

# LightBrilliantGold – Hackday V Report

## Activities:

1. First contact with V-rep.
2. Watching V-rep tutorial videos.
3. Designing a model for extinguishing a fire by setting a cooperation between a drone and an UGV, both controlled by the user.
  - a. Enlarging the Floor
  - b. Creating a building
  - c. Creating fire into the building
  - d. Connecting UAV to a specifically designed path for arriving to the fire zone automatically
  - e. Controlling the UGV for going to the fire zone with manual control
  - f. Filming a video in order to show all these features together
4. Reporting the activity
  - a. Writing a summary document of the activity
  - b. Updating a SysML Model

## Difficulties:

1. How to connect the UAV to the specific path.
2. How to control the UGV with manual control.
3. Extinguishing the fire. Finally, it hasn't been implemented, but the team has made an effort to explore alternatives such as signals (similar to global variables in Lua).

## Results:

1. The UAV arrives to the fire zone and returns to the base position automatically.
  2. The UGV goes to the fire zone with manual control.
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