

DUCSTeach Workshop 05 - Spaceship Game

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Time: 1 hour

People: 10 - 15 People

Materials:

- 15 Arduinos
- USB Type B Cable
- Laptop with Arduino IDE installed
- spaceship.ino file

Steps:

1. No circuitry involved for this workshop; the Arduino is strictly used as a compiler and run-time environment to allow for user input via the Serial monitor. Therefore, the steps listed should be used when creating the program (ino file) from scratch.
2. Copy over everything in the void setup() function for each individual. This is the precursor and instructions for the game.
3. Have the students create the variables.
4. Have the students create the void loop(), setting up the console interface that will be our “spaceship control panel”.
5. Have the students create void burn() and explain to them reference variables, switch statements, etc.
6. When finished, connect Arduino via USB cable to IDE and compile.
7. Lesson Completed

Future Improvement:

Add a Serial LCD to display fuel and velocity / distance

Add buttons for fuel burn options

Add LED's for warning codes