



Interim Report Code Bread

Team Callstack Overflow 2

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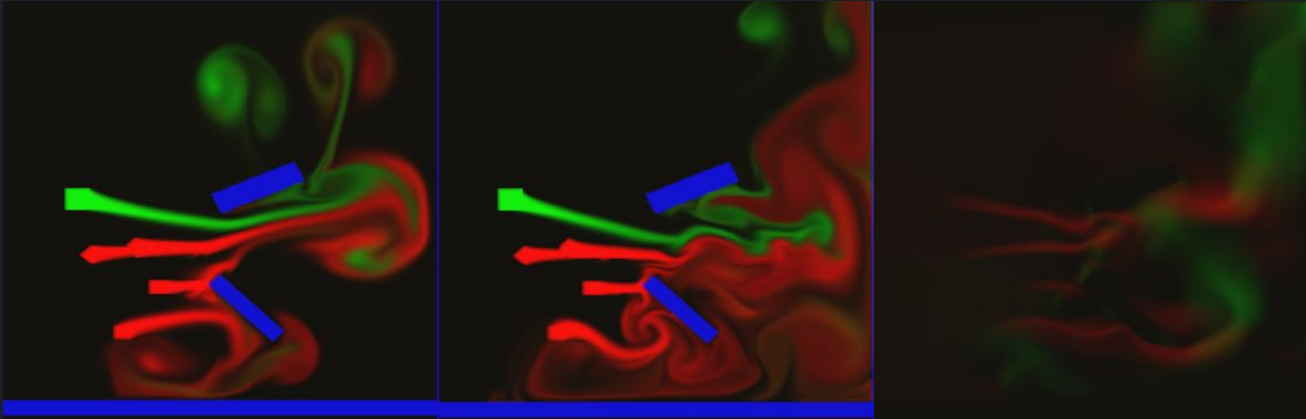
Progress - Gameplay Elements

- ✓ Split Screen Co-Op
- ✓ Pickups & Inventory System
- ✓ Plant Growth System
- ✓ Door Controls
- ✓ Revival System
- ✓ Pizza Baking (don't let it burn!)
- ✓ Pizza Orders & Delivery
- ✓ Breakable Walls
- ✗ Sound Effects (& Player Feedback)
- ✗ Ice Asteroid Gathering (Tractor Beam)
- ✗ Fire System
- ✗ Cows



Progress - Fluid Simulation

- Eulerian fluid simulation using ComputeShaders
- Advection/reflection scheme (if sufficient performance)
- Adaptive **O2** and **CO2** inflow/force field/**flag grid**
- 300 fps / 3ms (256x256 grid, 0.1 seconds/sync, 50 CG iter.)



Progress - Oxygen Visualization



No Oxygen



Flow after opening door



Room full of Oxygen



Progress - System Design

- Systems interact with each other
- Things that (will) interact with the "Air System"
 - Players
 - Animals
 - Fire
 - Breakable Walls/Asteroids



Demonstration

TA-DAAA!



Thank you!