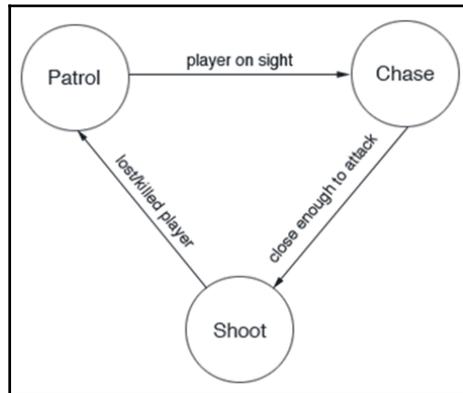
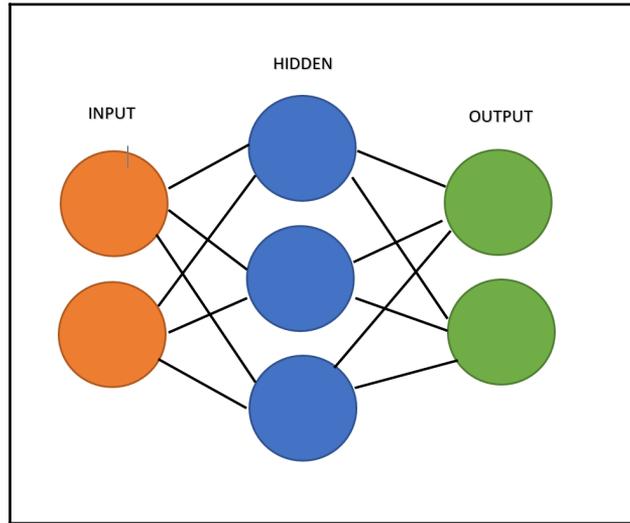
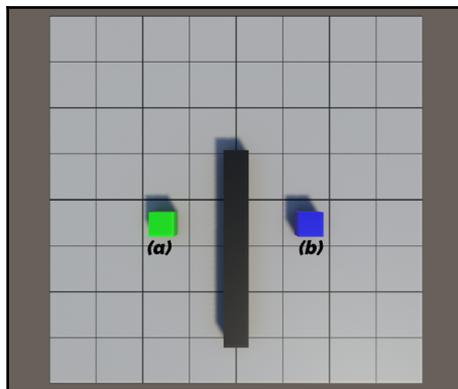
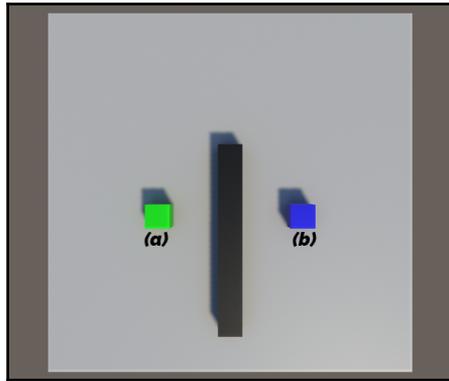
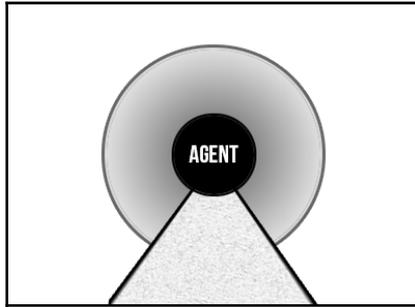
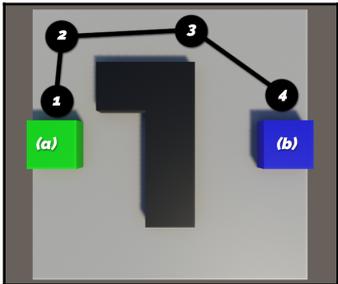
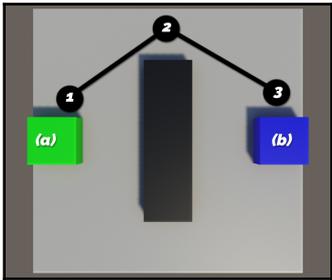
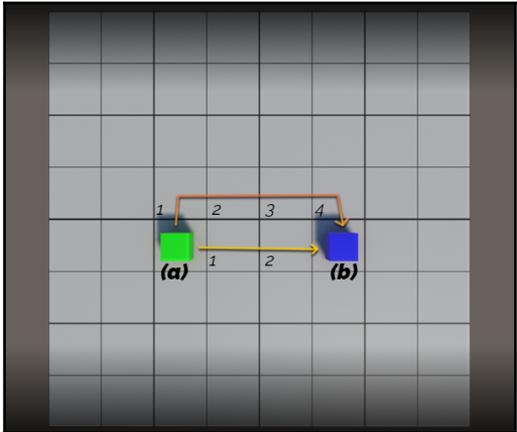
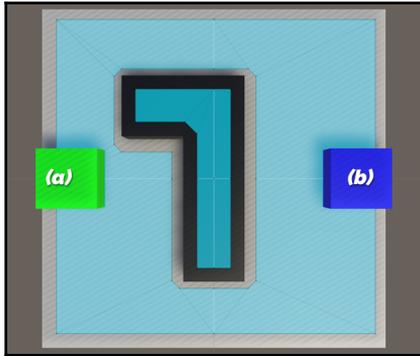


Chapter 1: The Basics of AI in Games

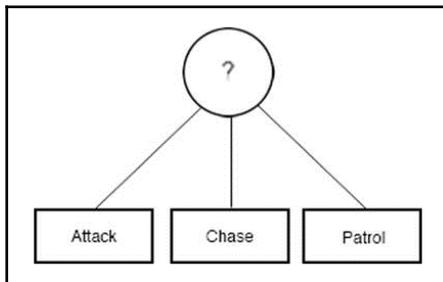


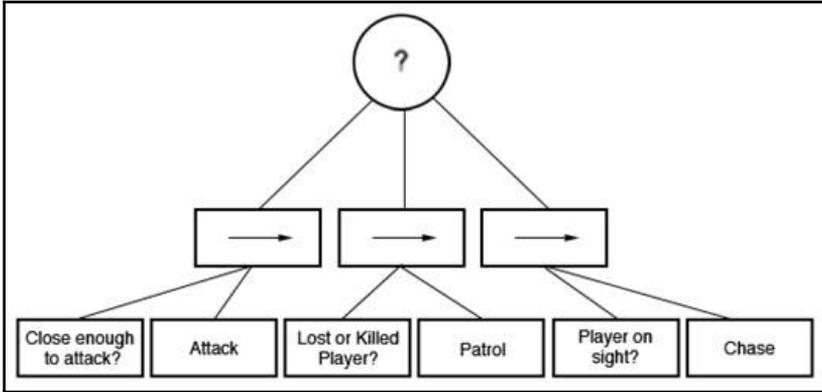




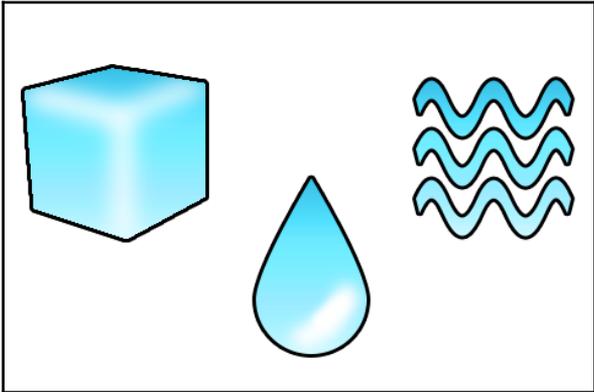


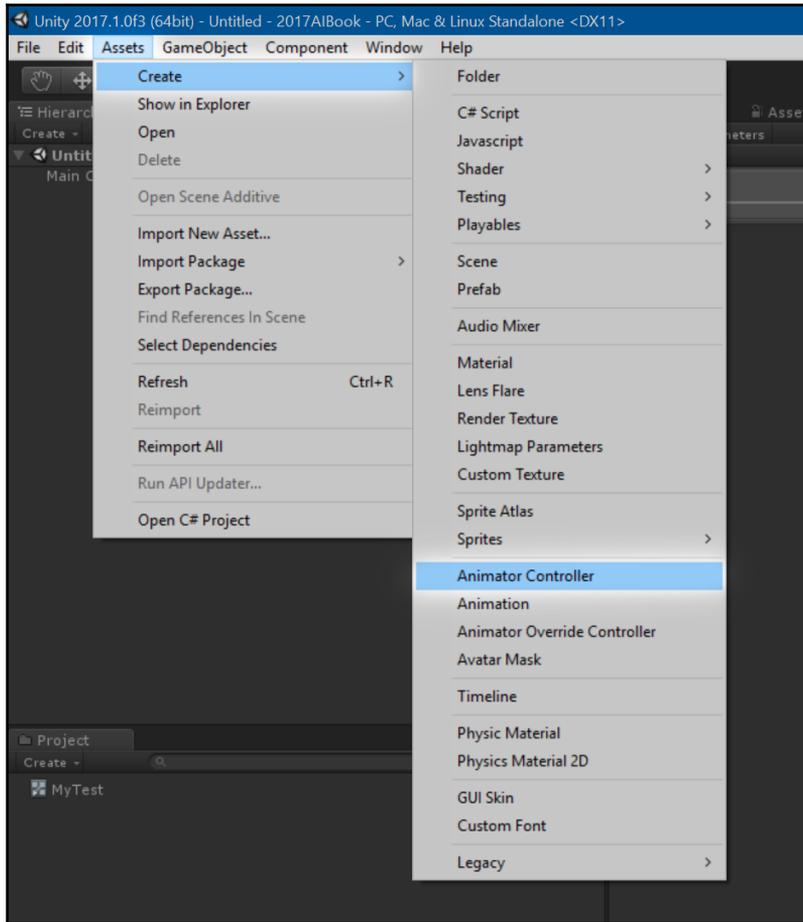
Player on sight?	Attack
Lost or killed player?	Chase
Close enough to attack?	Patrol

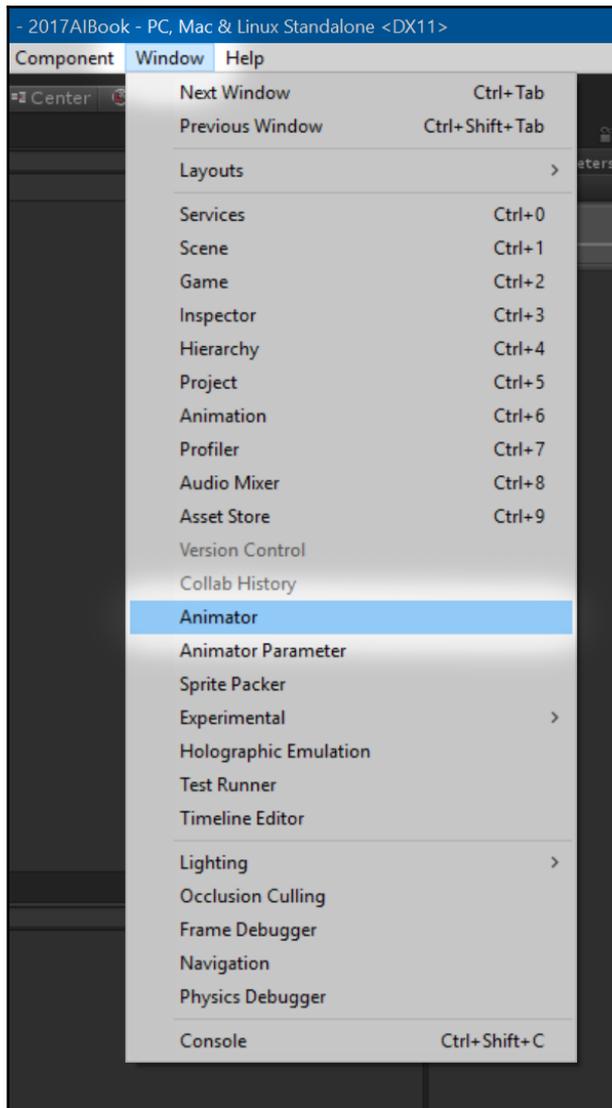


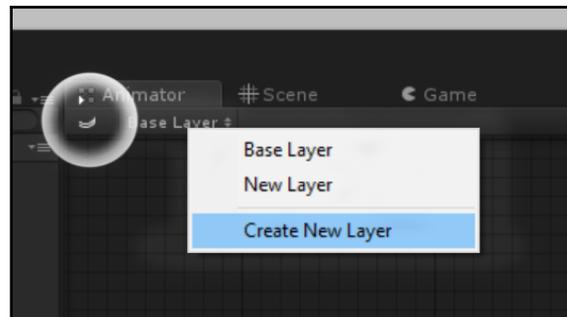
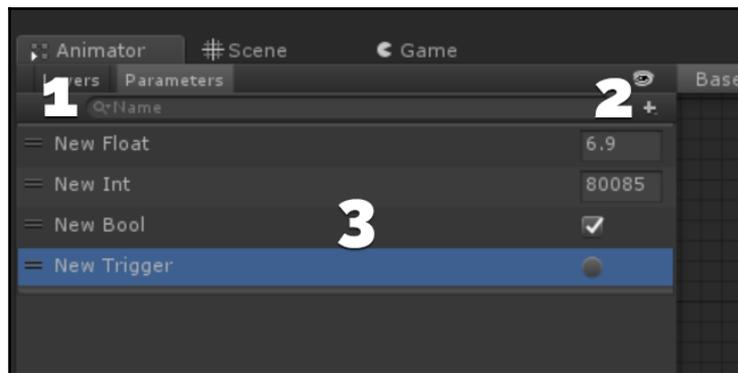
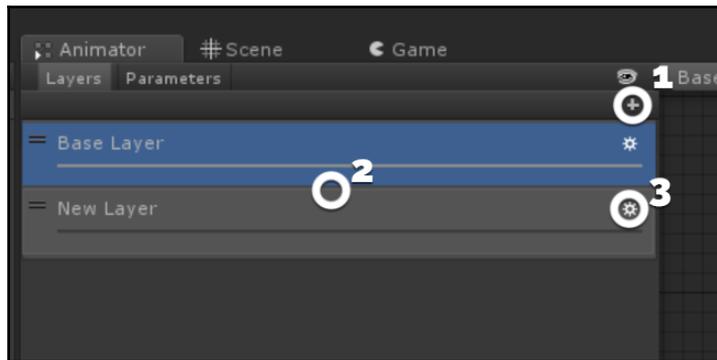


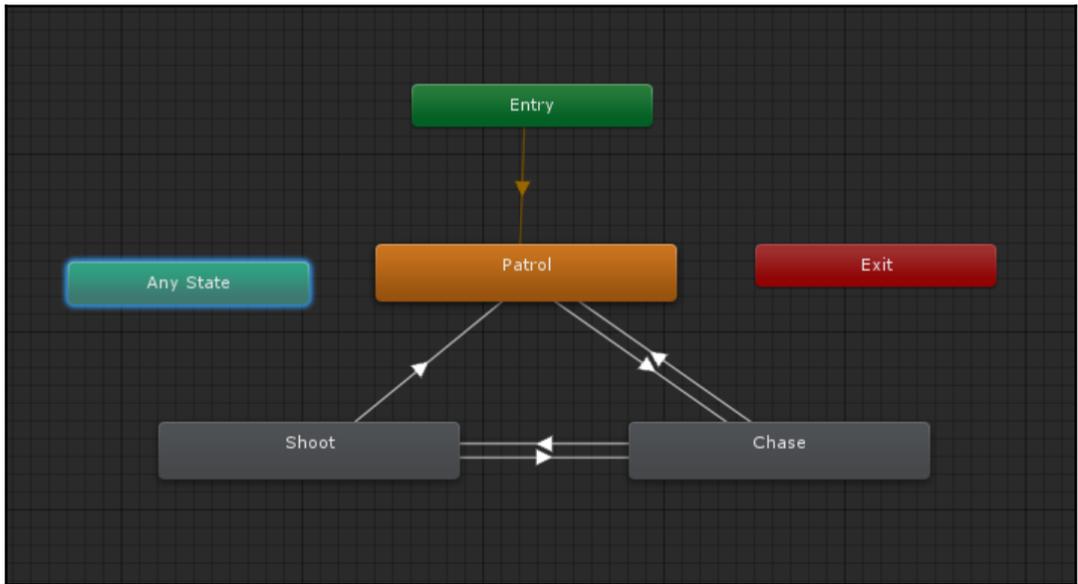
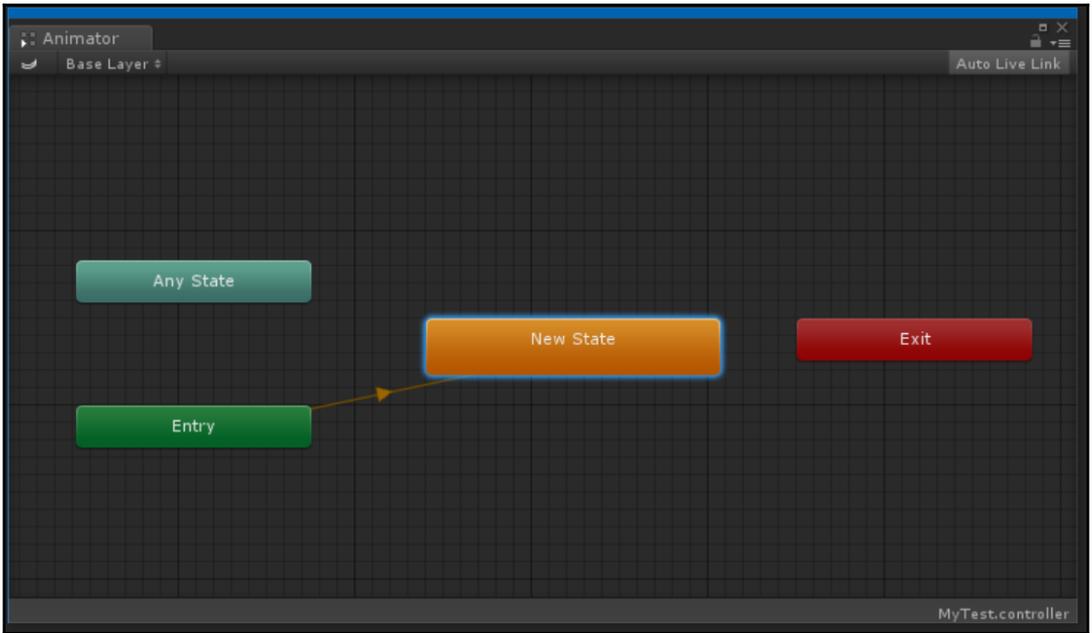
Chapter 2: Finite State Machines and You











Transitions Solo Mute

Patrol -> Shoot -

Patrol -> Shoot [?] ⚙️

Has Exit Time

▶ Settings

⚠️ Cannot preview transition: source state does not have motion

Conditions

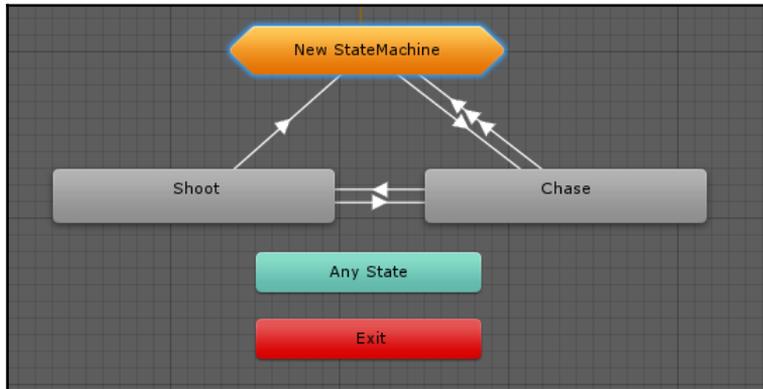
List is Empty +

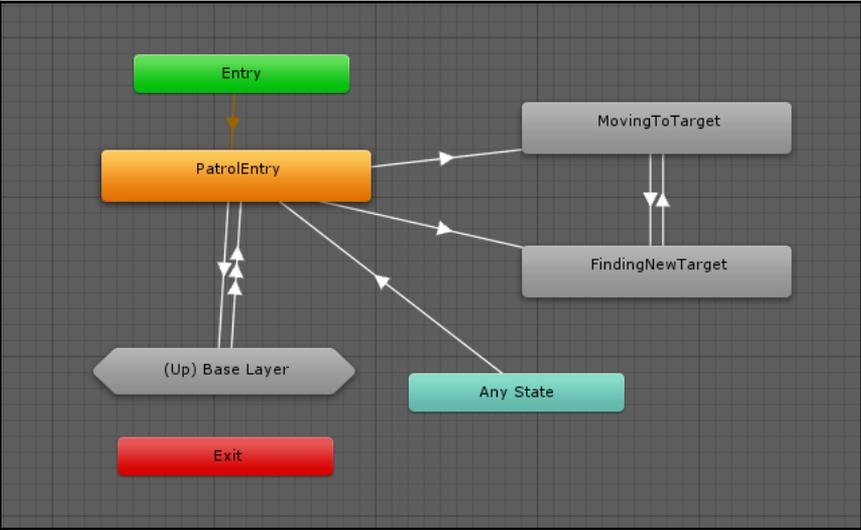
Conditions

= distanceFromPlayer Less + 5

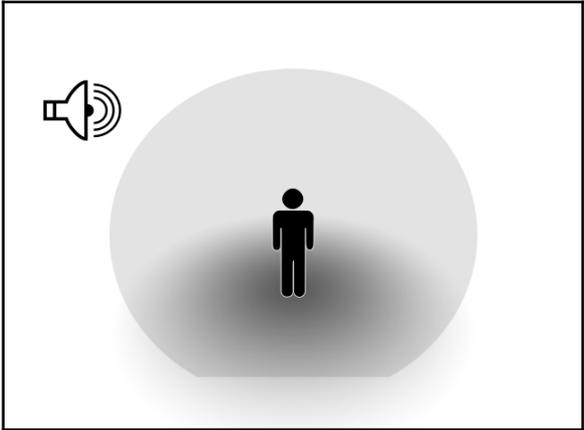
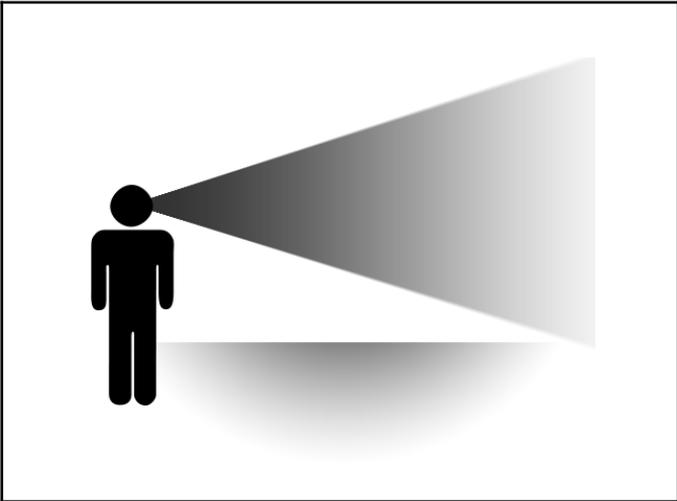
= isPlayerVisible true +

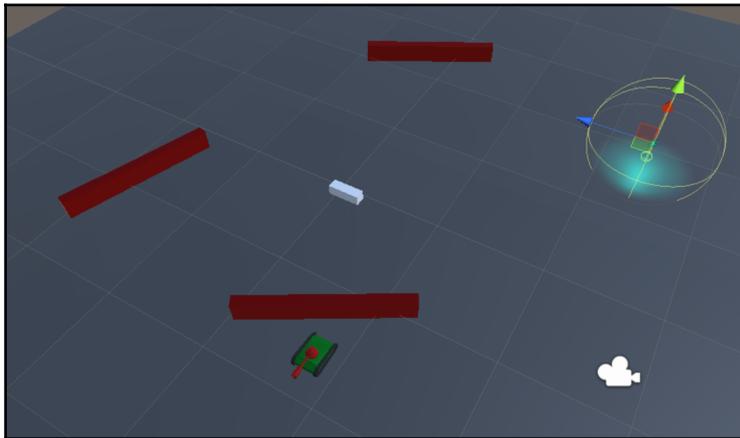
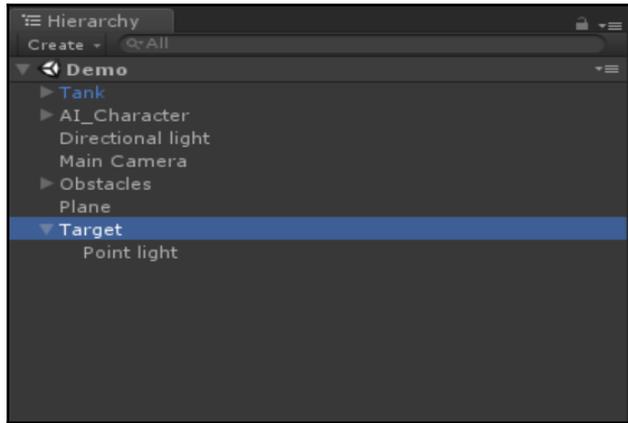
+ -

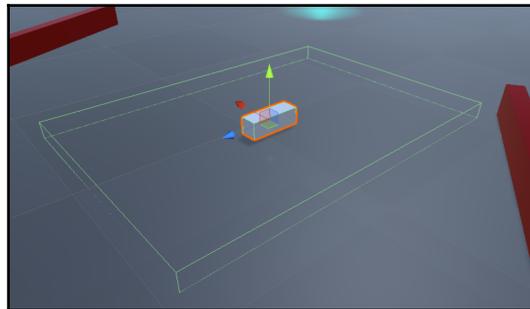
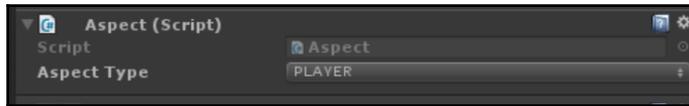
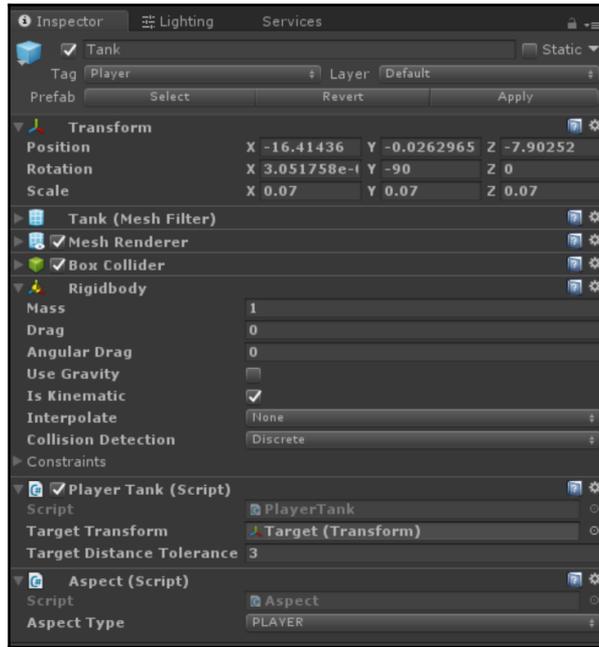


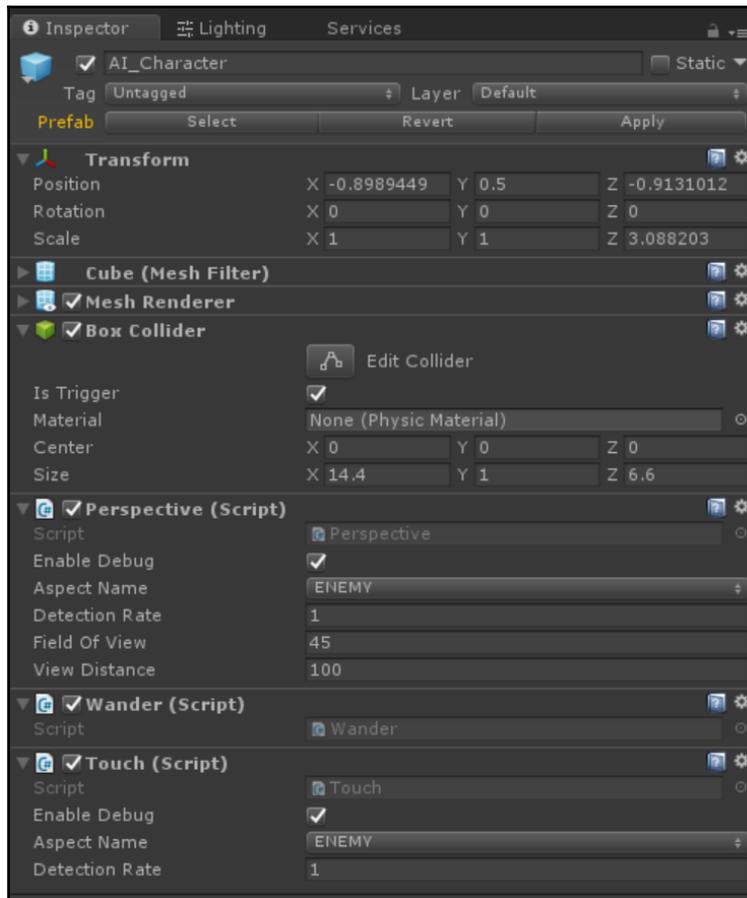


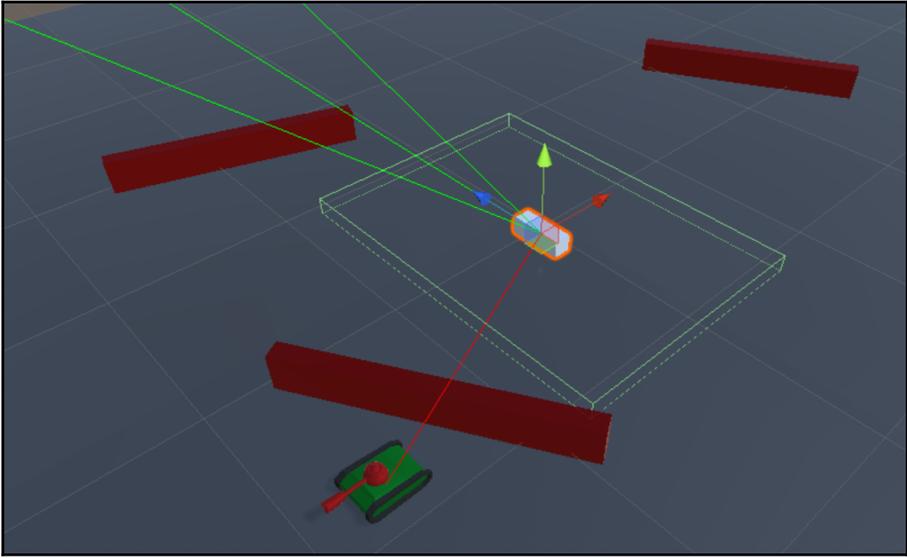
Chapter 3: Implementing Sensors



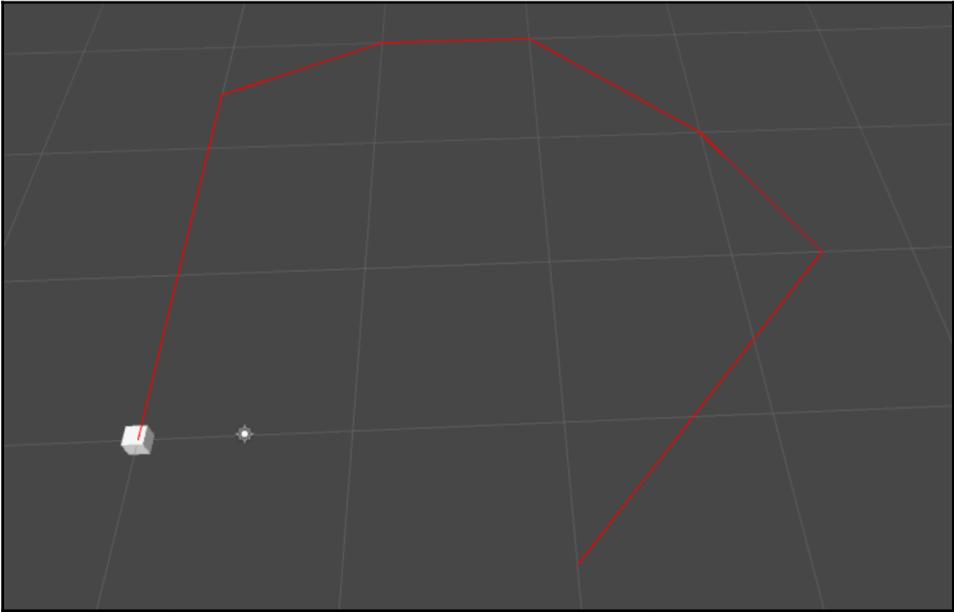


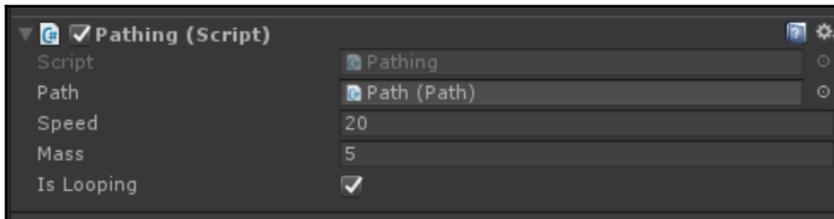
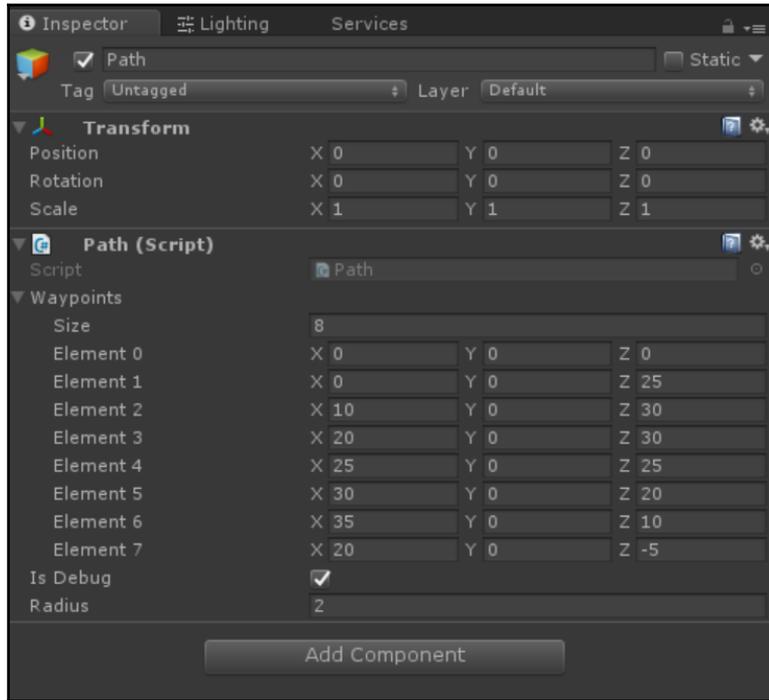


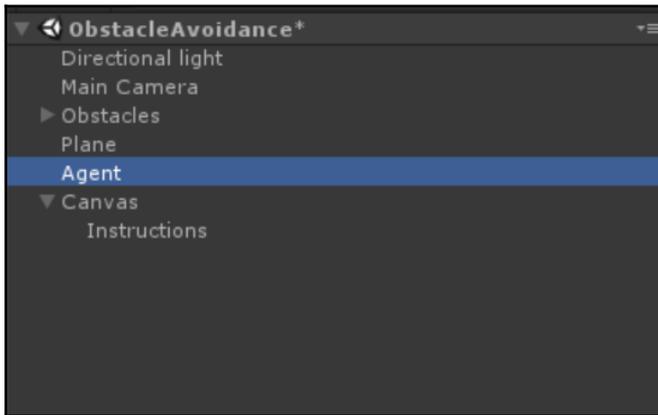
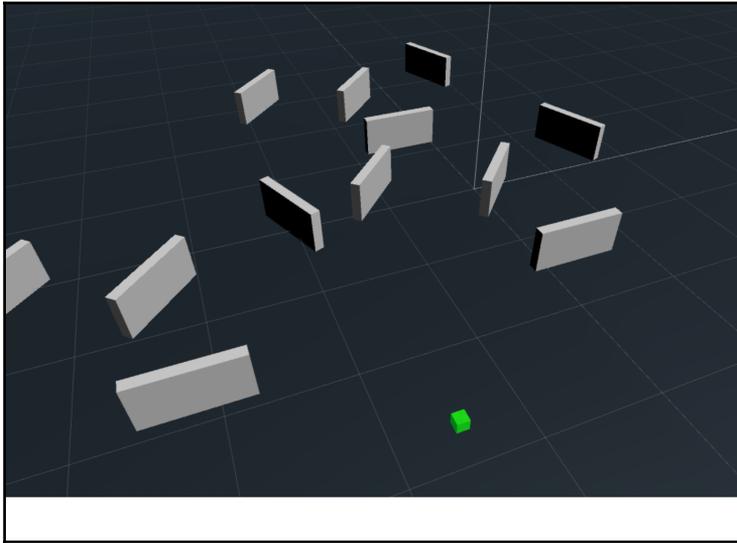


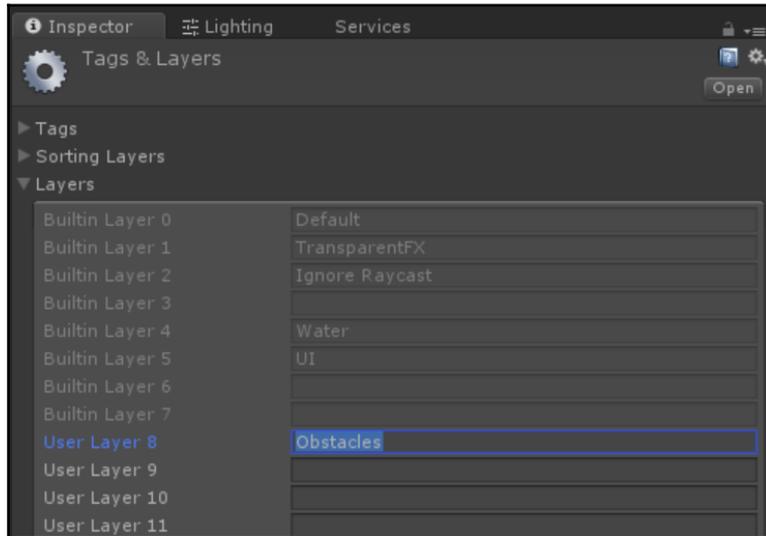
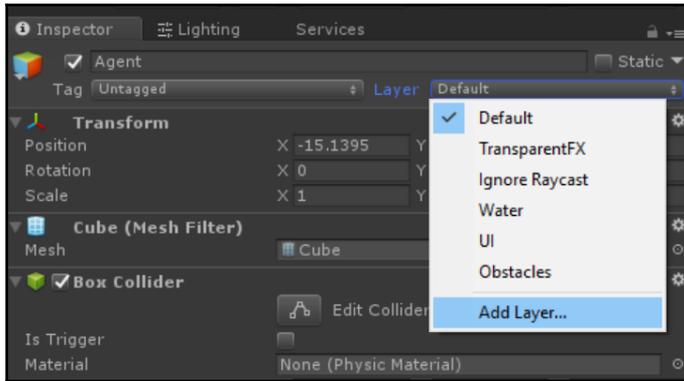


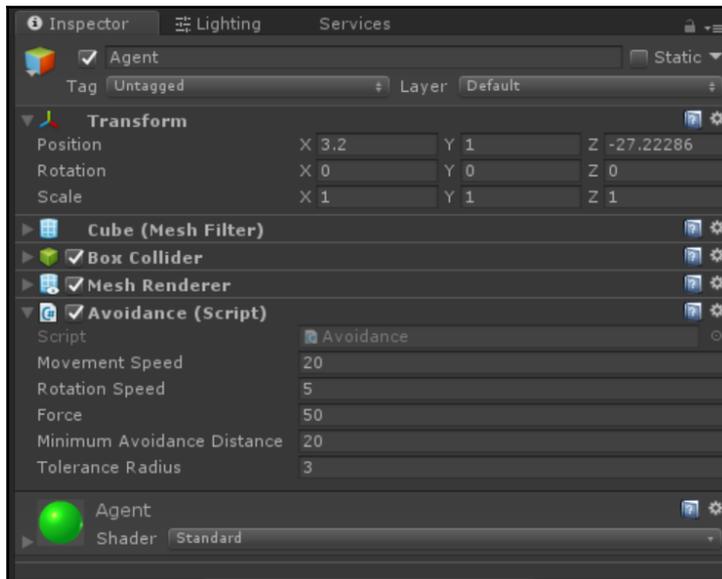
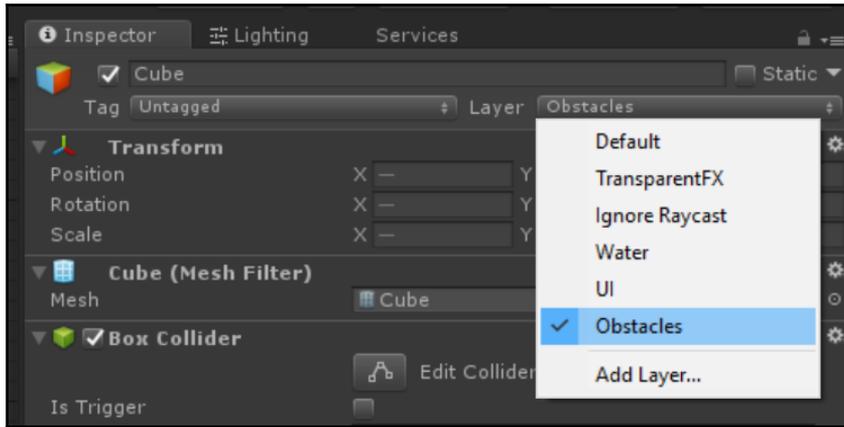
Chapter 4: Finding Your Way

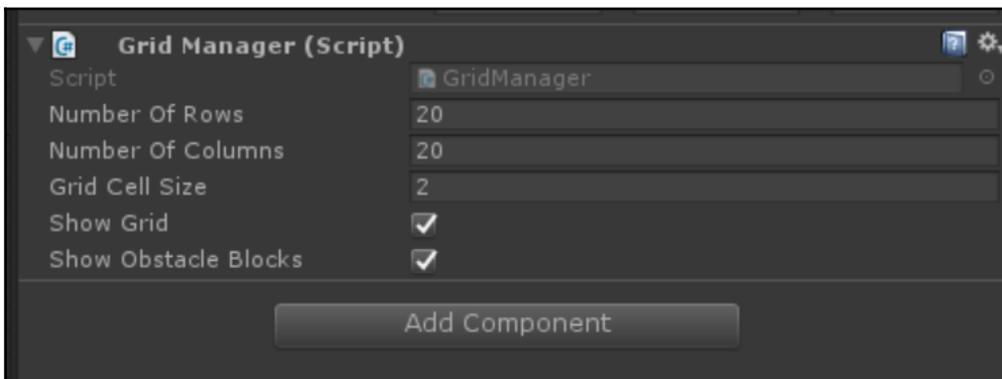
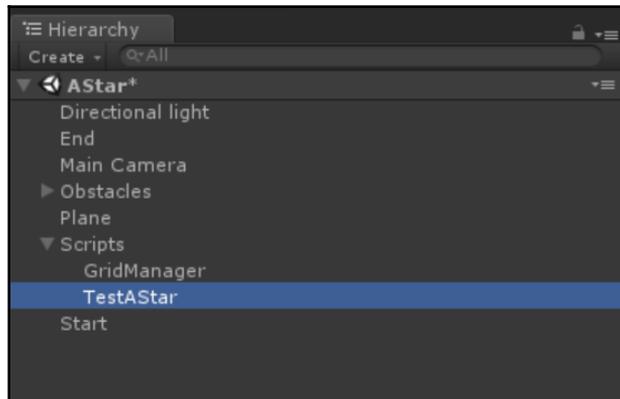
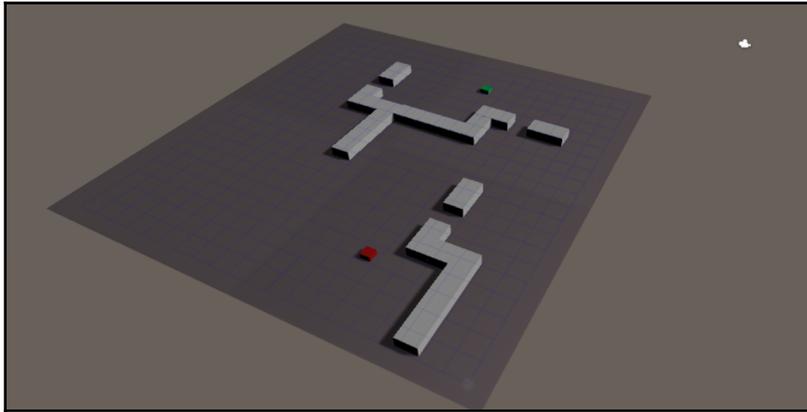


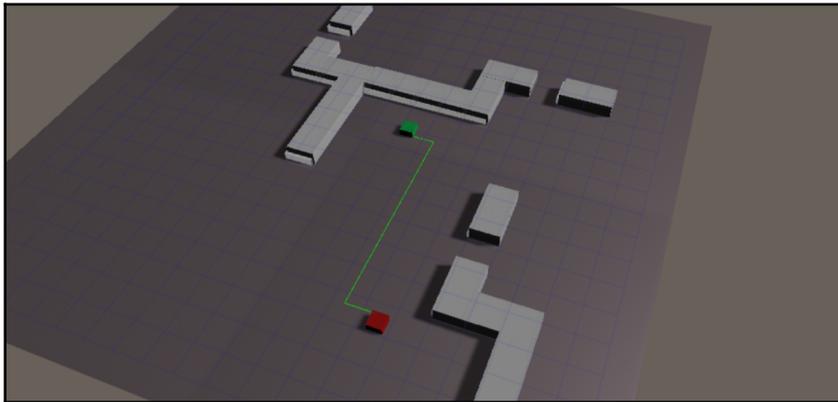
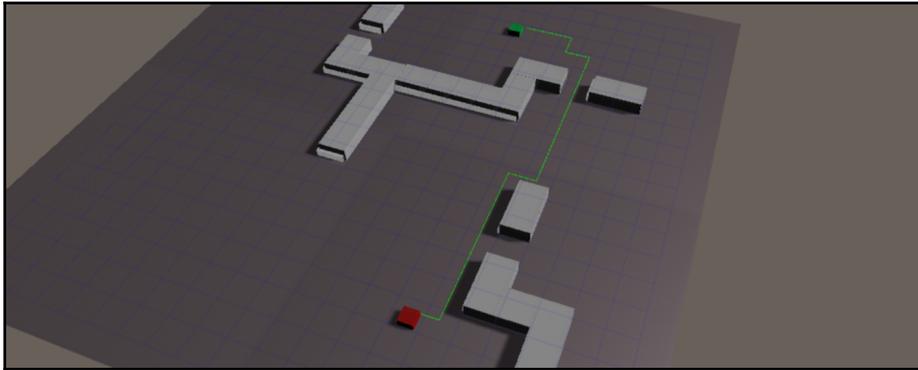


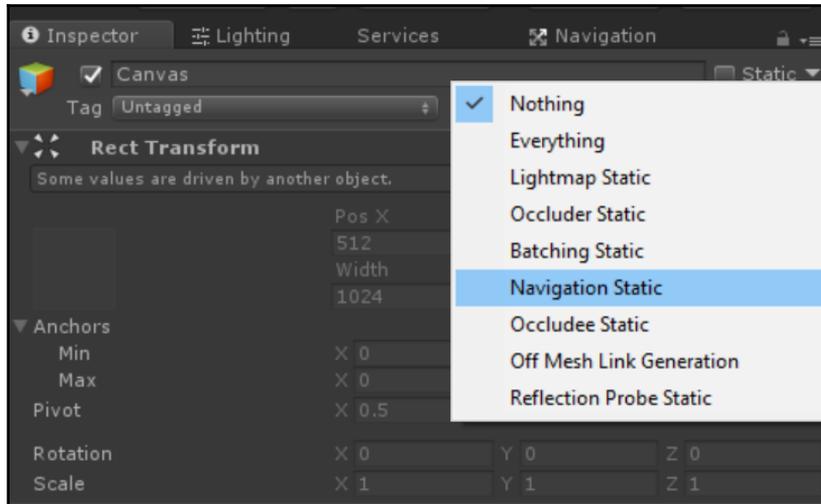
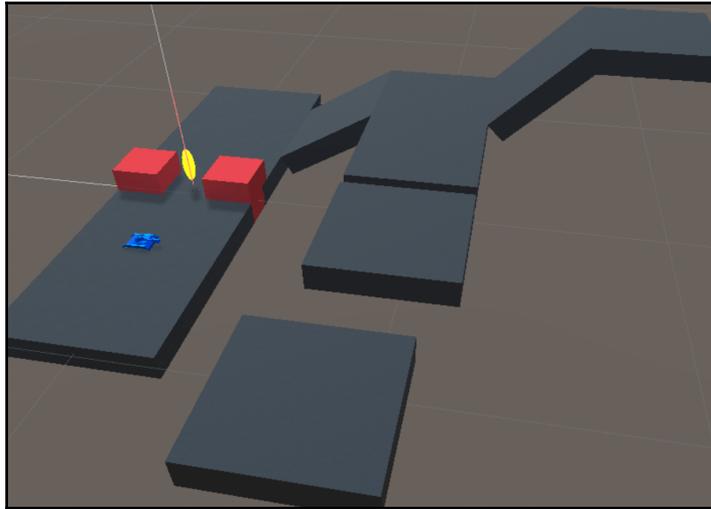










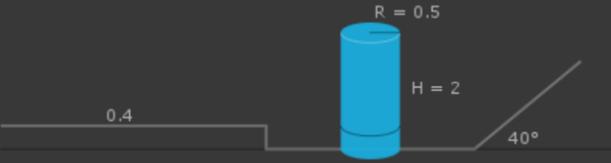


Inspector Lighting Services Navigation

Agents Areas **Bake** Object

[Learn instead about the component workflow.](#)

Baked Agent Size



0.4 R = 0.5 H = 2 40°

Agent Radius	0.5
Agent Height	2
Max Slope	40
Step Height	0.4

Generated Off Mesh Links

Drop Height	0
Jump Distance	2

▼ Advanced

Manual Voxel Size	<input type="checkbox"/>
Voxel Size	0.1666667
	3.00 voxels per agent radius
Min Region Area	2
Height Mesh	<input type="checkbox"/>

Clear Bake

Agents Areas Bake Object

Agent Types

Default

R = 0.5
H = 2
0.75
45°

Name Default

Radius 0.5

Height 2

Step Height 0.75

Max Slope 45

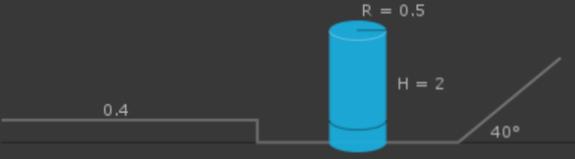
Agents Areas Bake Object

	Name	Cost
Built-in 0	Walkable	1
Built-in 1	Not Walkable	1
Built-in 2	Jump	2
User 3		1
User 4		1
User 5		1
User 6		1
User 7		1
User 8		1
User 9		1
User 10		1
User 11		1
User 12		1
User 13		1
User 14		1

Agents Areas Bake Object

[Learn instead about the component workflow.](#)

Baked Agent Size



0.4

R = 0.5

H = 2

40°

Agent Radius 0.5

Agent Height 2

Max Slope 40

Step Height 0.4

Generated Off Mesh Links

Drop Height 0

Jump Distance 2

▼ Advanced

Manual Voxel Size

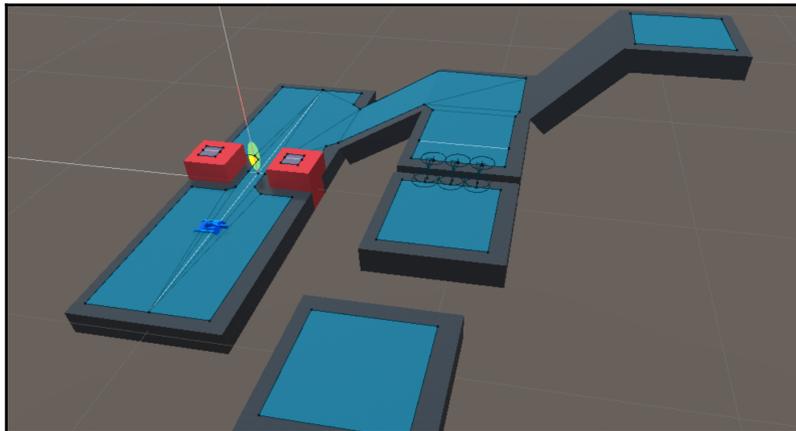
Voxel Size 0.1666667

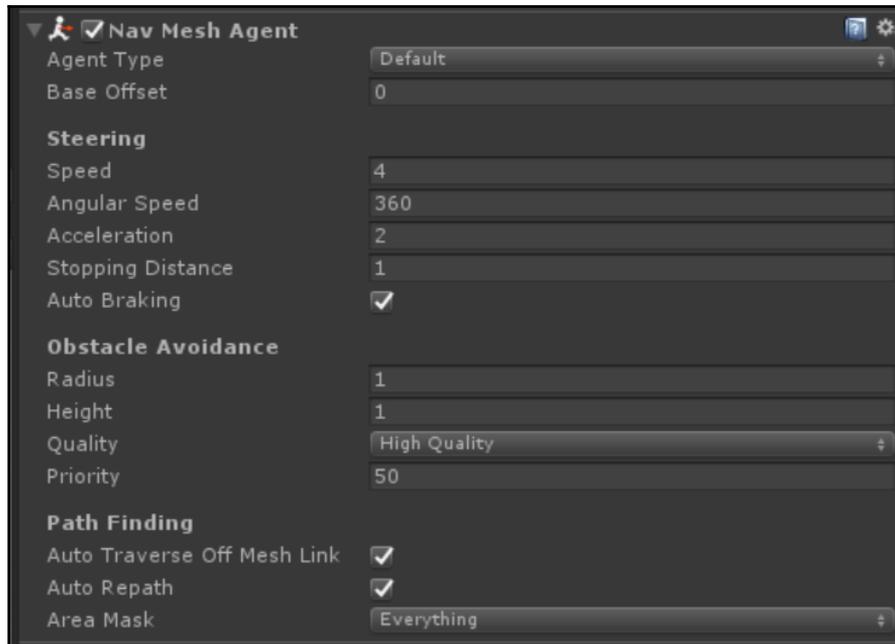
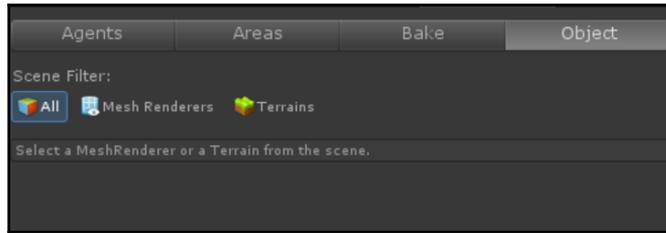
3.00 voxels per agent radius

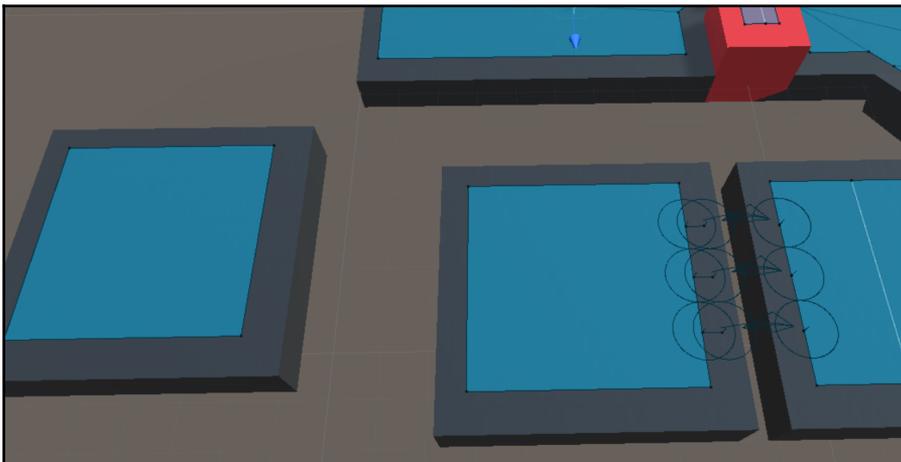
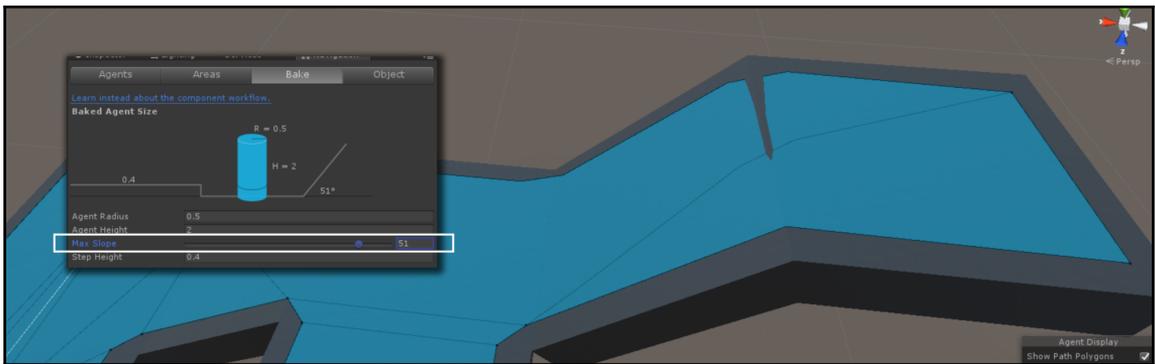
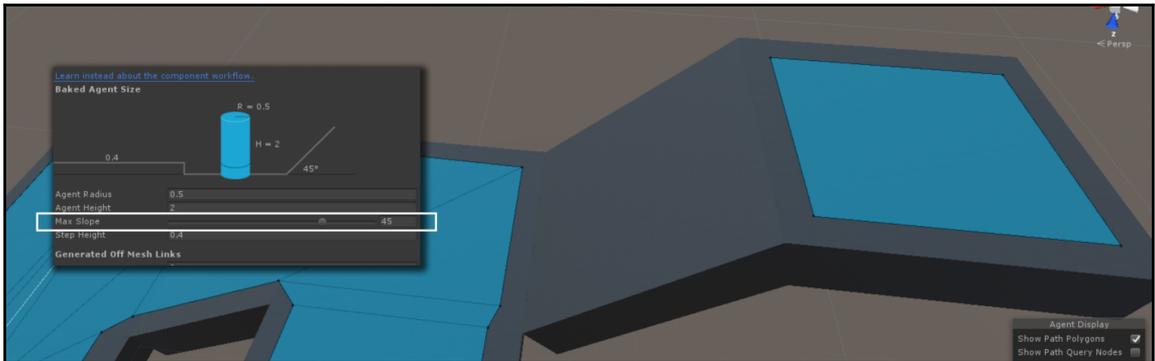
Min Region Area 2

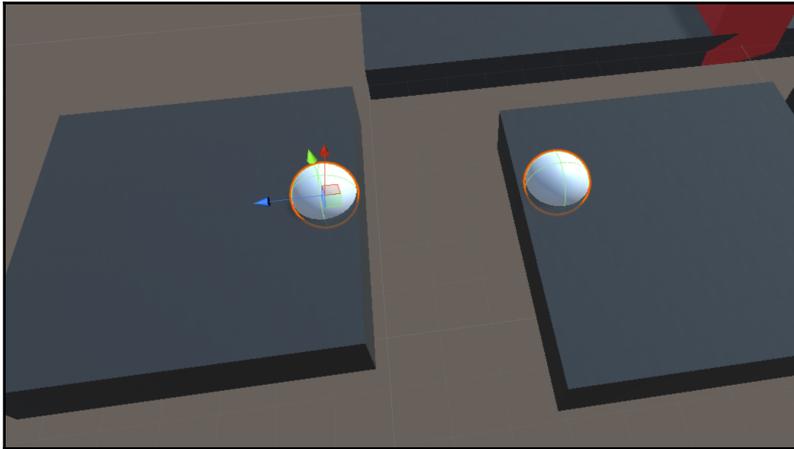
Height Mesh

Clear Bake



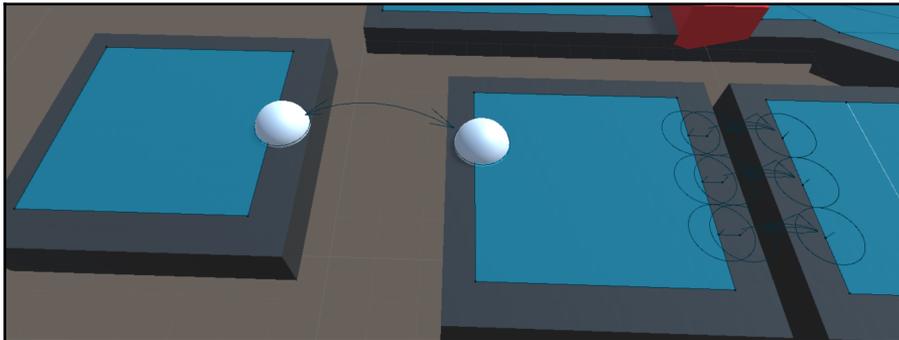


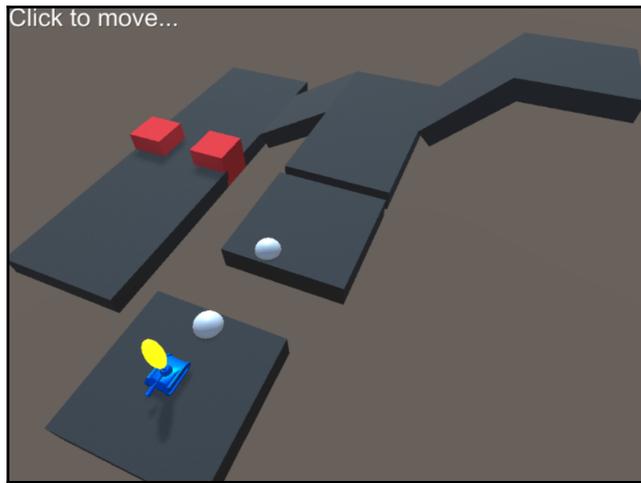




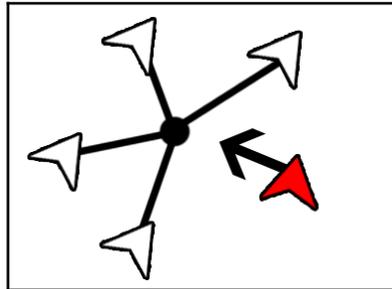
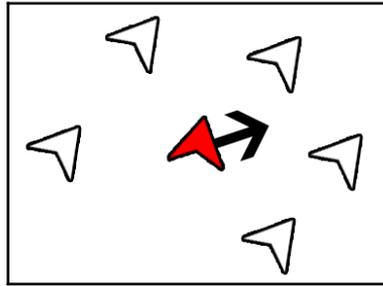
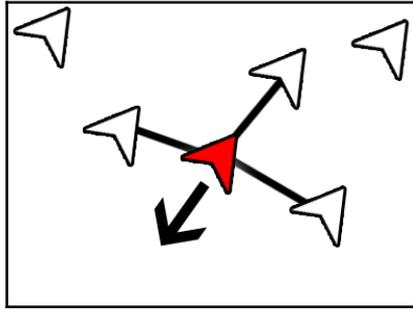
Off Mesh Link

Start	start (Transform)
End	end (Transform)
Cost Override	-1
Bi Directional	<input checked="" type="checkbox"/>
Activated	<input checked="" type="checkbox"/>
Auto Update Positions	<input type="checkbox"/>
Navigation Area	Walkable





Chapter 5: Flocks and Crowds



Maximize On Play Mute Audio Stats Gizmos ▾

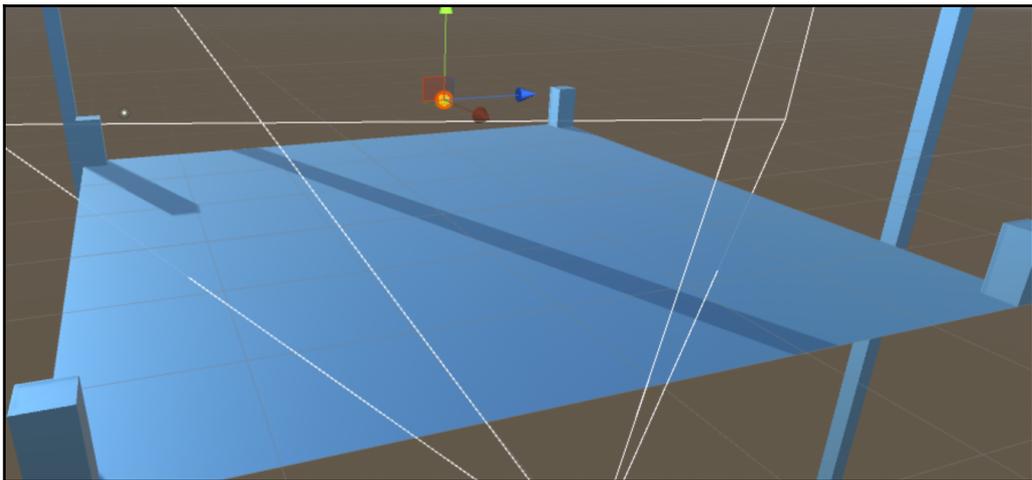
Statistics

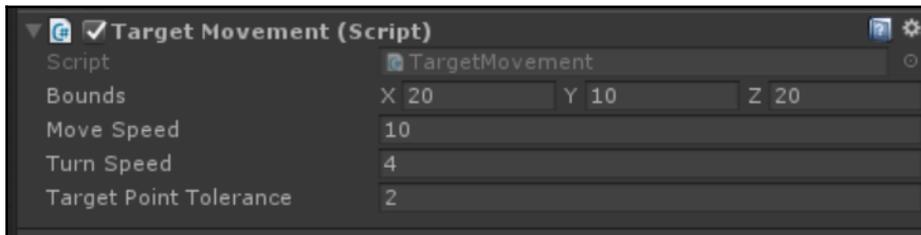
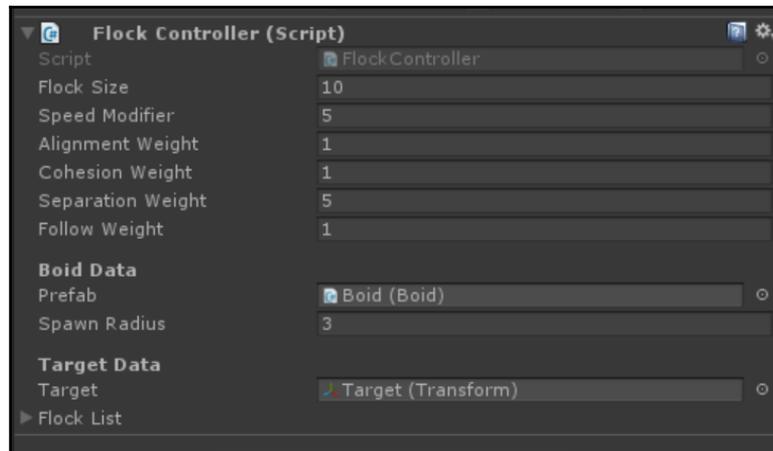
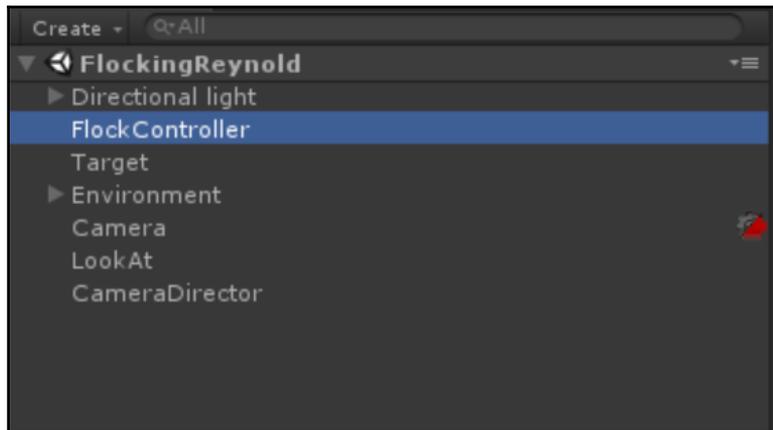
Audio:
Level: -74.8 dB DSP load: 0.0%
Clipping: 0.0% Stream load: 0.0%

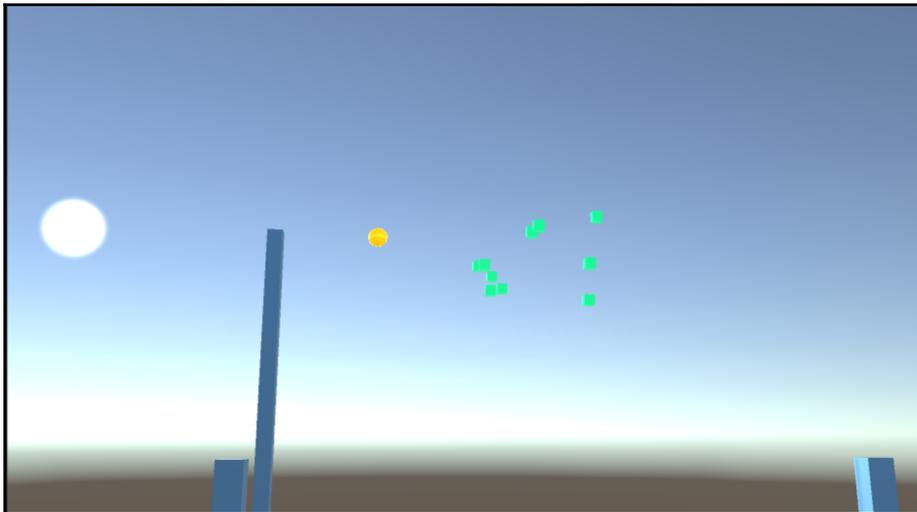
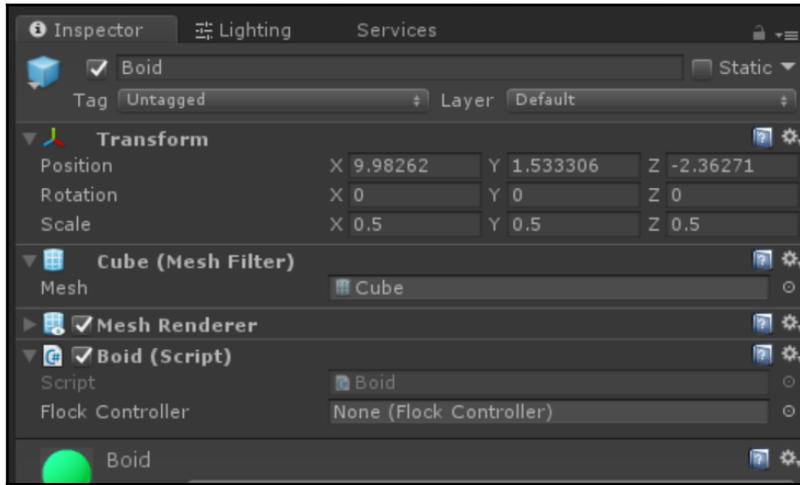
Graphics: 984.9 FPS (1.0ms)

CPU: main 1.0ms render thread 0.6ms
Batches: 15 Saved by batching: 27
Tris: 4.4k Verts: 7.5k
Screen: 951x534 - 5.8 MB
SetPass calls: 15 Shadow casters: 15
Visible skinned meshes: 0 Animations: 0

Network: (no players connected)







▼ Nav Mesh Agent [Icon] [Settings]

Agent Size

Radius

Height

Base Offset

Steering

Speed

Angular Speed

Acceleration

Stopping Distance

Auto Braking

Obstacle Avoidance

Quality

Priority

Path Finding

Auto Traverse Off Mesh

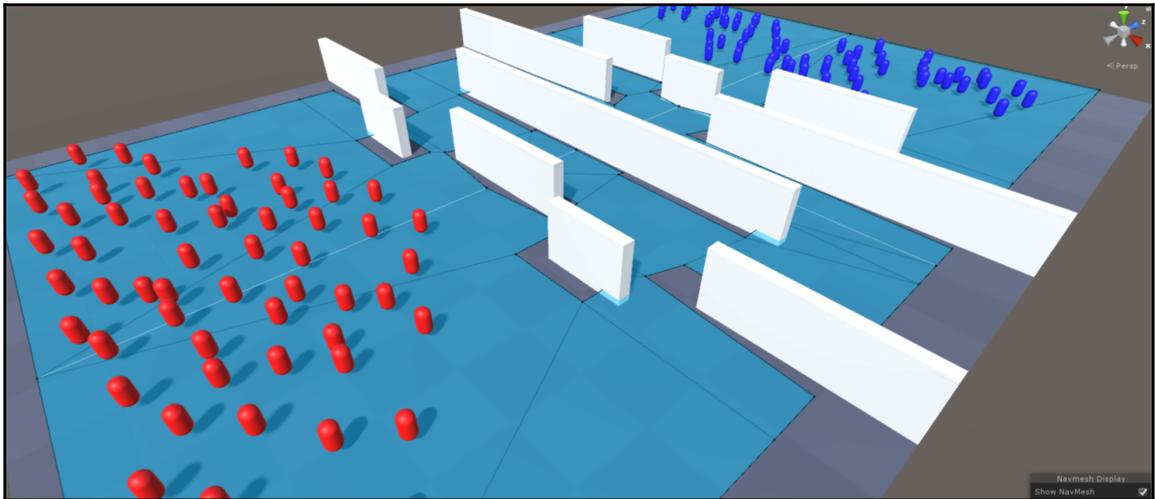
Auto Repath

Area Mask

▼ Crowd Agent (Script) [Icon] [Settings]

Script

Target



Nav Mesh Obstacle

Shape: Box

Center: X 0 Y 0 Z 0

Size: X 1 Y 1 Z 1

Carve:

Move Threshold: 0.1

Time To Stationary: 0.5

Carve Only Stationary:

Animator

Controller: Wall 6

Avatar: None (Avatar)

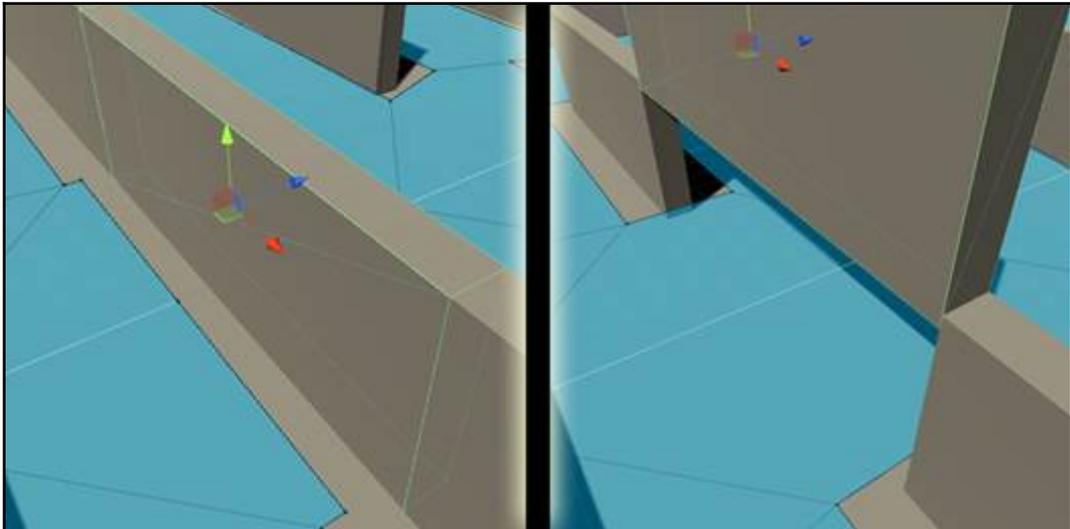
Apply Root Motion:

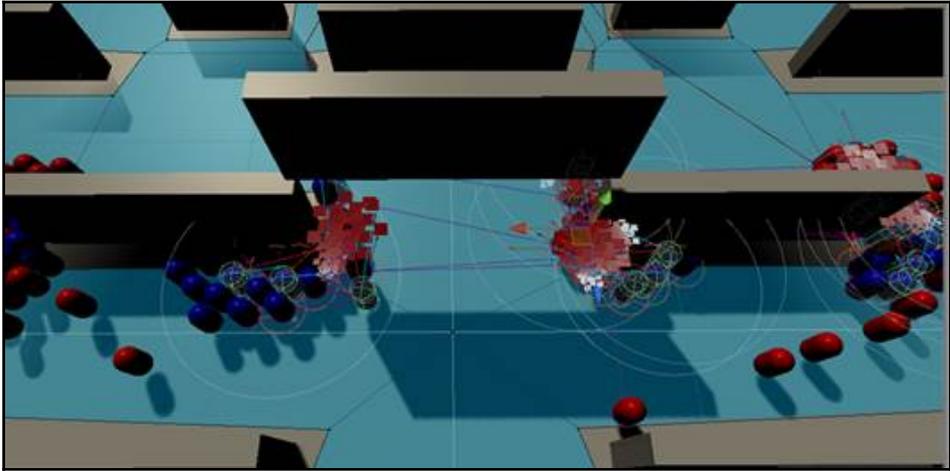
! Root position or rotation are controlled by curves

Update Mode: Normal

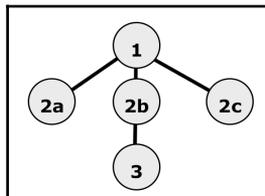
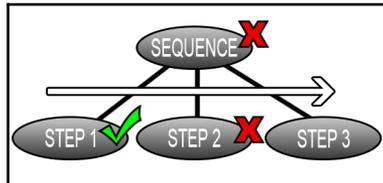
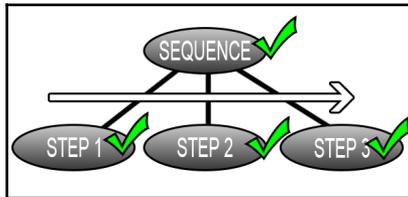
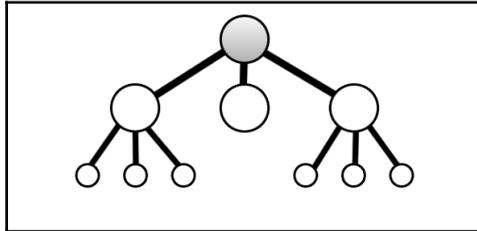
Culling Mode: Always Animate

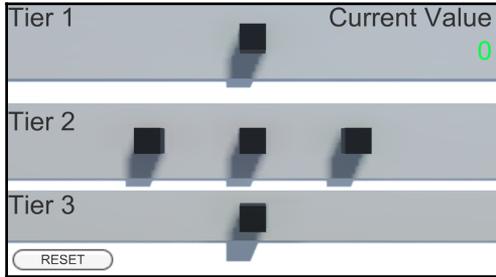
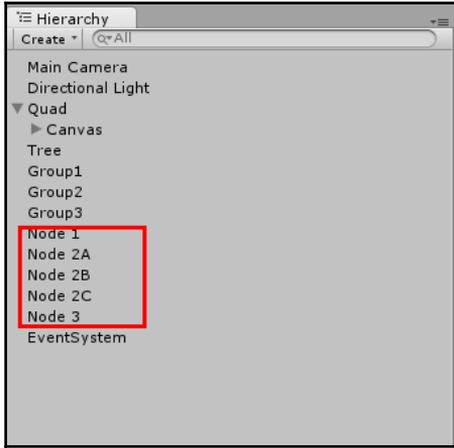
! Clip Count: 1
Curves Pos: 1 Quat: 0 Euler: 0 Scale: 0 Muscles: 0 Generic: 0 PPtr: 0
Curves Count: 3 Constant: 0 (0.0%) Dense: 0 (0.0%) Stream: 3 (100.0%)





Chapter 6: Behavior Trees





Tree Static
 Tag Untagged Layer Default

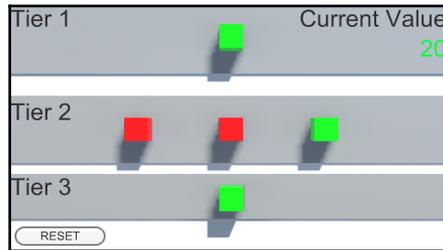
Transform

Position X 0.2348423 Y -7.103092 Z 0.7112379
 Rotation X 0 Y 0 Z 0
 Scale X 1 Y 1 Z 1

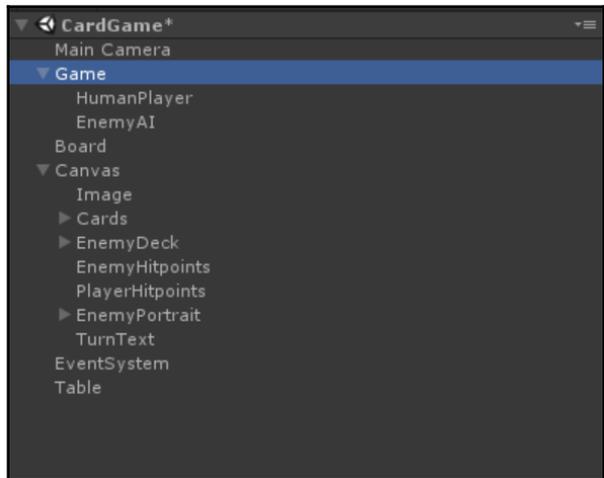
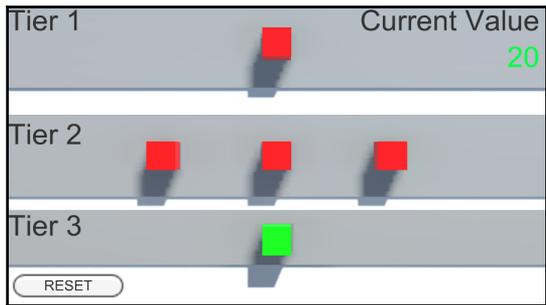
Math Tree (Script)

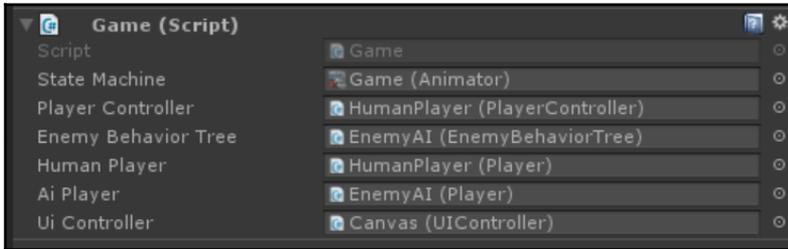
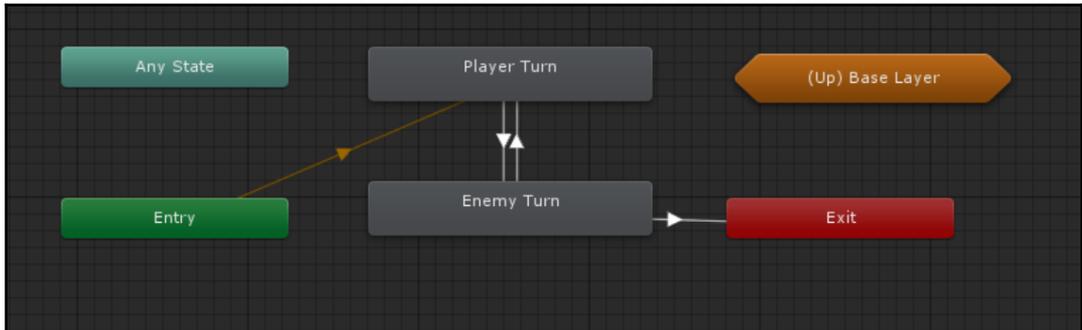
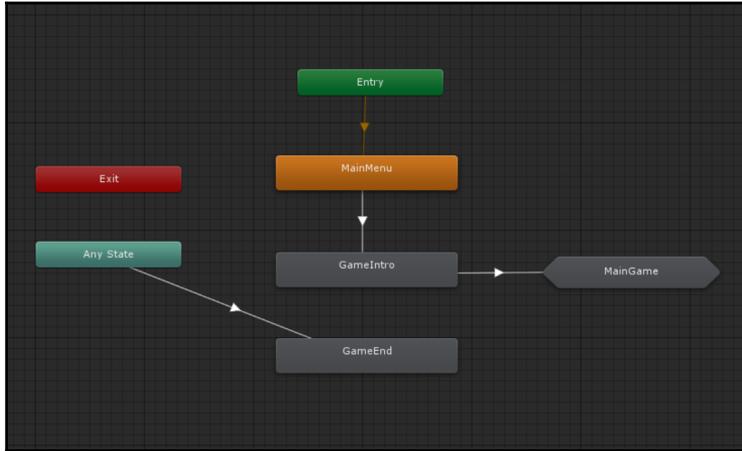
Script MathTree
 Evaluating
 Succeeded
 Failed
 Root Node Box Node 1
 Node 2a Box Node 2A
 Node 2b Box Node 2B
 Node 2c Box Node 2C
 Node 3 Box Node 3
 Target Value 20
 Value Label ValueLabel (Text)

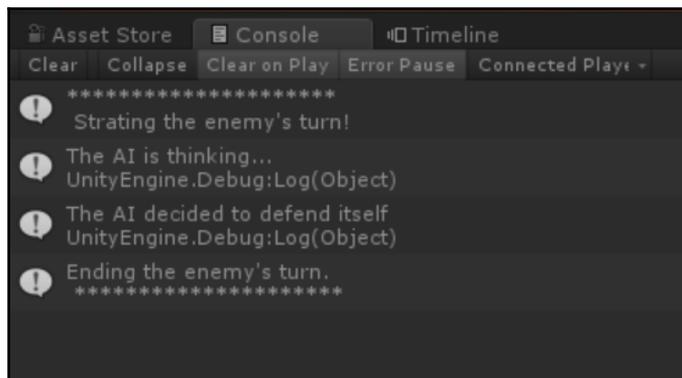
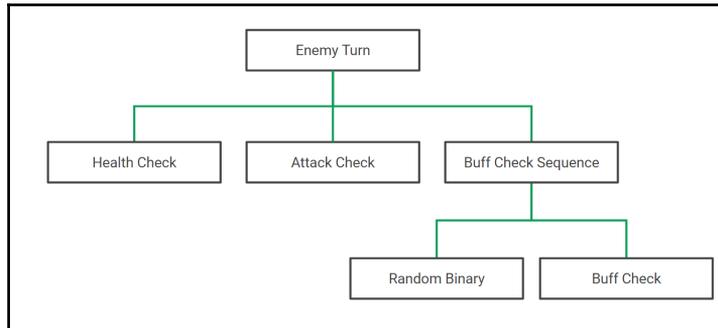
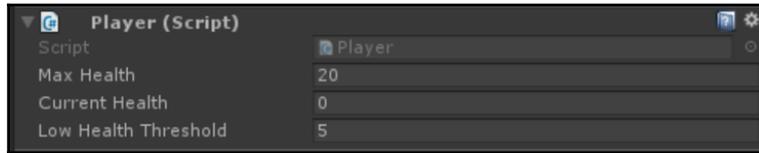
Add Component



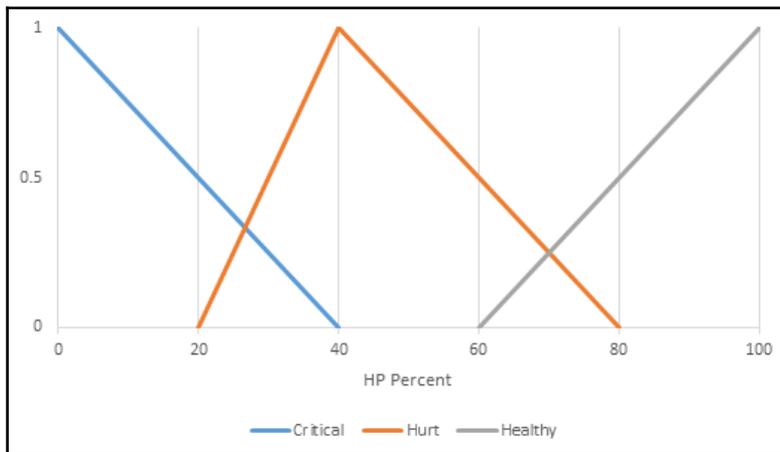
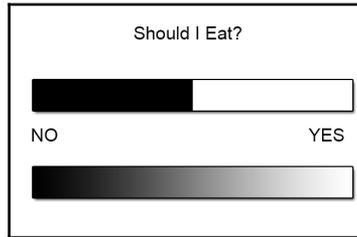
Node 3 Box Node 3
 Target Value 30
 Value Label ValueLabel (Text)

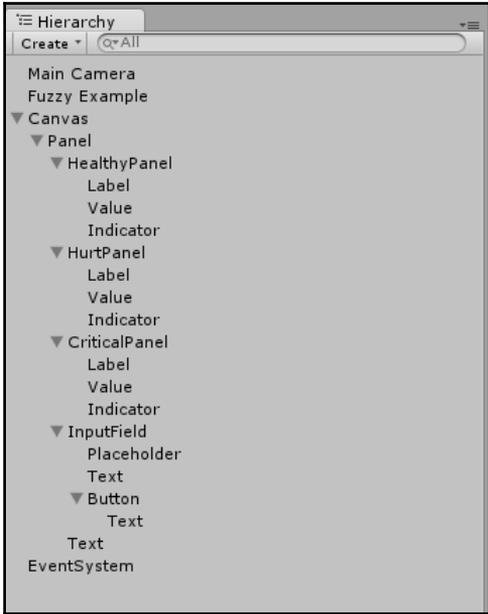
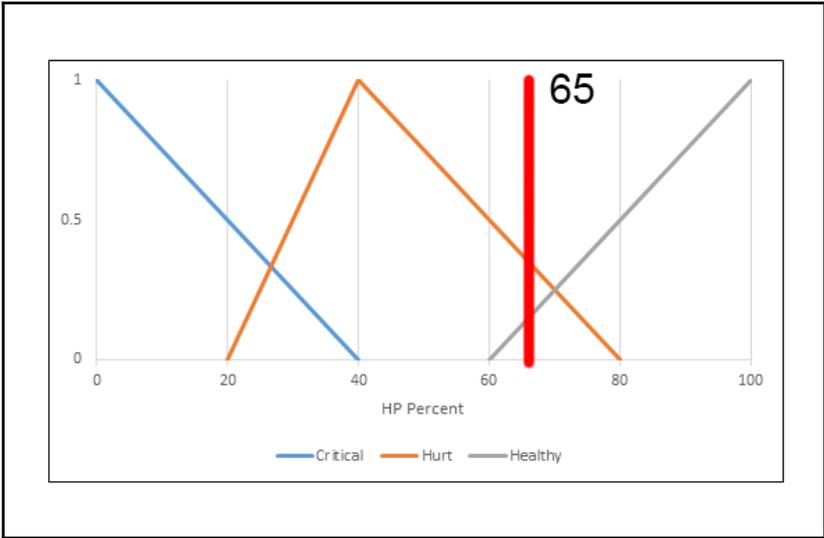


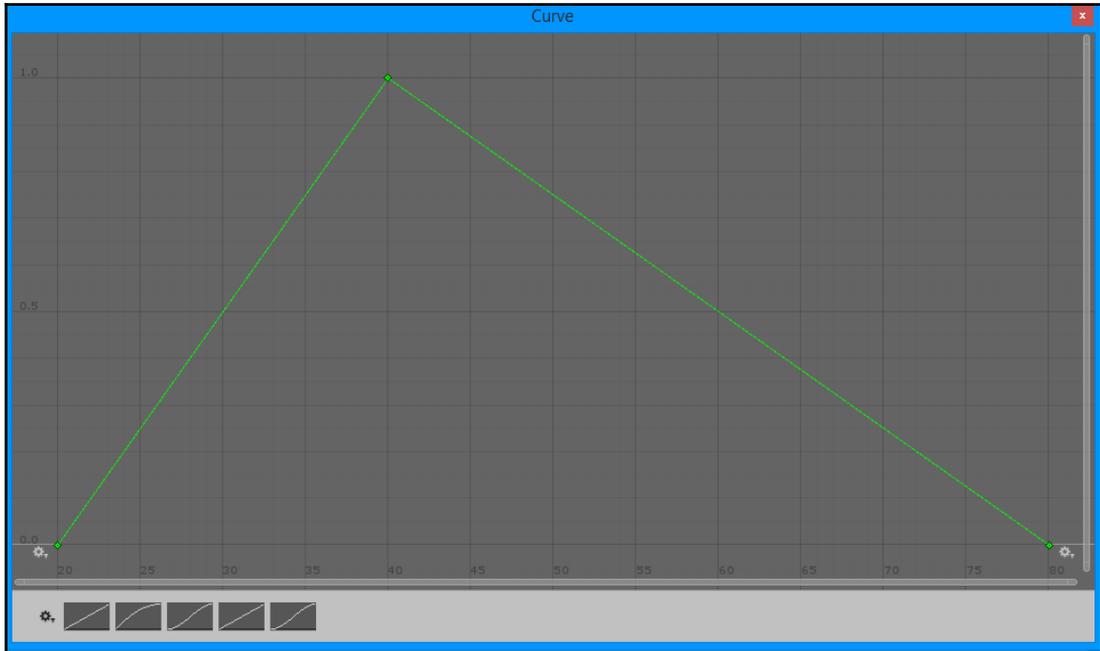
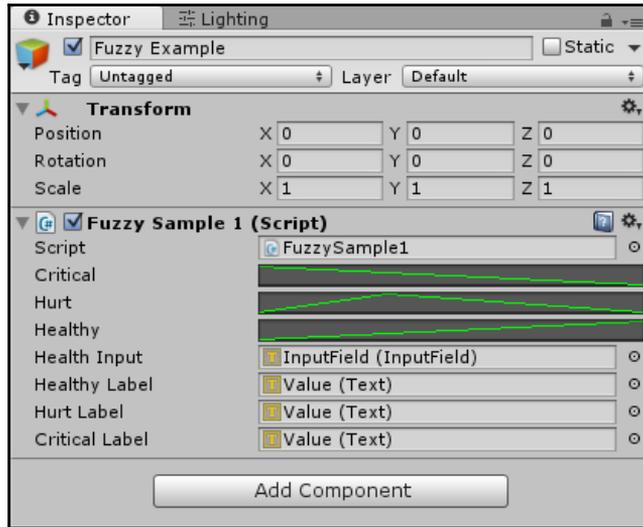




Chapter 7: Using Fuzzy Logic to Make Your AI Seem Alive







How is Bob the wizard doing?

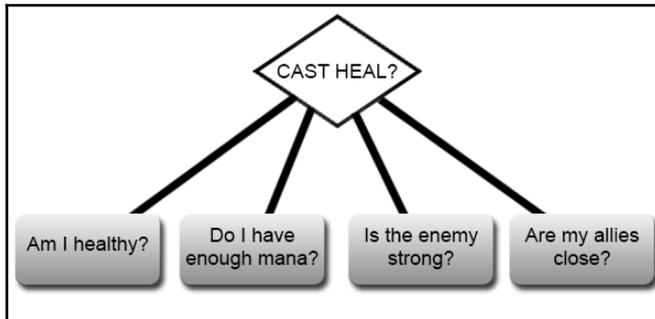
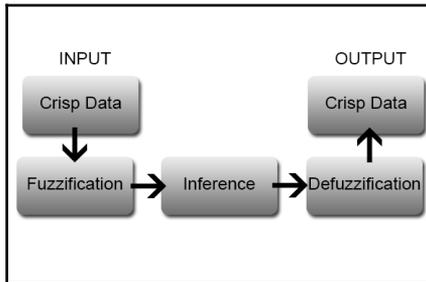
Healthy	0 true	<div style="width: 0%; height: 10px; background-color: green;"></div>
Hurt	0 true	<div style="width: 0%; height: 10px; background-color: yellow;"></div>
Critical	0 true	<div style="width: 0%; height: 10px; background-color: red;"></div>

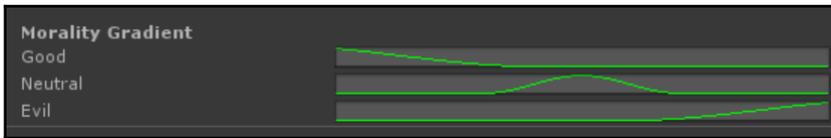
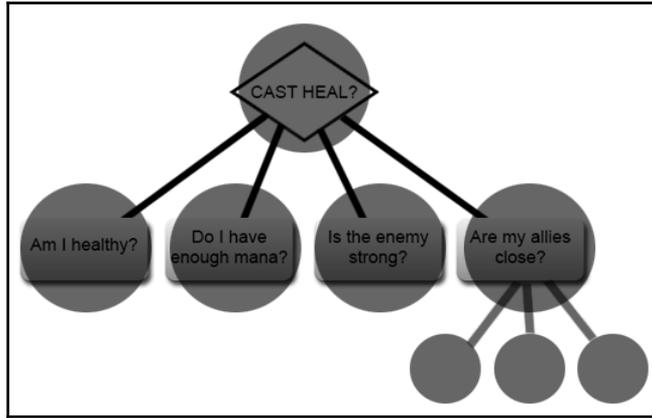
enter health (0-100) Evaluate!

How is Bob the wizard doing?

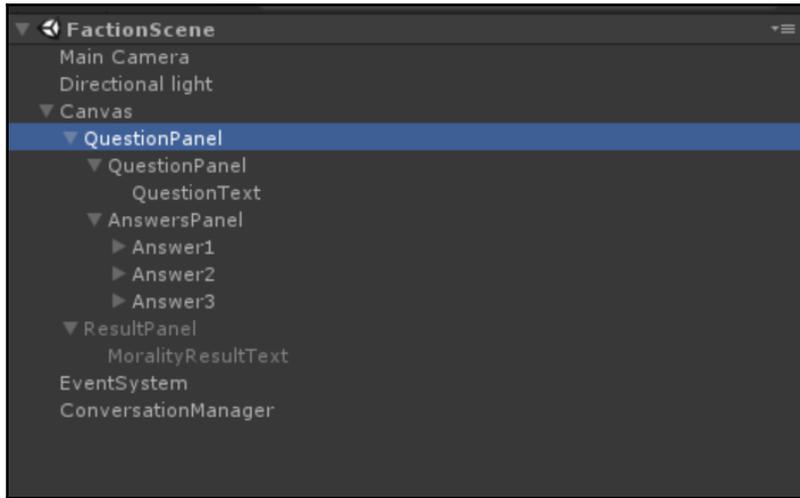
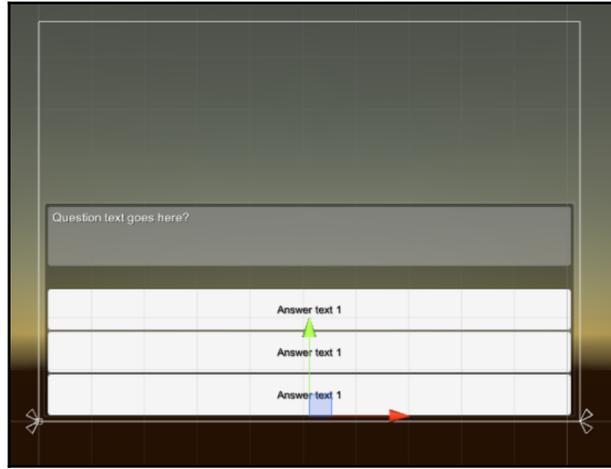
Healthy	0.125 true	<div style="width: 12.5%; height: 10px; background-color: green;"></div>
Hurt	0.375 true	<div style="width: 37.5%; height: 10px; background-color: yellow;"></div>
Critical	0 true	<div style="width: 0%; height: 10px; background-color: red;"></div>

65 Evaluate!





Your morality alignment is: GOOD



Conversation Manager (Script)

Script: ConversationManager

Questions

- Size: 3
- You encounter an injured infant goblin on the side of the road. These pesky creatures rava
 - Question Text: You encounter an injured infant goblin on the side of the
 - Answers
 - Size: 3
 - Help the young goblin! You can't just leave it to its fate.
 - Answer Text: Help the young goblin! You can't just leave it to its fate.
 - Morality Value: 0
 - Let someone know to send help once you get into town. It's not your problem.
 - Answer Text: Let someone know to send help once you get into town.
 - Morality Value: 50
 - An injured goblin is an easy target...
 - Answer Text: An injured goblin is an easy target...
 - Morality Value: 100
- You reach town, and are instantly greeted by the banker. You owe him 20 gold coins. It's a
 - Question Text: You reach town, and are instantly greeted by the banker
 - Answers
 - Size: 3
 - Pay up! You owe the man money, and you're a responsible citizen.
 - Answer Text: Pay up! You owe the man money, and you're a responsi
 - Morality Value: 0
 - Lie and say you gave your money to an orphan boy. You'll pay him back later. You pr
 - Answer Text: Lie and say you gave your money to an orphan boy. You
 - Morality Value: 50
 - Knock the man over and escape! You had no intention fo paying him back.
 - Answer Text: Knock the man over and escape! You had no intention fo
 - Morality Value: 100
 - A knight is in a hurry chasing a thief, and he drops a pendant. It looks expensive. What do
 - Question Text: A knight is in a hurry chasing a thief, and he drops a pei
 - Answers
 - Size: 3
 - Chase the Knight and return the pendant.
 - Answer Text: Chase the Knight and return the pendant.
 - Morality Value: 0
 - Leave the pendant on the ground. Maybe he'll return looking for it.
 - Answer Text: Leave the pendant on the ground. Maybe he'll return loo
 - Morality Value: 50
 - It does look expensive...
 - Answer Text: It does look expensive...
 - Morality Value: 100

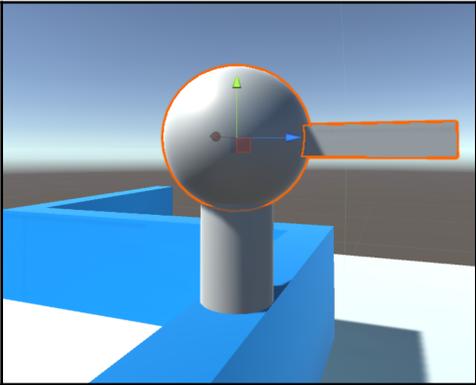
UI

- Question Panel: QuestionPanel
- Result Panel: ResultPanel
- Result Text: MoralityResultText (Text)
- Question Text: QuestionText (Text)
- First Answer Button: Answer1 (Button)
- Second Answer Button: Answer2 (Button)
- Third Answer Button: Answer3 (Button)

Morality Gradient



Chapter 8: How It All Comes Together



- ▼ Tower
 - ▼ Gun
 - ▼ Barrel
 - Muzzle

Inspector Lighting Services

Gun Static

Tag Untagged Layer Default

Transform

Position	X 0	Y 1.35	Z 0
Rotation	X 0	Y 0	Z 0
Scale	X 2	Y 2	Z 2

Sphere (Mesh Filter)

Sphere Collider Edit Collider

Is Trigger

Material None (Physic Material)

Center X 0 Y 0 Z 0

Radius 7

Mesh Renderer

Rigidbody

Mass 1

Drag 0

Angular Drag 0.05

Use Gravity

Is Kinematic

Interpolate None

Collision Detection Discrete

Constraints

Tower (Script)

Script Tower

Animator Gun (Animator)

Fire Speed 3

Muzzle Muzzle (Transform)

Projectile bullet

Animator

Controller TowerStateMachine

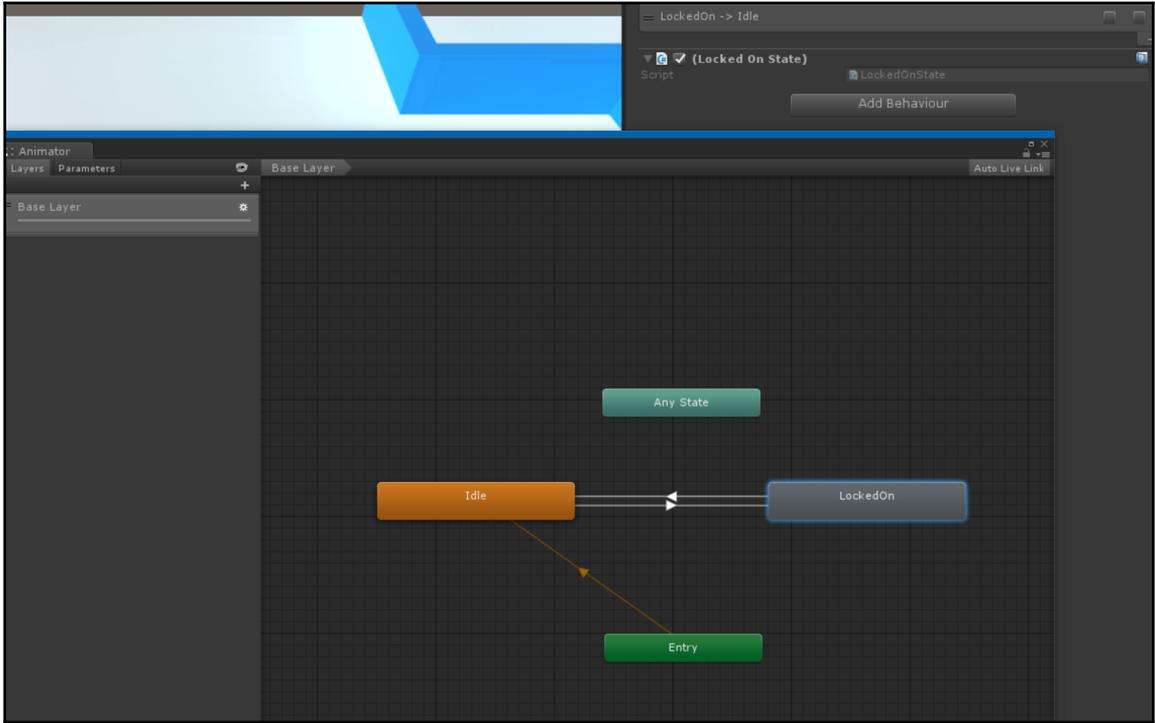
Avatar None (Avatar)

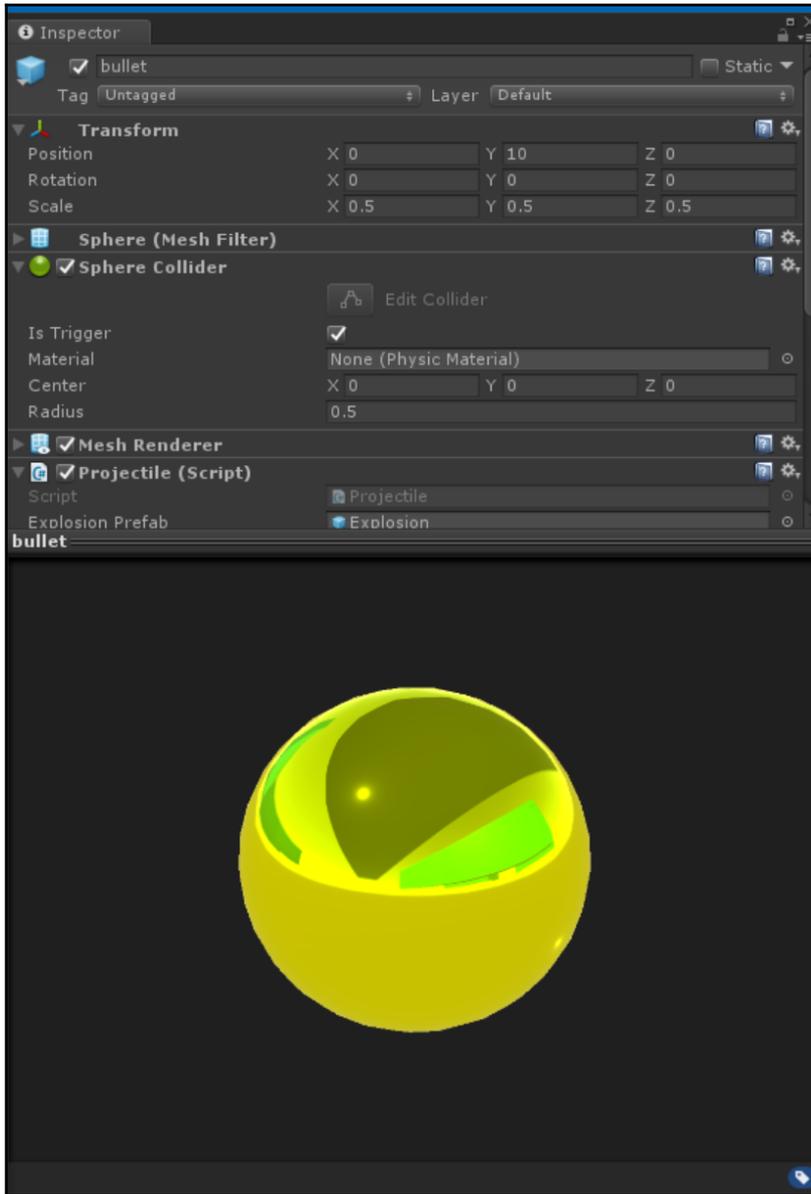
Apply Root Motion

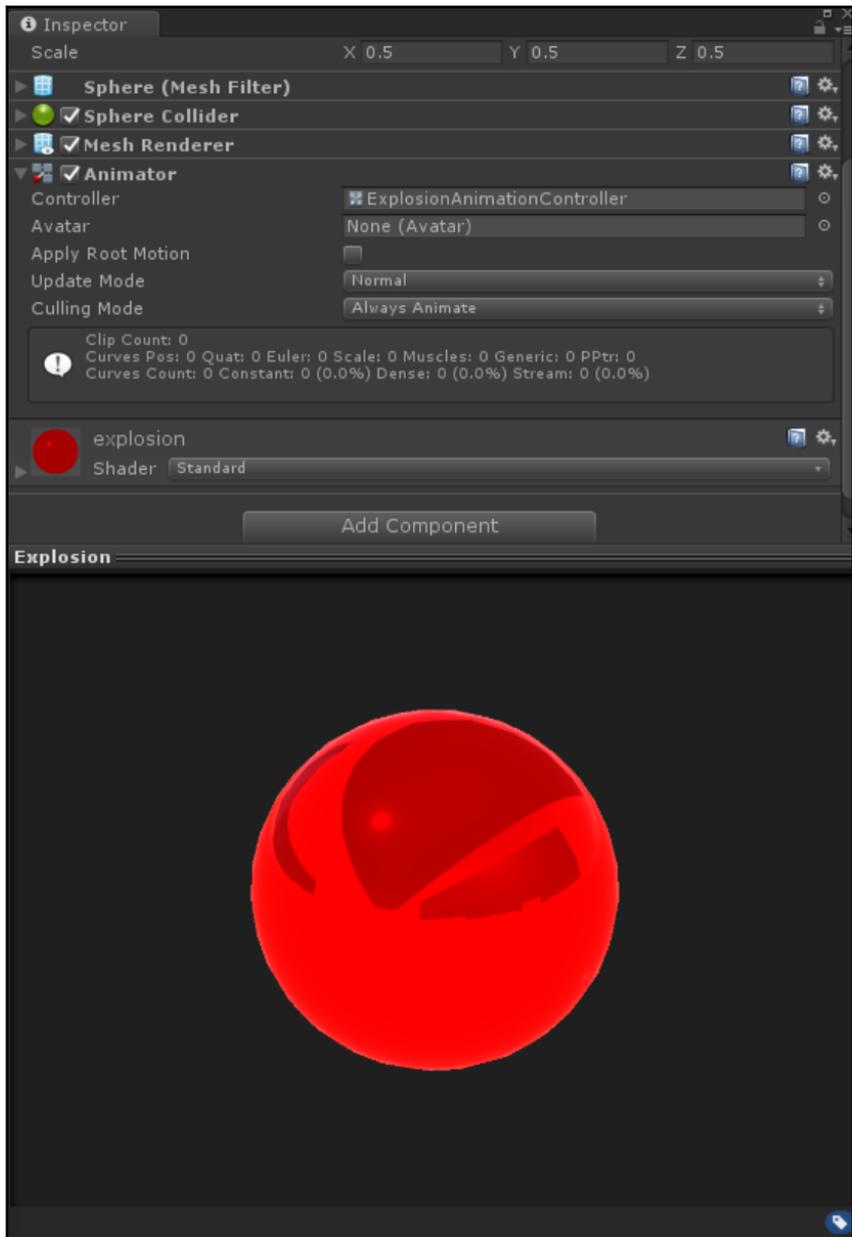
Update Mode Normal

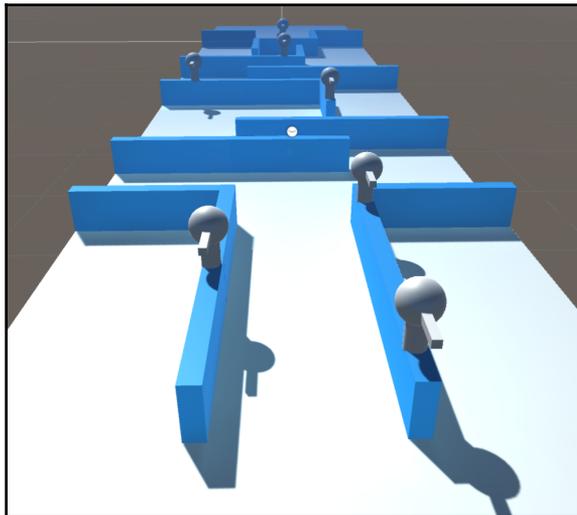
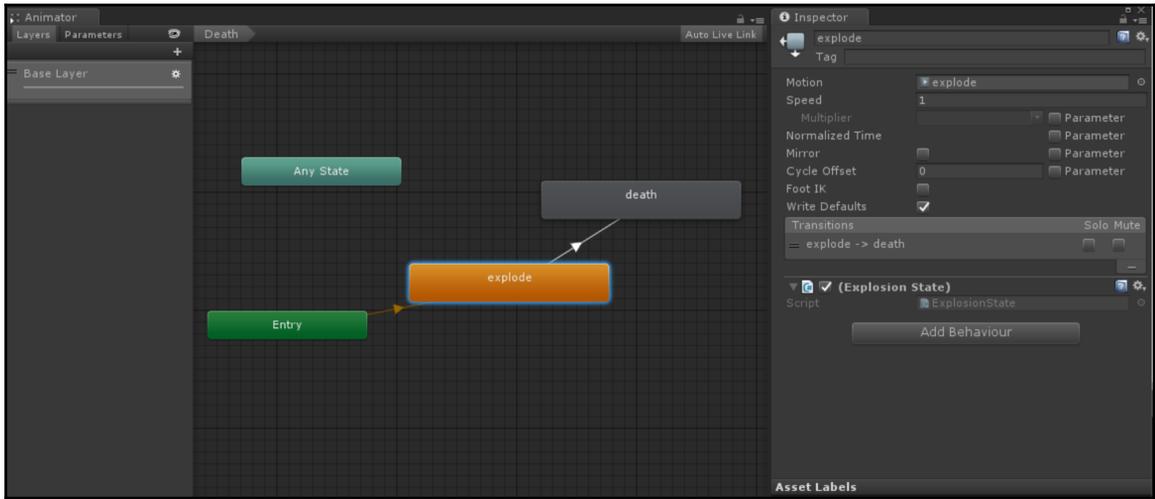
Culling Mode Always Animate

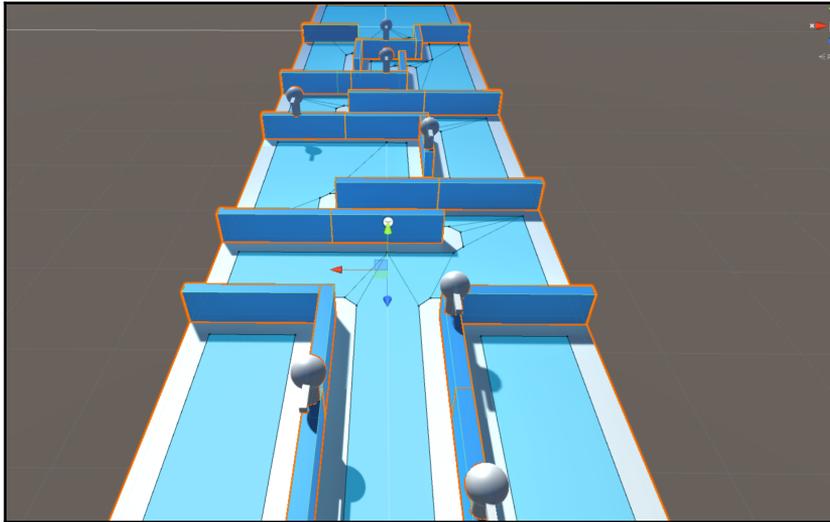
Clip Count: 0
Curves Pos: 0 Quat: 0 Euler: 0 Scale: 0 Muscles: 0 Generic: 0 PPtr: 0
Curves Count: 0 Constant: 0 (0.0%) Dense: 0 (0.0%) Stream: 0 (0.0%)











Tap "B" to boost
Tap "S" to shield

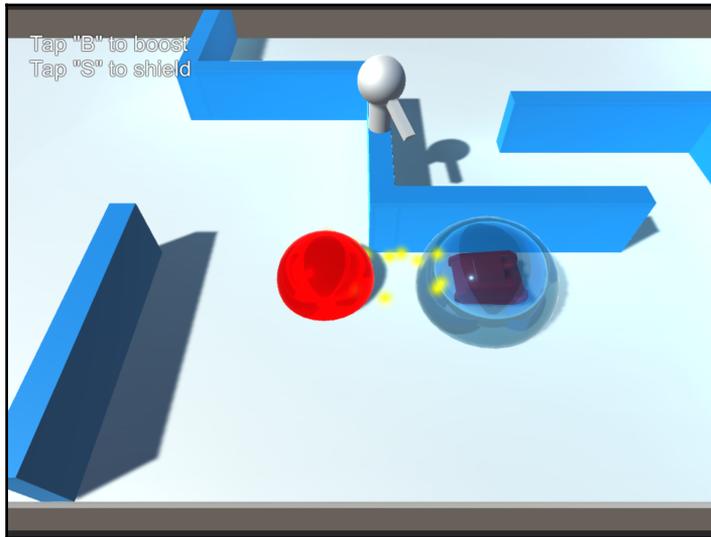


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