GAME AI

DAY 2 OF
"ADVANCED UNITY PROGRAMMING" (2015)
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NAVIGATION AND PATHFINDING

Task for the morning:

- **In the Unity editor, build a NavMesh and create a NavMeshAgent.**

- **Let the agent patrol between multiple targets.**

- **Create an obstacle and observe the agent's behavior depending on whether the obstacle uses carving.**

- **Optional: create off-mesh links and/or a height mesh; inform yourself how the A* algorithm and reciprocal velocity obstacles work.**

AGENT CONTROL

Task for the afternoon:

- **Extend the agent patrol with a simple <u>Finite State Machine using enums and switches</u> such that the agent switches between at least four states: patrolling, going to the bathroom, resting for a while, and chasing a visible intruder.**

- **Simplify the handling of transitions with a <u>Hierarchical State Machine</u>.**

- **Implement a simple <u>hierarchical agent control</u> based on the <u>agent's needs</u> by constantly determining the currently most important need (out of at least 3 needs) and changing the state accordingly.**

- **Optional: inform yourself about <u>behavior trees in general</u> and <u>for Unity</u>.**