## Ship Fires Laser [PL-1]

**Link to JIRA:** [http://jira.itcarlow.ie/browse/PL-1](http://jira.itcarlow.ie/%E2%80%A6)

**Description:** A ship is equipped with a laser that can be fired by the player.

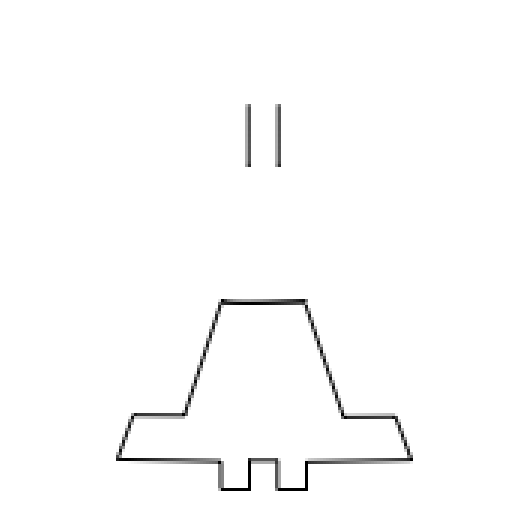


Figure 1: A simple sketch of a laser shot being fired by a ship.

**Conditions of Satisfaction:**

1. When the space key is pressed, a laser shot spawns at the top of the ship and moves directly upwards at a constant velocity.
2. If a laser shot collides with an asteroid, the asteroid is destroyed and disappears.
3. If a laser shot collides with an asteroid, the player’s score increases by one.
4. When a laser shot reaches the top of the view it disappears.

### Laser Destroys Asteroid (2 points)

**Link to JIRA:** [http://jira.itcarlow.ie/…](http://jira.itcarlow.ie/%E2%80%A6)

**Condition(s) of Satisfaction**:   
2. If a laser shot collides with an asteroid, the asteroid is destroyed and disappears.

**Link to the git commit:** https://github.com/...[[1]](#footnote-0)

**Steps to Test:**

1. Spawn an asteroid.
2. Set the asteroid to a fixed position.
3. Spawn a laser shot.
4. Set the laser shot to the same fixed position as the asteroid.
5. Yield to the Unity engine for 0.1 seconds.
6. Check that the asteroid is destroyed.

1. \*The\* git commit for this task should include the implementation and the automated tests, such as:

   * Assets/RW/Scripts/Laser.cs: the OnCollisionEnter() method.
   * Assets/RW/Tests/TestSuite.cs: the LaserDestroysAsteroid() method.

   [↑](#footnote-ref-0)