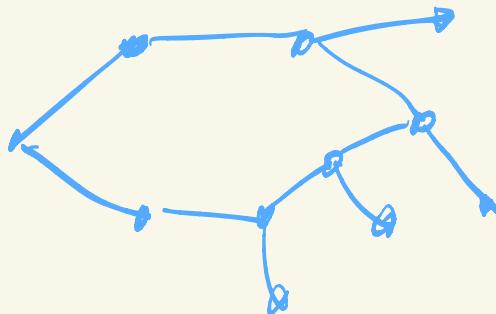


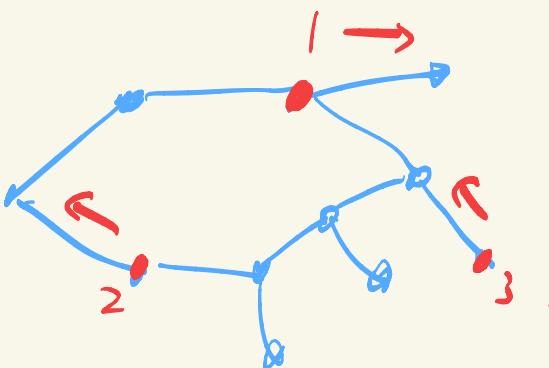


The model stores the following info of each time step t :

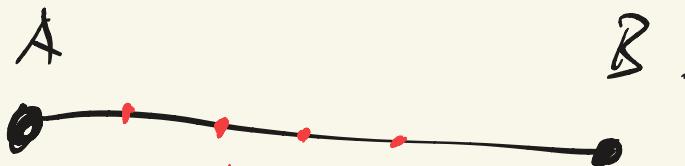
1. A graph representing the State of the building



- 2: Position & direction of movement of firefighters. & next move

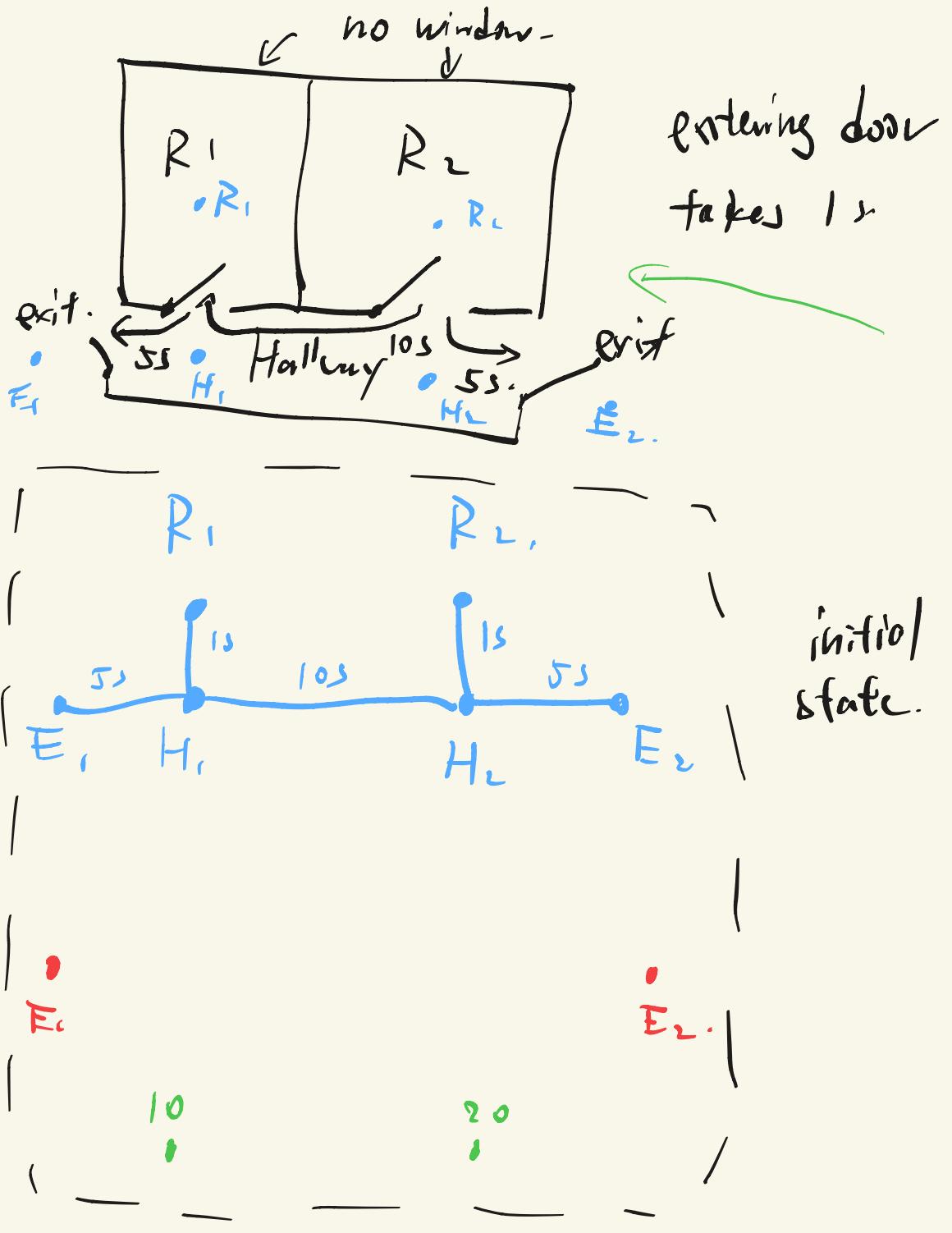


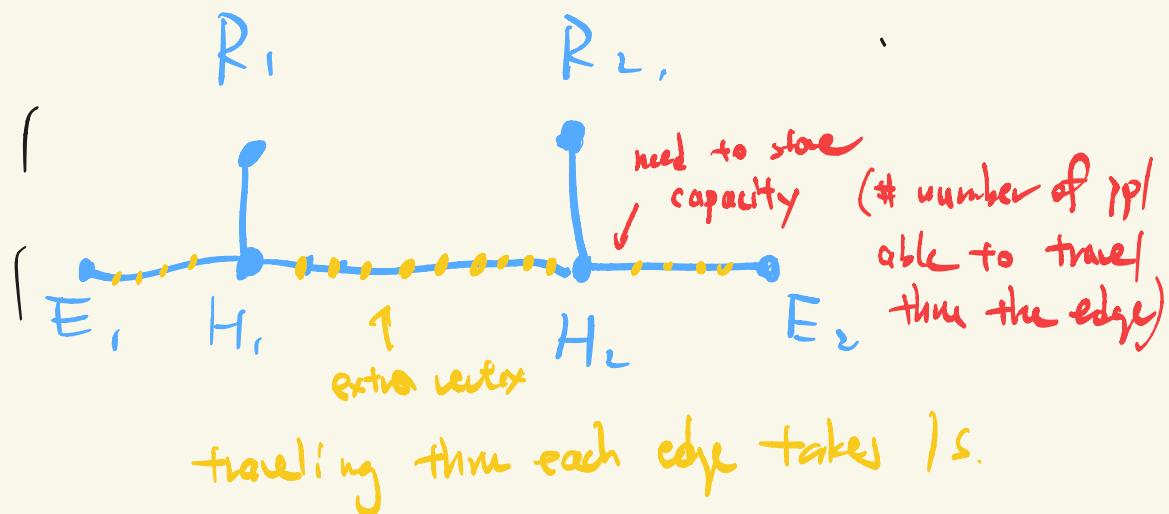
Distance btwn two rooms (n seconds to travel from room A to room B).



⇒ Can assume every firefighter can travel at most 1 edge.

3. People to evacuate in each vertex.

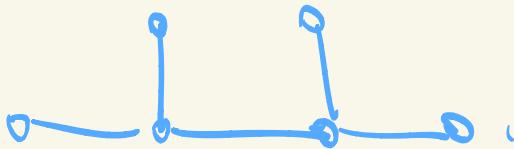




Output : 1. Total time
 2. At each fine :
 { position of fighters
 # of people carried
 by the fighters.

Each state :

Graph \leftarrow layout of the building



Position of firefighters.

$$f_1 \rightarrow v_{i_1}$$

$$f_2 \rightarrow v_{i_2}, \dots$$

(don't have access)
to # ppl in way
that are
not scared

of people needs to be reduced.

each vertex \rightarrow # of people at
the vertex.

* other parameters - (capacity, priority).

Tell firefighters what to do
next.



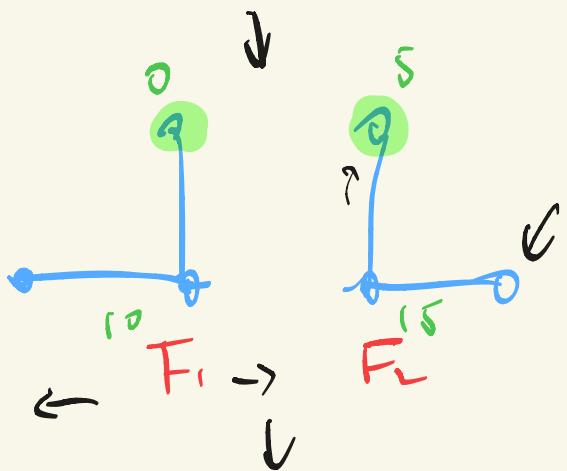
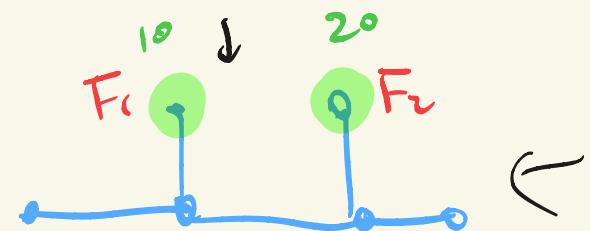
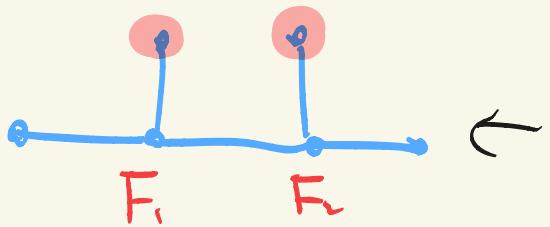
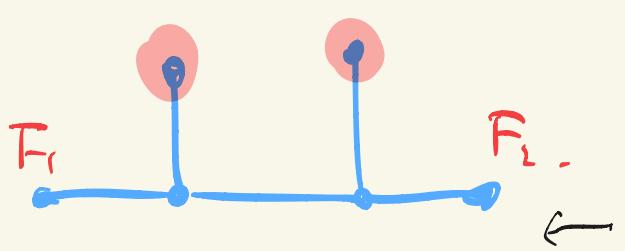
When to update the output of the model.
or how to evaluate.

- * Dynamic, will respond to random events.
- * When events happen, the model will re-evaluate & output another plan.
- * If not, then do we need to ever update the model?

Write out different strategies
that the model can prioritize

● : rooms not yet cleaned or visited.

● : room is visited.



class Simulator

11 objects:

Graph layout.

Firefighter[] fighters.

def init
 populate the information stored in the
 layout.
 initialize fighters.

def update (
 if random events).
 Call Model to assign

def read.