Heavy object lifting

Gameplay mechanics 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 so he need to handle them differently. Every Heavy object must have a visual representation as a physical object, cannot be abstract. Every heavy object need to 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 a character, that will keep heavy objects in the air while player will move around. The most important thing is that this will keep characters hands free during the operation. Although any damage to the character will cause system to focus on characters health and disable other, unnecessary subsystems, like GFT.

Limitations:

Every system, even in the 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 is to move around with it.
-   **Mass** of the object. GFT have a mass limit it can take at once. So player needs to make an inventory selection.
-   **Number** of objects. GFT has limited number of tentacles available. It can take only limited number of objects at once.

Mechanics

Objects in world are separated into **small** and **heavy(big)**.
Heavy object need to have physical properties like **mass** and **size in 3 d**imensions.
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 make it easy for character to move them around.
GFT limitations:
-   **Mass** (X kg). It can lift X kg of load at once.
-   **Number of tentacles** (Y). It can take up to Y 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.

For future development: Component will be upgradable. Possible upgrades:
- Increase mass limit
- Increase Number of tentacles
- Using Heavy object as a shield (GFT could use some heavy object as a shield against shooting opponents)
- Partly penetrable (GFT can make object fly through walls or floors)
- Lift (GFT can use tentacles to lift the player instead of object)
- etc.