

Implementation Details

1. Coding Standards

The code for this project will follow as close as possible to the official Godot style guide https://docs.godotengine.org/en/stable/tutorials/scripting/gdscript/gdscript_styleguide.html. Variable organization, function structure, and static typing of all variables and functions will be enforced using the GD Lint toolkit through a github action for any push to the repository. <https://github.com/Scony/godot-gdscript-toolkit>

2. Layer Bitmasking

Layer	Collision Application
1	Map and world boundaries (e.g. walls, floors, etc)
2	Player
3	Physical plane (e.g. player "Living" state, item pickups, objects in rooms, etc)
4	Spirit plane (e.g. ghosts, player "Dead" state, etc)
5	Items
6	Possessables
7	Object Blocker (used with doors to stop movable objects from passing)

3. Hit Detection

Hurtboxes are only responsible for existing on the collision layer of "damage" they are responsible for. **It is the damage receiver's responsibility to process the contact between itself and any hurtbox.**