Meeting Notes

# **Fire Escape Simulator Application**

## Main goal

Find the best spot and number of fire extinguishers with respect to <something>

## Optional goals

## Main Functionality

* The System should be able to generate random fire on the floor
* The System should be able to generate random position for peoples
* The system should be able to generate random position for fire extinguisher
* The User should be able to input the number of fire extinguisher
* The User should be able to input the number of peoples
* The User should be able to command the system to simulate the simulator

## Optional Functionality

* User should be able to design the layout of the floor
* User should be able to specify the placement of the fire extinguisher
* User should be able to specify the placement of the exit door
* User should be able to specify how many exit door
* The User should be able to specify how many time should be system simulate

# MVP solution

**Scenario :**

The user will input the number of people and fire extinguishers, then press the simulate button to simulate the simulator, the system will then show the most optimal placement and animation of that optimal scenario.

# Questions

* What is the limitation of this project set by the Fontys?
  + Is there a specific programming language/framework that we need to use?
    - If Not, is Unity allowed?
* What's the goal?
  + Is the simulation done if someone reaches an extinguisher or when all the fires have been extinguished or when everybody has escaped?
  + What decides the best/worst-case scenario? (who decides this?)
    - Does it depend on the number of people that have died, how fast the fire has been extinguished or the size of the fire? And etc
* What parts of the simulation are entered by a user and what parts are randomly generated? (who decides this?)
  + Room layout?
    - Exits
    - Pre-defined?
    - Are there walls or other obstacles?
    - Customizable?
  + People?
    - Amount?
    - Position?
      * Random or predefined set?
    - How fast do they move? Can they move diagonally? Should this be random for every person?
    - What happens when there’s nowhere left to go? (No exit)
    - Can people move through each other?
  + Fire extinguishers?
    - Amount
    - Position
      * Does the designer place them, or should they be placed randomly?
      * Does it have to be alongside a wall?
    - Can a fire extinguisher run out?
* Does the fire spread?
  + How fast?
  + Do people die by fire?
  + Does fire spread equally (ie. circle)?
* Should the people in the simulation be able to leave through an exit?
  + How do the people decide between leaving and going to a fire extinguisher?
* Are there restrictions on the code languages we can use?
  + Does the solution need to be a desktop app?
  + Or is it a sandbox environment?
  + Does it depend on the number of people that have died, how fast the fire has been extinguished or the size of the fire? And etc

# Example:

