

Heavy object lifting

Gameplay mechanic about lifting heavy objects in game

Assumptions:

Player can encounter heavy objects in the game and will need to deal with it somehow.

Those kind of objects player cannot put into his inventory and so he need to handle them differently.

Every Heavy object needs to be shown in world as an physical object, cannot be abstract.

Every heavy object would have mass and its overall size (volume).

Lore:

Having in mind assumptions and theme of the game (Sci-Fi) we need something more than just putting logs on the shoulder. Character in game would much rather use technology than pure strength. That is why I would like to present GFT (Gravity Force Tentacles).

This is a box mounted on the belt of character, that will keep heavy objects in the air while player will move around. Most important this will keep characters hands free during this operation. Although any damage to the character will cause system to focus on characters health and disabling other, unnecessary subsystems, like GFT.

Limitations:

Every system, even in future has some restrictions. GFT, besides its usefulness has some constraints too. Those are core properties of objects that has to be considered when putting them into GTF:

- **Size (volume)** of the object. The larger the object, the harder it would be to move around with it.
- **Mass** of the object. GFT have a mass limit it can take at once. So player would need to prepare for journey.
- **Number** of objects. GFT has limited number of tentacles available. It can take only limited number of objects at once.

Mechanic

Objects in world are separated into **small** and **heavy(big)**.

Heavy object need to have physical properties like **mass** and **size in 3 dimensions**.

Heavy object can be lifted by **GFT (Gravity Force Tentacles)**.

GFT lifts an object in the air, causing it to float above the ground and making it easy for character to move them around.

GFT limitations:

- **Mass** (1000 kg). It can lift 1000 kg of load at once.
- **Number of tentacles** (8). It can take up to 8 objects at once.

GFT will try to adjust height of objects somewhere near players height.

Objects that float could, but for prototype will not collide with player.