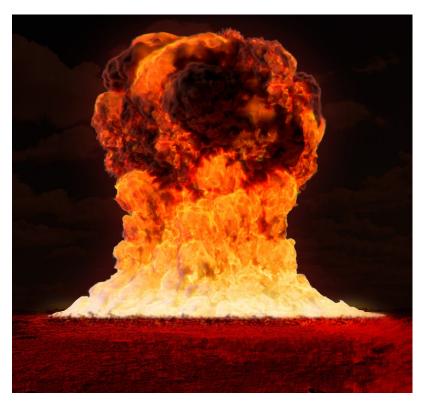# Discussion on implementing explosion effet in Unity



**Through observing an explosion in the real physical world, we can have an idea how explosion works.**

**Explosion begins from an extreme hot tiny spot and explode in volume and temperature. It comes with flames and smokes.**

We are using particle system for this effect. The bottom of an explosion effect had the lightest color and became darker getting higher. In other words, the darkness of the flames represents its existing time. The longer after the flame appears, the darker it gets. So for this effect, we can use color over life time. For the mushroom shape of the explosion, we can use shape and size over lifetime curve to approach. By observing the video of exploding, I found out the all the small flames rotates in an outward direction, so we need a rotation over lifetime and rotation by speed to control the flame spinning. For the smokes above the explosion, we can implement another particle system. Finally, put a spot light at the explosion spot to stimulate the glows created by the fire.

Part 2:

Members: Hutson Hall, Naylon, Allen

Duckelganger Effect
Glow effect
Random, momentary vertex displacement/color shift every once in a while

Paradox/Game Over
Screen distortion via noise function
Disorienting
Color shifting (post processing inversion of colors)
Possibly some screen blur

Fast Forwarding
VHS Fast Forward
Horizontal bars moving downward
Grainy texture
Chromatic dispersion

Teleporter to next level
Shifting
Rotating vortex
Time travel effect

Pause Menu
Darken + bloom