

Part 1 (Image from <https://i.redd.it/x5xxvmn9oxwy.jpg>)



Fog

Fog in games covers such a large area. I'd imagine the size is both good and bad—good in that implementation could be flexible, but bad in that the size and quality requires more processing power. To cut costs, I can make it so that the fog is like a bubble over land. The bubble's surface is foggy, but the inside is clear. If the player enters, they get enclosed in a smaller fog bubble.

I would probably use a particle system with a billboarding 2D smoke texture (or multiple). The particle system will emit over the bubble's surface. To reduce repetition, I can randomly rotate them upon spawning. Fog travels slowly and is persistent, so velocity will be low while lifetime is high. The texture's transparency also depends on how thick the fog will be; its transparency, alpha, starting color, etc. can be modified to reduce repetition further.

For added effect, I can also tinker with lighting. Ambient lighting seems rather high, and the specular and diffuse lights don't stray too far from the ambient light. The lights will also depend on whether it's day or night.

Part 2

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All of us are on the same team for the senior game design project.