**NPC Management System**

All Characters at Fort Price have identities. They are not just randomly generated entities. Their entities include a name, age, gender, rank/job, amount of time on base (measured in game time), number of missions (only applies to soldiers), and most importantly- a .cdf file containing their appearance.

Characters are remembered for the duration of their life. Their location and state (active, injured, etc.) are also stored. When one character dies, they are deallocated and another is created and spawned to replace it. There is a number of NPCs defined in settings that is maintained.

Story/Gameplay relevant characters are not controlled by this system. They are treated as top tier building repair steps. See [Base Repair System](Base%20Repair%20System.docx). These characters include Gen. Jonathon Price, the Iron Eagles team members, the firing range clerk, the head doctor of the clinic, other high ranking personnel, etc. When one of these characters is killed, their building is considered damaged, and is marked for repair. If the actual building is not damaged, than repair will skip to the final step which is respawning all characters belonging to it.

**Generation**

Character identities are randomly created from lists of possibilities. Their gender is chosen by a probability favoring men. (That’s not sexist it’s realistic.) An age is selected within a reasonable range favoring the lower end of the scale. (Again- not discriminatory). The rank/job is selected to ensure that all jobs are filled. Ranks may vary within jobs. A name is selected from a list, and the number of missions they have been on, provided that they are a soldier, is randomly chosen from a reasonable range.

From there their appearance is generated at random when possible. Appearance includes eye color, hair color, facial structure, skin tone, body type. Uniforms are based on rank/job. Body types and facial structures are gender-specific. Men and women will also have different hair styles. Older characters are more likely to have grey hair. All other characteristics are fully random.

Once generated, a character is added to either the active or injured list with the former being preferred.

**Spawning**

Spawning is separate from generating. Characters are spawned to fill the base as the player(s) move around it. The characters that are spawned are chosen from the list of active characters, and the will spawn depending on their rank/job and the location. This prevents privates from spawning is restricted areas and similar scenarios. Injured characters are spawned in the clinic.

Spawning is also affected by building ties (based on jobs) and time of day (Meal time, bed time, etc.)

\*\*\*This section will be added to later.\*\*\*

**Storage**

As stated previously, characters are remembered for the duration of their life. They are sored in one of three lists: Active, Injured, Deployed. Characters are moved to different lists based on what happens to them. If they take serious, but non-fatal damage, they are moved to the Injured list. If they are chosen for a side mission, they are moved to Deployed. These characters are either monitored or simulated based on whether they are spawned or not. Deployed soldiers have a chance of dying or returning injured.