# Vehicles

These are game contenders either controlled by the gamer or by steering behaviors. They carries dynamic bodies, joints and systems.

## Leapfrog

The Leapfrog is the main player vehicle.

### Required Bodies

|  |  |  |
| --- | --- | --- |
| ***Body*** | ***Name*** | ***Description*** |
| Main Body | lfMainBody | The main body upon where forces are applied |
| Main Booster | lfMainBooster | The booster engine used to attach a FlameEmitter |
| Right Steer Body | lfRightSteer | The right steering engine used to attach a FlameEmitter |
| Left Steer Body | lfLeftSteer | The left steering engine used to attach a FlameEmitter |

### Required Joints

|  |  |  |
| --- | --- | --- |
| ***Joint*** | ***Name*** | ***Description*** |
| Right Steer/leg Joint | rightSteerJoint | Hold steering engine to leg. Used to destroy the joint |
| Left Steer/leg Joint | leftSteerJoint | Hold steering engine to leg. Used to destroy the joint |
| Right leg joint | rightLegJoint | Hold Big leg to main body. Used to control the mode of the vehicle and to destroy the joint |
| Left leg joint | leftLegJoint | Hold Big leg to main body. Used to control the mode of the vehicle and to destroy the joint |
| Right small leg joint | rightSmallLegJoint | Hold small and big leg together. Used to control the mode of the vehicle and to destroy the joint |
| Left small leg joint | leftSmallLegJoint | Hold small and big leg together. Used to control the mode of the vehicle and to destroy the joint |
| Right foot joint | rightFootLegJoint | Hold small leg and foot together. Used to control the mode of the vehicle and to destroy the joint |
| Left foot joint | leftFootLegJoint | Hold small leg and foot together. Used to control the mode of the vehicle and to destroy the joint |

### Required Systems

|  |  |  |
| --- | --- | --- |
| ***System*** | ***Name*** | ***Description*** |
| Gun | lfGun | The gun of the leapfrog. Has ammo. Start/Stop fire interface. |
| Booster Flame Emitter | lfBoosterFlame | The Main Booster Flame particle system. Parameters of it change with the environment. Start/Stop interface. |
| Left Steering Flame Emitter | lfLeftSteerFlame | Steering flame particle system. Parameters of it change with the environment. Start/Stop interface. |
| Shield | lfShield | Attached to main body. Rotates to the hit direction. Not used in Landing environment. |
| Center Reentry Heat Flames | lfCenterReentryFlame | Reentry flame particle system. Only used during reentry. Heat amount interface. |
| Left Reentry Heat Flames | lfLeftReentryFlame | Reentry flame particle system. Only used during reentry. Heat amount interface. |
| Right Reentry Heat Flames | lfRightReentryFlame | Reentry flame particle system. Only used during reentry. Heat amount interface. |

### Optional Systems

None

### Properties of Leapfrog

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Property*** | ***Event to set property*** | ***Id*** | ***Read Only*** | ***Description*** |
| Set Mode | LeapfrogExtSetModeEvent | 0 | False | Set the mode of the Leapfrog. 0 = TBD, 1 = TBD, 2 = TBD |
| Set Environm. | LeapfrogExtSetEnvEvent | 1 | False | Set the environment of the Leapfrog. 0 = TBD, 1 = TBD, 2 = TBD |
| Read State | N/A | 2 | True | Read the state of the Leapfrog  0 = TBD… |
| Read X-pos | N/A | 3 | True | Read the x-pos |
| Read Y-pos | N/A | 4 | True | Read the y-pos |

### Events sent by Leapfrog

|  |  |
| --- | --- |
| ***Event*** | ***Description*** |
| LeapfrogModeReachedEvent | Event sent when a command to change mode has been completed. |

## Enemy Ship

## Asteroid

## Landing Pad

## Launch Site

# Systems

Systems are things like particle systems or object factories. They can be stationary or attached to a body.

## Object Factory

## Flame Emitter

## Guns