Enemy Ai Finite State Machine

Available enemy actions : Move , Shoot

Transitions.

Retrieve -> Deposit.

Deposit -> Retrieve.

State: Retrieve

-Action: Collect Flag -Will try to move to collect the flag

--Transition: Will prioritize action at the start of the game Does not possess flag

-Action: Attack Player – will attack the player

--Transition: If player is within range of the enemy. Will switch to collect flag if player moves out of range/ dies.

State: Deposit

-Action: Return to base – if in possession of the flag

--Transition: If in possession of a flag the enemy will move to the base to deposit. Will move to retrieve state after flag has been deposited.

-Action: Flag dropped – will move to a location within 5 m and evaluate what to do (pick up flag or attack)

--Transition: flag will drop if hit with a bullet and the ai will move away from the flag and if the player is within range the attack action will be taken.

A diagram of a state

Description automatically generated

Github Link:

<https://github.com/xxxGrimfiendxxx/TankYou.git>