



# Game Idea Pitch: Code Bread

Team Callstack Overflow 2

Min-Shan Luong, Mark Pilgram, Felix Neumeyer, Maximilian Werhahn







\$1,309.<sup>00</sup> USD ⓘ

ADD TO CART








# So your Spaceship kind of sucks. What does this mean?

- No fancy shield systems to protect you from asteroids
  - Frequent hull breaches => depressurization events
- Life support system barely functional
  - Can produce air, but it's not breathable
  - Plants needed to convert CO<sub>2</sub> to O<sub>2</sub>
- Random things catch on fire more often than they should
  - Fires consume O<sub>2</sub>
- Power lines and generator are unreliable
  - Loss of power to systems
  - Loss of artificial gravity



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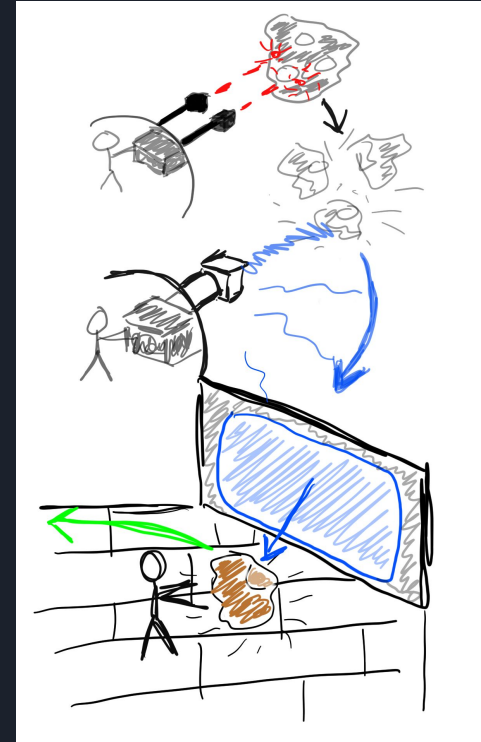
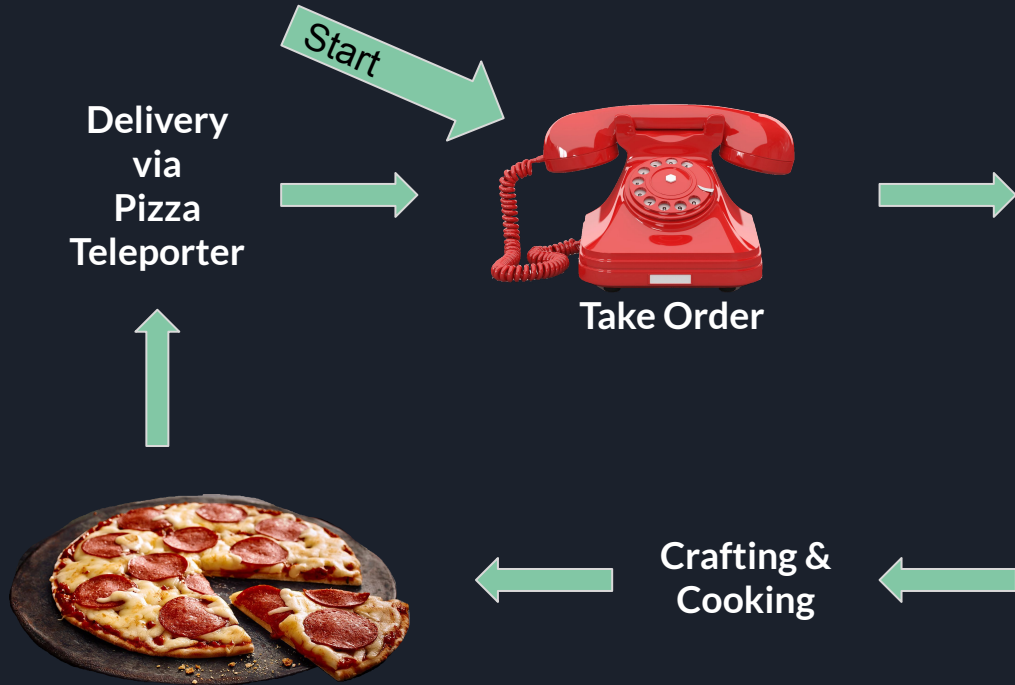
Constantly changing  
climate



Problems that can't be  
ignored and need to be  
dealt with



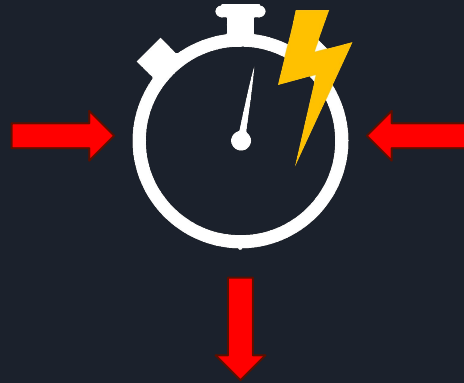
At the same time you have a business to run



Resource Gathering

# Too many jobs, not enough time

Fix problems on your  
ship to maintain a  
habitable environment



Run a business making  
pizzas for customers

Time and personnel  
management required

# Too many jobs, not enough time

Fix problems on your ship to maintain a habitable environment

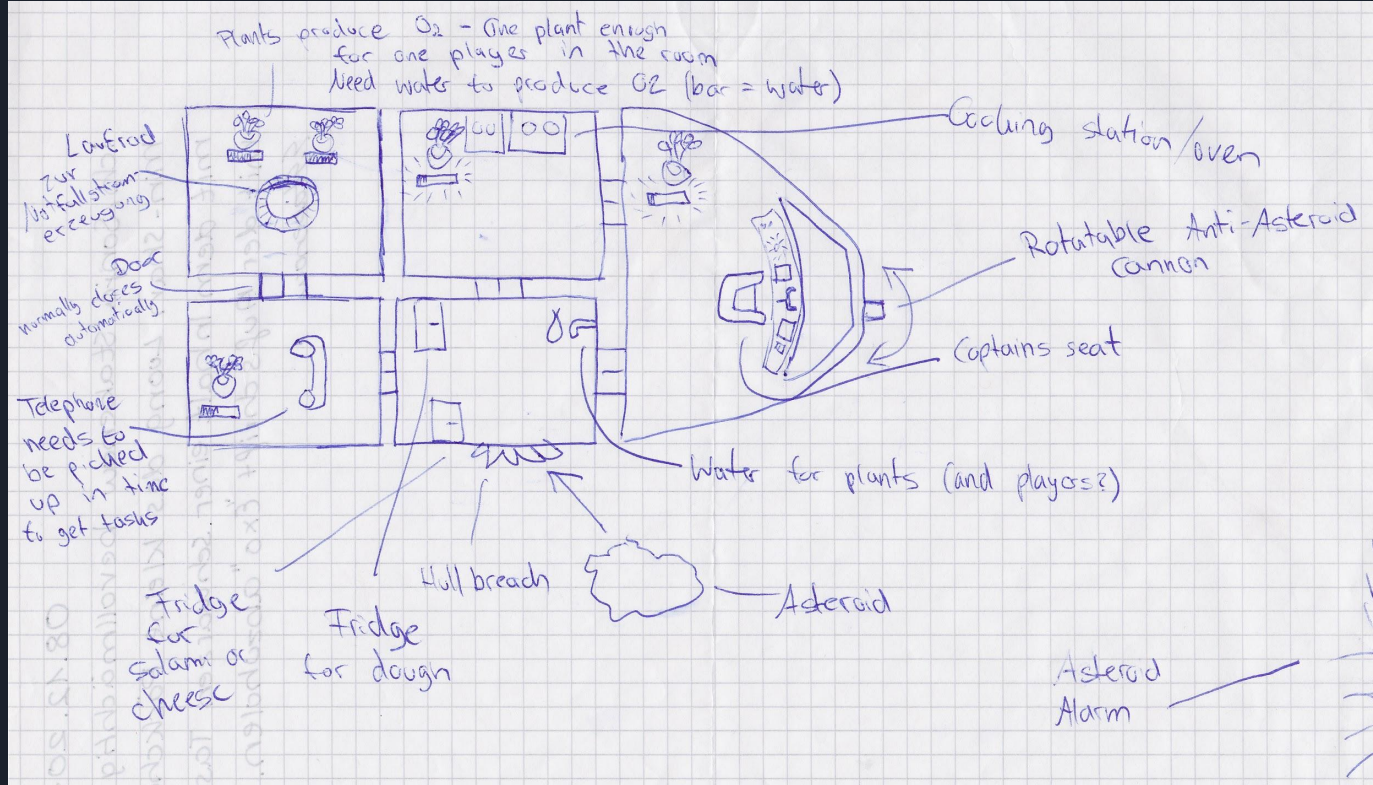


Run a business making pizzas for customers

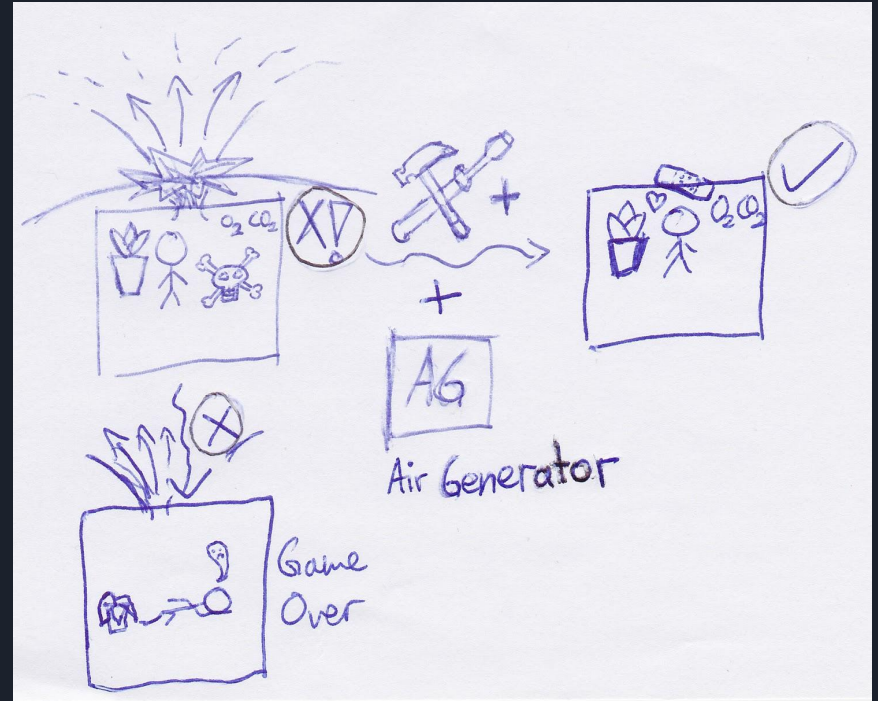
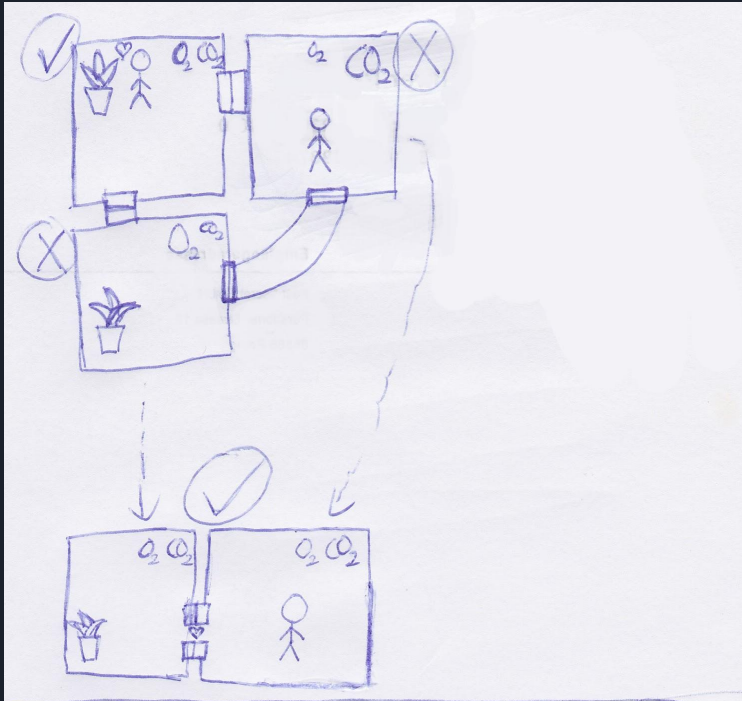
Time and personnel management required

**CHAOS**

# Sketches



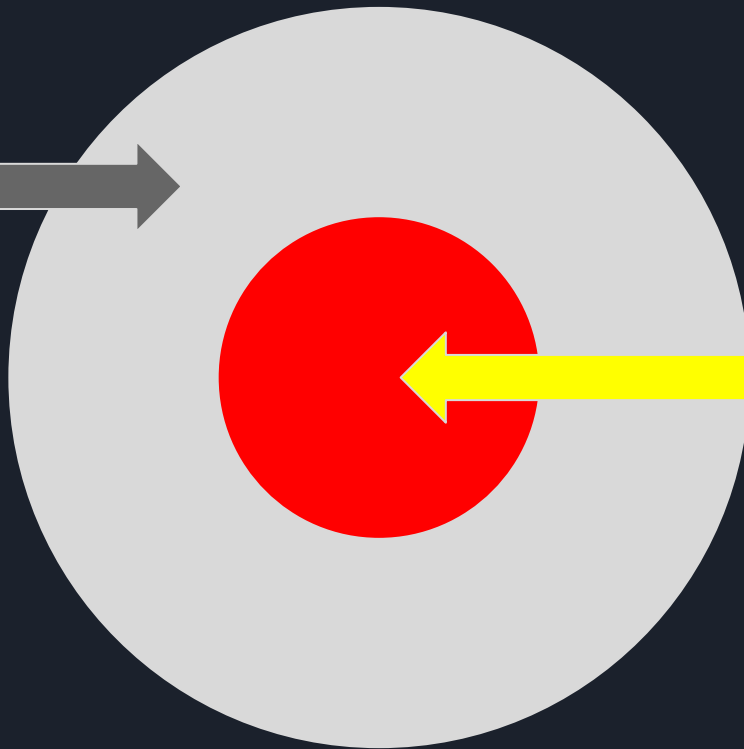
# Sketches





# “Big Idea” Bullseye

Cool environment  
simulation tech

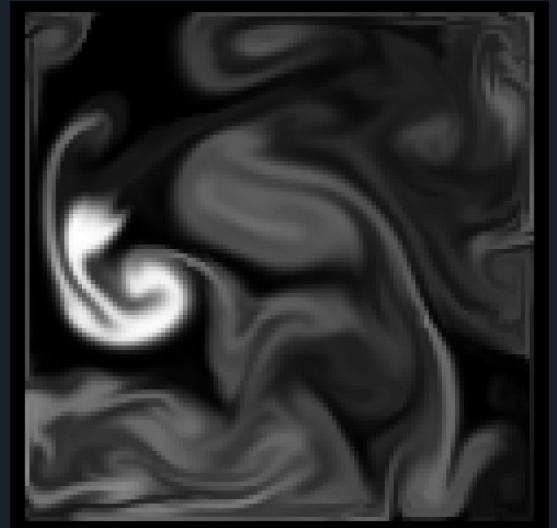


Actually fun  
cooperative gameplay



# Technical Achievements

- Networking (Online Co-op):
  - Object/game state synchronization
  - Client-sided interpolation
  - Custom messages & serialization
  
- Environment simulation:
  - 2D/3D real-time fluid simulation
  - One-way interactions between simulation & objects





# Fluid Simulation

- GPU parallelization (real-time performance)
- Track temperature & density of fluid
- Objects influence quantities (e.g. plants add O<sub>2</sub>, oven heats up fluid)
- If gravity is disabled: fluid can move objects around

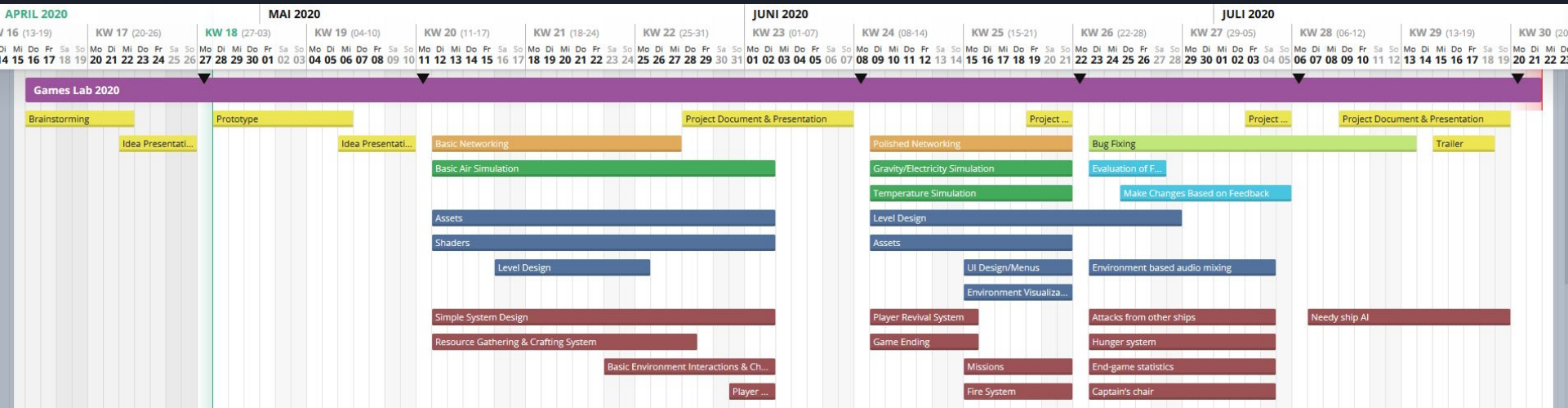




# Timeline

Work (~123h)

# Timeline





# Assessment

- Thought-out information presentation
- Entertaining tasks
- Simultaneous actions for every player to cause chaos
- Ridiculous communication



Thank you!