

- After downloading and starting the build, press n to change which part of the project you are viewing (A, B, C)
- Part A
  - For this, I did a variation on a phong shader, vertex displacement shader and shader that changes textures when lit (Assets/Shaders/A)
  - The 4 colored dots are 4 colored point lights
  - This code was adapted from the phong example and the vertex displacement example angus gave us
- Part B
  - For this code, I combined the blur shader and edge detection shader Angus gave us (Assets/Shaders/B)
  - The blur level can be adjusted based on where your mouse is positioned, closer to the left side of the screen means less blur
  - The edge detection is colored is based on the horizontal and vertical differences between the pixels. The green value is affected by the x difference in pixels, while the blue value is affected by the y difference in pixels
- Part C
  - For this code, I adapted the cellular automata code Angus gave us (Assets/Shaders/C, Assets/Scripts/Ian\_PingPong\_CellularAutomata.cs). The rules are the same, but the colors are reflective of how long each pixel has been in each state. When pixels become alive, they start light blue and fade to dark blue. Once pixels die they turn pink and fade to purple.
- Part D
  - The write up for part d is at Assets/Homework1D.pdf