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Group 9 Project Proposal

For our final project, we plan on implementing an animated snow scene modeled inside of a snow globe. To model the snowfall, we will use **velocity fields**, and implement **motion blur** as well as **collision detection** to prevent snow from exiting the globe and form snow accumulation on the ground which will be rendered using parametric surfaces. In addition, we will place some characters inside of the globe that are animated using **rigid body motion**, and **spline-based animation curves**. If we have extra time, we may also implement other advance features as well such as a small fluid simulation (possibly using shallow water approximation) in one part of our scene or volumetric clouds based on perlin noise. Attached below is an image showcasing a small demo of our initial scene setup which we will fill with our scene.

