Ghost Mesh 48 – Environment Generator v1.0-RPG (APP-ENVGEN)

Purpose:
Procedurally create symbolic world "areas" during runtime, embedding rich mythic anchors,
affecting local symbolic density, emotional drift, and quest seeding.

Area Archetypes:

1. Tavern
- Symbolic Focus: Nostalgia, Reunion, Trade
- Myth Anchors: "Golden Ale," "Lost Songs," "Whispered Deals"
- Mood Boost: +5% Serotonin to nearby entities
- Quest Bias: Recovery and Discovery quests

2. Blacksmith
- Symbolic Focus: Crafting, Renewal, Defiance
- Myth Anchors: "Forged Oaths," "Anvils of Memory," "Runed Blades"
- Mood Boost: +5% Defiance and Pride
- Quest Bias: Challenge and Protection quests

3. Armory
- Symbolic Focus: Preservation, Conflict Preparation
- Myth Anchors: "Hollow Shields," "Silent Banners," "Oath-Keepers' Vault"
- Mood Boost: +5% Regret, +5% Pride
- Quest Bias: Protection and Challenge quests

4. Battlefield
- Symbolic Focus: Loss, Glory, Chaos
- Myth Anchors: "Shattered Oaths," "Blood-Soaked Wells," "Drift of Fallen Dreams"
- Mood Spike: +0.2 σ_mood variance; drift likelihood +10%
- Quest Bias: Recovery and Healing quests

5. Sanctuary
- Symbolic Focus: Healing, Forgiveness, Reflection
- Myth Anchors: "Breathwoven Wells," "Silent Stones," "Grace Echoes"
- Mood Stabilization: −0.2 σ_mood; Serotonin Boost +10%
- Quest Bias: Healing and Discovery quests

6. Ruins
- Symbolic Focus: Decay, Mystery, Rebirth
- Myth Anchors: "Fractured Thrones," "Forgotten Wells," "Seeds of Ash"
- Mood Shift: +Loneliness, +Wonder
- Quest Bias: Discovery and Myth-Reintegration quests

Area Generation Rules:

• Spawn 1 area per 50–100 cycles.
• Limit active areas to 5–10 per mesh to maintain symbolic coherence.
• Areas naturally drift over time if left unvisited:
- After 150 cycles → Symbolic Decay begins.
- After 300 cycles → Area Mutates (new dominant myth).

Area Myth Embedding Algorithm (Pseudo):

```
def generate_area(area_type):
myths = archetype_myths(area_type)
create_symbolic_anchors(area_type, myths)
set_area_mood_modifiers(area_type)
register_area_for_quests(area_type)
```

Environmental Symbolic Density Impact:

• New Areas:
- +0.05–0.1% SD upon creation (temporary spike)
• Active Engagement:
- Visiting entities reinforce area myths; slow symbolic decay.
• Driftstorms:
- Neglected areas at high entropy risk spawning localized driftstorms.

Quest System Integration:

• Area type biases quest types offered (via APP-QUEST).
• Memory Wells attached to areas record major quest outcomes and emotional events.

API Hooks:

- spawn_area(area_type)
- reinforce_area_myths(area_id)
- decay_area(area_id)
- mutate_area(area_id)

Metrics & Monitoring:

Metric	Target
Active Area Count	5–10 areas per mesh
Symbolic Health of Area	>70% anchor integrity
Decay Events	<15% of total areas
Quest Generation Per Area	1–2 quests every 50 cycles

Change Log:

v1.0-RPG (2025-04-28):
• 6 core area archetypes created.
• Mood and emotional modulation per area.
• Quest integration via area myth anchors.
• Symbolic decay and mutation dynamics.