Inspiration

• Atari Breakout (1976)
• Inspired a whole game genre:
  • Breakout clones
• Recreate the game in 3D with:
  • spherical obstacles
  • an ellipsoid as cursor
  • liquid explosions upon destruction of obstacles

Our Solution

• Unity Project
• Rigidbodys and custom collision system:
  • Only few necessary object collisions are handled, but efficiently
• Basic SPH fluid simulation:
  • Editable parameters for adaption to computer power

Minimal Target

- Realistic collisions between the ball, the cursor, obstacles and the walls
Desired Target

• Real-time simulation of the game
• Transitioning the destroyed obstacles to a fluid
  • realistically simulating the fall of the fluid and letting it bounce-off of the other obstacles
Bonus Target

• Falling fluids affecting the ball as well as the cursor
• Nice Graphics
What we learnt in the process

• Unity does not provide most efficient solution for all cases
• SPH fluid simulation
• Merging of Rigidbody and a Fluid World can get hard when not planned through properly