

# Preamble:

We present six different simulations of a combat encounter. The rules are a simple form of hide-and-seek. In the simulations, the drone – the aerial Member – and the man wearing the green t-shirt – the ground member – form a team. They work together to target their opponent, who wears a red t-shirt.

Each of the six scenarios is illustrated below, with each showing the initial and final situation for that scenario. The final situation shows the environment state after the drone makes its decision. It chooses from three options: to stay, to move, or to give advice to the ground team member.

The illustrations also show the drone camera view (with pink boxes for the drone and the drone view) and a prediction of the behaviour of the ground team member and of the opponent (red arrows show the predicted movement).

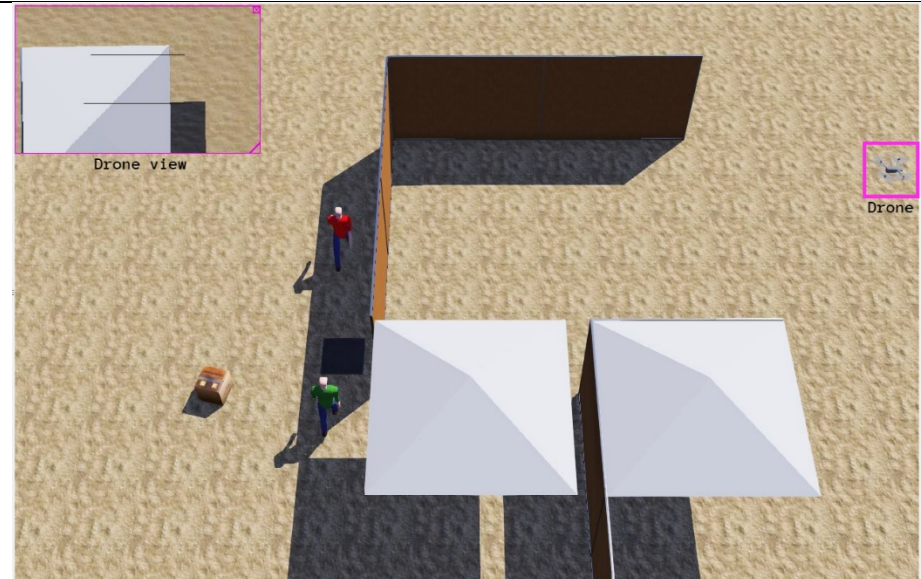
The drone bases its decision on its view of what the ground team member and the opponent are doing.

**Scenario 6:** Drone moves actively looking for opponents after ground team member targeted an opponent.

**Initial situation**



**Final situation**



**Question (for the drone):** Why did you move beside the gazebo?

**Explanation:** I moved beside the right gazebo because in my previous position an opponent has been already targeted by a ground team member and, therefore, in the new position I have a higher probability to target another opponent who may be hidden under the gazebo.