

CH7\_006

EXERCISE

# AIPLAYER: VARIABLE SPEED #1

## Exercise Files

*Starter – "Kit/gpgt/server/scripts/gpgt/chapter7/exercise006.cs"*

*Answers – "Kit/gpgt/server/scripts/gpgt/chapter7/answers/exercise006\_f.cs"*

## Exercise Mission

*Chapter 7: "006 AIPlayer: Variable speed #1"*

## Synopsis

In this exercise, we will learn how to set a bot's initial movement speed to some arbitrary fraction of its full speed.

## Prerequisites

1. *ch1\_001.pdf "Using The Kit"*

## Exercises

1. *Add Dynamic Field to Datablock (pg 2)*
2. *Setting Initial Speed (pg 3)*

# AIPLAYER: VARIABLE SPEED #1

## 1 Add Dynamic Field to Datablock

**Goal:** Use the bot's datablock to hold speed information about our bot using a dynamic field.

**Starter Code:** You are provided with a partially defined datablock definition (variableSpeedBotA).

```
datablock PlayerData( variableSpeedBotA : BlueGuy )
{
    category = "gpgt";
    //maxAISpeed = ?????
};
```

**Steps:** Please uncomment the maxAISpeed dynamic field declaration and set it to 25% of the bots maximum speed.

**Output Goal:**

None.

**Hints:**

1. This value has nothing to do with the persistent speed fields. We're talking about a relative speed.

# AIPLAYER: VARIABLE SPEED #1

## 2 Setting Initial Speed

**Goal:** Learn to use one of the bot's callbacks to set an initial speed for this bot.

**Starter Code:** You are provided with a partially defined method whose name is not given, but that is scoped to the bot's datablock namespace.

```
// 1
/*
function variableSpeedBotA::?????( %DB, %theBot )
{

// 2           // ?????
}
*/
```

### Steps:

1. Please uncomment the body (remove /\* and \*/ around the code. Then, please decide which callback this is and replace ???? with the correct callback name.
2. Please add the code needed to set this bots speed to the value stored in its datablock (from the work we did above.)

### Output Goal:

If you run the mission after editing this code, the AIPlayer will walk in a circle, following the path, and will only move at a rate of 25% of its maximum rate.

### Questions:

1. What would happen if we tried to set the rate to 250%?