Campainger (working title)

# Elevator pitch:

GAME is a software product made for players of DND. Technically speaking it isn’t as much a game as it is a story telling tool. A DM can create spaces (levels, rooms, dungeons, etc) to build visual environments for their story. These spaces can be brought to live with decorations and pawns (actors). When having built a space, the DM can host the space online and invite their players to view their created world. The DM can then control aspects of the world such as locations of objects, hidden objects, etc to immersively tell their story. Players will be limited to the amount of interactivity they have, but GAME’s ultimate goal is to replace currently used tools such as roll20.

# In-Depth:

The game features 2 main “modes”, these are “building mode” and “interacting mode”. Within build mode the DM can place, move, rotate and resize their environments and objects within. In interacting mode, the DM can interact with objects to tell their story live, some examples include “possessing” a NPC and talking as them, hiding objects from the players because they haven’t seen it yet. Activating environment interactions such as opening doors.

The game is essentially a level editor with a single player and multiplayer mode. Where only the host has the power to edit the level.

An ideal end state would be a state where the developer does not have to do a large amount of work on modelling because of added steam workshop support, the player would be able to submit / download models, levels, and maybe other assets. This is however not a priority.

# Features

* Steam Network support
* Build mode
  + Content drawer style
  + Click to select object to build
    - Preview prefab style
    - Escape or right click to cancel placement
  + After object has been built
    - Clickable to modify wanted properties
      * Model for player actors
      * Color?
    - Ability to adjust place, size and rotation using a transform tool
  + Ability to set lighting and time of day.
* Interact mode
  + Each player is in Interact mode (although limited), only the DM has full interact access and access to build mode
  + A player can press on the ground to spawn a ping (visible by other players and DM), used to highlight locations of interest
  + Each player is assigned a different color.
  + The DM can do a couple of things in interact mode:
    - Interact with interactable environment, such as doors
    - Basic move actors
    - Hide / show actors
    - Highlight actor (to let others pay attention)
    - Possess an actor and speak as them.
  + Everyone has access to a chat function, the chatbox has two purposes:
    - Send messages to everyone, basic chatting
    - Run Commands using a “/” prefix
      * Roll Dice using /r or /roll
      * Hidden dice roll using /hr or /hiddenroll
      * Whisper using /w or /whisper
  + Everyone can roll dice using either the chat function or by using a preset menu that has common dice rolls hidden under one click.
  + The DM can play music from either .mp3 files or website links.
* Later on custom asset support
  + The players are able to use their own models in game.
    - This way the developers don’t have to keep supplying new assets and the game can easily be extended towards other TTRPG’s
  + Custom functionality. Modders could create custom scripts that bring added functionality into the game.

# Saving Loading

* Saving
  + The player can “Save As” and “Save”
    - Save as will be used as a first time save or to save a copy / another version of the map
    - Save will overwrite the current map save with the new data
  + When saving, some info will be saved
    - Map data consisting of which objects have been built
      * Transform
    - Each object has some of it’s own data
      * A DM given name, for things as NPC’s
      * Notes, in case the DM wants to remember something about an npc.
      * More?
    - An Image from some random point on the map (maybe DM POV). This way the DM can have some more idea which save it is they want to load.
  + Maybe autosaving?
* Loading
  + When loading a map, ask the player if they are sure, in order to keep unsaved data
  + Destroy all map objects present for a basically full reset
  + If the destroying / spawning lags and freezes everything, look into increasing performance.
  + When the players presses the first load button, display either a list or a grid with the possible saves.
    - Probably includes a name, last saved date, image and maybe notes.