Spawning a character starts with sending the eventHandler an EventSpawnEntity. This can come from a variety of classes/functions. One example is from a behaviorComponent – perhaps casting a spell or shooting a projectile.

The resource management portion of the game should check for any assets that need to be loaded from disk (hopefully none), then create new instances of all the required entity components.

The new entity can have anchor points (this could relate to particles that are relative or for creating special particle contacts such as rods).

One way to accomplish this could be to have the parent particle of the spawned entity linked with a rod to the particle that we want it anchored to. This particle could stay still and the child particles could eminate from the parent particle positon

EG p A Wizard shooting fire from it’s hands would spawn a flame throwing entity. The flame throwing entity would have it’s parent particle linked to the wizards hand, so that it always shoots out from that point. As the hand moves so would the parent particle and thus the child particles with it.

The EventSpawnEntity contains the basic parameters needed to create a new entity, and a startup\_states dict which can be used for additional state information. The type of information needs to be added to the STARTUP\_STATE\_TYPE enum.

The reason for this structure is to allow additional startup to be defined, and only needing to change the ENUM, the GameEngine’s initialize entity functions, and the factory which creates the entity