CH7_010

AIPLAYER: LOOK AT OBJECT

Exercise Files

Starter – "Kit/gpgt/server/scripts/gpgt/chapter7/exercise010.cs"
Answers – "Kit/gpgt/server/scripts/gpgt/chapter7/answers/exercise010_f.cs"

Exercise Mission

Chapter 7: "010 AIPlayer: Looking at an object"

Synopsis

In this exercise, we will learn how to make the bot aim at a player (an object) while walking around the path.

Prerequisites

1. ch1_001.pdf "Using The Kit"
2. ch3_002.pdf "GameConnection: Named Connections"
3. ch7_009.pdf "AIPlayer: Look At Position"

Exercises

1. Aiming At an Object (pg 2)
2. Aiming At Player's Position Instead (pg 4)

AIPLAYER: LOOK AT OBJECT

1 Aiming At an Object

Goal: Make the bot aim at a player while walking around a path.

Starter Code: This exercise is almost the same as the last exercise (009) except we want the bot to aim at us (our player object). You are provided with a partially implemented method (onReachDestination). Your job is to modify this method so that the bot will aim at the player every time it crosses a new node in the path (calls this callback).

```
function lookAtObjectBot::onReachDestination( %DB , %theBot )
{
    %pathNode = %theBot.myPath.getObject( %theBot.currentPathNodeNum );
    %pathNode.visibleMarker.setSkinName("red");
    %theBot.currentPathNodeNum++;
    if( %theBot.currentPathNodeNum > 7 ) %theBot.currentPathNodeNum = 0;
    %pathNode = %theBot.myPath.getObject( %theBot.currentPathNodeNum );
    %theBot.setMoveDestination( %pathNode.getTransform() , false );
    %pathNode.visibleMarker.setSkinName("green");

    // 1
    // ?????
}
```

Steps:

1. Uncomment the ????? and write code to replace it that will make the bot aim at the position of the selected aimNode. Also, while aiming, we don't want the bot to aim exactly at the player, but at 1.5 world units above its position.

Output Goal:

If you run the mission after editing this code, the AIPlayer will walk around the path in a circle and aim at the player, adjusting its aim according to the player's position on every new node it reaches.

Hints:

1. Think back. We talked about how standard Torque starter kits have code to store information regarding the player's ID somewhere, but where?

SAMPLE

Questions:

1. If you walk around, how does the bot respond?

2. What is our motivation for aiming above the Player's position?

3. What happens if we move the aiming code into the exercise starter function (startexercise008), or into the bot's onAdd callback instead?

2 Aiming At Player's Position Instead

Goal: Modify the code to aim at the player's position and observe what happens.

Questions:

1. If you walk around, how does the bot respond?