

Behaviour Tree Diagram

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This diagram illustrates the structure of the behavior tree. The root node is a '**Selector**' which has three child nodes. The first two child nodes are '**Sequence**' nodes, one for the Attack sequence and another for the Chase sequence. The third child node is the '**PatrolAction**'

The Attack sequence has two conditions ('**CanSeePlayer**' and '**IsCloseEnoughToAttack**') that must both be met before the **AttackAction** is executed. Similarly, the Chase sequence has two conditions ('**CanSeePlayer**' and '**IsNearPlayer**') that must both be met before the **ChaseAction** is executed.

The '**Selector**' node will try to execute each child node in order, stopping at the first successful node. If the Attack sequence is successful, the NPC will perform the attack action. If the Attack sequence fails but the Chase sequence is successful, the NPC will perform the chase action. If both the Attack and Chase sequences fail, the NPC will default to the patrol action.

