**Progress Report**

In this progress report, I will describe what I have accomplished so far and what I plan to be working on over the period until the check point at Thanksgiving.

*What I have accomplished so far:* I have now finished drawing the scene with proper texture and lighting, including the Hogwarts Castle, the Forbidden Forest and the Quidditch Court. At the same time, I also finished drawing the lake in the middle of the Forbidden Forest and the water wave simulation, which has extended the basic material we have covered in class.

*What I plan to be working on over the period until the check point:* I will finish first, the particle engine in the Forbidden Forest part; second, the user could fly all over the scene; third, the light modeling inside the Hogwarts Castle(including drawing the indoor scene).

*After check point:* I will first, finish the potronums and the light modeling inside the Forbidden Forest; second, 3D selection in the Hogwarts Castle and Quidditch Court; third, the ball runway calculation. If there is still some time left, I will finish my stretch goals.