Plumber ← Customer

Specialization - task

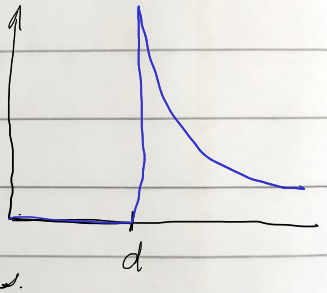
distance $\propto \frac{1}{d}$ $d > 500$ m or 250 m

Rating : $\frac{1}{\text{Rating}}$

Rating
better the ~~application~~, the company can incentivize them for joining huge ~~Gov~~ Construction projects that gives continuous income for a longer period.

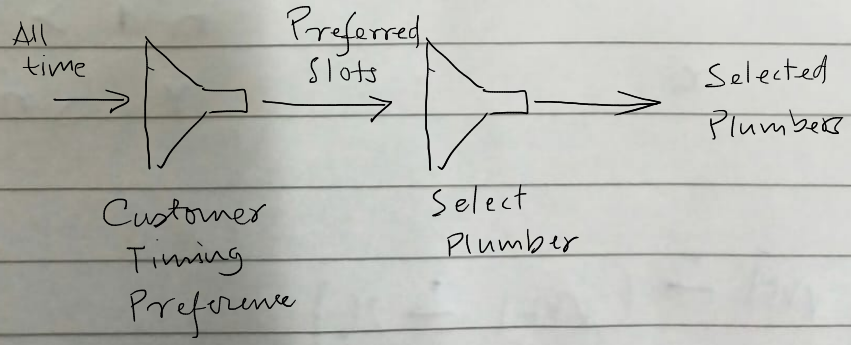
1 { 1. Customer Problem → $s_1, s_2, \ldots s_n$
  { 2. Plumber specialization

2. Distance $\propto \frac{1}{\text{Preference}}$

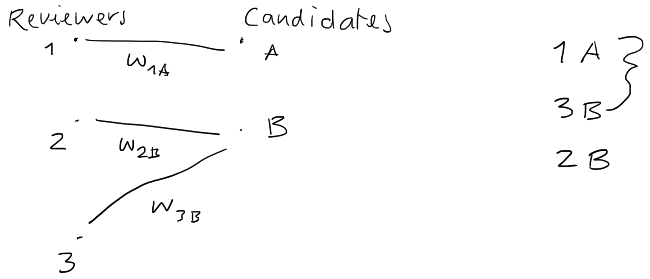


3. Rating based incentives to plumbers.

4. How soon a plumber is available?



Edge Sorting



Max Flow Min Cost

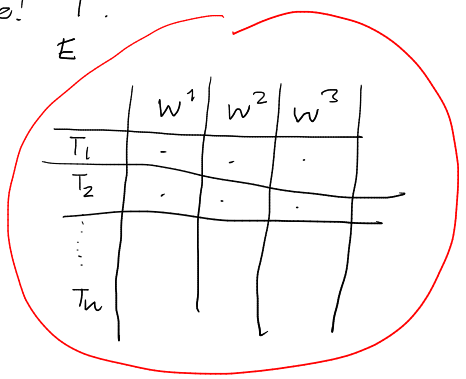
C

1. Customer Problem
2. Plumber specialisation — P
2. Distance $\propto \frac{1}{\text{Preference}}$ — D

S_{PC} → # matching specialisation/problem.

3. Rating based incentives to plumbers. R
   time from the complaints to earliest available plumber time.
4. How soon a plumber is available? T.
5. Experience (# assignments completed) E

$$W_{PC} = S_{PC} + \frac{K_D}{D^K} + ER + \frac{K_T}{T}$$ ← Fine Tuning



Experimental Result

How to test and improve the algorithm.

- Independent implementation & testing