

CH7\_004

ANSWER

# AIPLAYER: RANDOM PATH

## 1 Reinforcing Skills and Random Node Selection

### Finished Code:

```
// 1 - Create a path for our AIPlayer to follow.
// 2 - Spawn an AI player user our datablock.
// 3 - Assign the path to our bot.
// 4 - Select a random first node.
// 5 - Start the AI player moving towards the initial node.
function startexercise004()
{
    // 1
    exerciseCenter.createSimplePath( "testPath" , 15 );

    // 2
    %theBot = AIPlayer::spawn( exerciseCenter.getTransform() ,
                              randomPathFollower );

    // 3
    %theBot.assignPath( testPath );

    // 4
    %theBot.currentPathNodeNum = getRandom( 0 , 7 );

    // 5
    %pathNode = %theBot.myPath.getObject( %theBot.currentPathNodeNum );
    %theBot.setMoveDestination( %pathNode.getTransform() , true );

    %pathNode.visibleMarker.setSkinName("green");
}
```

# AIPLAYER: RANDOM PATH

## 2 Random Navigation

### Finished Code:

```
// 1 - Select a new (random) destination node in the path.
// 2 - Start the AI player moving towards the next node.
function randomPathFollower::onReachDestination( %DB , %theBot )
{
    %pathNode = %theBot.myPath.getObject( %theBot.currentPathNodeNum );
    %pathNode.visibleMarker.setSkinName("red");

    // 1
    %theBot.currentPathNodeNum = getRandom( 0 , 7 );

    // 2
    %pathNode = %theBot.myPath.getObject( %theBot.currentPathNodeNum );
    %theBot.setMoveDestination( %pathNode.getTransform() , true );

    %pathNode.visibleMarker.setSkinName("green");
}
```

### Answers:

1. PlayerData, ShapeBase, GameBase, ..., etc. We could also have created a new namespace using the className datablock field. See code below for example.

```
datablock PlayerData( randomPathFollower : BlueGuy )
{
    category = "gpgt";
    className = speedy;
};
```

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```
// 1 - Select a new (random) destination node in the path.
```

## AIPLAYER: RANDOM PATH

```
// 2 - Start the AI player moving towards the next node.
function speedy::onReachDestination( %DB , %theBot )
{
    %pathNode = %theBot.myPath.getObject( %theBot.currentPathNodeNum );
    %pathNode.visibleMarker.setSkinName("red");

    // 1
    %theBot.currentPathNodeNum = getRandom( 0 , 7 );

    // 2
    %pathNode = %theBot.myPath.getObject( %theBot.currentPathNodeNum );
    %theBot.setMoveDestination( %pathNode.getTransform() , true );

    %pathNode.visibleMarker.setSkinName("green");
}
```