



CLIENT



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TEAM 01



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PROBLEM

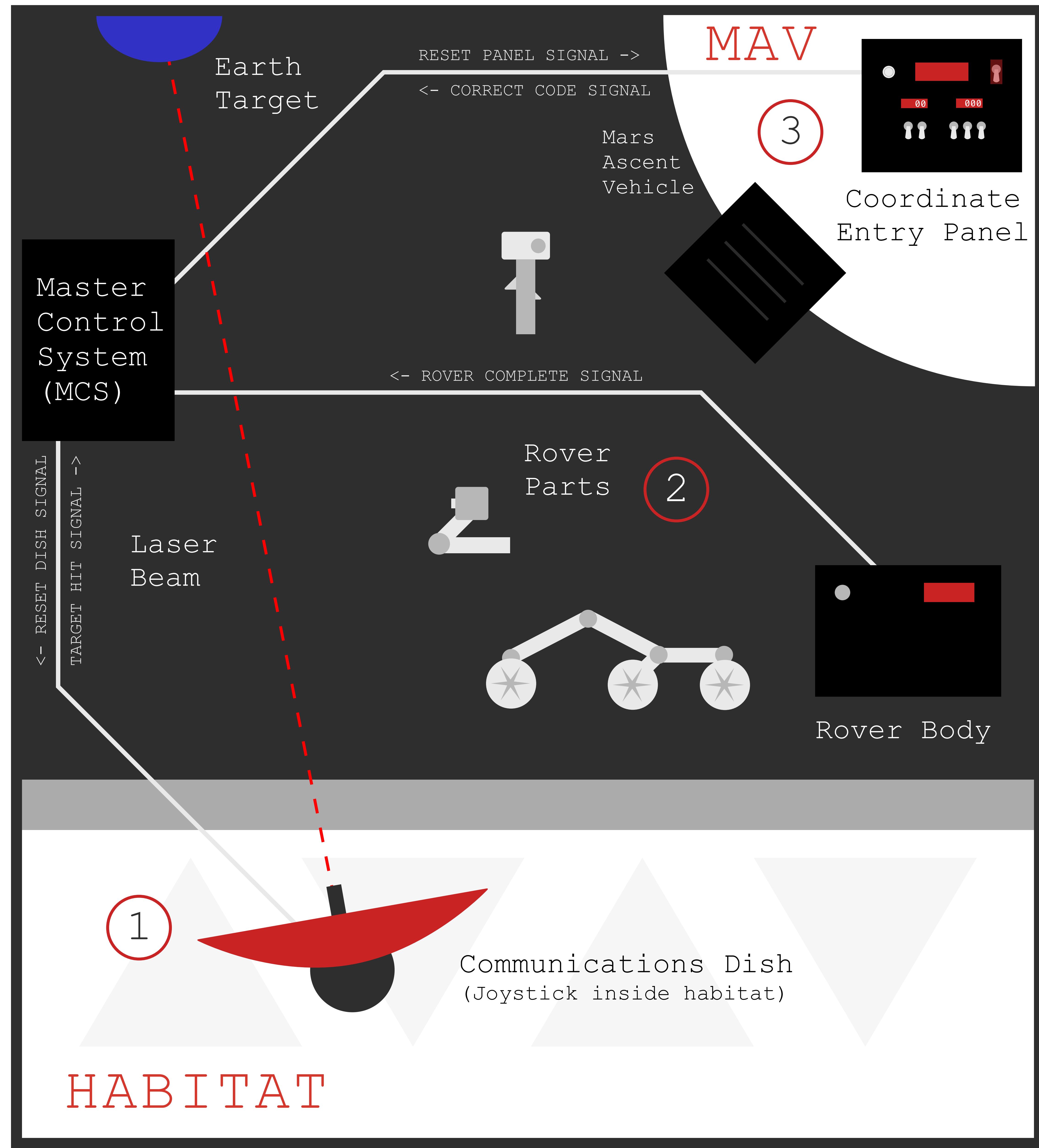
Escape rooms consist of a sequence of 18-20 mini clues that players solve to unlock the door and "escape" the game.

Breakout Games is developing a Mars/Asteroid-themed room that will include more technically advanced clues.

BASIC REQUIREMENTS

- Develop 3 to 5 clue subsystems
- Match Mars/Asteroid theme
- Require no more than 2 players
- Require < 5 minutes to complete each clue

ROOM DESIGN



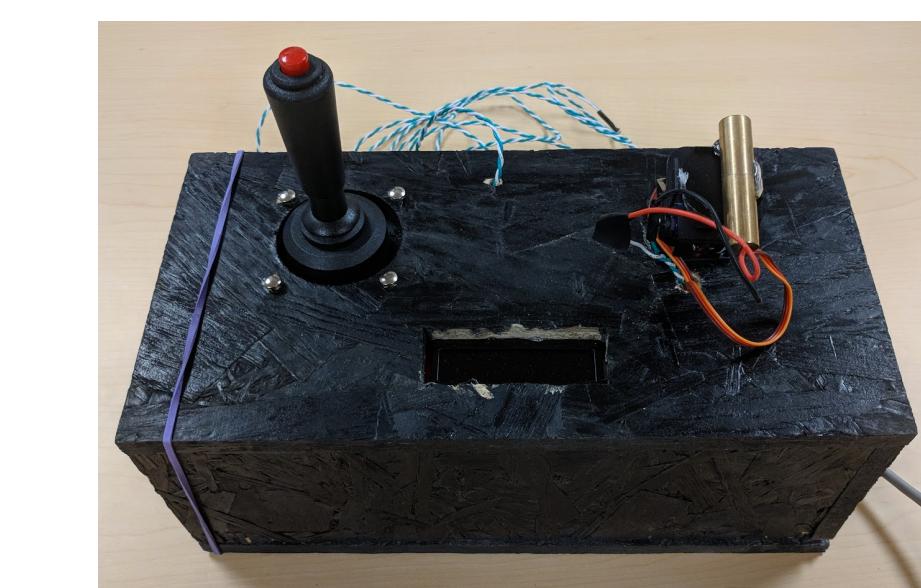
CLUE SYSTEMS

Controllers: Arduino Uno

Software: Arduino IDE C/C++

Each clue integrates with Breakout's Master Control System (MCS), which manages the room. The systems send clue completion signals to and respond to reset signals from the MCS.

1. REALIGN COMMUNICATIONS DISH

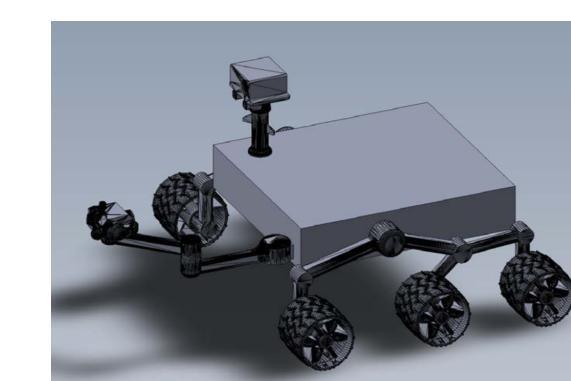


Players use a joystick to align the laser dot with a sensor on the wall of the escape room.

2. ROVER REPAIR



Players reattach missing 3D-printed parts to the rover's body to complete the clue.



3. LAUNCH COORDINATE ENTRY



Players must enter correct coordinates and push the load button before flipping the switch to launch the MAV and end the game.

RESULTS

- Developed 3 clue systems
- Integrated with existing theme
- Successfully tested clues with 2 players to verify completion time
- Compatible with Breakout's MCS