

# Firebrigade Agents

# Making Fire

- allNoEarthquake.sh has no fires
- Switch on collapse and firesimulator (uncomment)
- Maybe blockade for Kobe map (+ sample police agents) as too easy otherwise
- More example maps on website, any map! should do

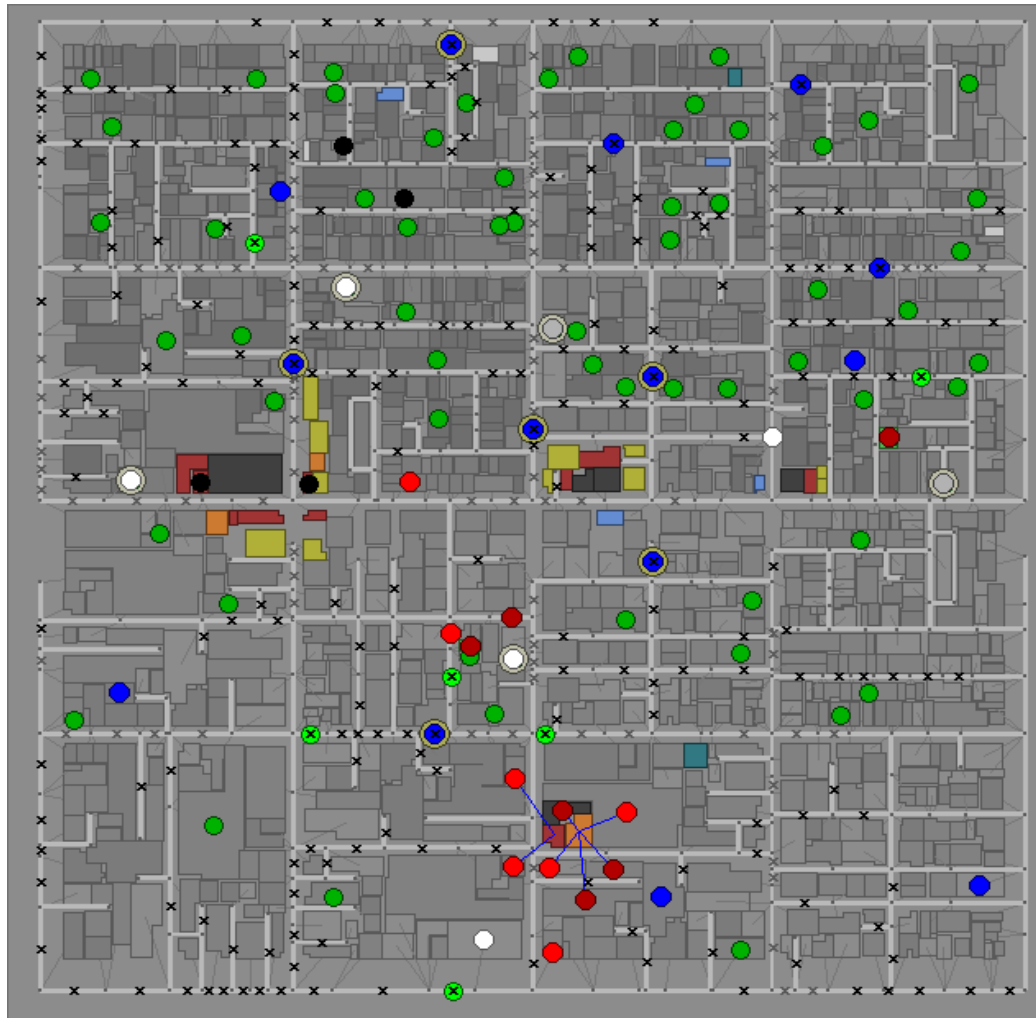
# Basic Behaviors

- Look at sample agents for examples!
- Water gets used -> need to refill at refuges (just move there)
- Keep simple as sampleagents
  - if empty move to refuge,
  - if at refuge and not full wait
- extinguish(building)
- within MAX\_EXTINGUISH\_DISTANCE

# Detecting „fires“

- Check FIERYNESS property (isOnFire())
- Each building is a „fire“
- Better: Cluster of buildings is **one** fire
- Clustering: Create sets of fires by union-find within nearby burning buildings
- Decide which agents extinguish which fire(-cluster) -> coalition formation
- Decide which building of a cluster to ext.

# Example



# Basic Strategies

- Work together -> if one cant extinguish a house before fire spreads -> waste
- Extinguish borders of fires only
- Extinguish towards non-burning areas (map center?)
- Try to reduce number of fires early (ideally only one)
- (extinguish from houses)

# Your task

- Implement simple strategies to solve basic problems
- Choose one problem, that you think will yield most performance increase and do it properly
- Document! We want to understand, what you did, how, and why.
- Look at actual performance