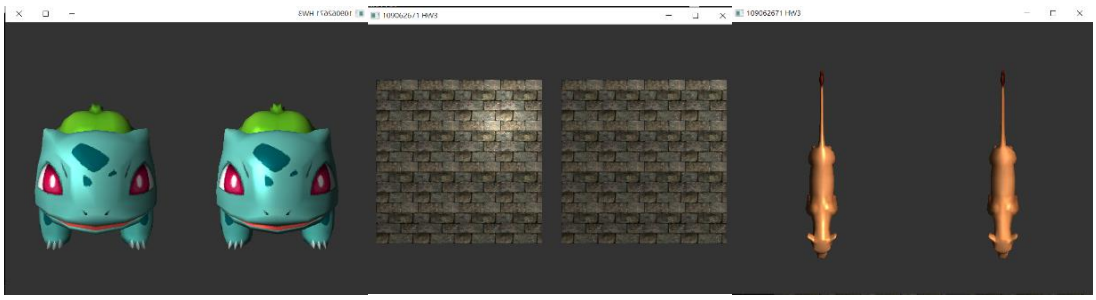
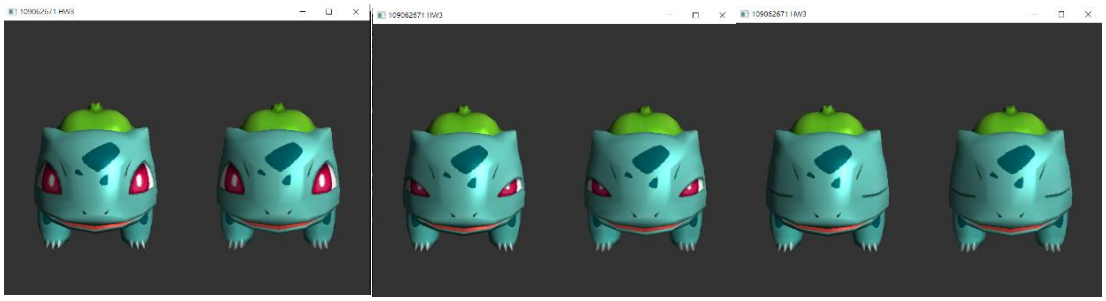
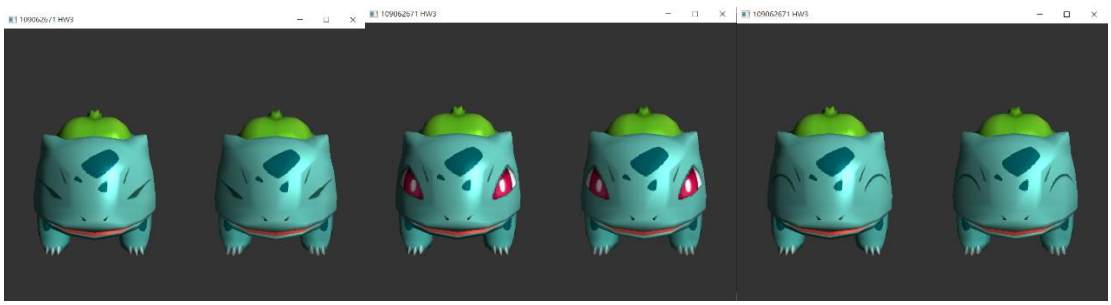
Computer Graphics Homework 3 Report 109062671 吳竣宇

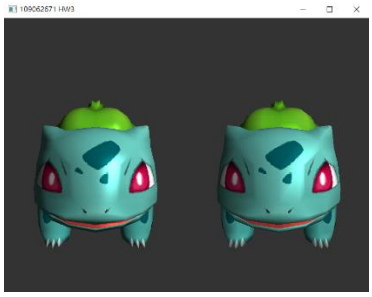
1. Screen Shot
    a. Every model



    b. Texture transform (eyes ID: 1-7)





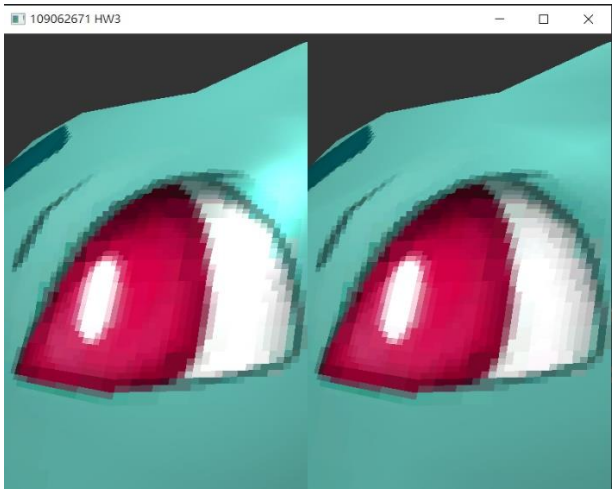


2. Description of your program control instructions

Suppose (mag_mode, min_mode) =

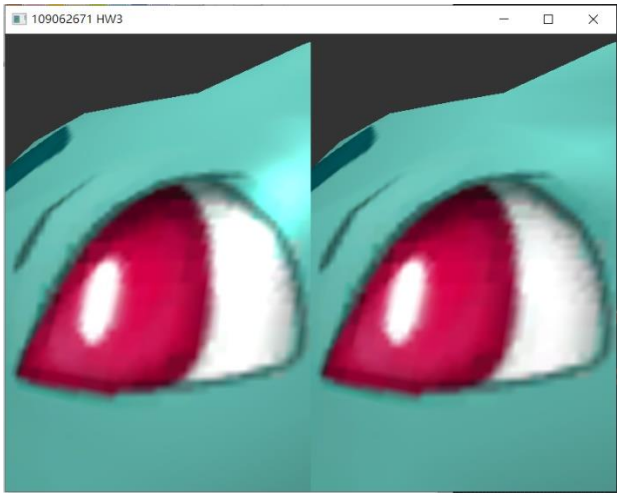
(magnification texture filtering mode , minification texture filtering mode)

a. (mag_mode, min_mode) = (nearest sampling, nearest sampling)



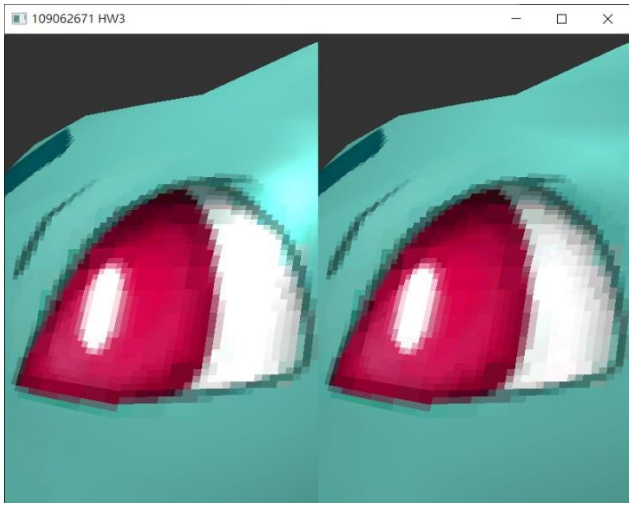
Filter 的效果較為顆粒

b. (mag_mode, min_mode) = (linear sampling, nearest sampling)



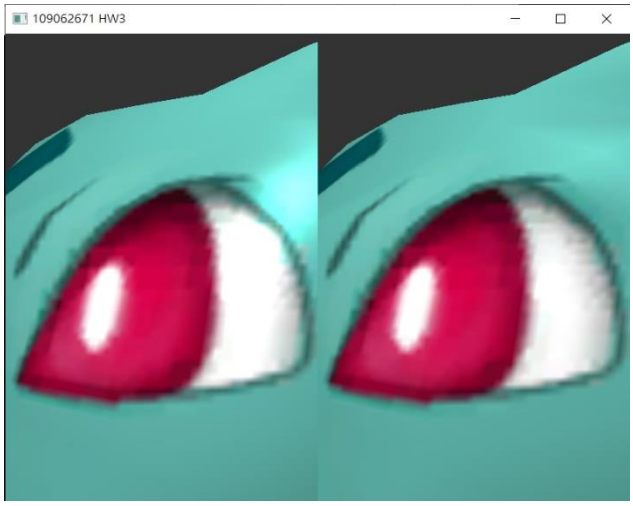
Filter 的效果較為平滑

c. (mag_mode, min_mode)=(nearest sampling, linear_mipmap_linear sampling)



Filter 的效果較為顆粒，放大 filter 的效果不適用 mipmap 所以和 a 相似

d. (mag_mode, min_mode) = (linear sampling, linear_mipmap_linear sampling)



Filter 的效果較為平滑，放大 filter 的效果不適用 mipmap 所以和 b 相似

因為縮小 filter 的效果也不易肉眼觀察，故沒有放縮小 filter 的相關圖片

3. Something found

作業做到最後時發現 per vertex lighting 出來的效果非常模糊，後來才發現原來是因為 texture 的座標是對應到每個 pixel，所以 texture 相關的 calculation 須在 fragment shader 中執行才會出現正確的結果，錯誤的輸出如下圖示：