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Video Demos

Distraction ending
https://www.youtube.com/watch?v=7XGp1ovpxzQ
Negotiation ending
https://www.youtube.com/watch?v=uEupNHY51s8

Controls

W and S: To move the camera
Press and hold the spacebar: To have the agents start celebrating in Stage Three

The story

My project has 3 stages: a beginning, middle, and end.

Stage One

The first stage (the beginning) has the two agents greet and have a small conversation, and have one of the two agents press the button to open the door. To introduce a small amount of non-linearity to the story, I made it so that the agents would use different gestures in a different order on each run during the conversation at the beginning.

Stage Two

The second stage (the middle) has the two agents confront an agent that has blocked the way across the bridge. We will call this agent the bully agent. After getting blocked by the bully agent, the two other agents will retreat behind a wall to discuss their plans to deal with the bully agent. They have two options (which will correspond to two different endings in stage three): one option is to negotiate with the bully agent to let them through, another option is to distract the bully agent by throwing an object over the wall, which will distract the bully agent while the other agents sneak through. I used my custom node controller, which simply is a selector that picks a random child node to decide what the two agents will do to deal with the bully agent.

Stage Three

The third stage (the end) has the two agents getting past the bully agent and walking across the bridge. There are two different scenarios that can happen when the agents get to the end of the bridge, which was influenced by the actions that they took in stage two. If the agents decide to deceive the bully agent by distracting the bully agent with an object, then one of the two agents will press the button to retract the bridge, which will cut off the bully agent's path to getting to them. But if the agents decide to negotiate with the bully agent, the two agents will simply walk across the bridge and stop. Regardless of the scenario the two agents chose, the user will have

the option for them to start celebrating when they get to the end platform. To make the agents celebrate, the user will simply need to press and hold the spacebar.

Custom Node Controller

This is a simple node controller that selects a random child node that was added to the children array. This was very helpful in implementing non-linearity into the store by having different events happen on each run. For example, in stage two, the agents have a random chance of either negotiating with the bully agent or distracting the bully agent by throwing an object.

Non-IK Affordance

I used quite a few non-IK affordances throughout this project. I implemented some helper affordances to get basic behaviors added to the agents, such as navigating to waypoints, orienting the agents to look at other agents, having the agents look at an object and etc. I also added affordance, such as getting agents to greet/converse with one another using different gestures (these gestures will be different from run to run).

IK Affordance

I used a couple of IK affordances, such as pressing a button to either make the door open or retract the bridge. I also implemented the IK affordance to have an agent pick up an object and throw it.

[NOTE] Behavior tree drawing

The behavior tree drawing is a very very high level visualization of the behavior tree that I implemented because there are quite a lot of sub behavior trees that would be composed of basic behaviors such as navigating, looking, making gestures, and so on and each of these would be completely different from one another.