

Computer Graphics Homework3 Report

110062401 李浩榮

Assignment Requirements and Key Mapping

- Z / X : Switch the model
- T : Switch to translation mode
- S : Switch to scale mode
- R : Switch to rotation mode
- E : Switch to translate eye position mode
- C : Switch to translate viewing center position mode
- U : Switch to translate camera up vector position mode
- O : Switch to Orthogonal projection
- P : Switch to NDC Perspective projection
- L : Switch between directional lightsource
- K : Switch to light editing mode
- J : Switch to shininess editing mode
- G : Switch magnification (nearest / linear)
- B : Switch minification (nearest / linear-mipmap-linear)
- LeftArrow: Change the eye on reverse order
- RightArrow: Change the eye on normal order.

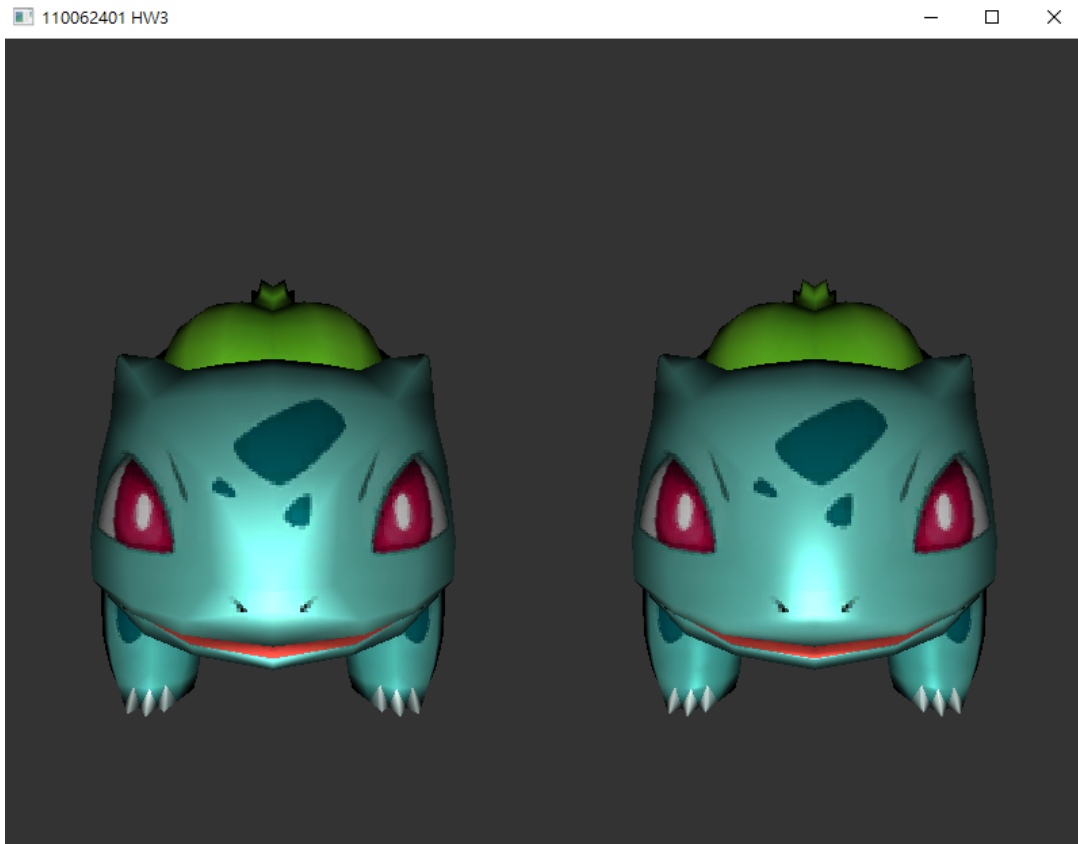
Screenshot for each key actions

Here we are going to demonstrate the required key actions in the AS03_Detail.pdf only. The rest keys are still available, feel free to try them in the exe file!

- **Default**

(This is the default condition of model and place before giving any instruction.)

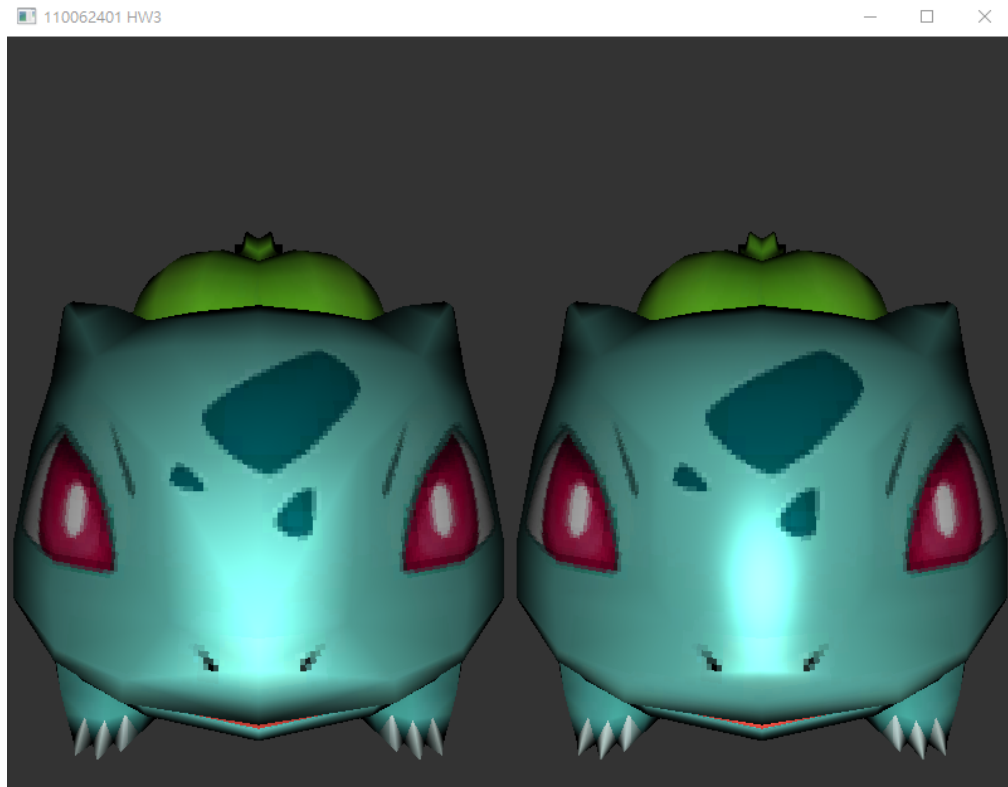
Here we show the per-pixel lightning and per-vertex lightning and combine with texture mapping side-by-side in the window viewport.



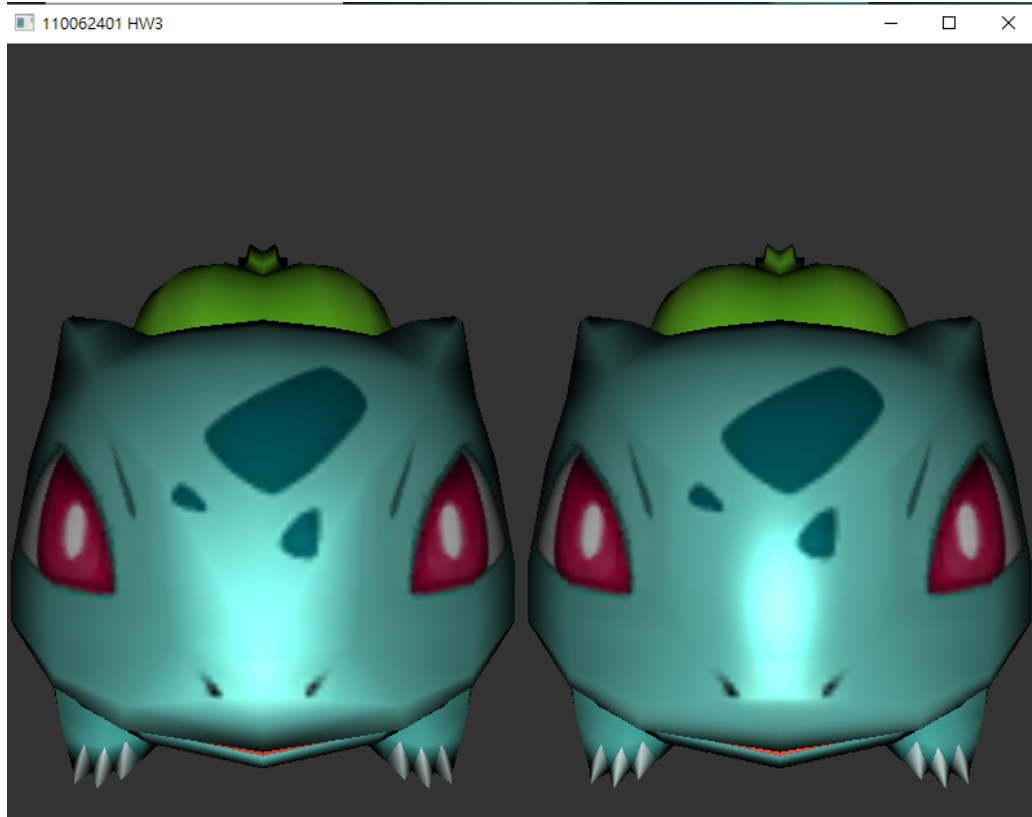
- **G: Switch magnification (nearest / linear)**

Switch the magnification effect between nearest and linear.

- **Nearest**



- **Linear**



- **B: Switch minification (nearest / linear-mipmap-linear)**

Switch the minification effect between nearest and linear-mipmap-linear. It is not obvious to classify the effect, but it still looks different in the eyes (sharp and blur).

- **Nearest**



- **Linear-mipmap-linear**



- **RightArrow/LeftArrow: Change the eye on normal(reverse) order.**

Change different eye effects on the model with normal(reverse) order (1~7). Implement in repeat mode for texture coordinate addressing.

- **1**



- **2**



- 3

