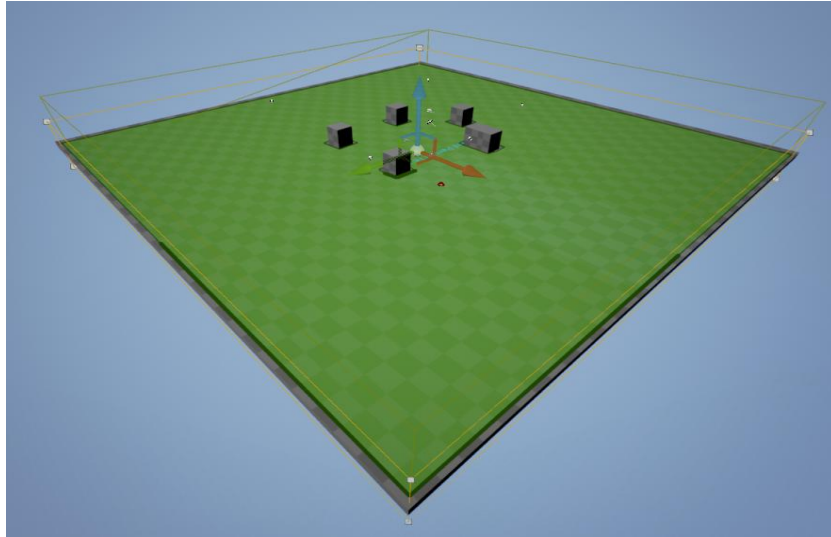
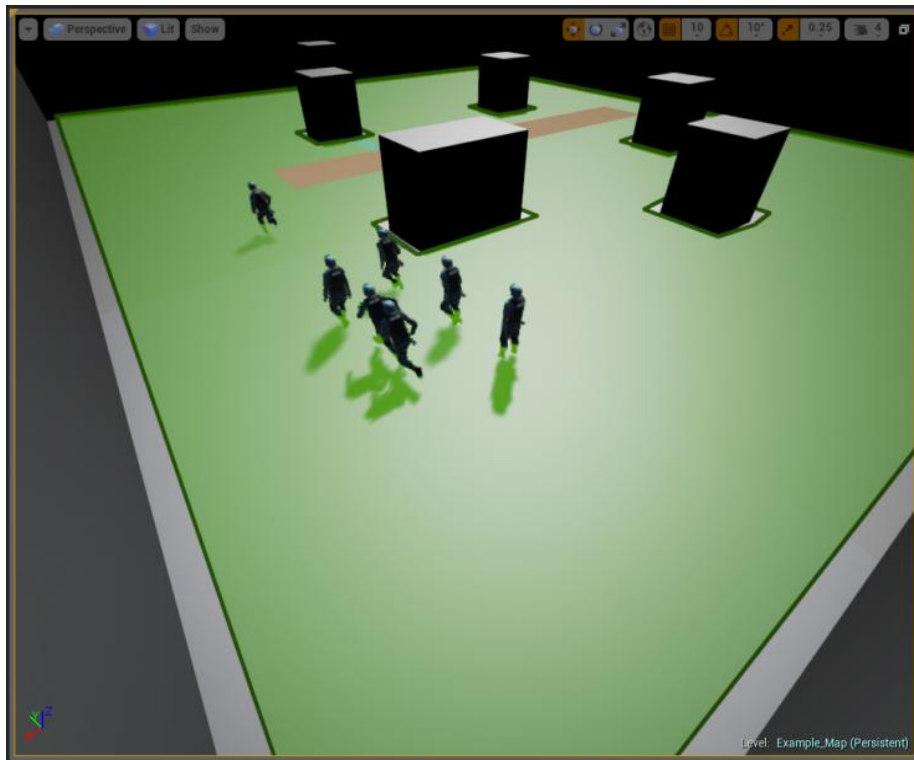
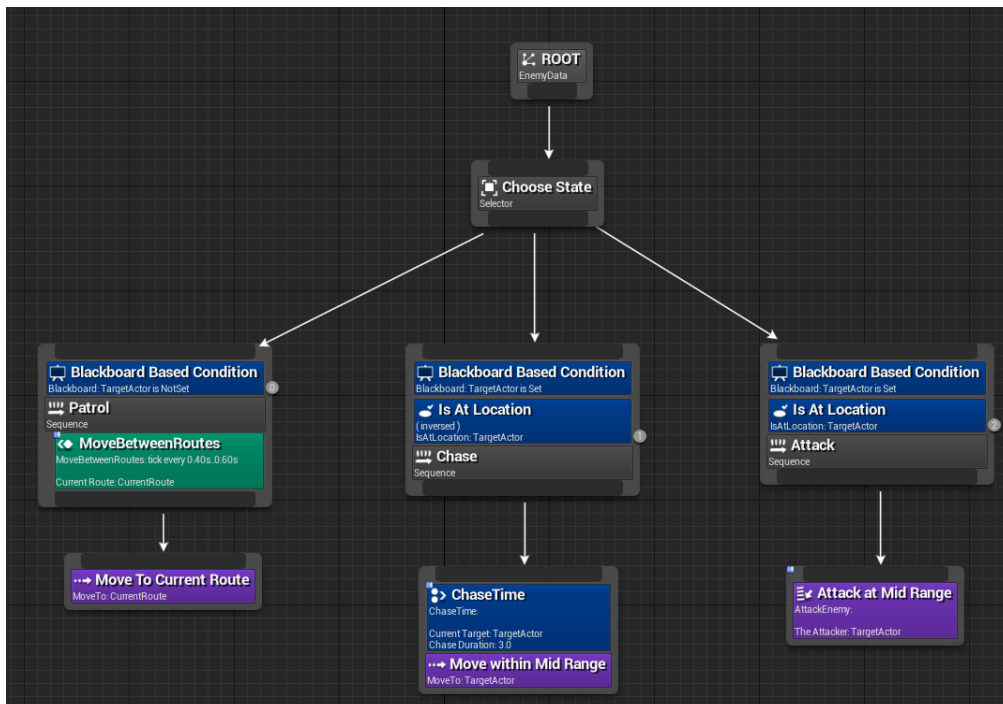
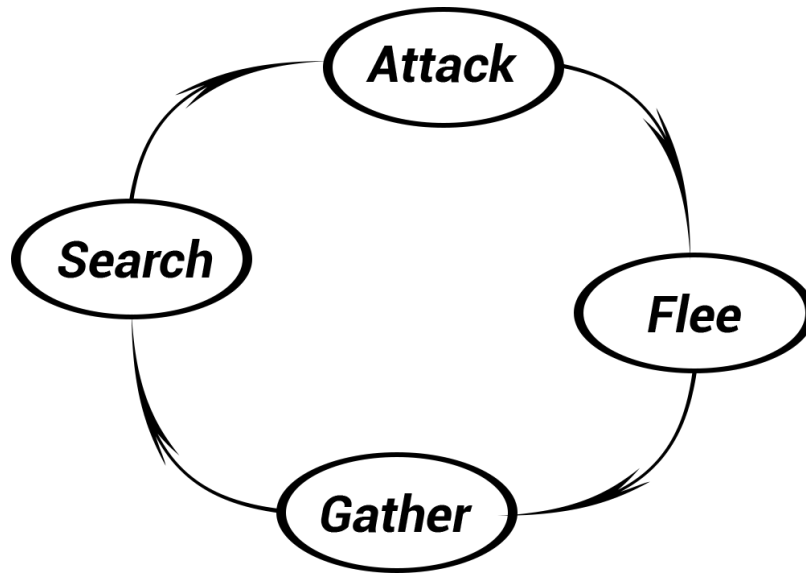
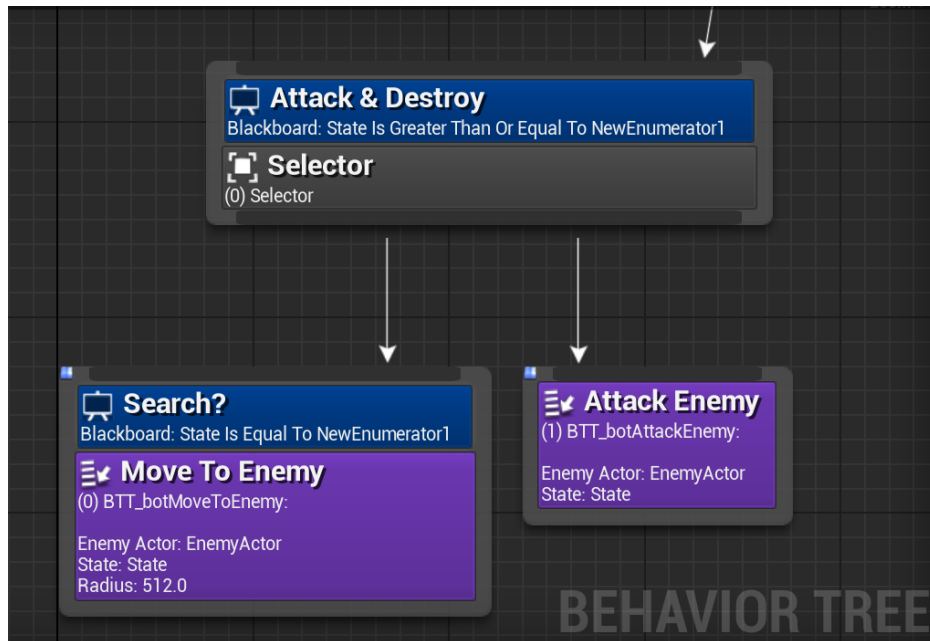
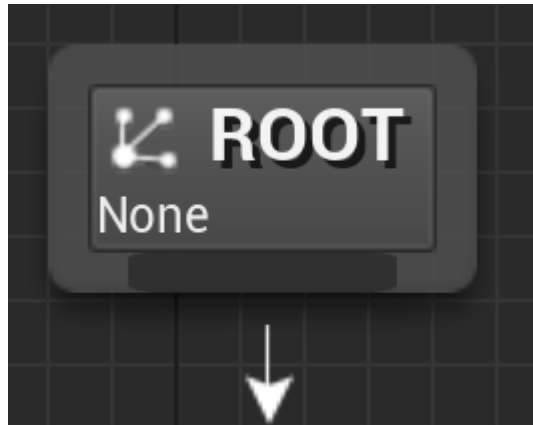


## Chapter 1: Introduction to Game AI

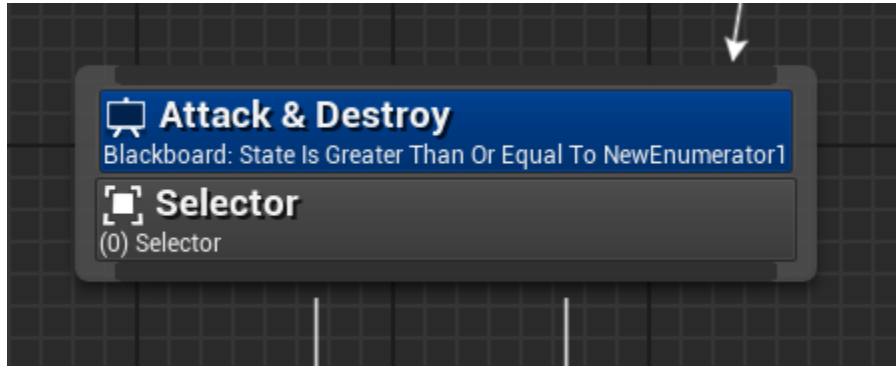


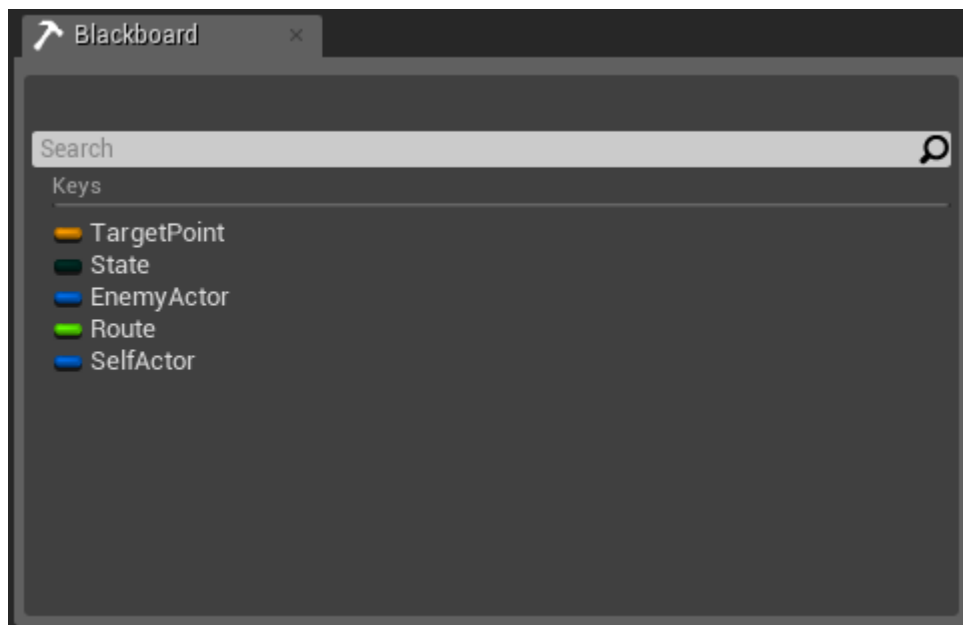
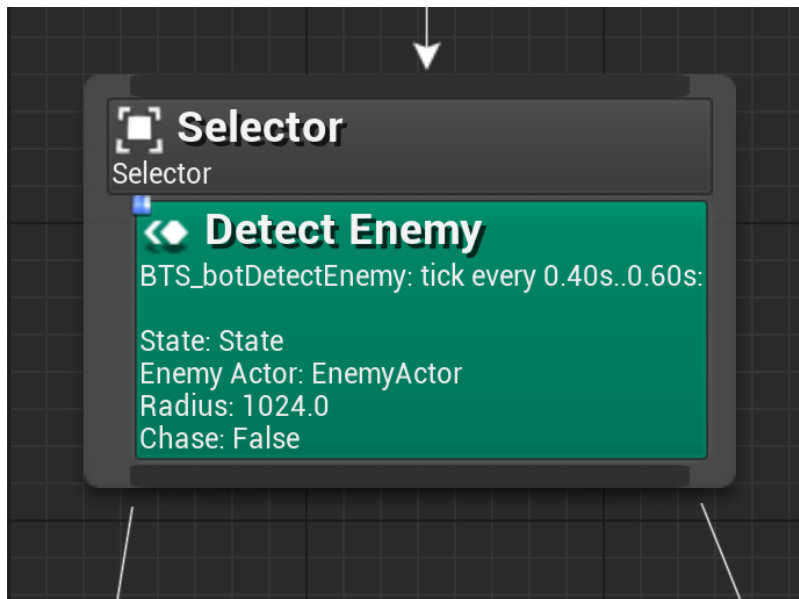


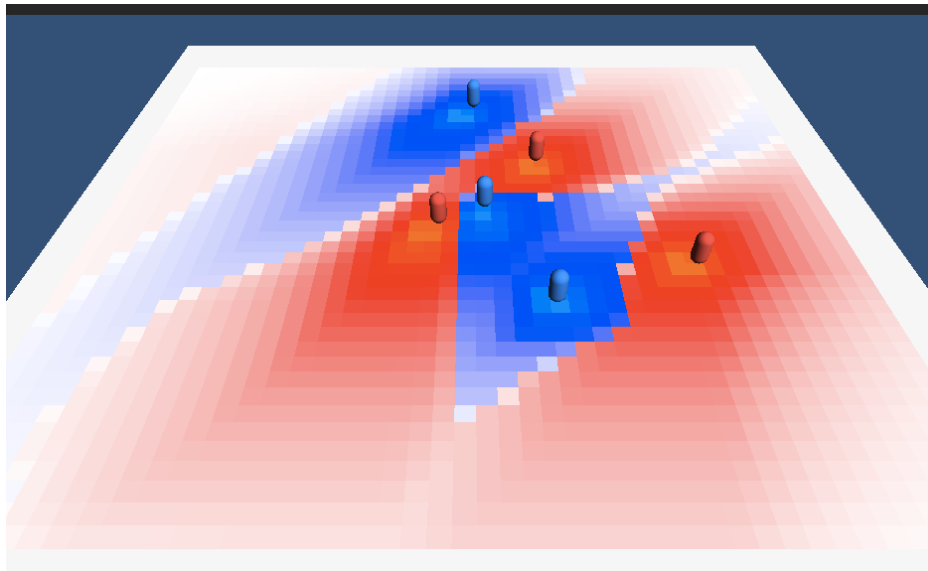
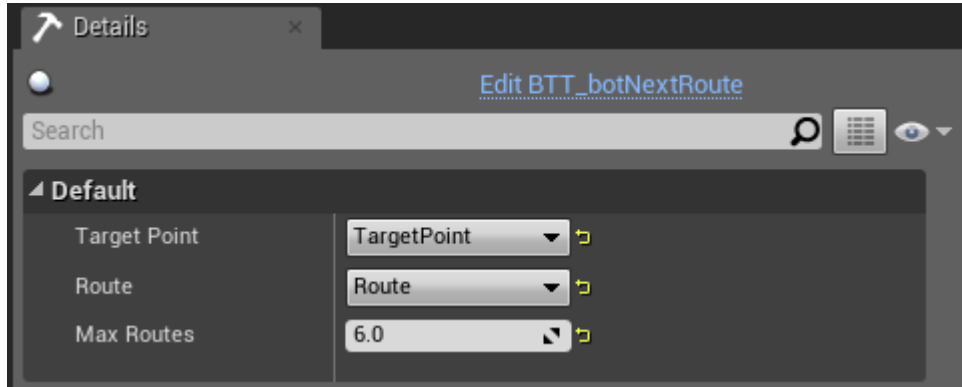


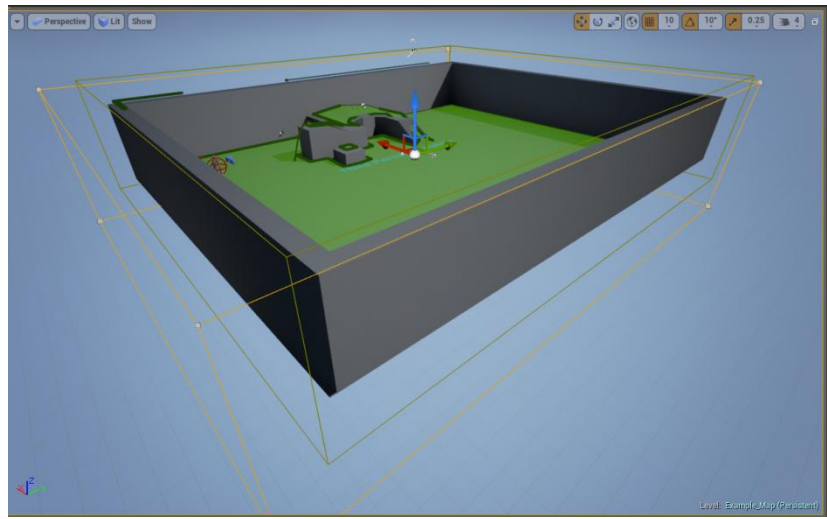




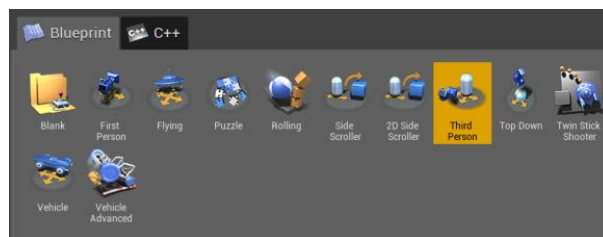
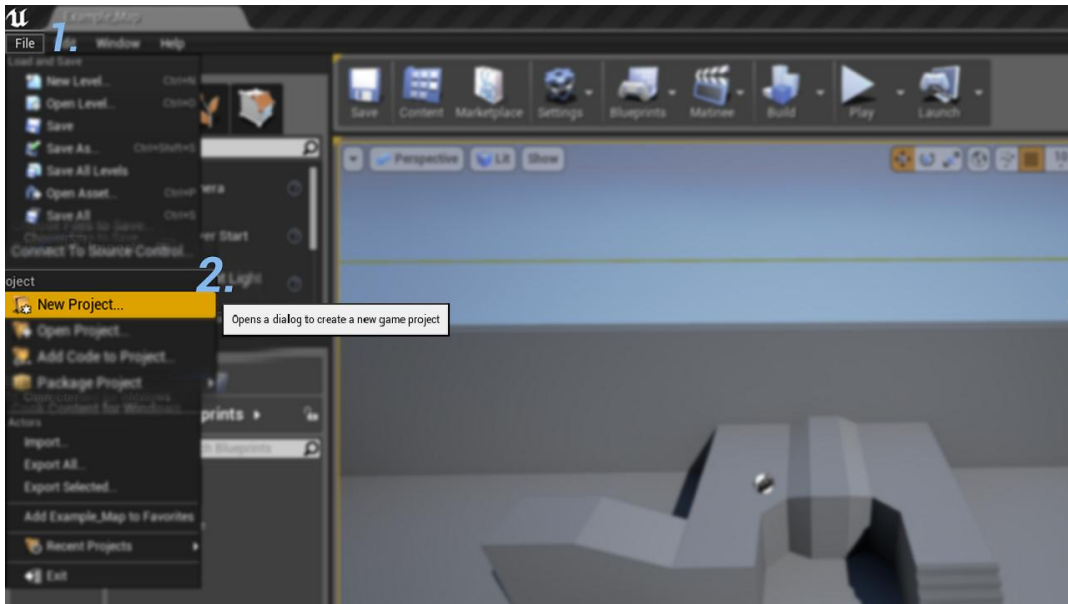


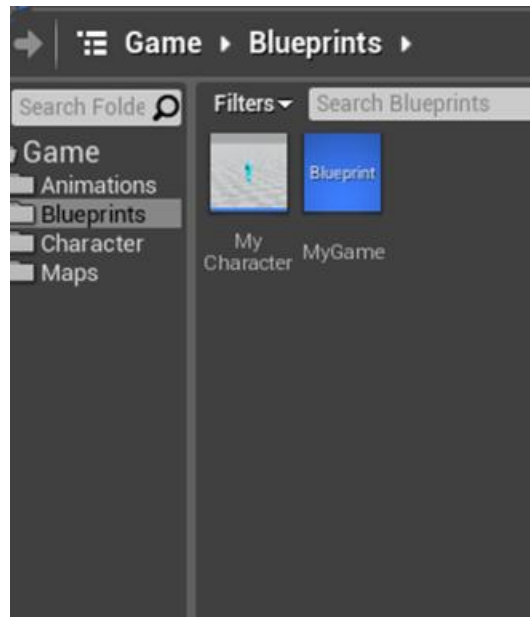
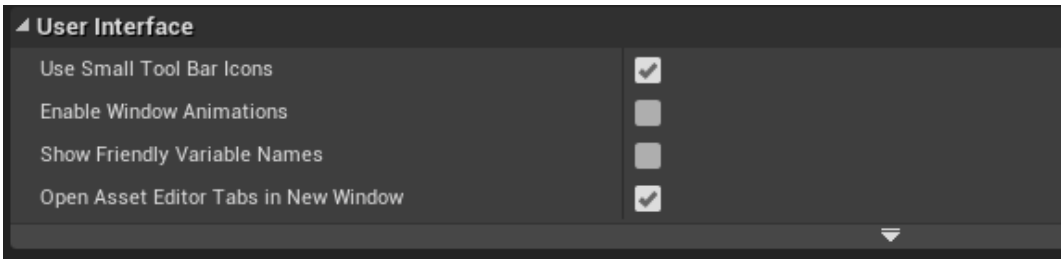


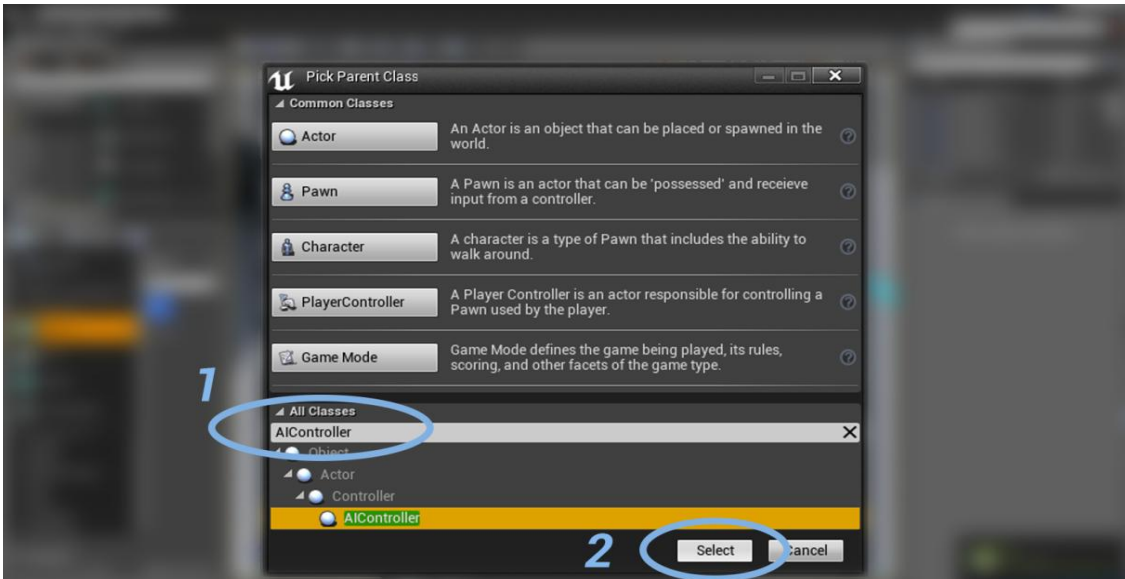
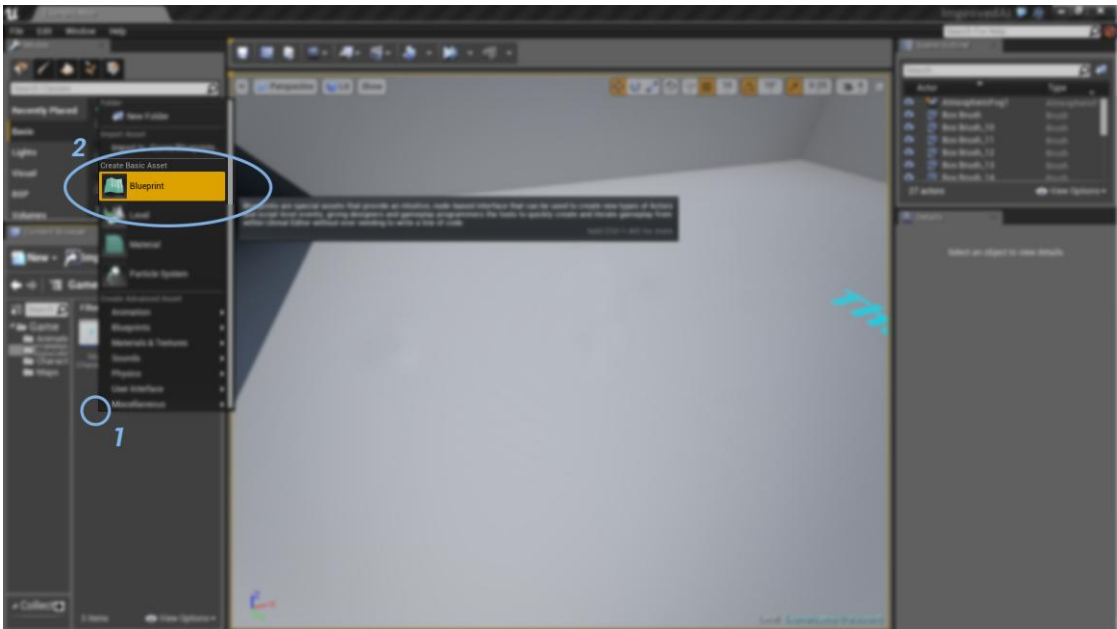


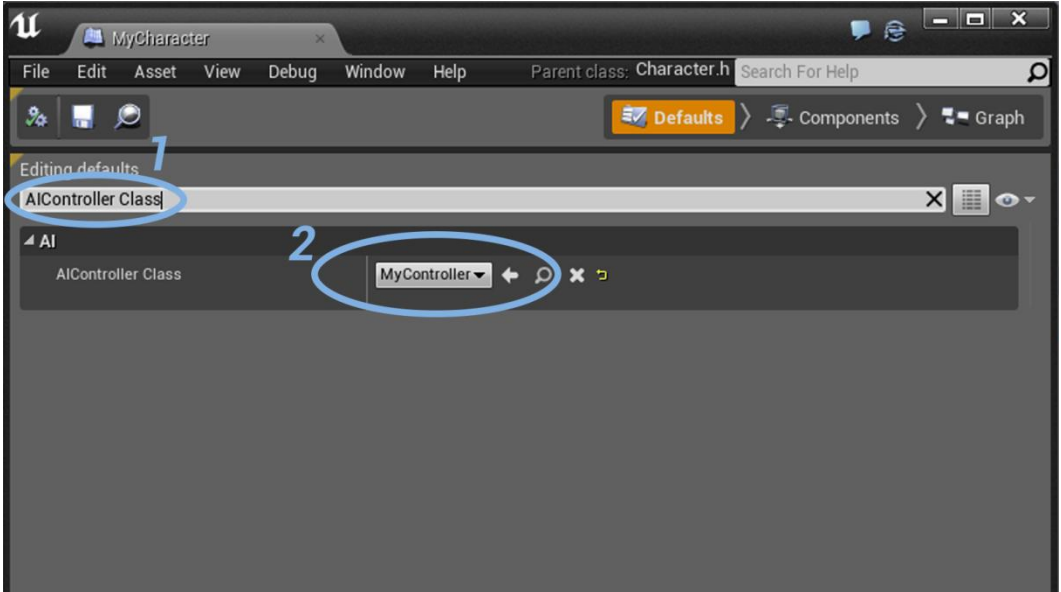


## Chapter 2: Creating Basic AI

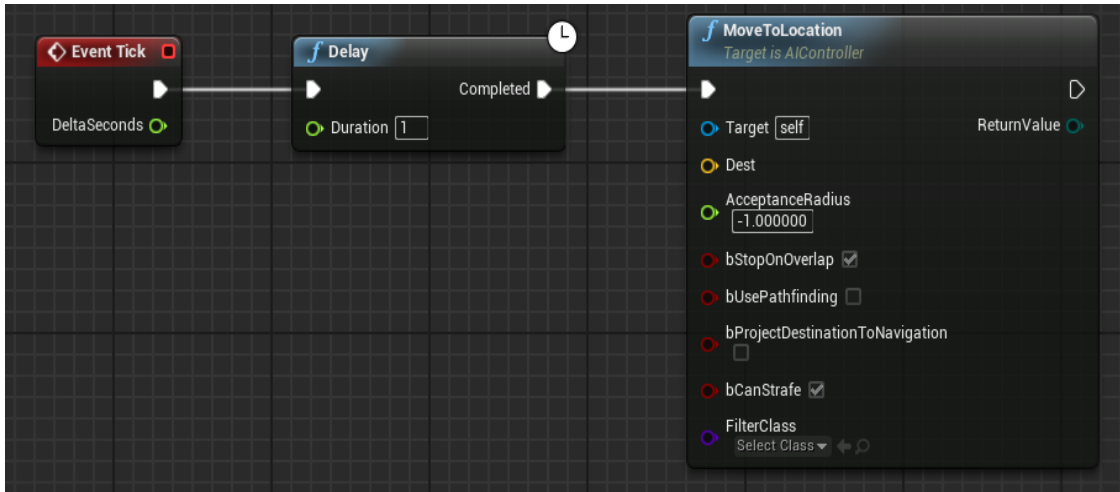
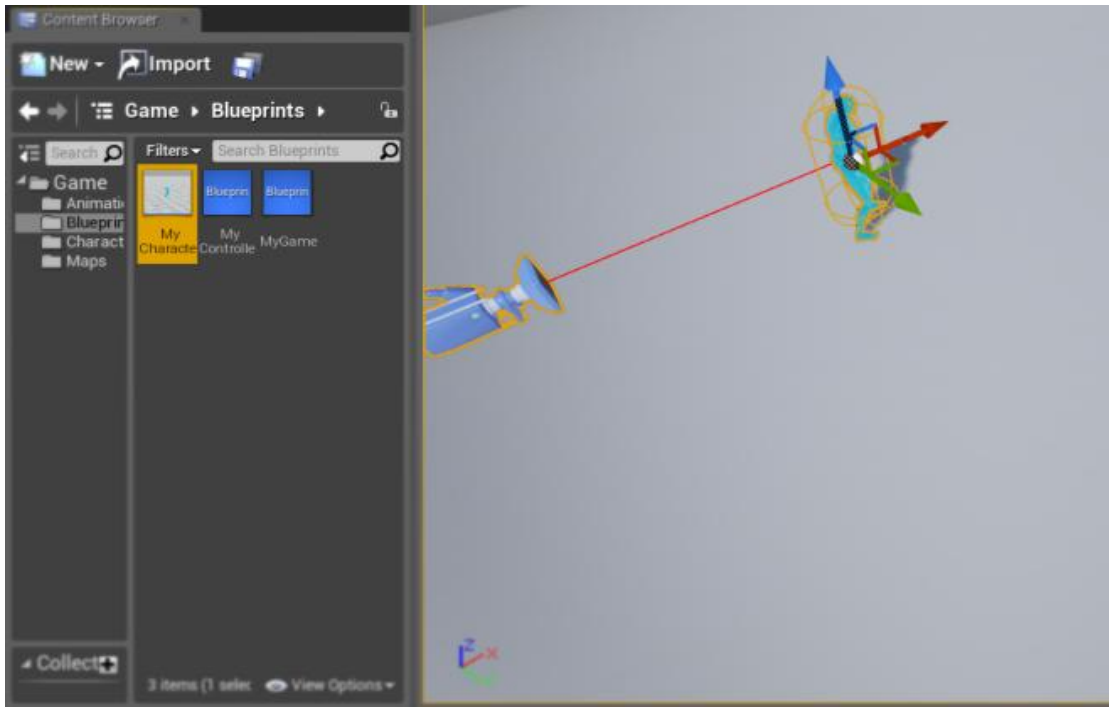


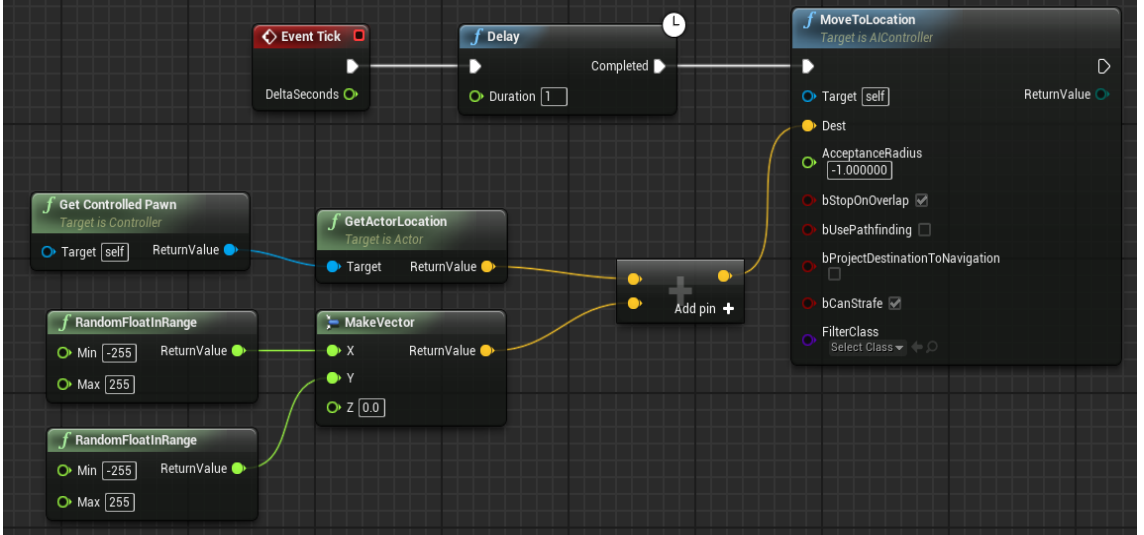
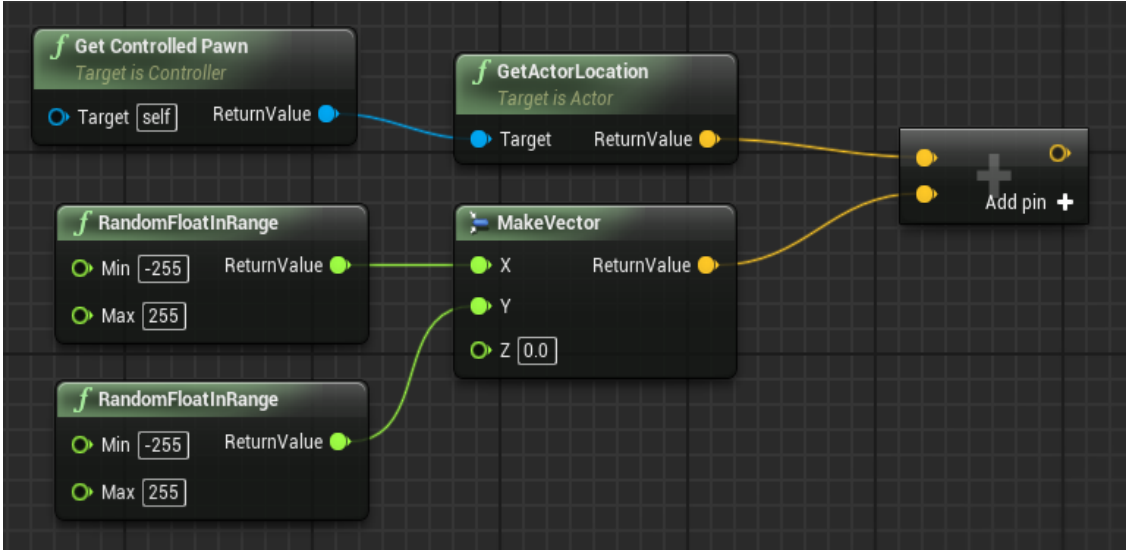












Event Tick

Delta Seconds

Move to Location  
*Target is AIController*

Target self

Dest

Acceptance Radius  
-1.000000

Stop on Overlap

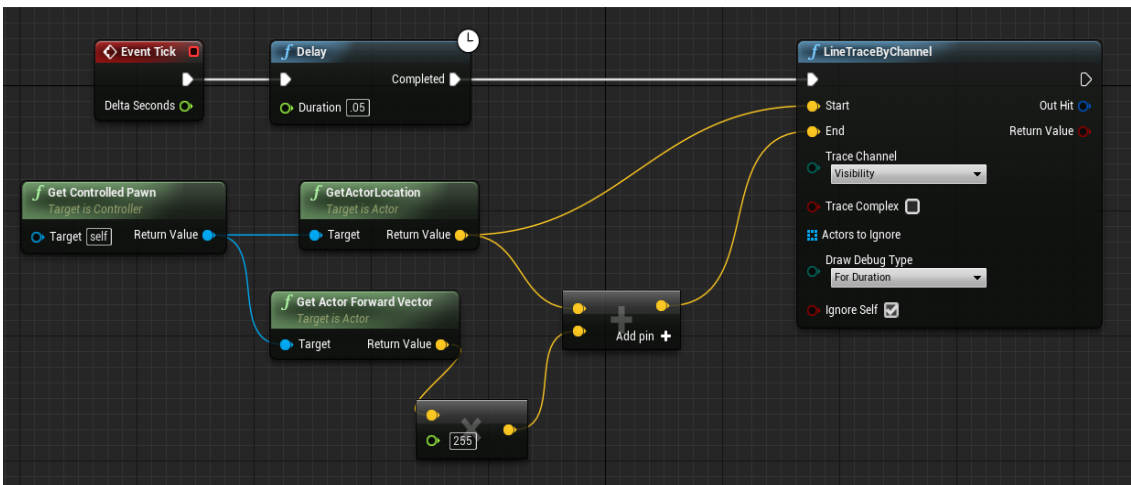
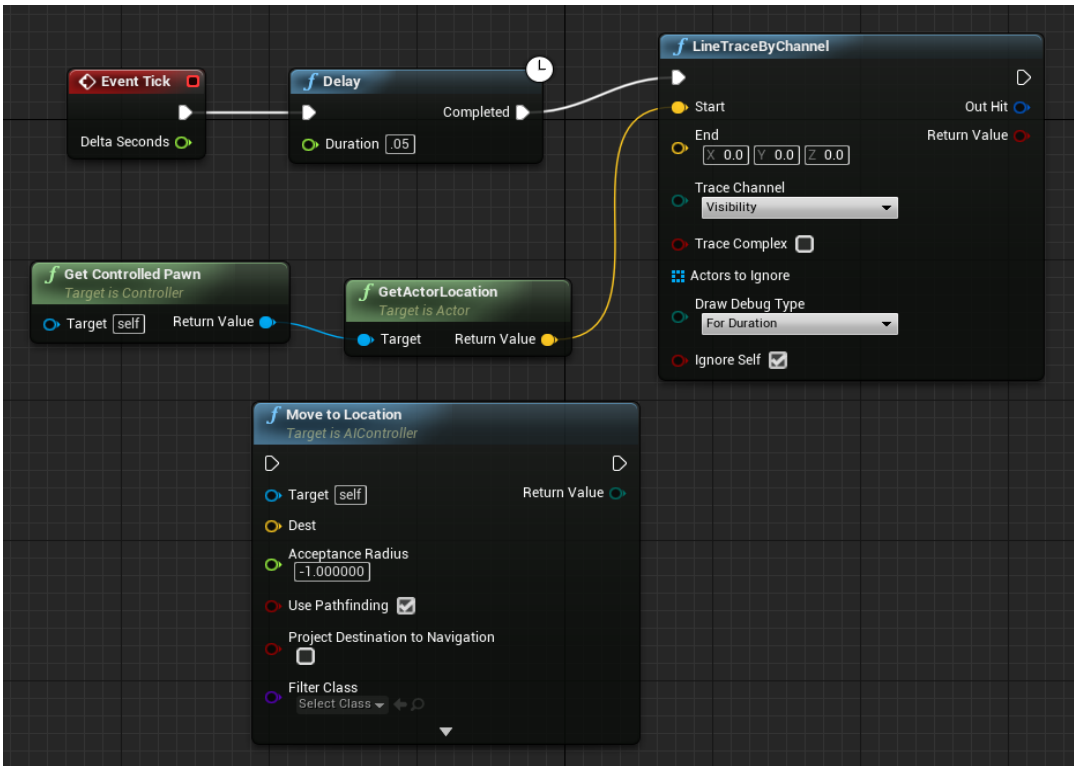
Use Pathfinding

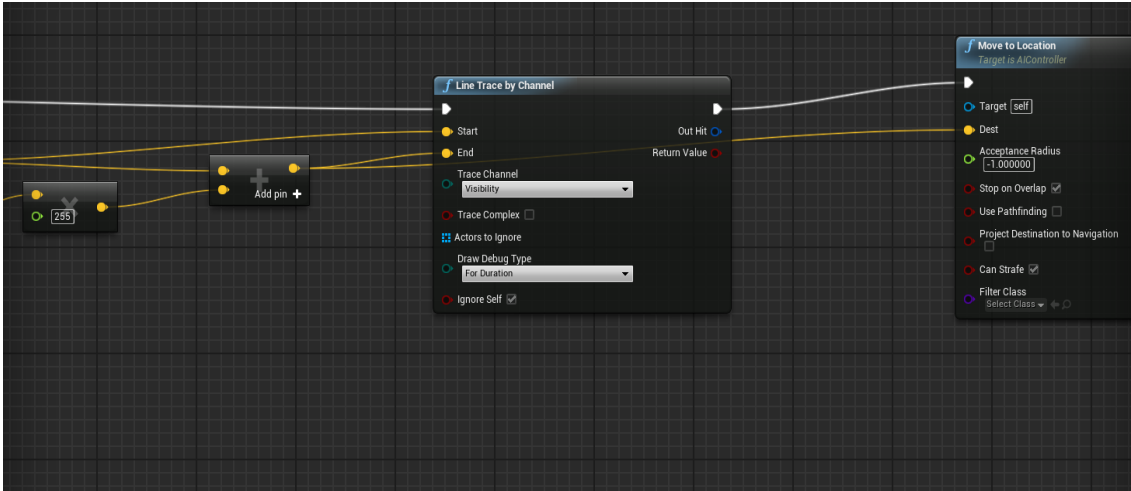
Project Destination to Navigation

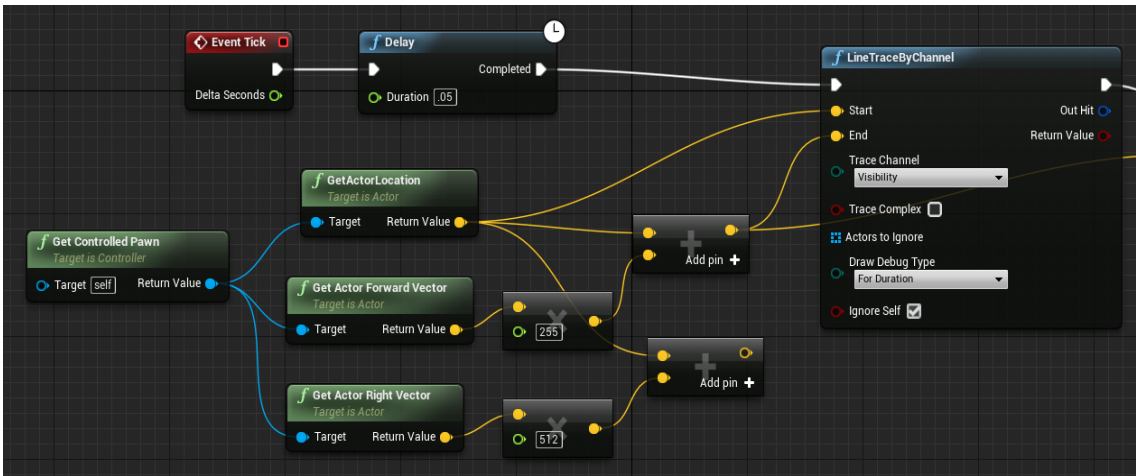
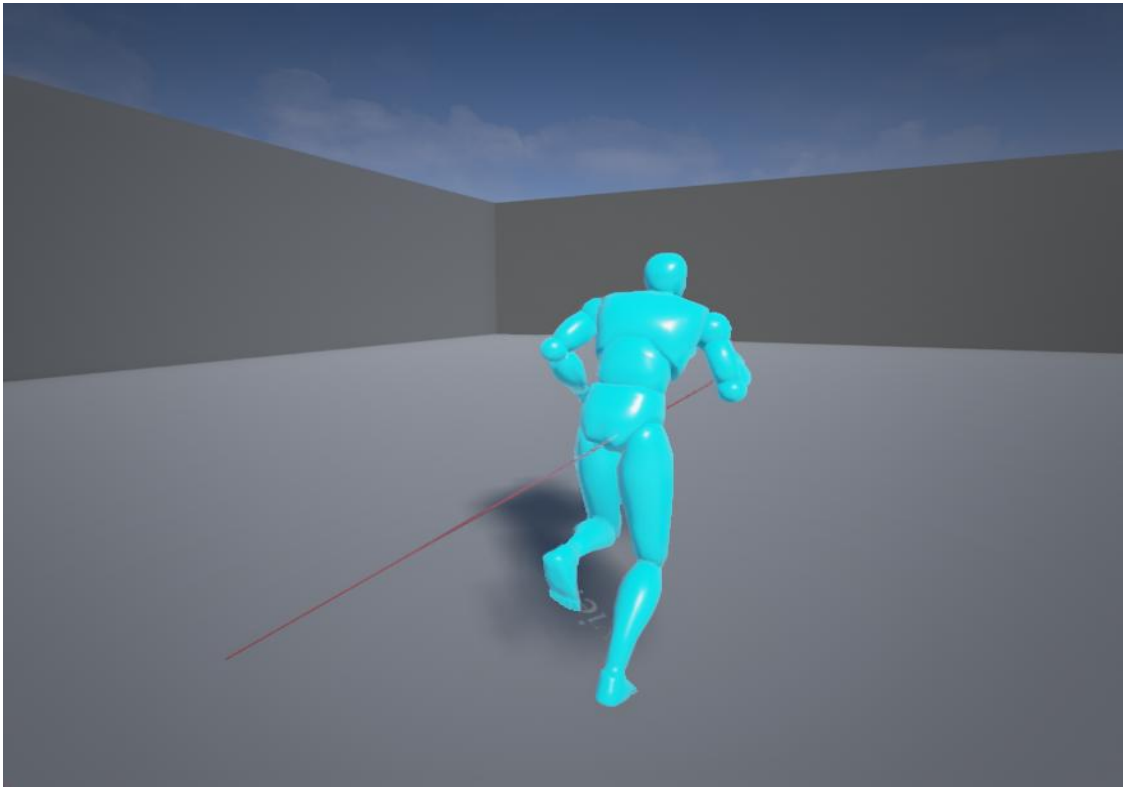
Can Strafe

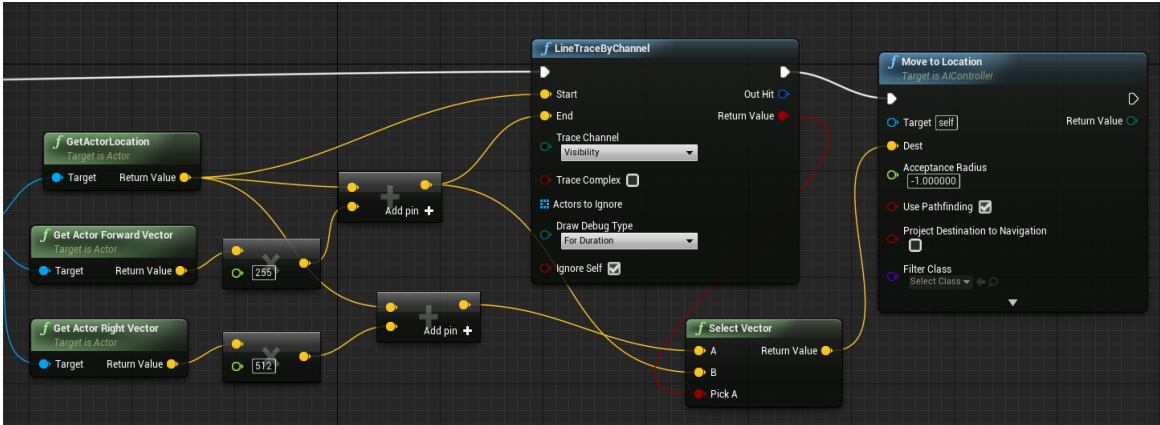
Filter Class  
Select Class

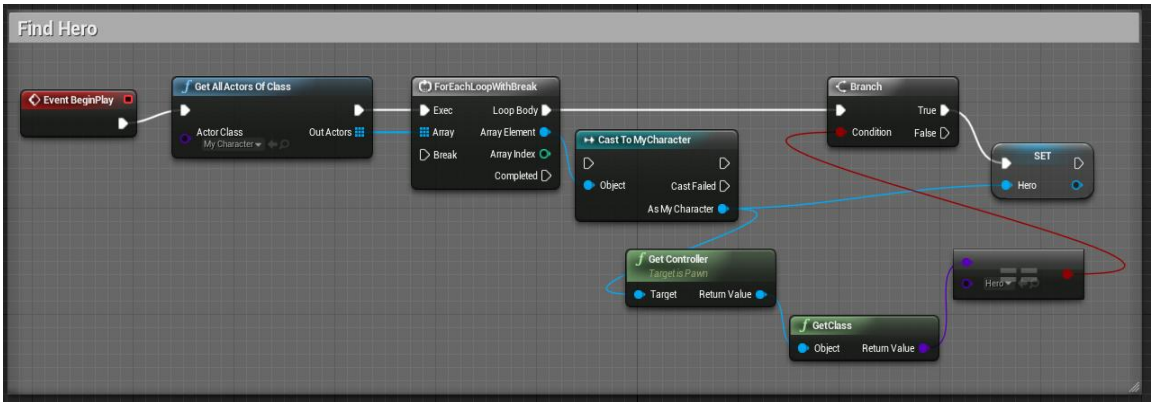
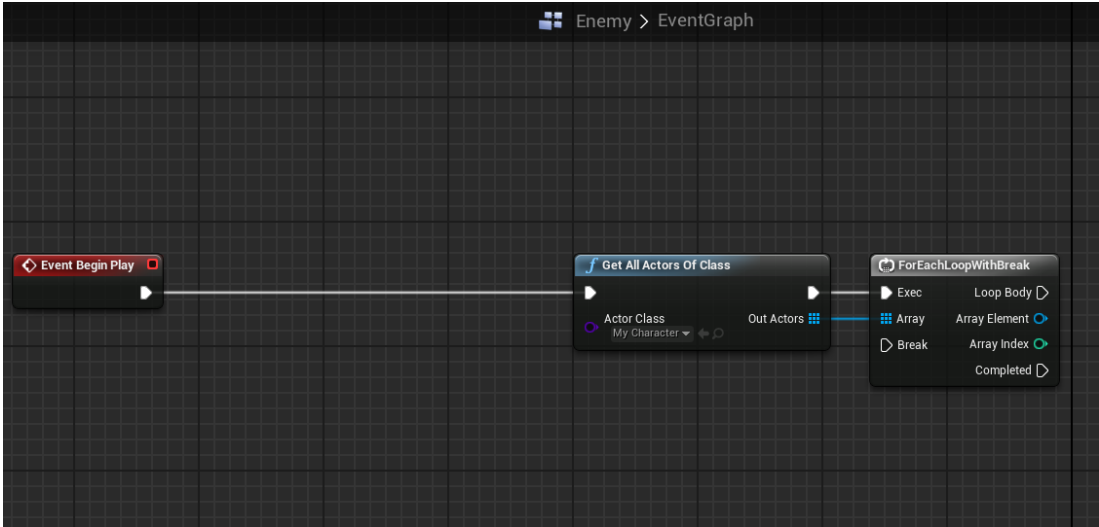
Return Value



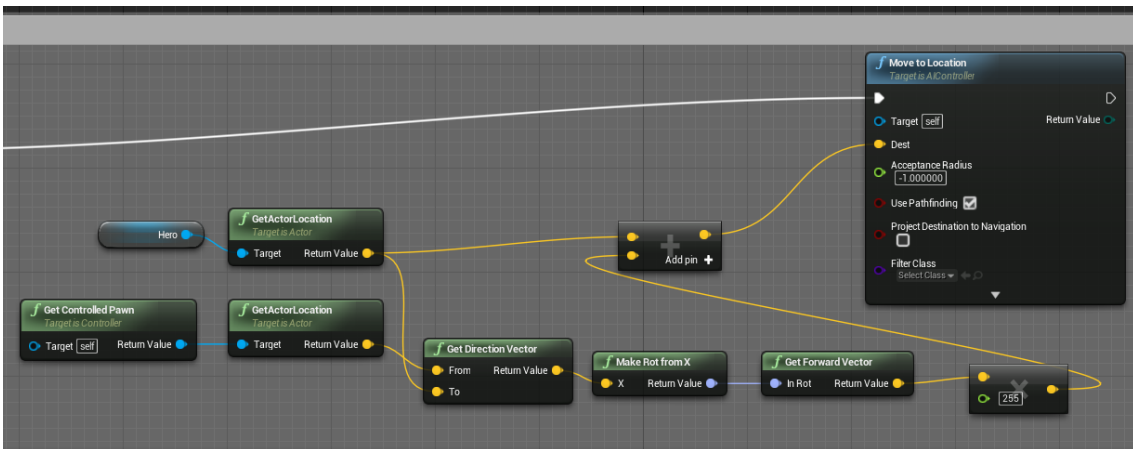
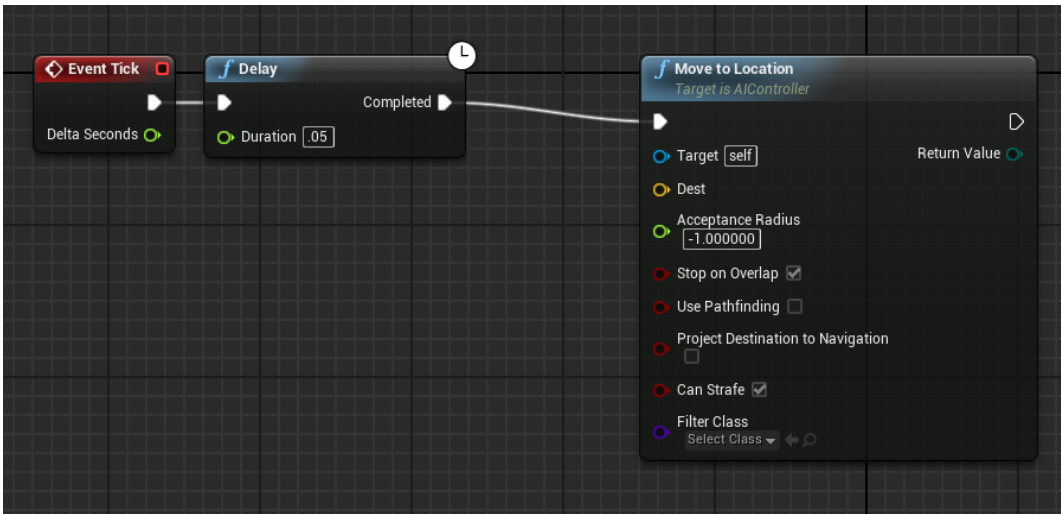




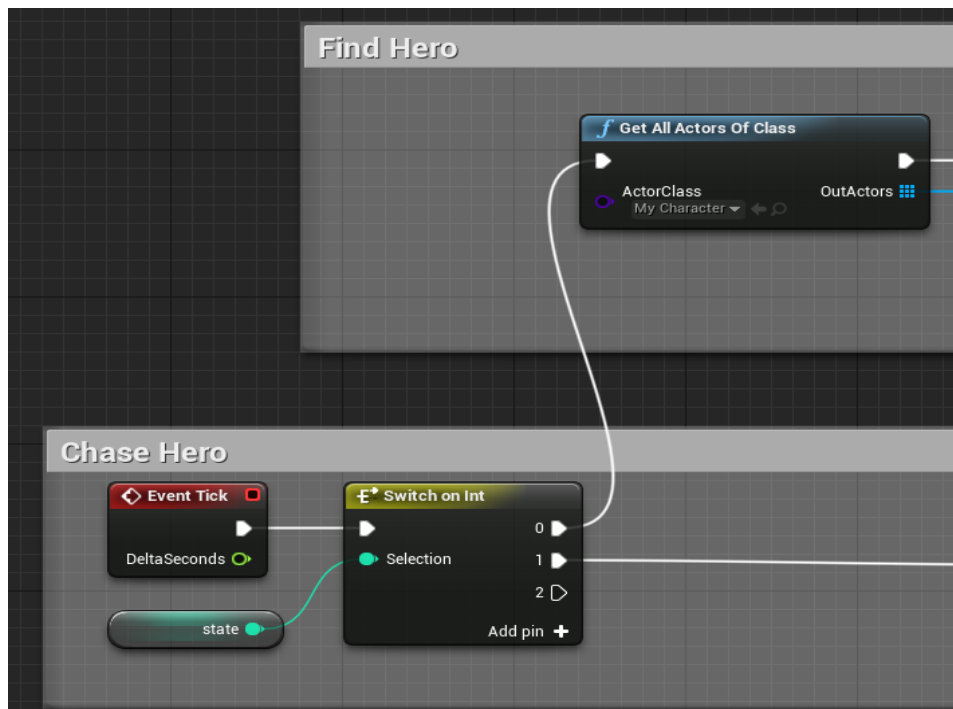
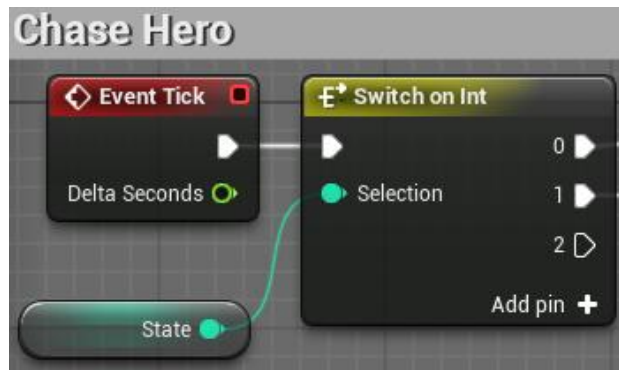


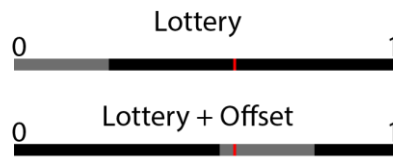




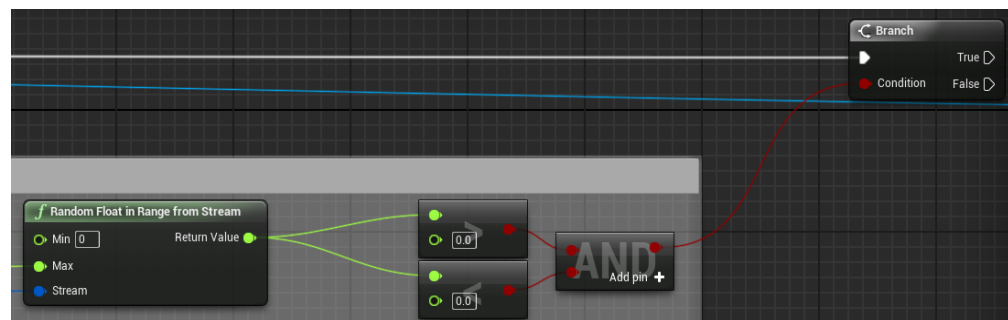
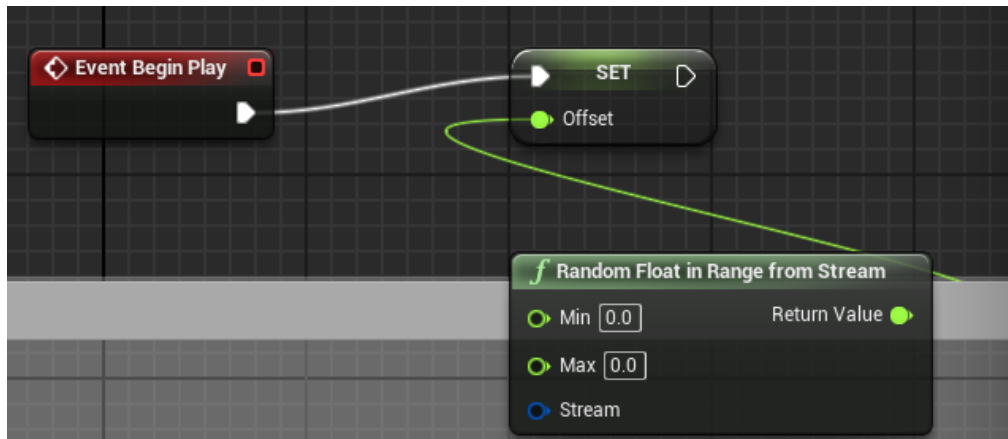


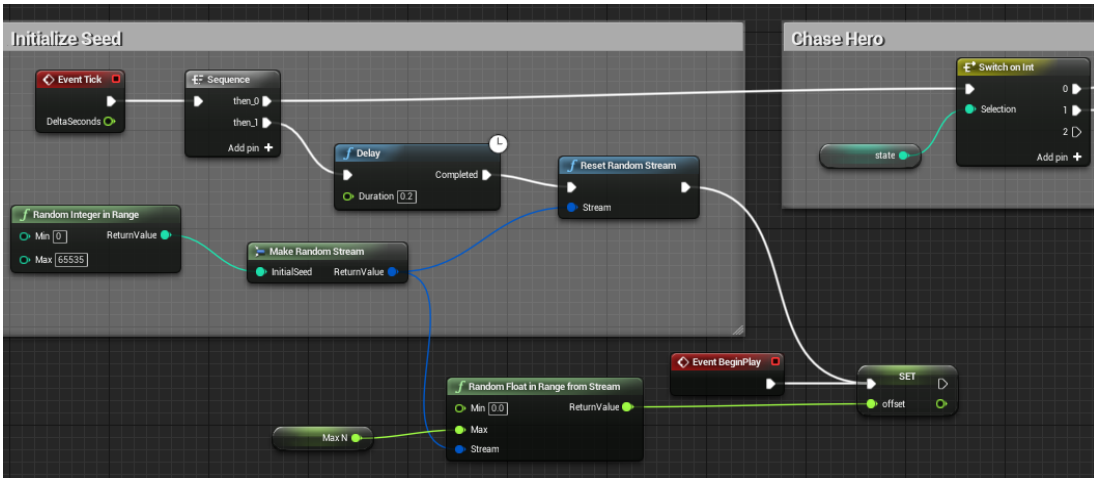
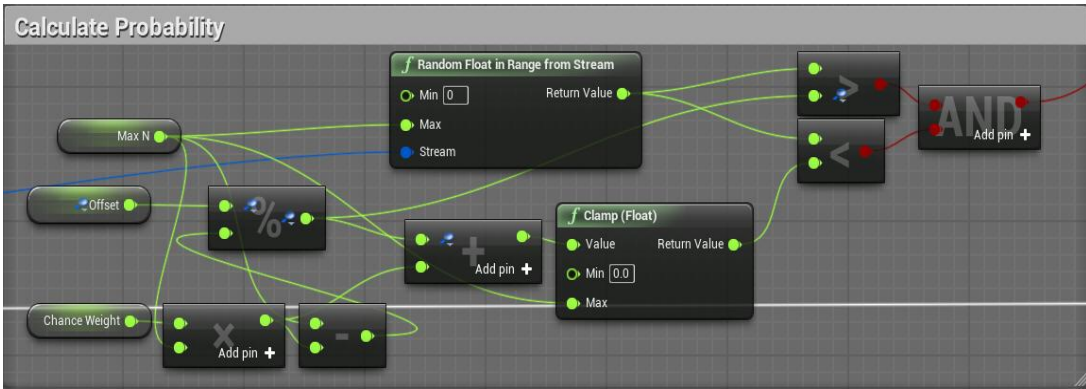
## Chapter 3: Adding Randomness and Probability

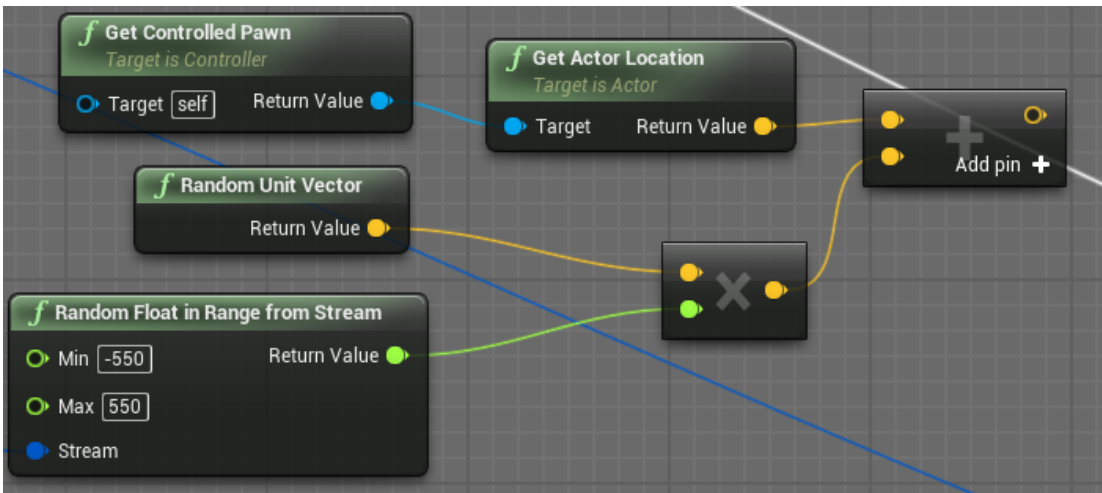
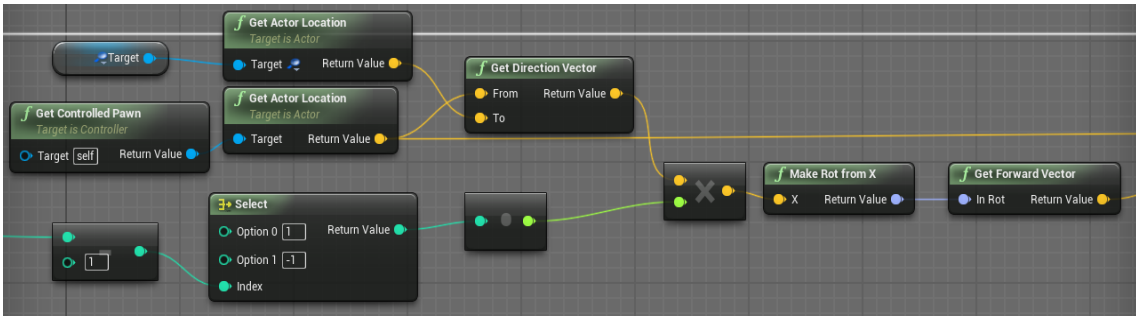
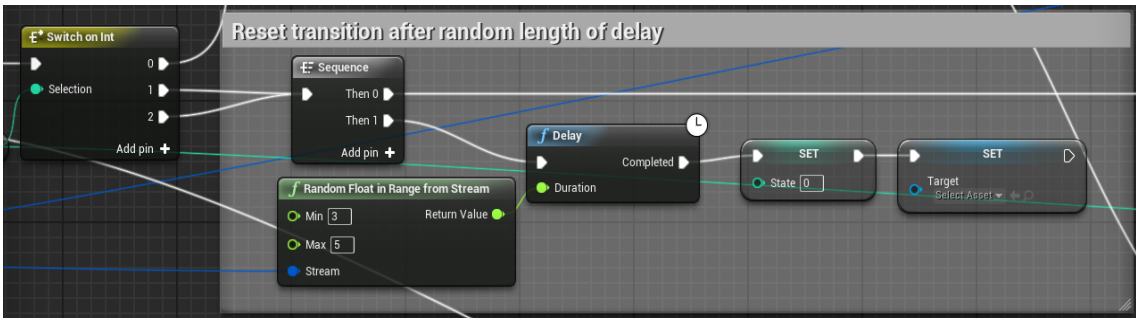


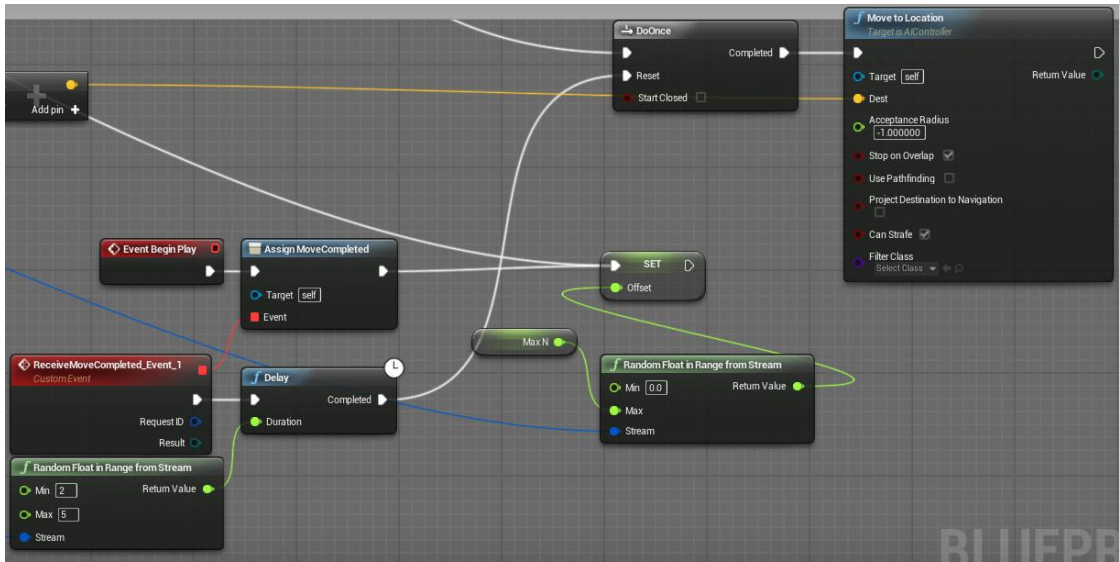


Is within probability?

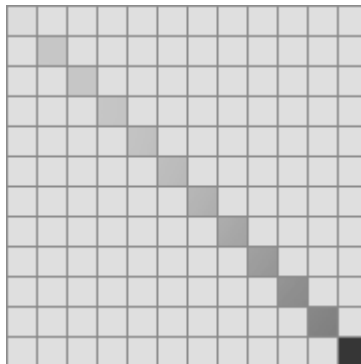
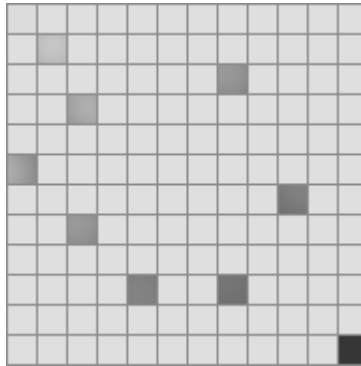


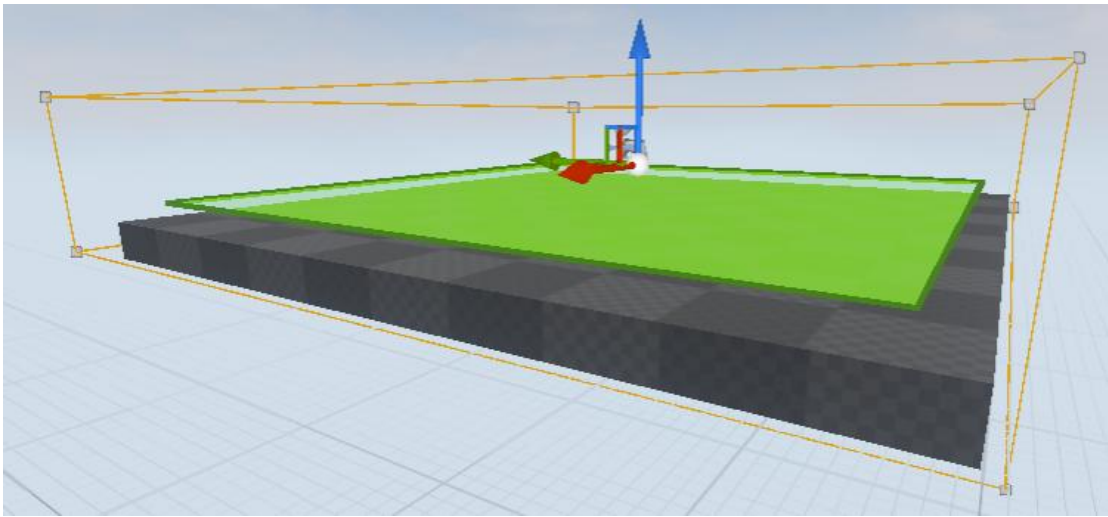
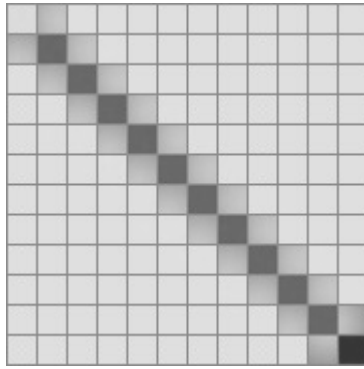




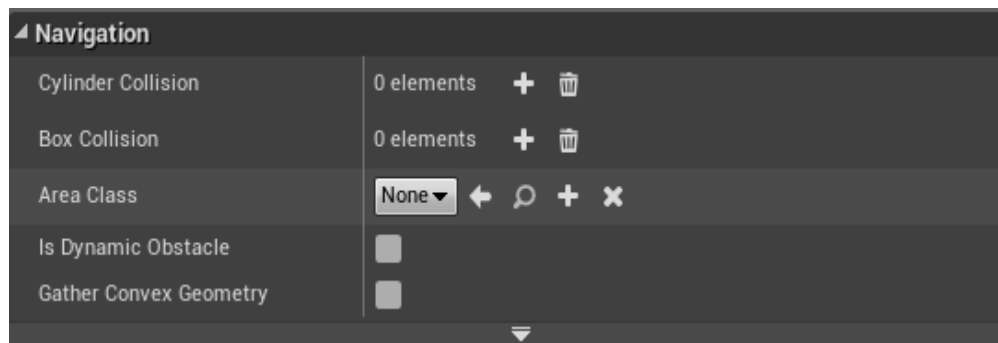


## Chapter 4: Introducing Movement



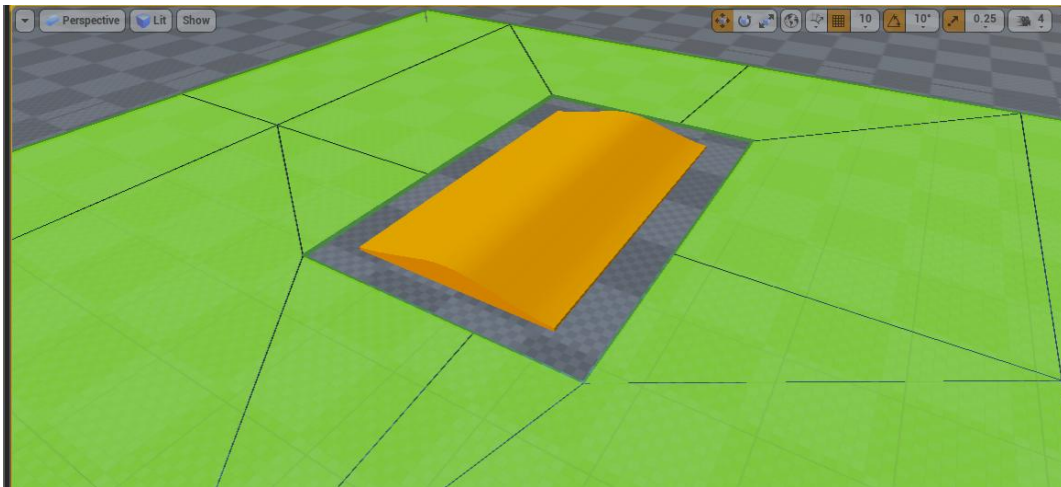






Navigation

|                        |                                     |          |           |
|------------------------|-------------------------------------|----------|-----------|
| Cylinder Collision     | 0 elements                          | +        | 🗑️        |
| Box Collision          | 1 elements                          | +        | 🗑️ ↗️     |
| 0                      | 2 members                           | ▼        | ↗️        |
| Offset                 | X -124.000001                       | Y -218.5 | Z -30.5   |
| Extent                 | X 124.000008                        | Y 218.5  | Z 30.5    |
| Area Class             | NavArea_Null                        | ←        | 🔍 + ✖️ ↗️ |
| Is Dynamic Obstacle    | <input checked="" type="checkbox"/> |          |           |
| Gather Convex Geometry | <input type="checkbox"/>            |          |           |



**f Simple Move to Location**

▷

- Controller
- Goal

**f Move to Location**  
*Target is AIController*

▷

Target  Return Value

Dest

Acceptance Radius

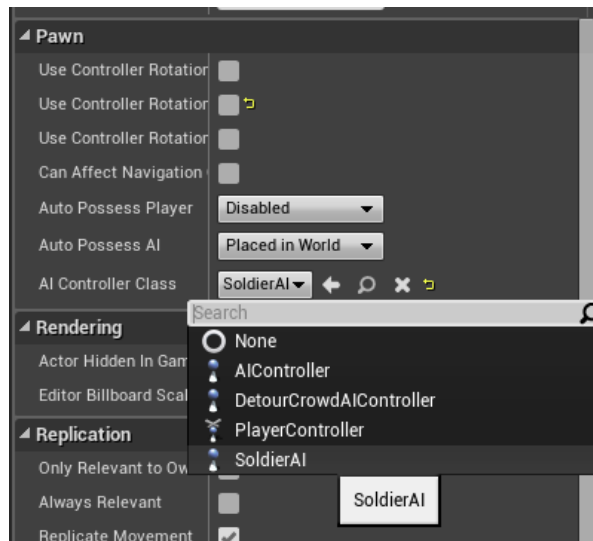
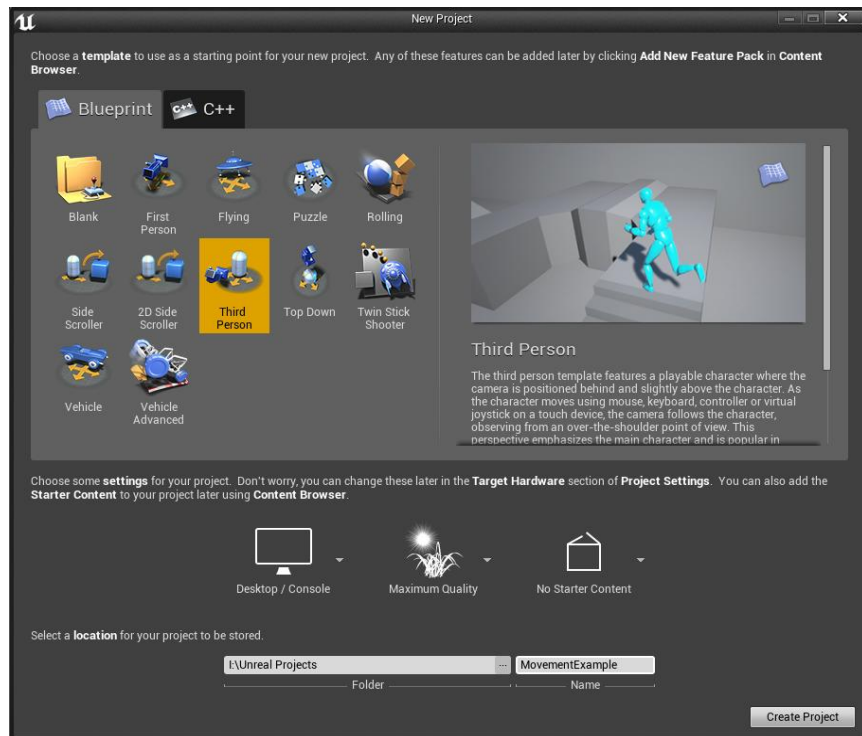
Stop on Overlap

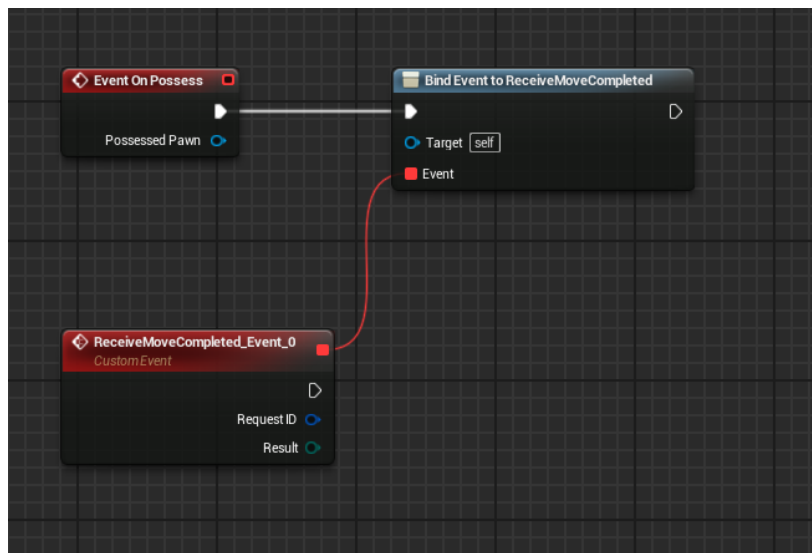
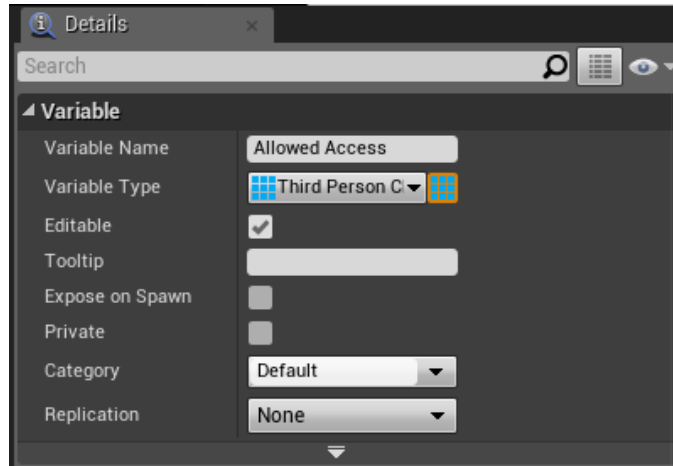
Use Pathfinding

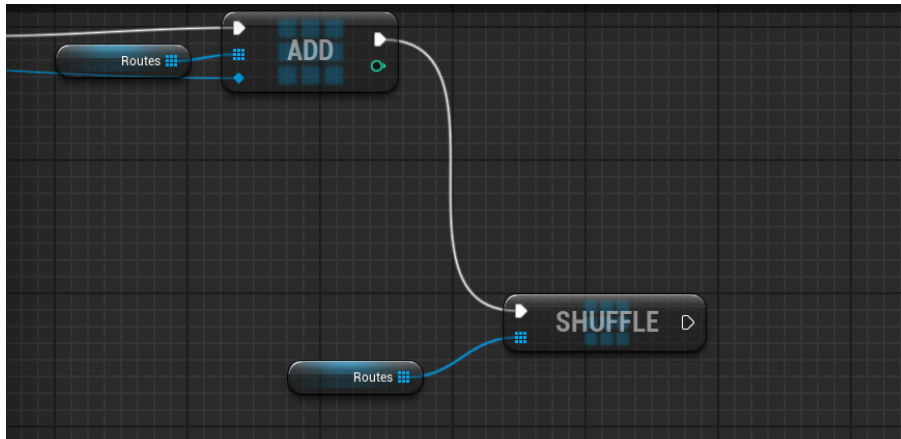
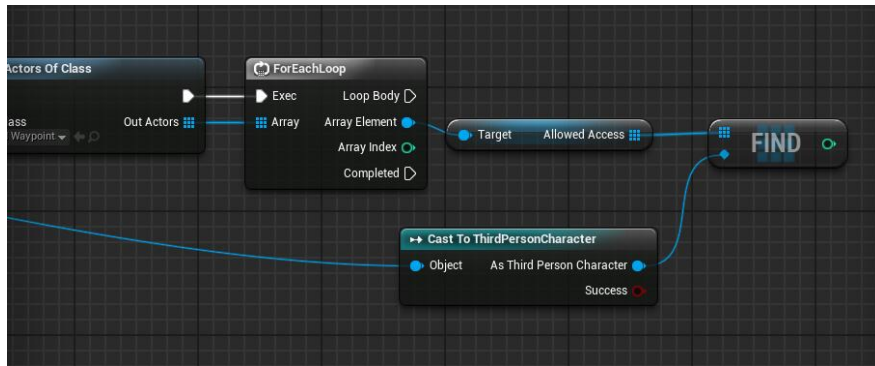
Project Destination to Navigation

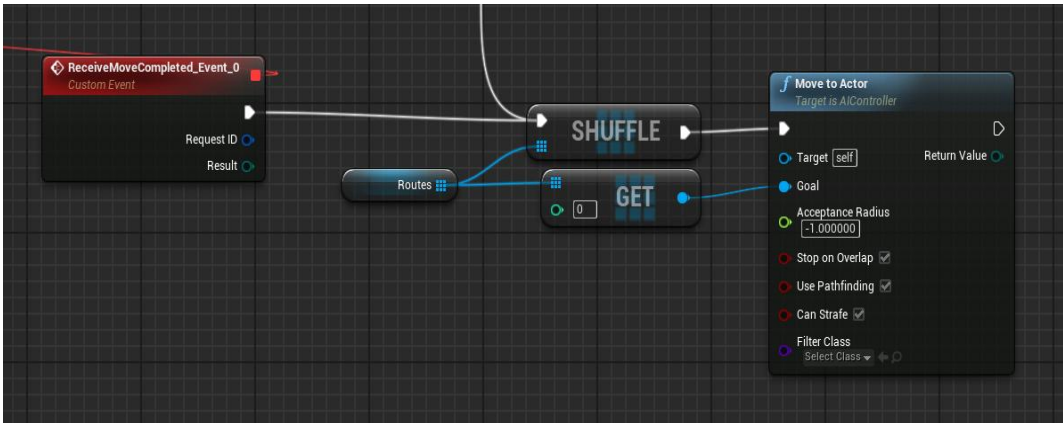
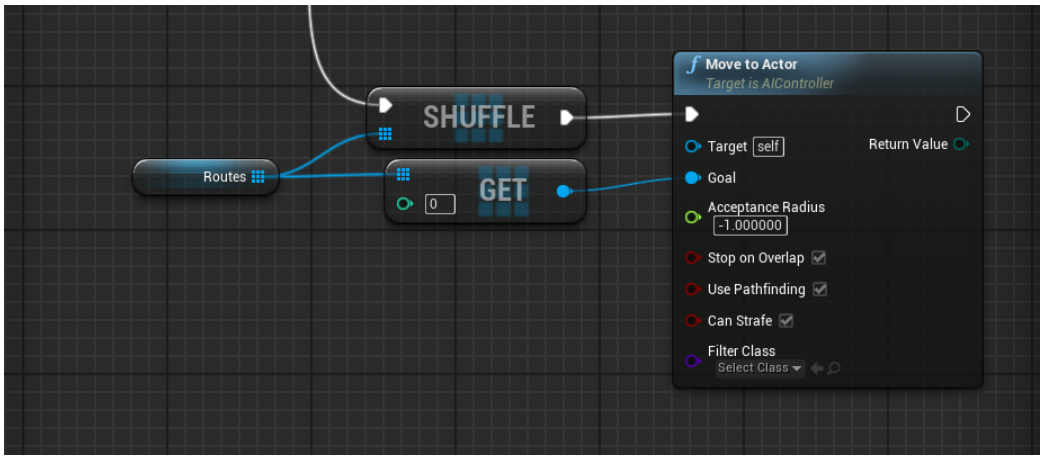
Can Strafe

Filter Class








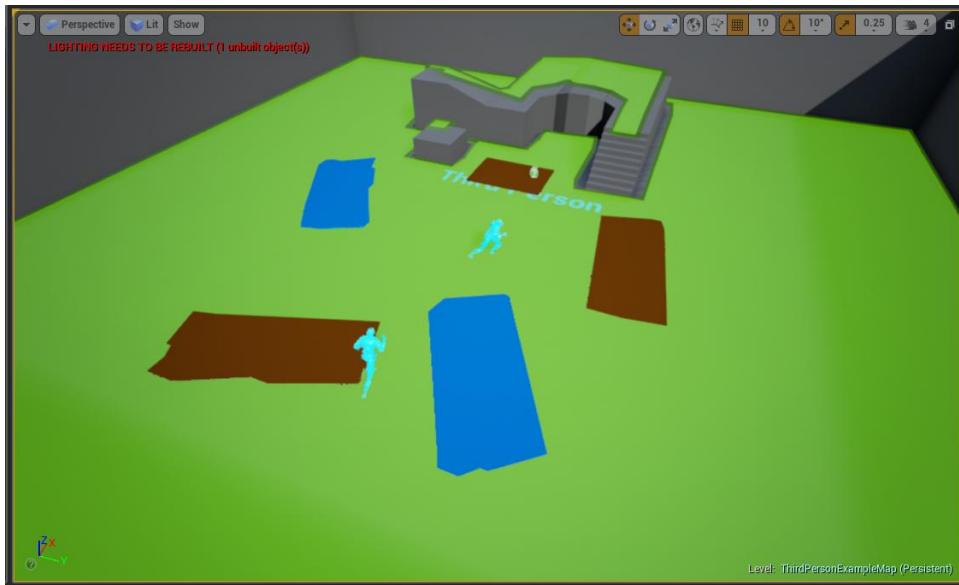




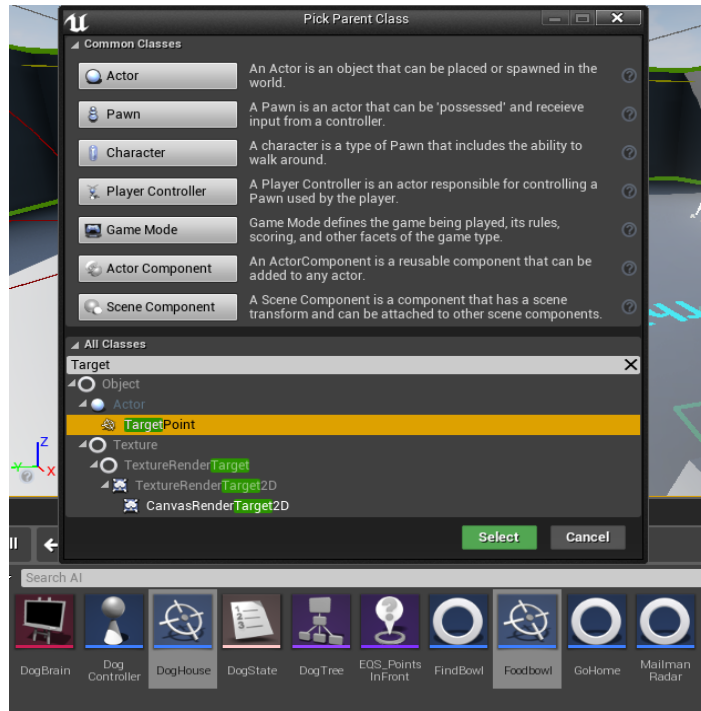
▲ Nav Area

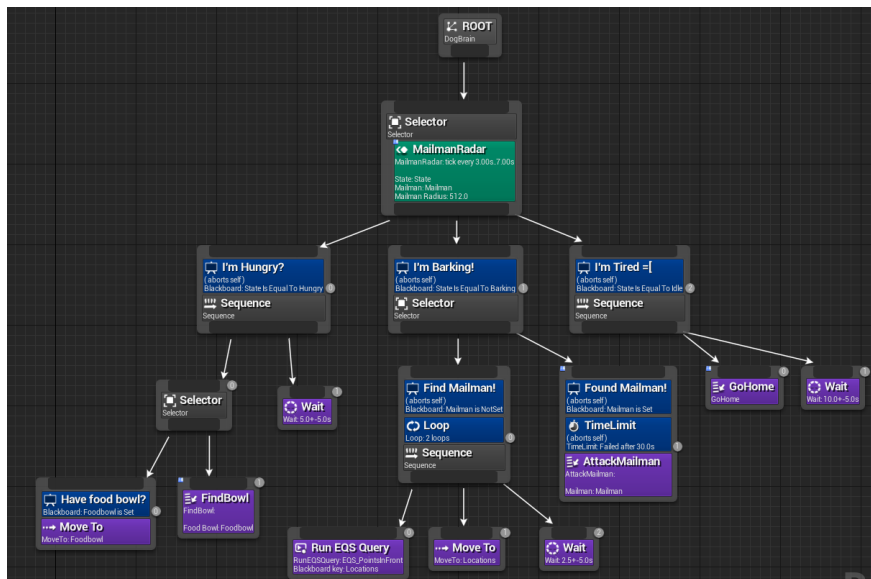
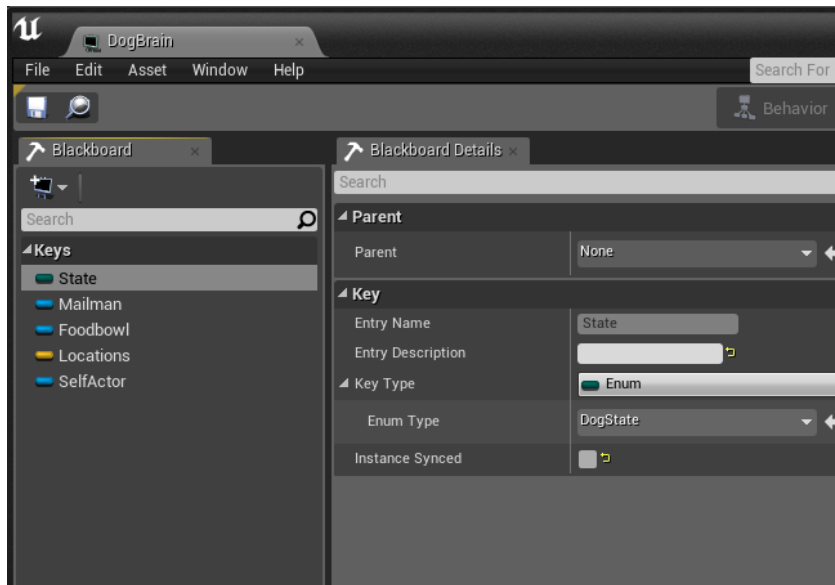
|                          |  |
|--------------------------|--|
| Default Cost             | 2.5  |
| Fixed Area Entering Cost | 0.0  |
| ▷ Draw Color             |  |

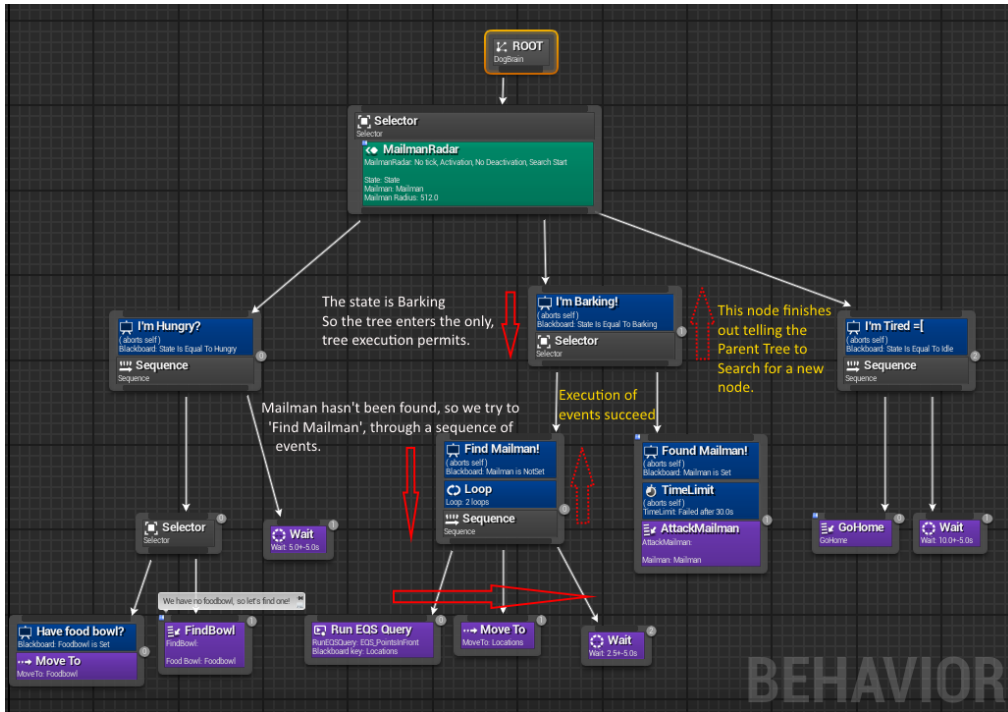


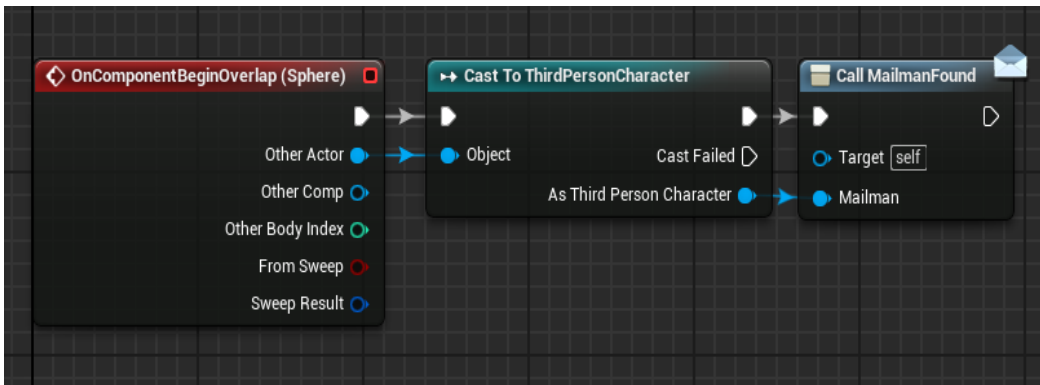
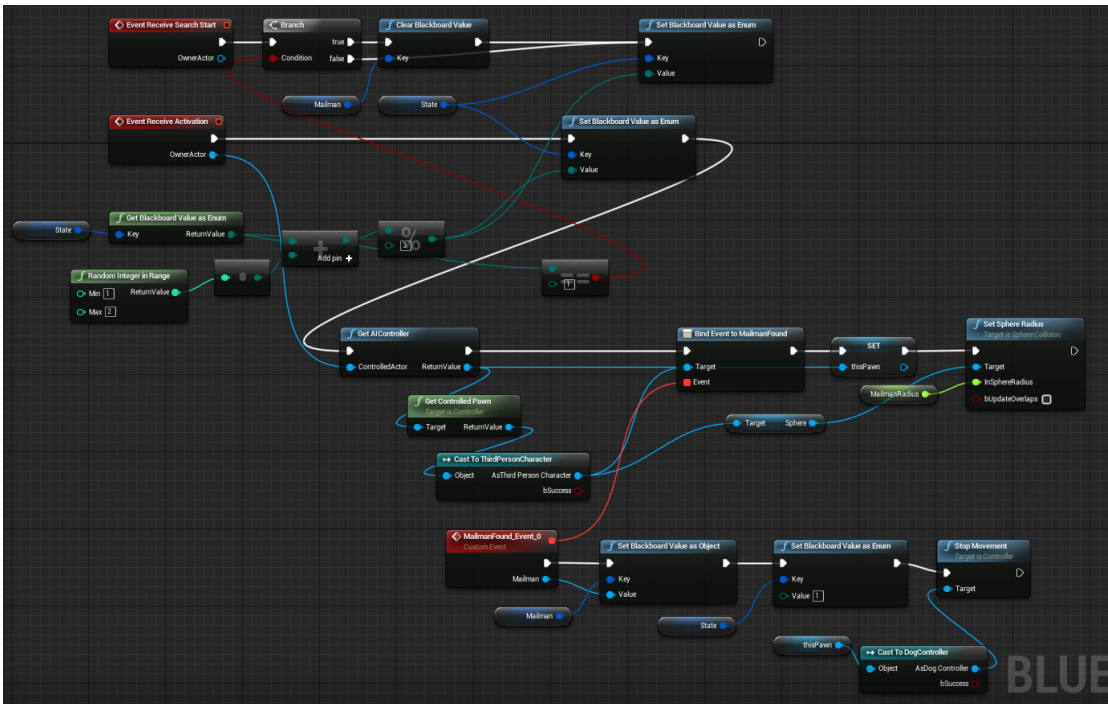


## Chapter 5: Giving AI Choices





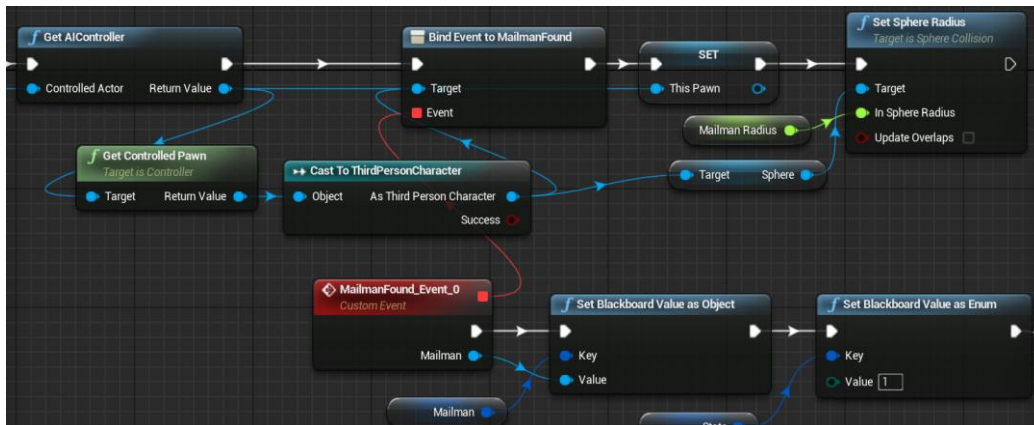
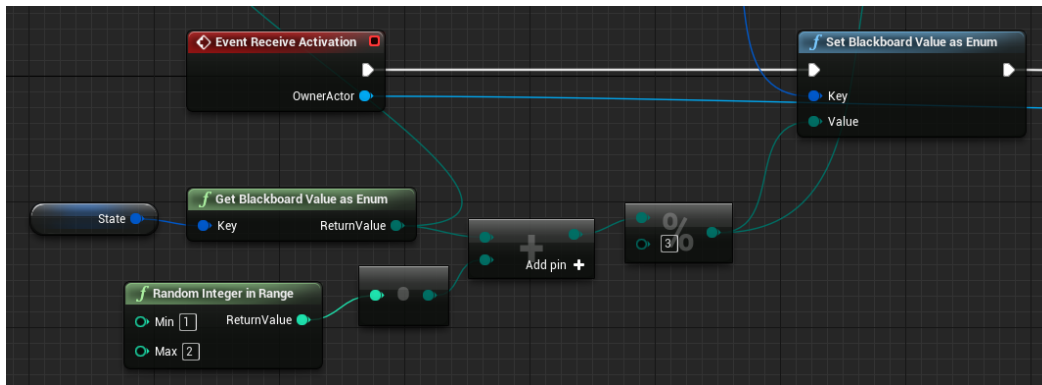


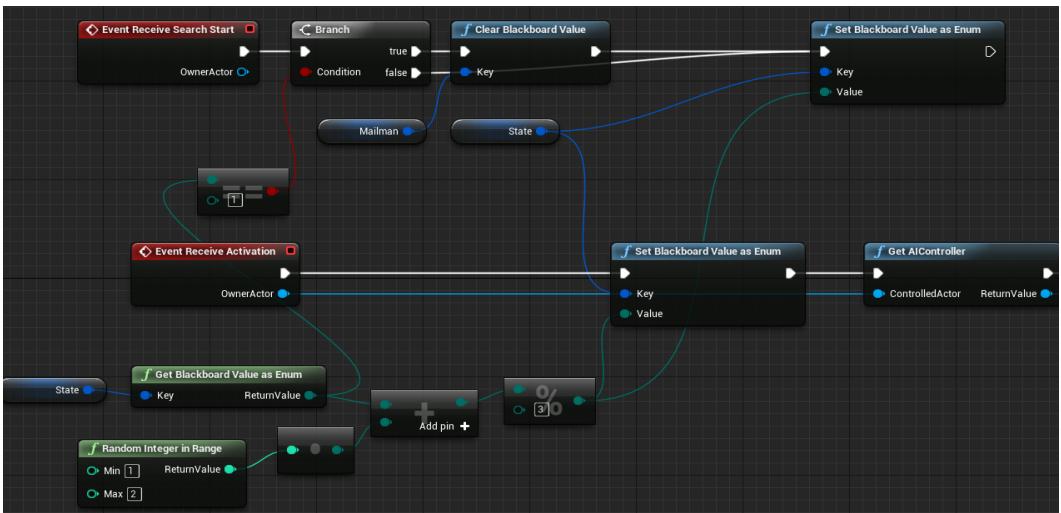
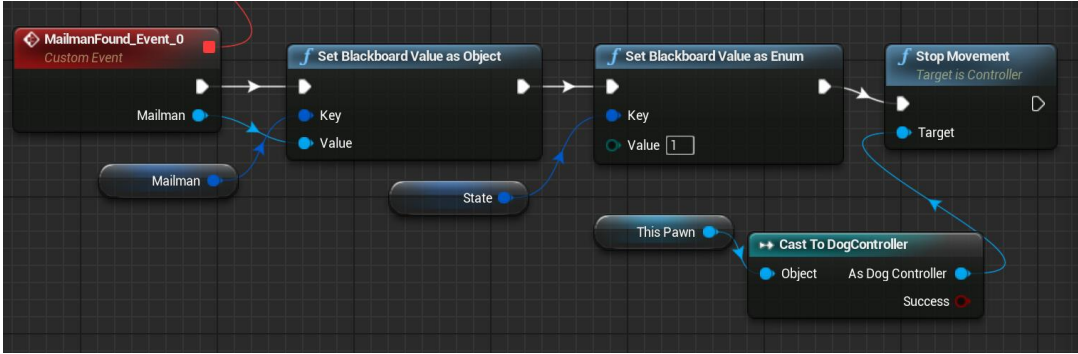


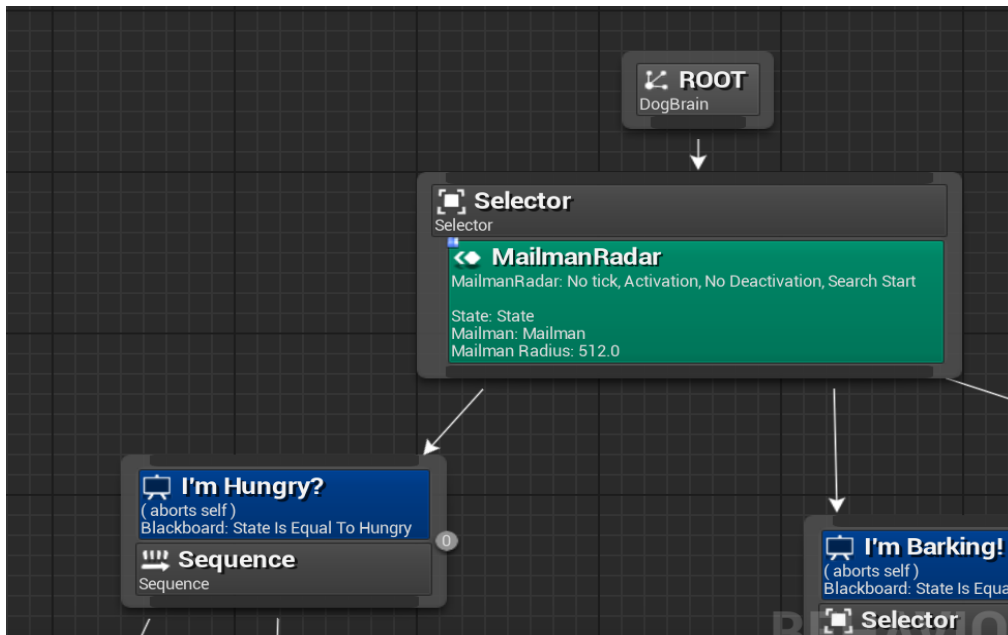
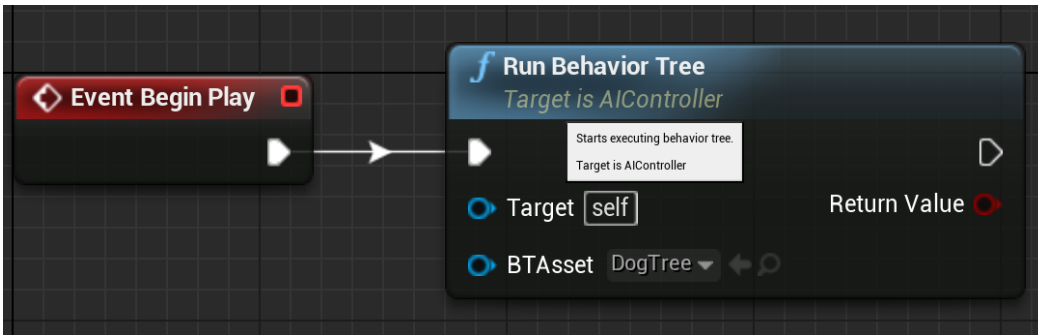
**Variables** +

- State
- Mailman
- MailmanRadius
- thisPawn

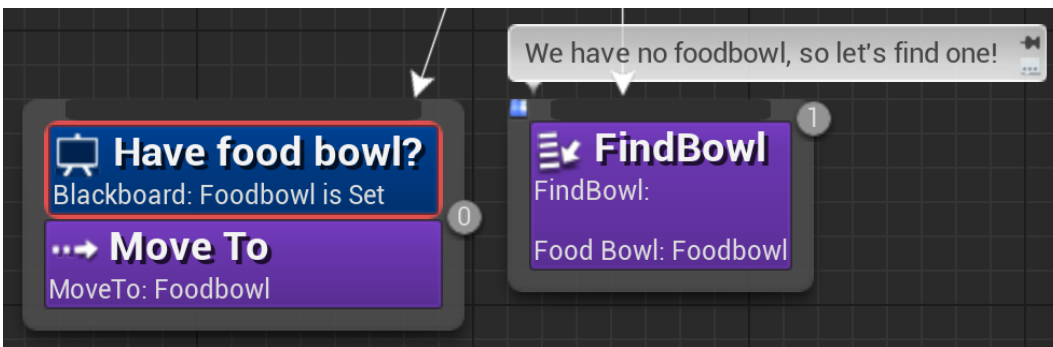
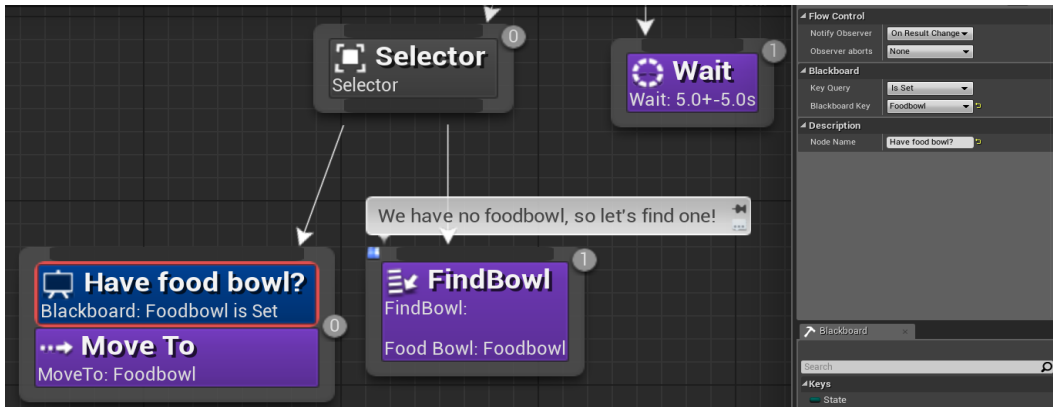
**Event Dispatchers** +











**Generator**

Grid Size: 1024.0

Space Between: 512.0

Generate Around: EnvQueryContext\_Querier

Projection Data: navmesh trace

Trace Mode: Navigation

Navigation Filter: None

Extent X: 0.0

Project Down: 1024.0

Project Up: 1024.0

Post Projection Vertical Offset: 0.0

**Dot**

Line A  
Mode: Rotation  
Rotation: EnvQueryContext\_Querier

Line B  
Mode: Two Points  
Line From: EnvQueryContext\_Querier  
Line To: EnvQueryContext\_Item

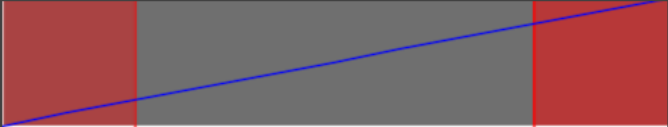
Test Mode: Dot (3D)  
Absolute Value:

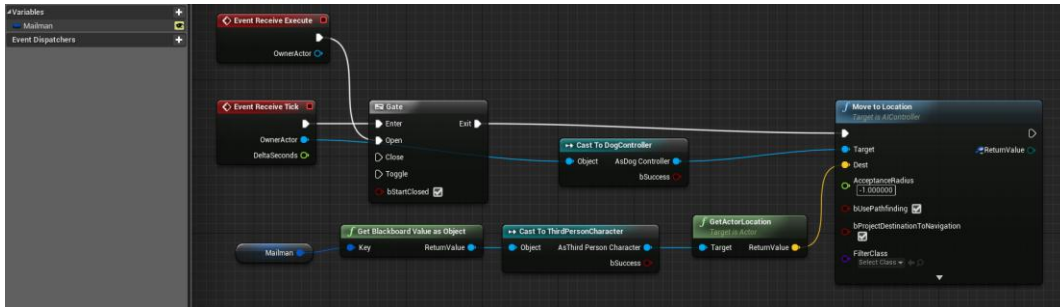
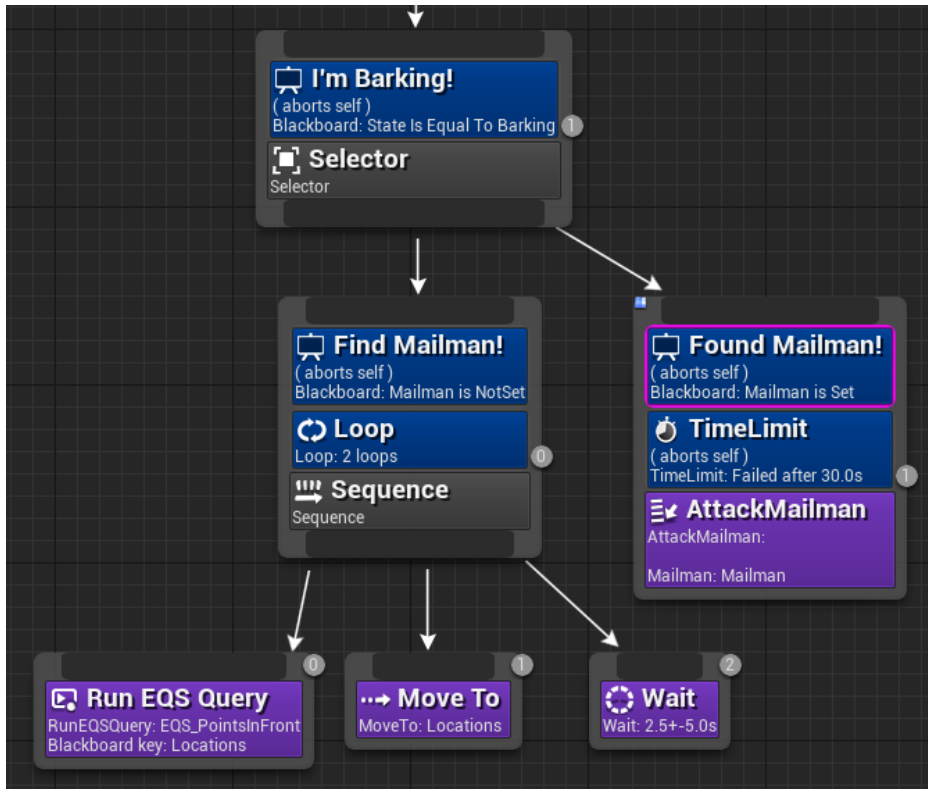
**Test**  
Test Purpose: Filter and Score

**Filter**  
Filter Type: Range  
Float Value Min: 0.4  
Float Value Max: 0.85

**Score**  
Clamping:   
Scoring Equation: Linear  
Final score = ScoringFactor \* NormalizedItemValue  
Scoring Factor: 1.0

**Preview**





**I'm Tired =**  
 ( aborts self )  
 Blackboard: State Is Equal To Idle 2  
**Sequence**  
 Sequence

**GoHome**  
 GoHome 0

**Wait**  
 Wait: 10.0+-5.0s 1

**Flow Control**  
 Notify Observer: On Result Change  
 Observer aborts: Self

**Blackboard**  
 Key Query: Is Equal To  
 Key Value: Idle  
 Blackboard Key: State

**Description**  
 Node Name: I'm Tired =

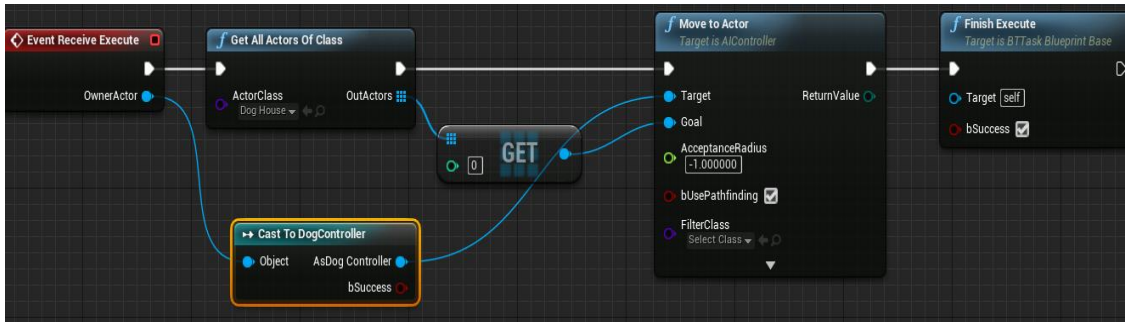
Nodes aborted by mode: Self

Blackboard

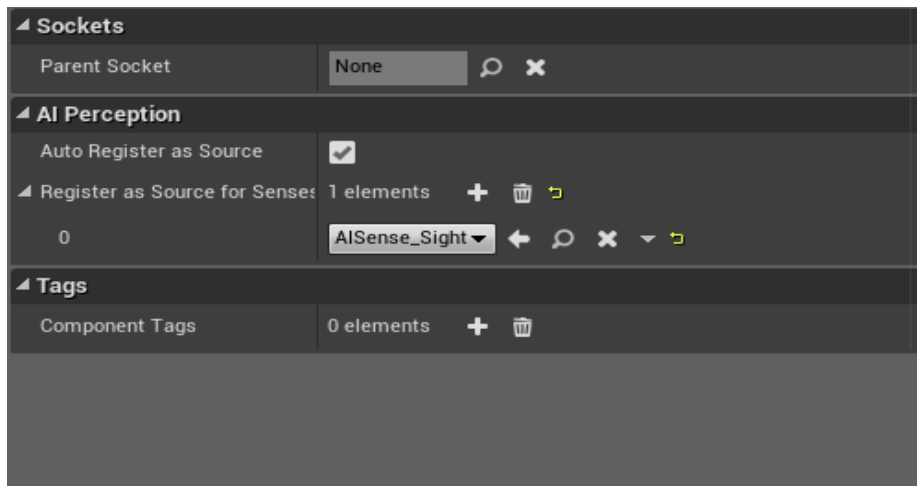
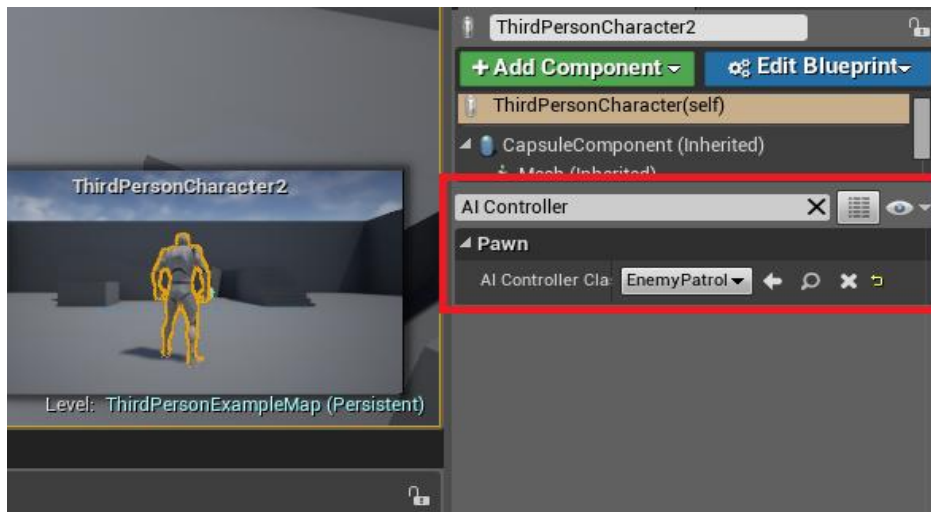
Search

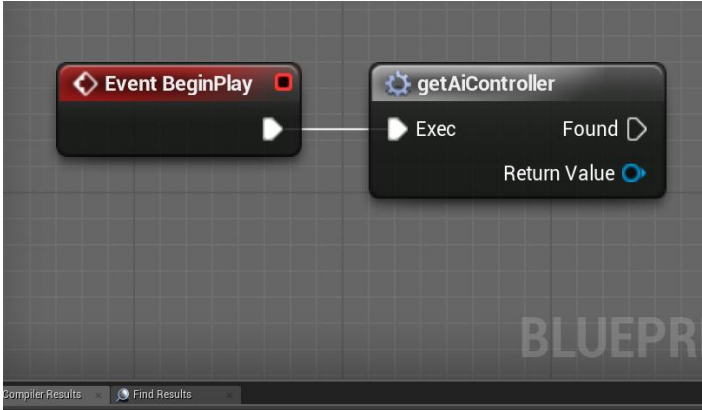
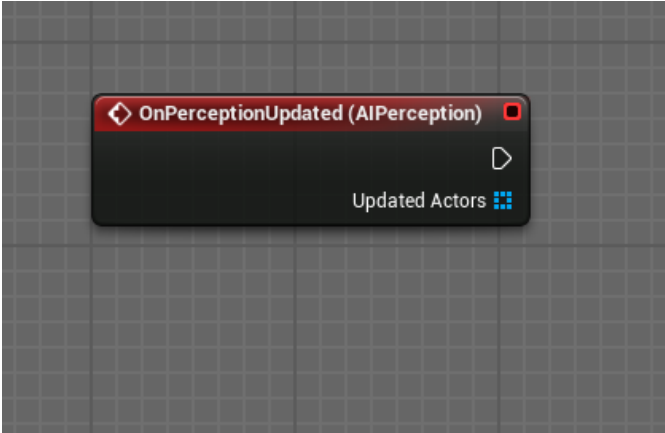
**Keys**

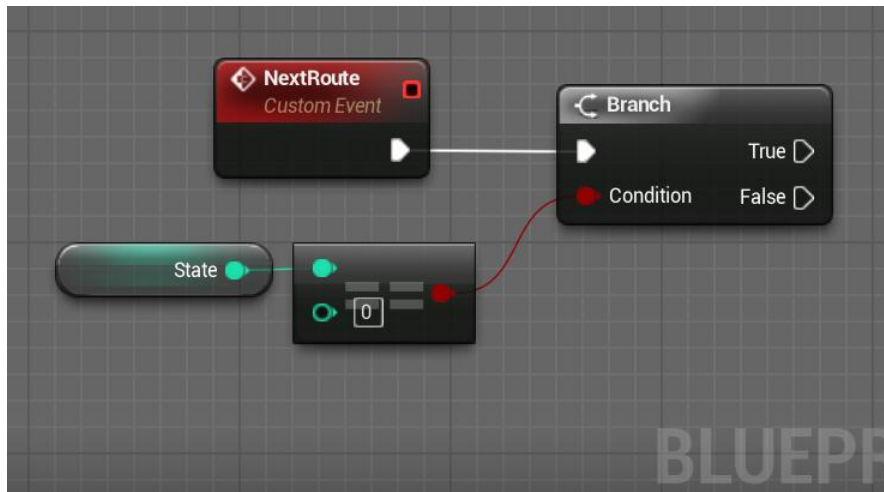
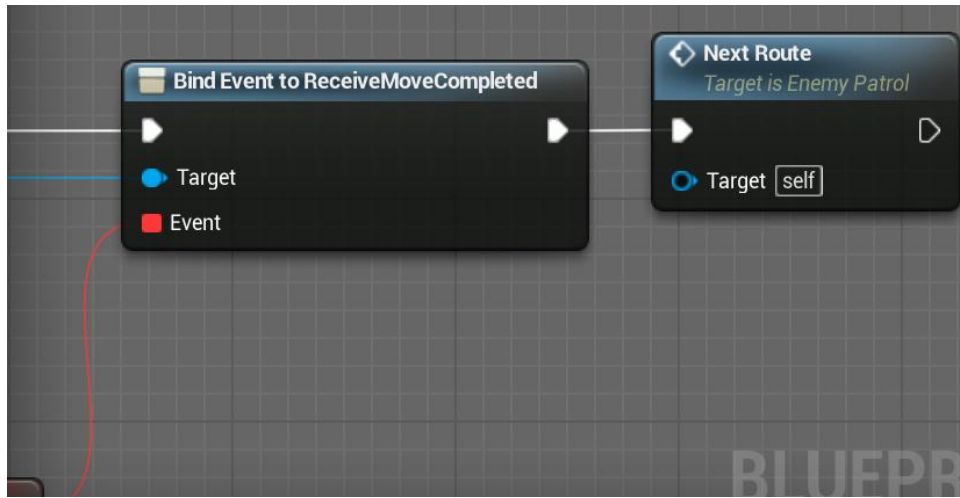
- State
- Mailman
- Foodbowl
- Locations
- SelfActor



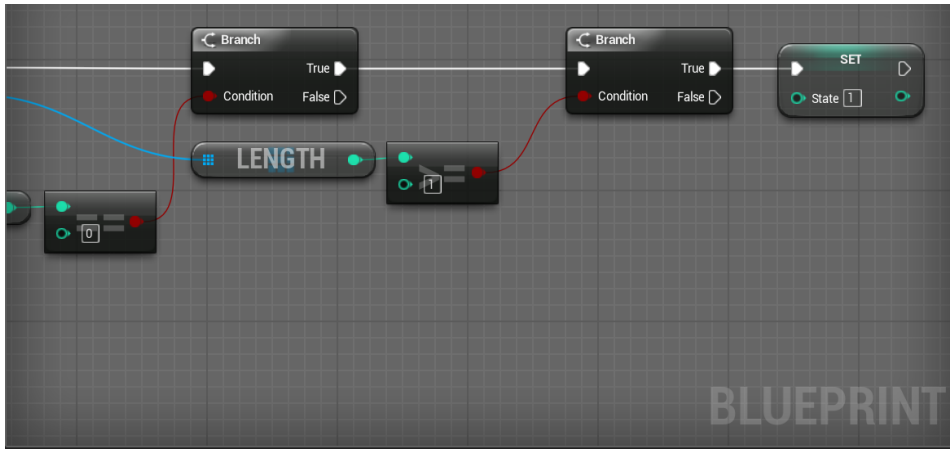
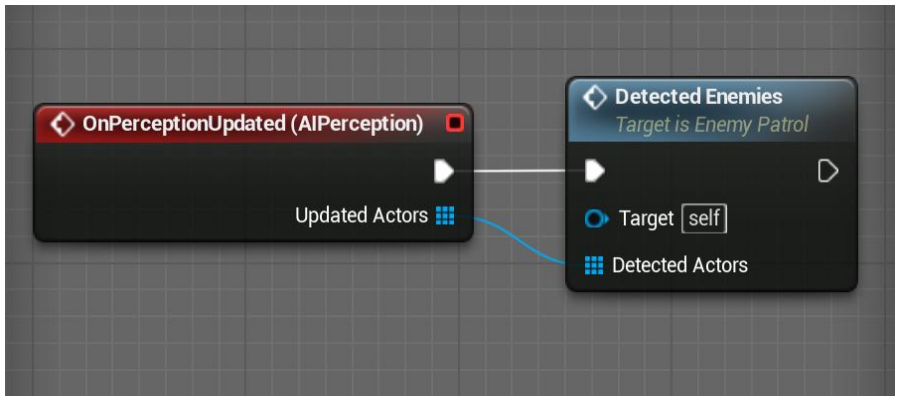
## Chapter 6: How Does Our AI Sense?

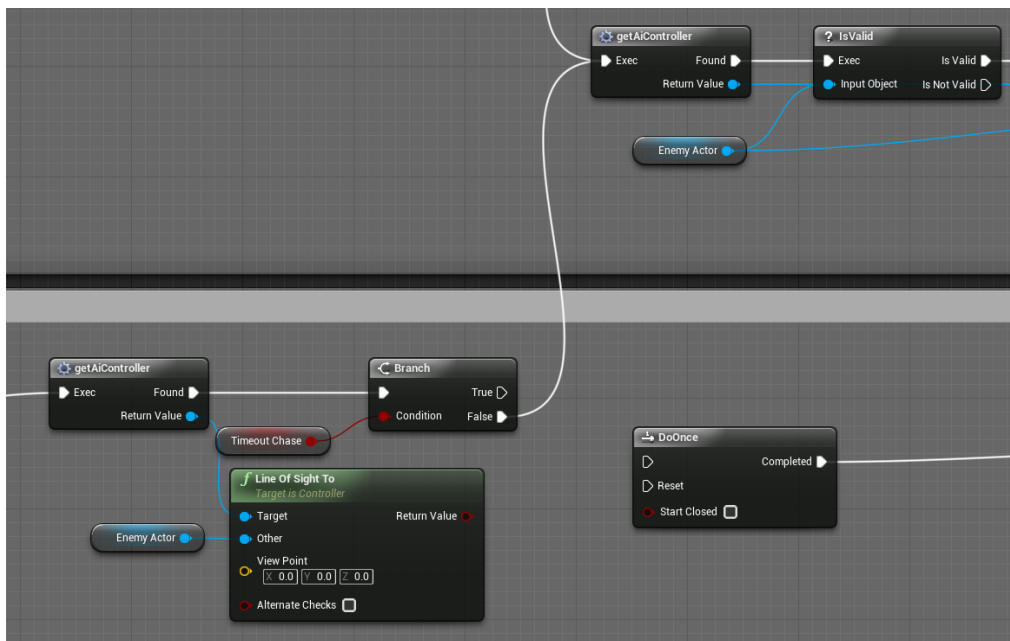
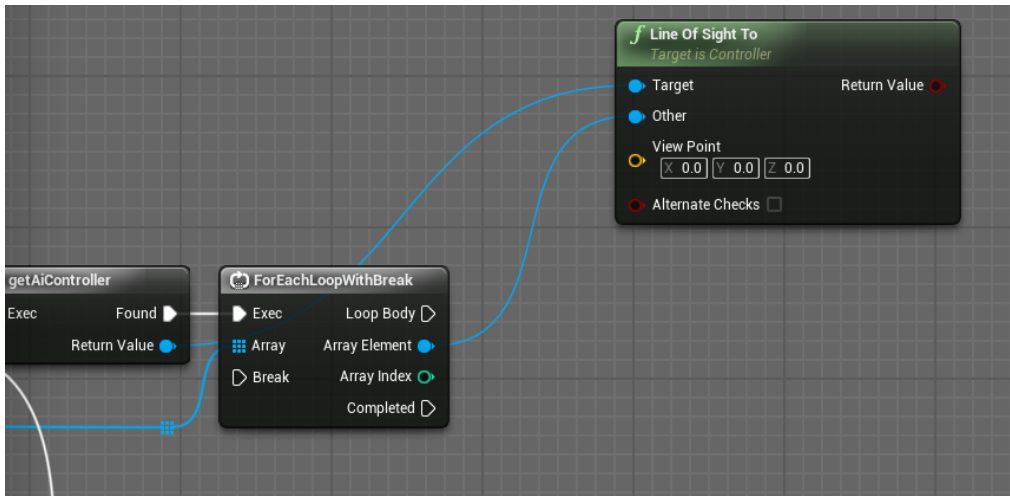


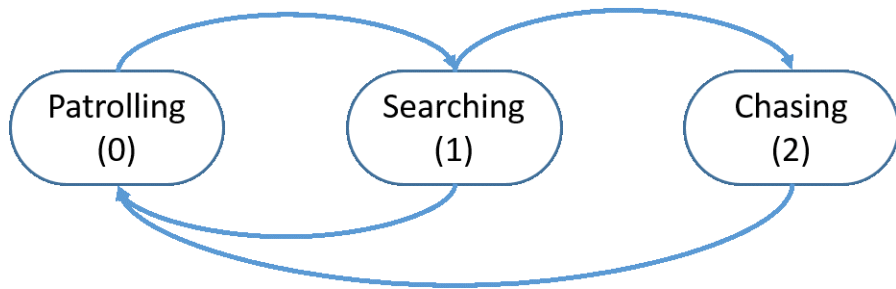
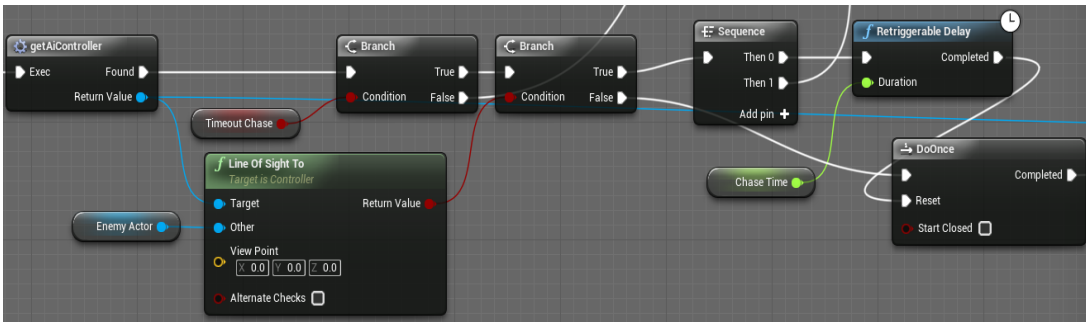




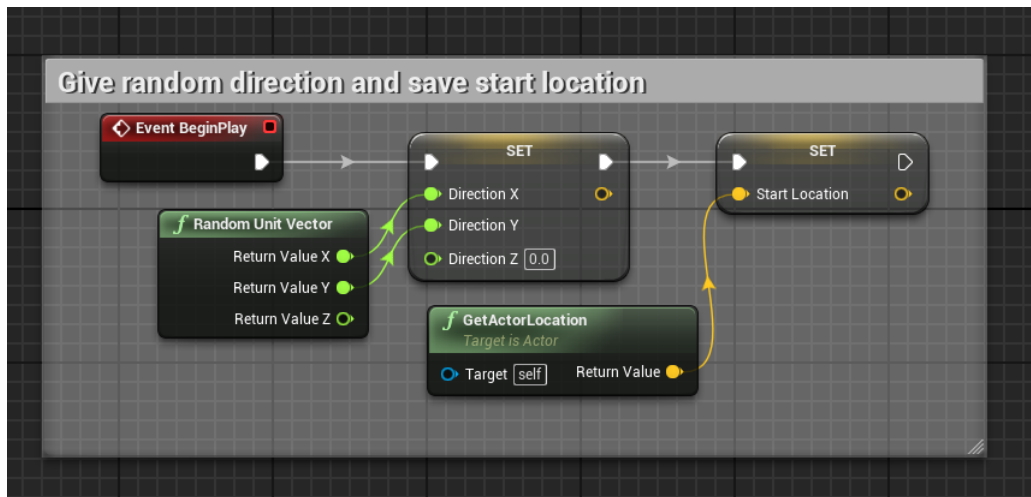
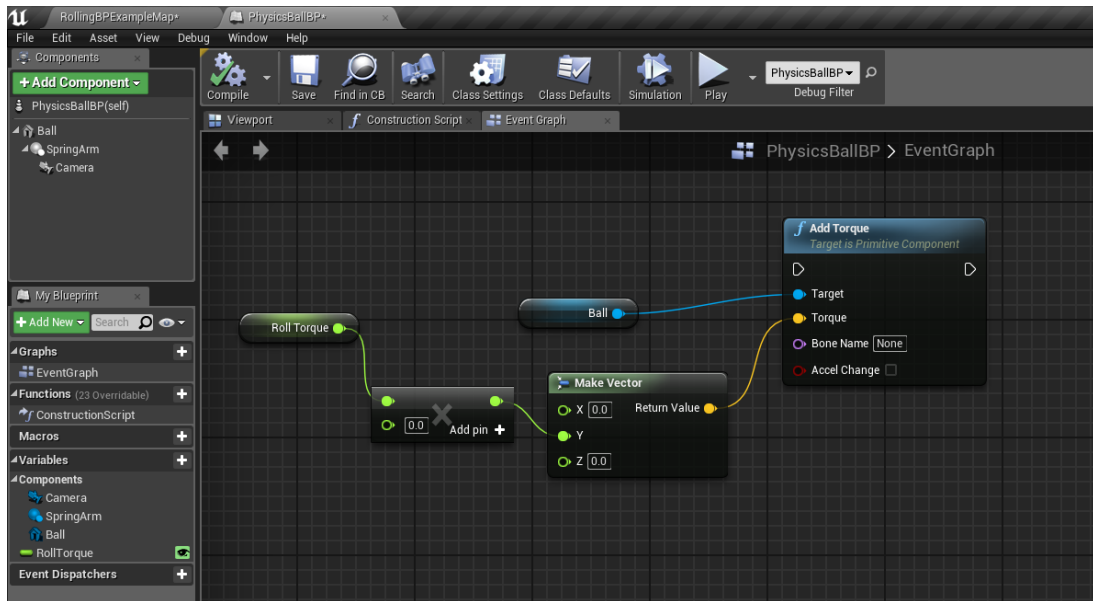


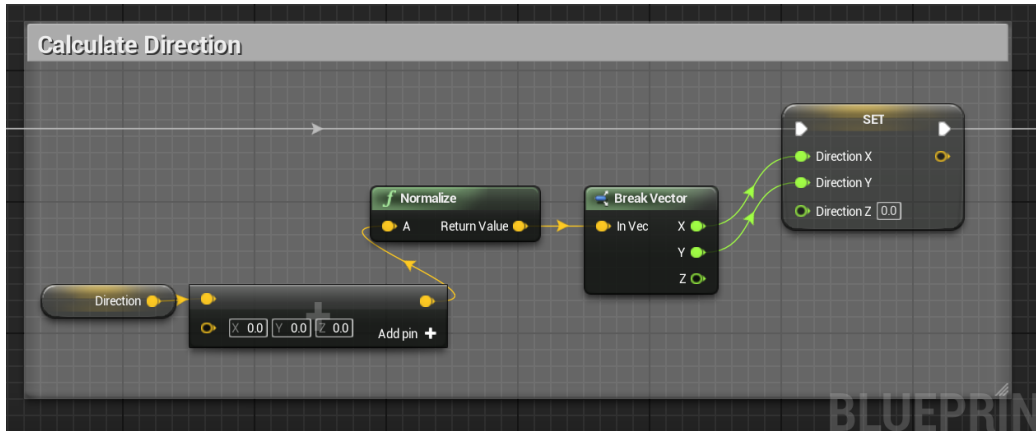
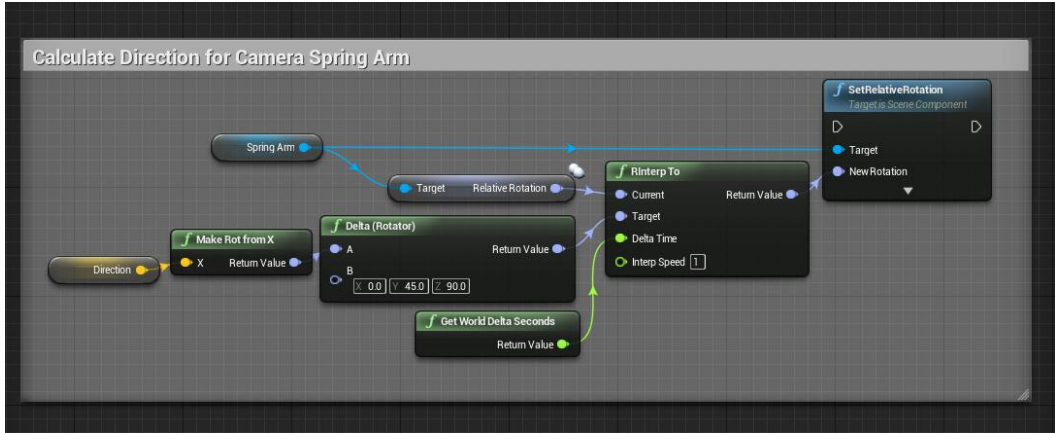




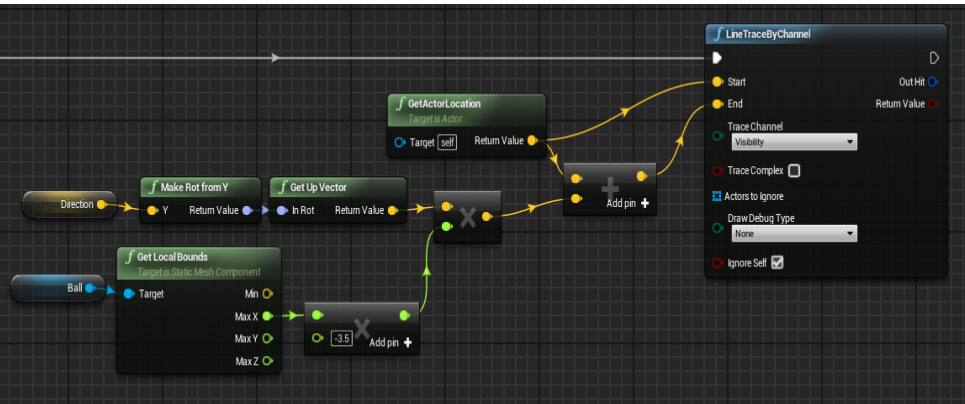
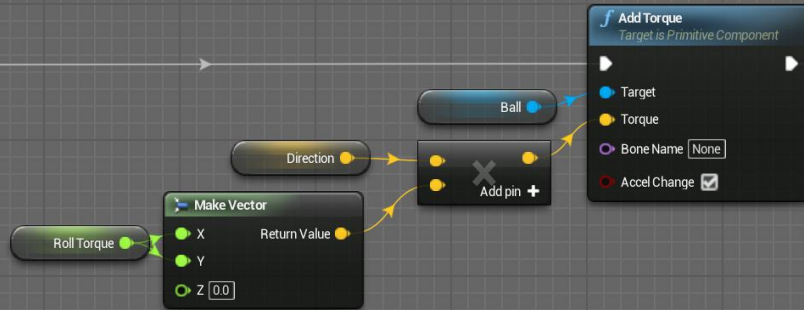


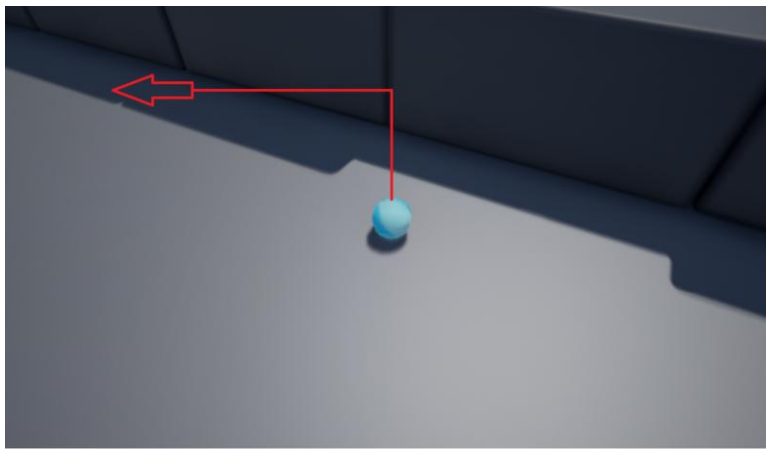
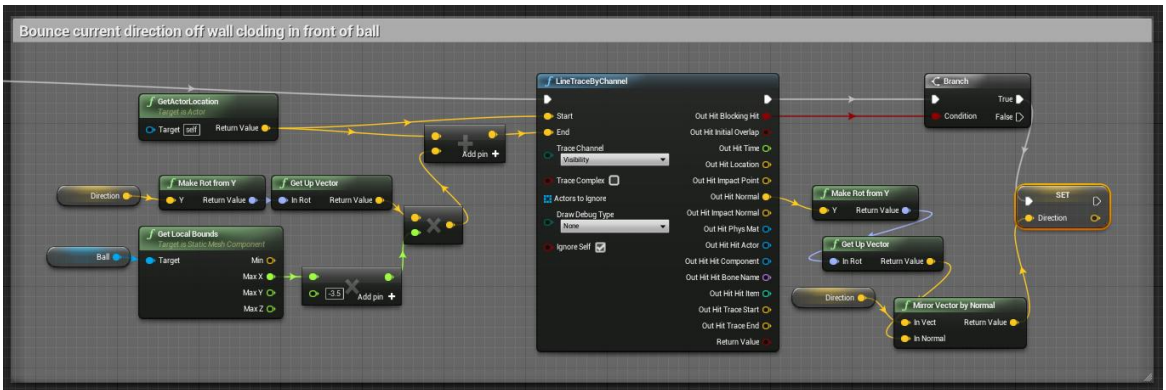
## Chapter 7: More Advanced Movement

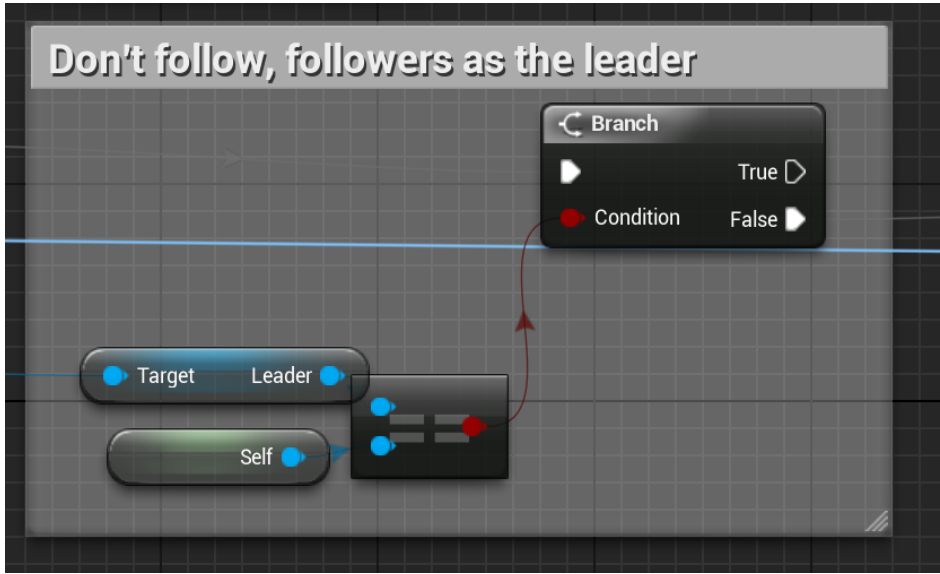
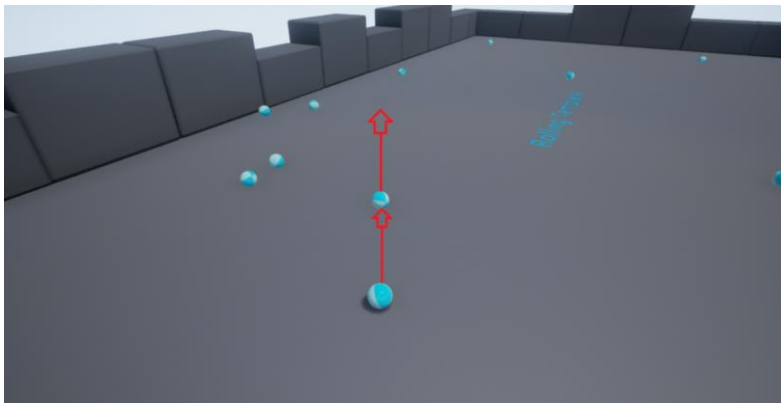




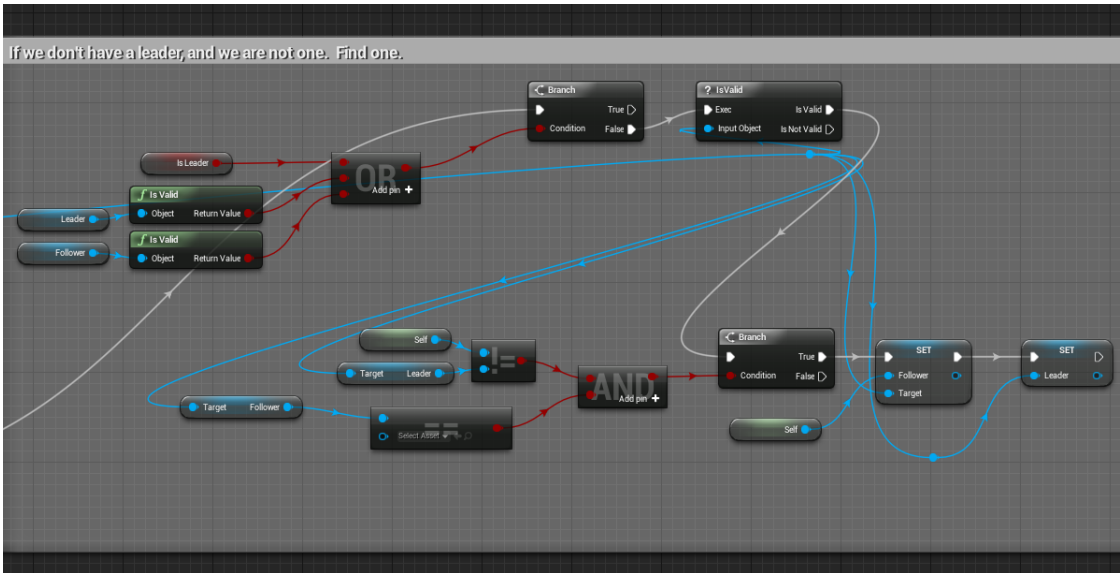
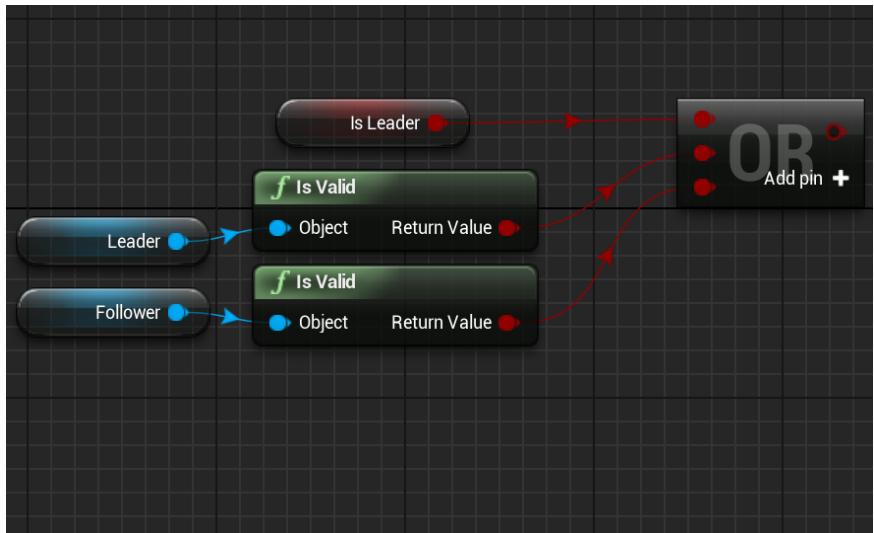
## Apply Torque to Ball

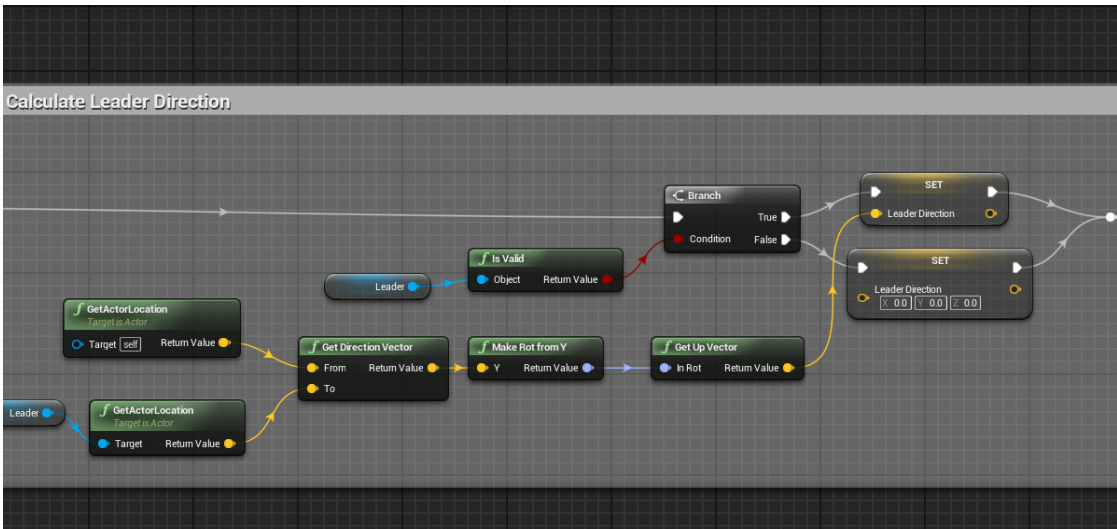


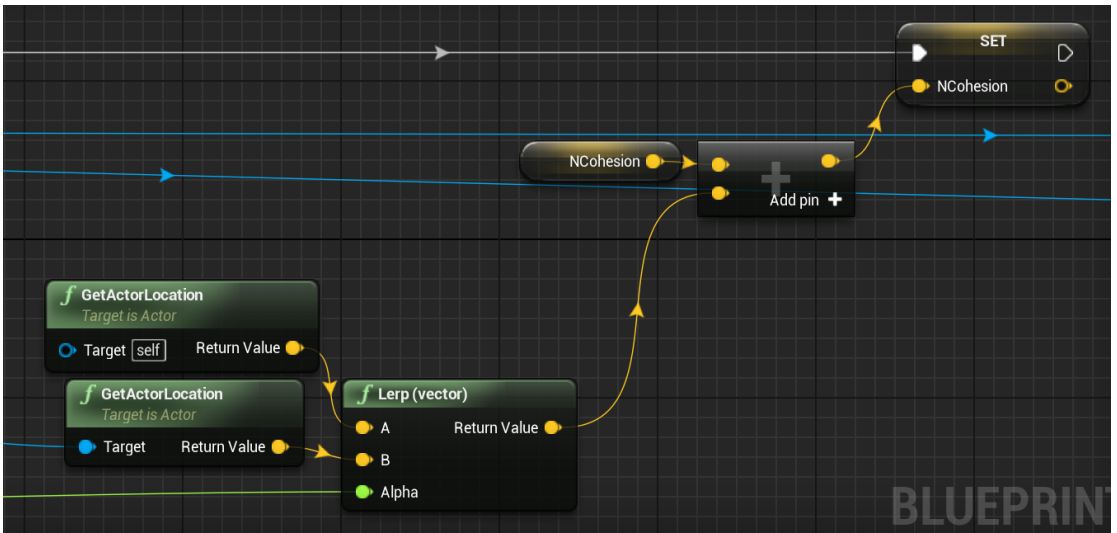
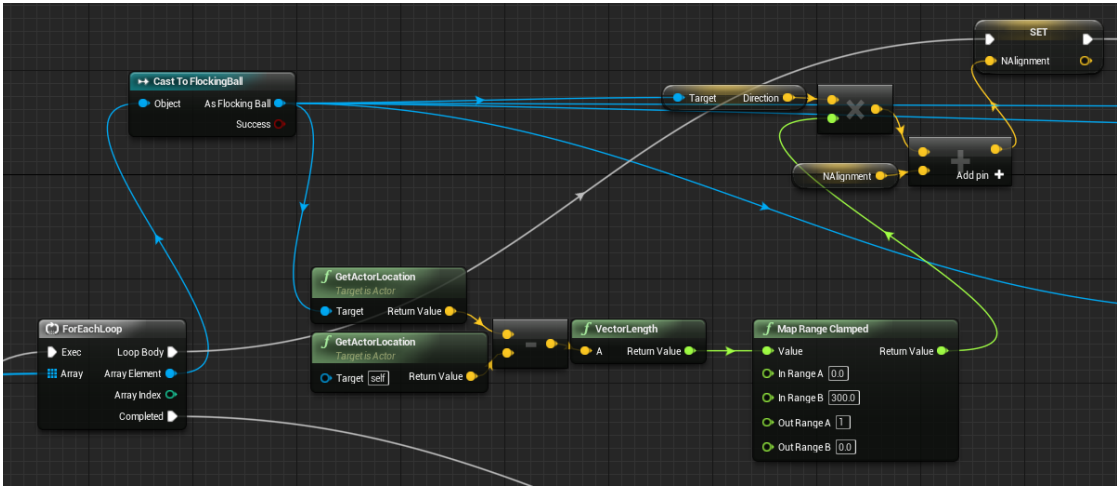




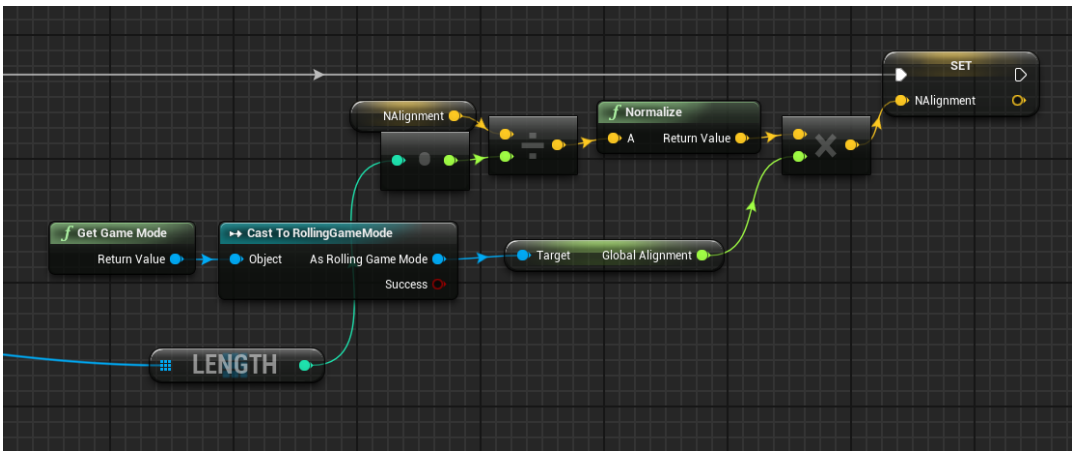
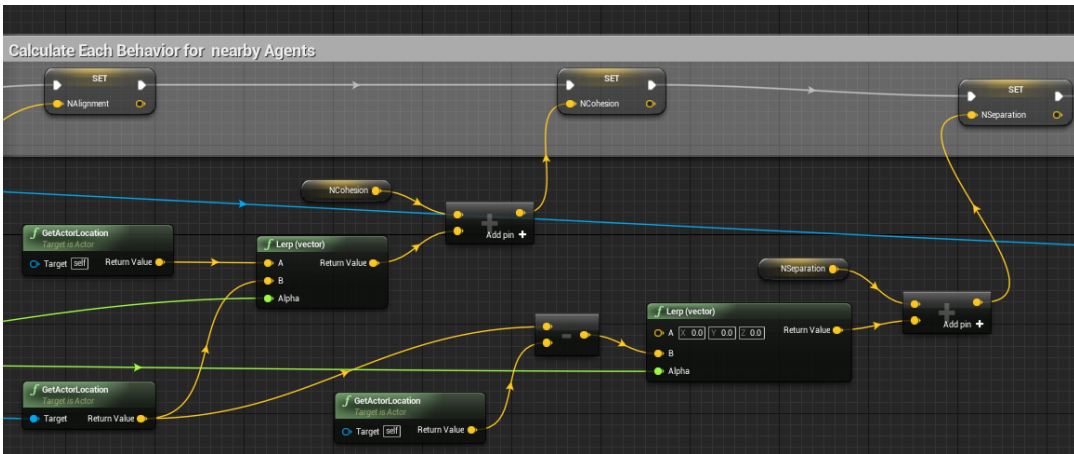


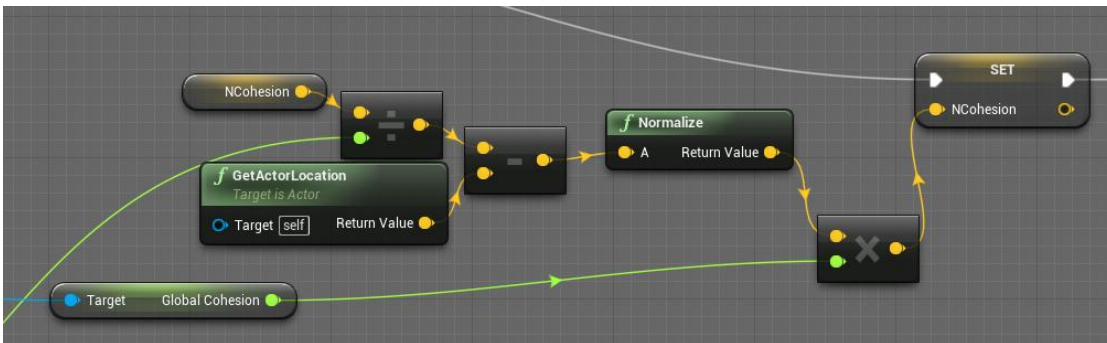
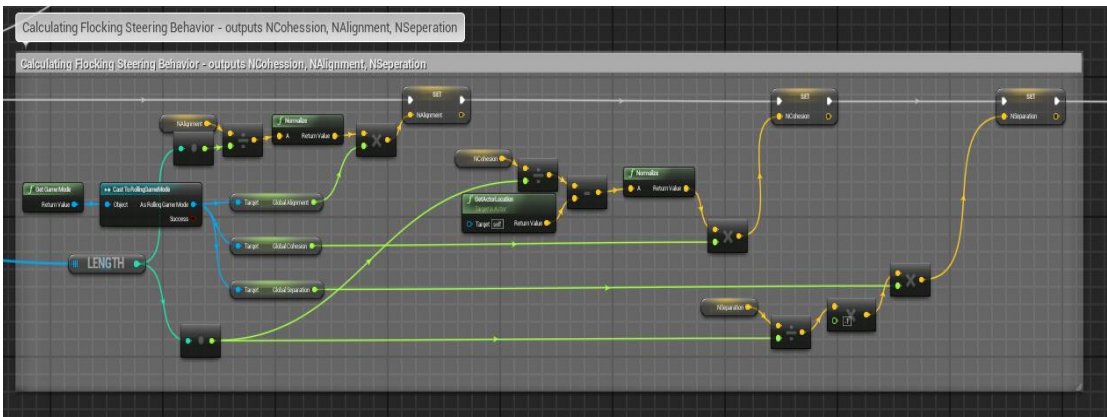
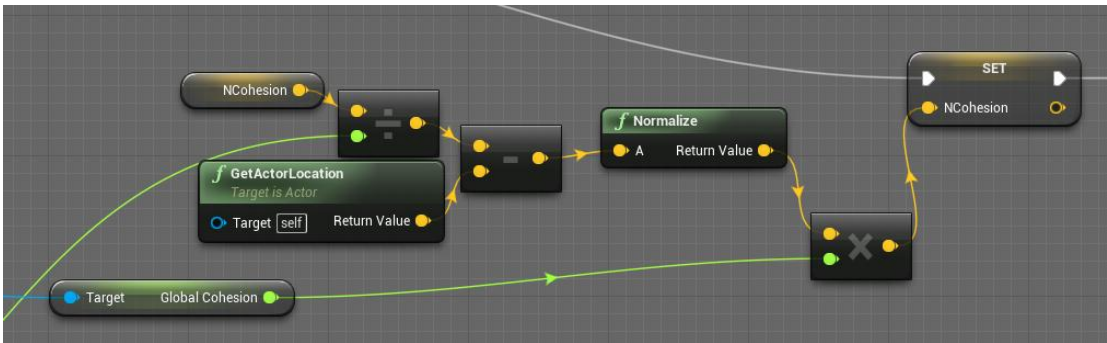


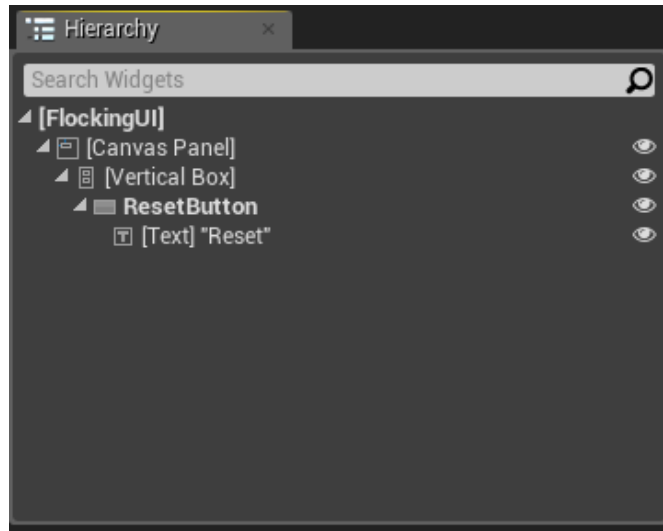
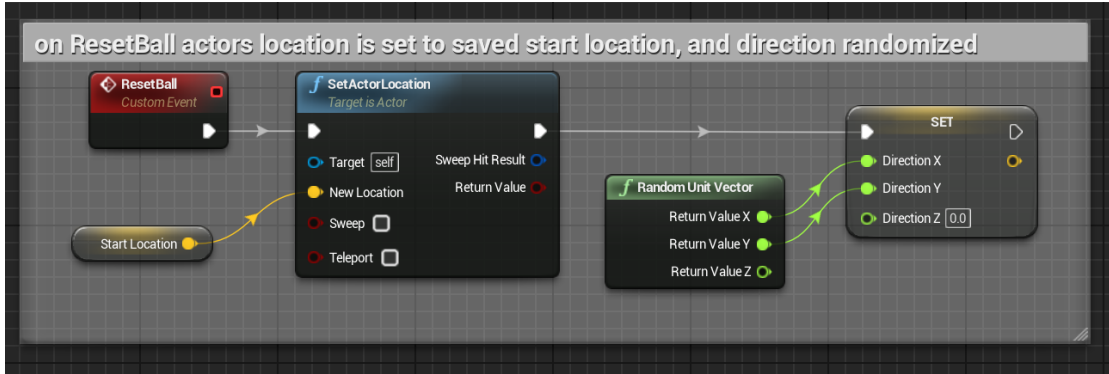


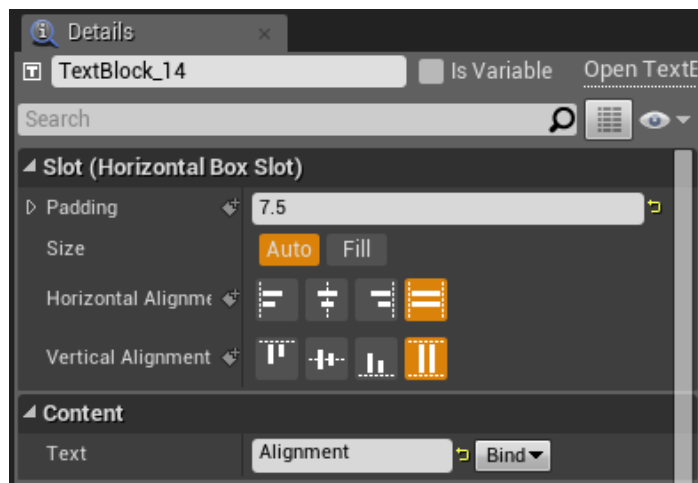
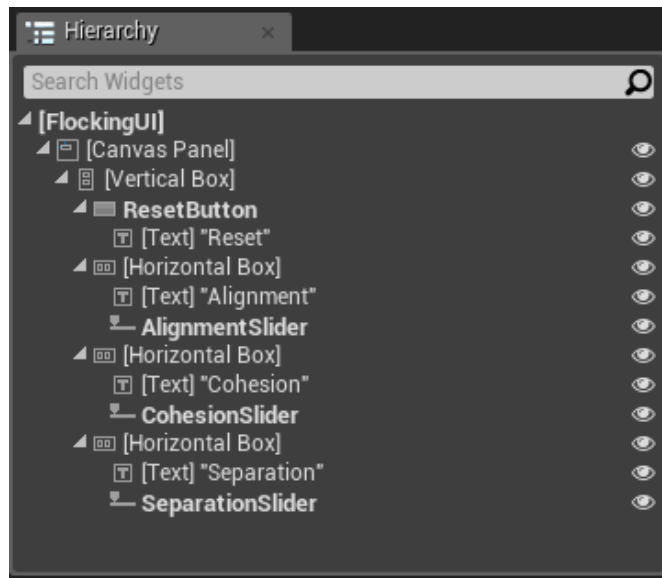


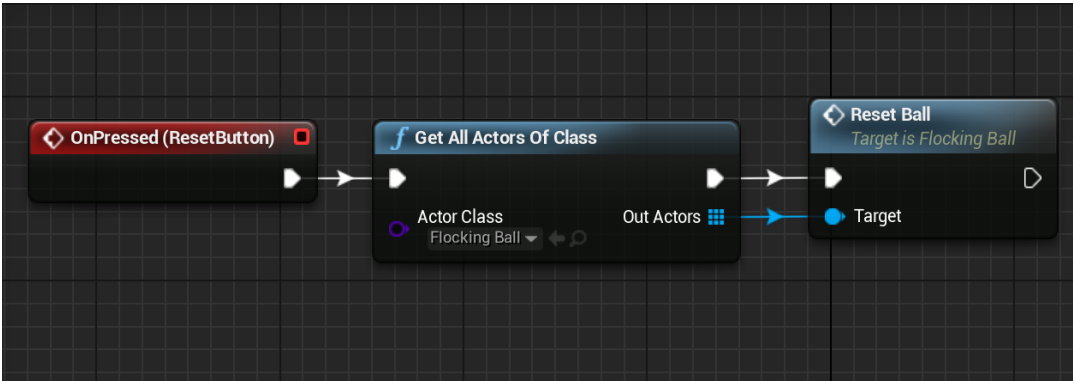
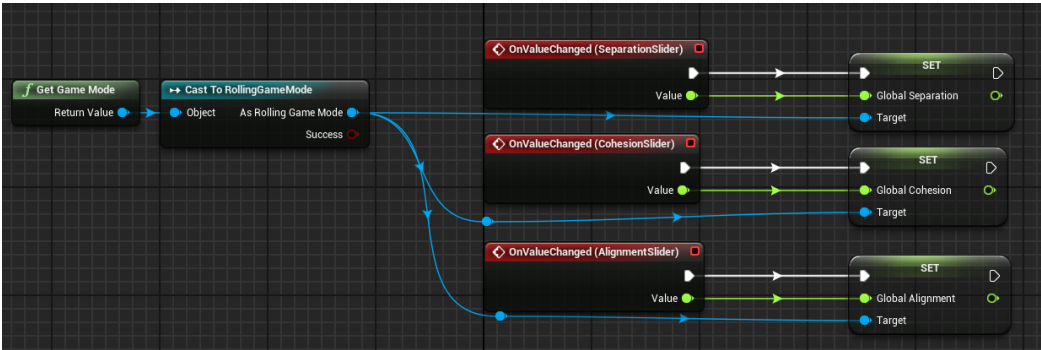
BLUEPRINT



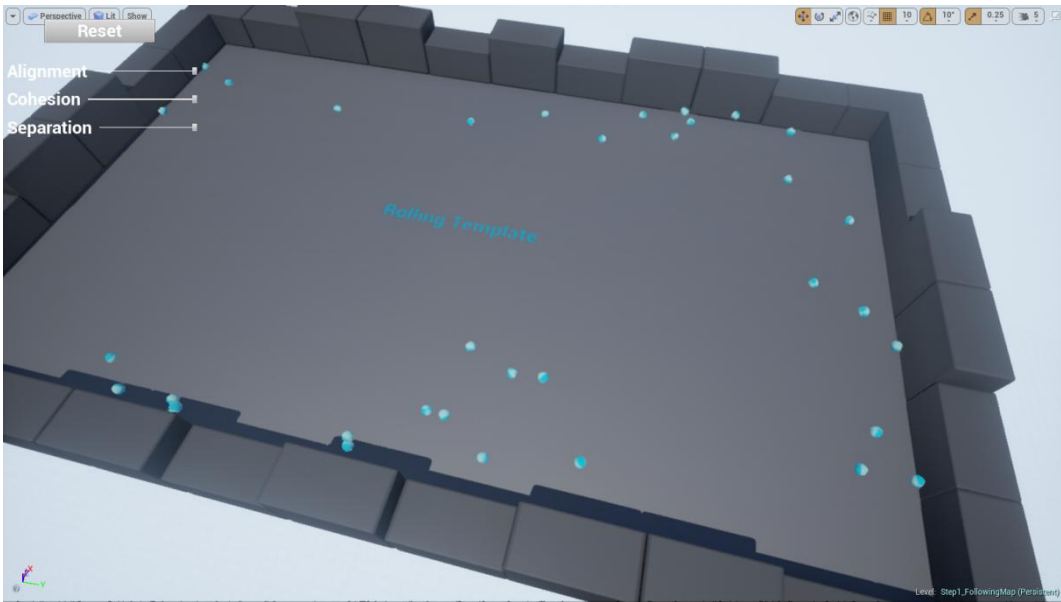
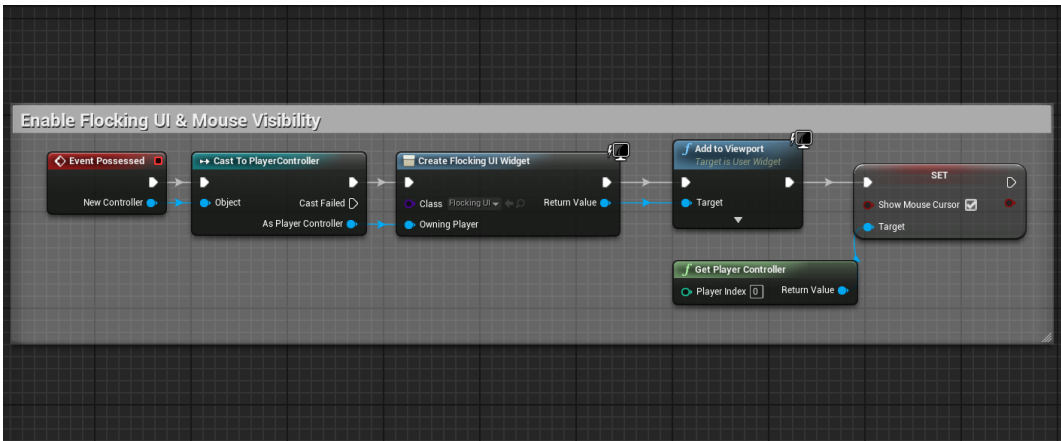












## Chapter 8: Creating Patrol, Chase, and Attack AI

