ML WING DESIGN; ML WING V PROGRAMMERS
Subject: New AI commands/stuff completed:

NEW! EXCITING! WILL KICK YOUR ASS!

The following new AI commands are hooked up and ready to go for testing:

- AI_AddToAttackList
- AI_ClearAttackList
- AI_RemoveFromAttackList

- AI_AddToDefendList
- AI_ClearDefendList
- AI_RemoveFromDefendList

- AI_AddToIgnoreList
- AI_ClearIgnoreList
- AI_RemoveFromIgnoreList

- AI_Attack

Here's the scoop:

Take any ordinary object. Make it be pissed off at another object by `AI_AddToAttackList(enemy_name,priority);` This, by itself, does nothing but put it on the queue to be killed when the object starts attacking. THIS DOES NOT MAKE IT START FIGHTING. You can add, remove, or clear the whole list at once. Call `AI_Attack();` when the time for fighting is ripe. `AI_Attack` will not return until EVERYONE on the list is dead. So, don't go putting the player on the list unless you're ready to have to kill them yourself (the player is invulnerable).

1. Notice that "priority" is the second parameter. The higher the number, the more important the object is to be killed. This will sometimes break ties in otherwise equally matched targets. For the moment, if you add many things to the attack list of an object, it always attacks the closest one until it is dead, then moves on to the next object on the list.

2. Eventually, the closest ship, weakest ship, strongest ship, current pilot's flying skill, ships currently unengaged in combat, and priority will factor into the decision for the next target.

3. Ignore list will eventually prevent an object from being put on the "shit list" (attack list) when firing on the ship. The ship will ignore any threats on that list completely. This can be great if you want to have a surgical strike on a particular object, just put everyone on the ignore list and it'll suicidally head for the object and destroy it, or be killed first.

4. There is no number 4.

5. Defend list will eventually list all the things that the ship defends. When one of those objects gets attacked by a new target, it will make a communication to the defending ship and ask for assistance. This is how the player gets called as well (real video/audio comms). Highest priority on the list gets the comm through first.

6. Currently the attack is stupid and will always head straight for the target and shoot. Enhancements on the horizon. Be patient.

JH

To programmers: This is a big big step towards the final AI model I'll be following. I just thought you'd like to know it's approaching.