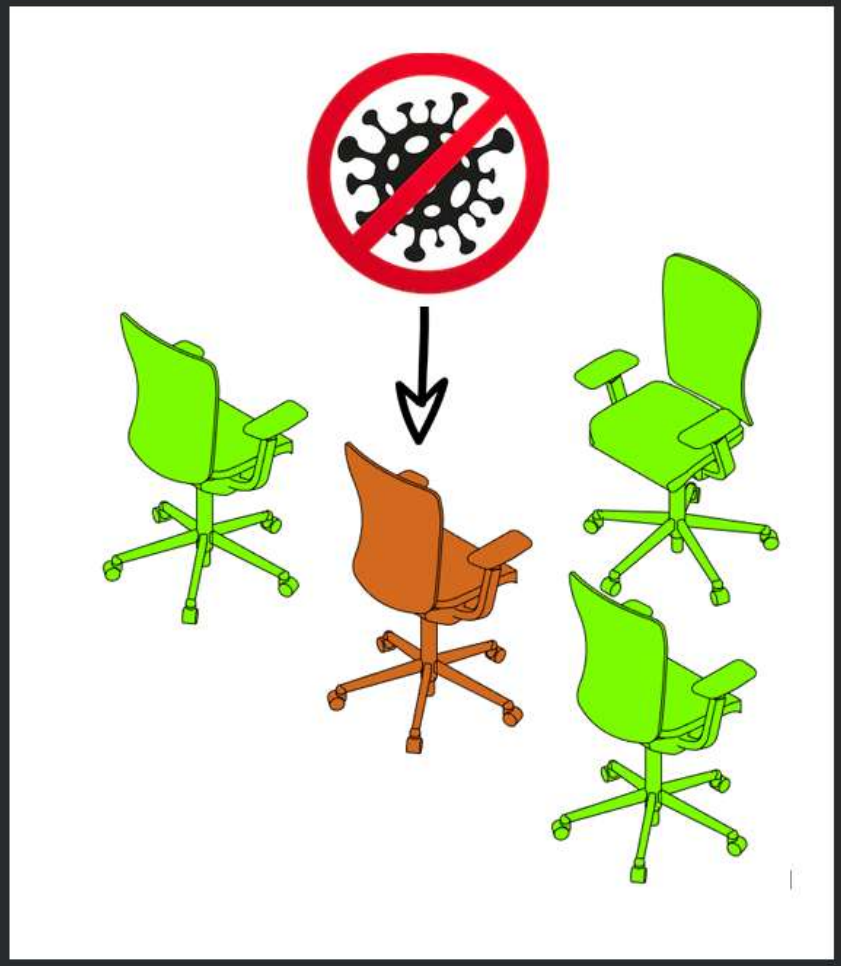


REVIT COVID-19 FITOUT TESTING USING DYNAMO

BY THE AUSSIE BIM GURU

Thanks for the help!

Cyril POUPIN · 2nd

Technicien Bureau d'études & Référent BIM

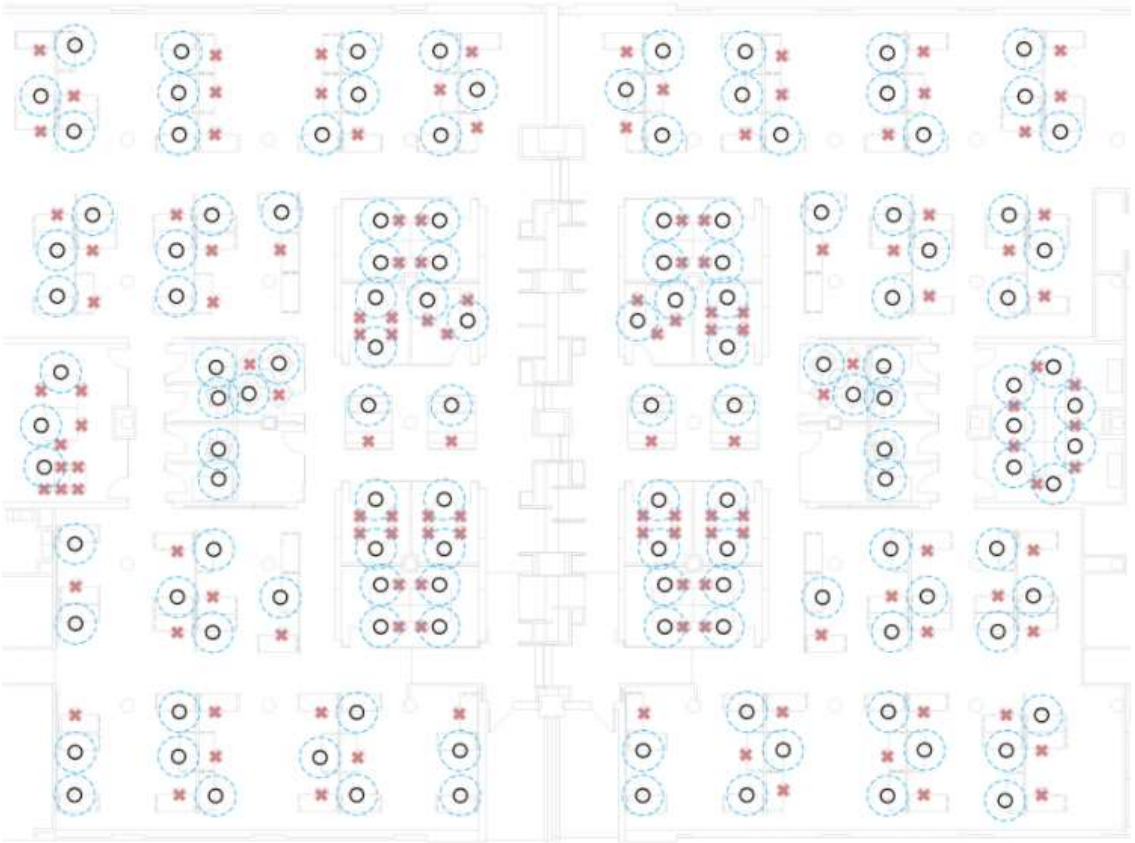
c.poupin 1d

A variant with a better result (permutation of the first element to be tested)

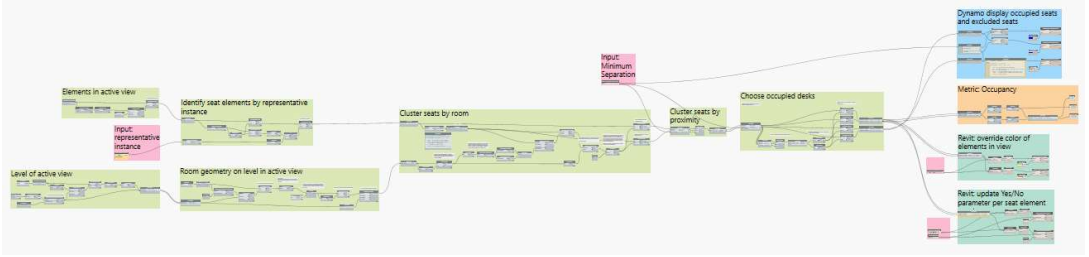
```
import clr
clr.AddReference('ProtoGeometry')
from Autodesk.DesignScript.Geometry import *

clr.AddReference('RevitAPI')
import Autodesk
from Autodesk.Revit.DB import *

def nextSpaceChair(group = [], elemA = None, startIdx = 0):
    global margin
    group = list(group)
    if elemA is None:
        elemA = group.pop(startIdx)
        return [elemA] + nextSpaceChair(group, elemA )
    else:
        locPt = elemA.Location.Point
        lstPair = [[x, x.Location.Point.DistanceTo(locPt)] for x in group if x.Lo
        lstPair.sort(key = lambda x : x[1])
```

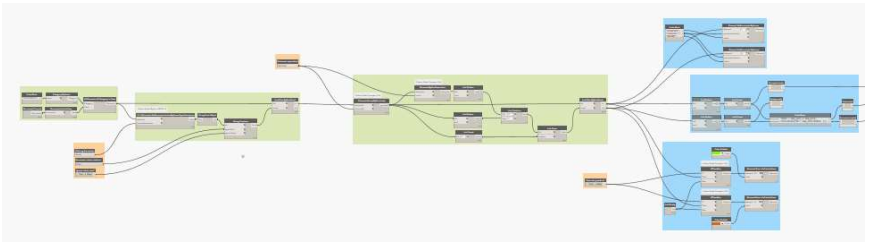
Thanks for the idea!

https://dynamobim.org/occupancy/



Why rebuild it?





Simplify the script logic
Streamline the clustering process

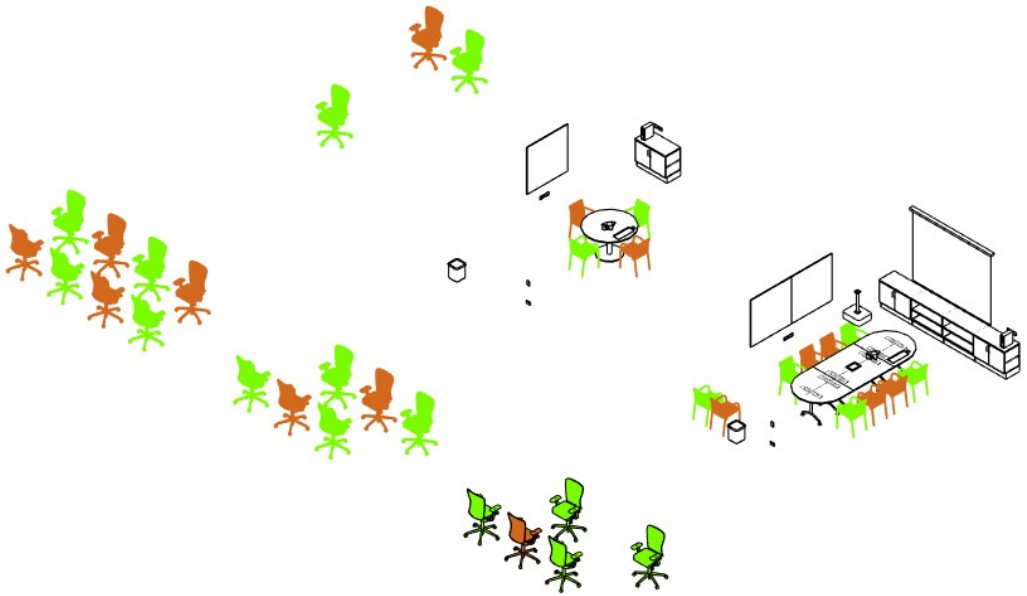
Why such a delay?

I know many of my followers and their families have been personally affected by this epidemic.

I've delayed this until countries have (hopefully) better controlled this, so as not to hit so close to home.

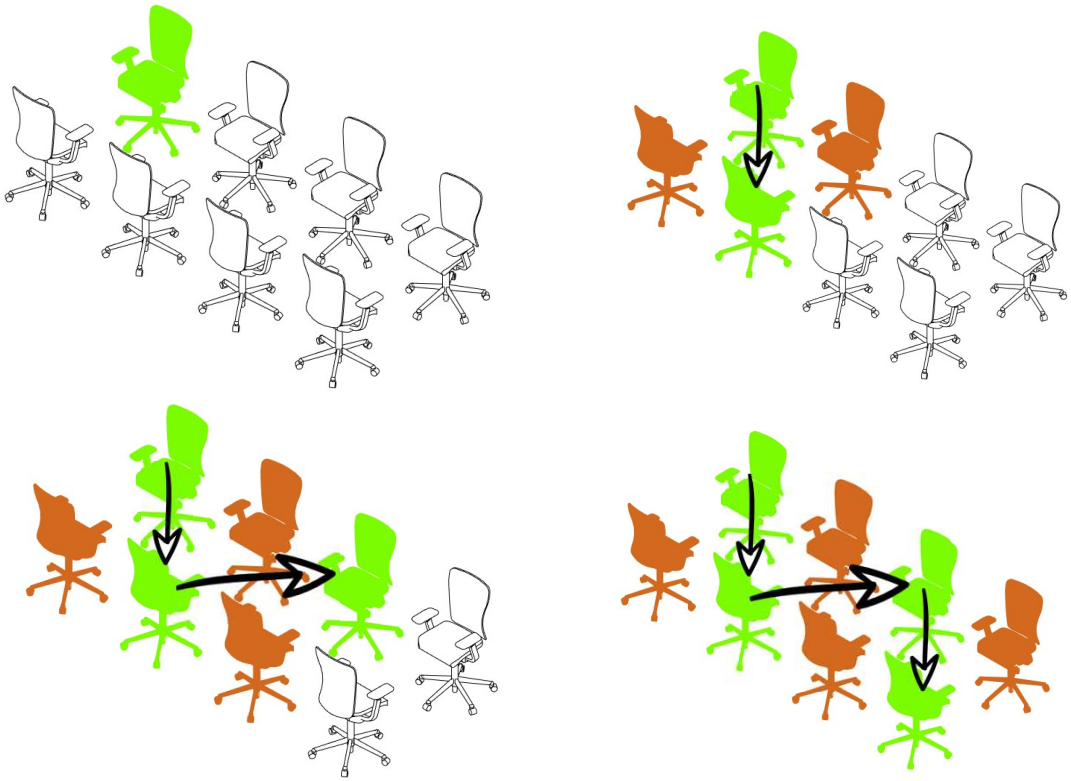
I wish everyone good health, and those without it a speedy recovery.

The goal



Maximum seats filled
Efficiency reported back
Results visually shown

The method

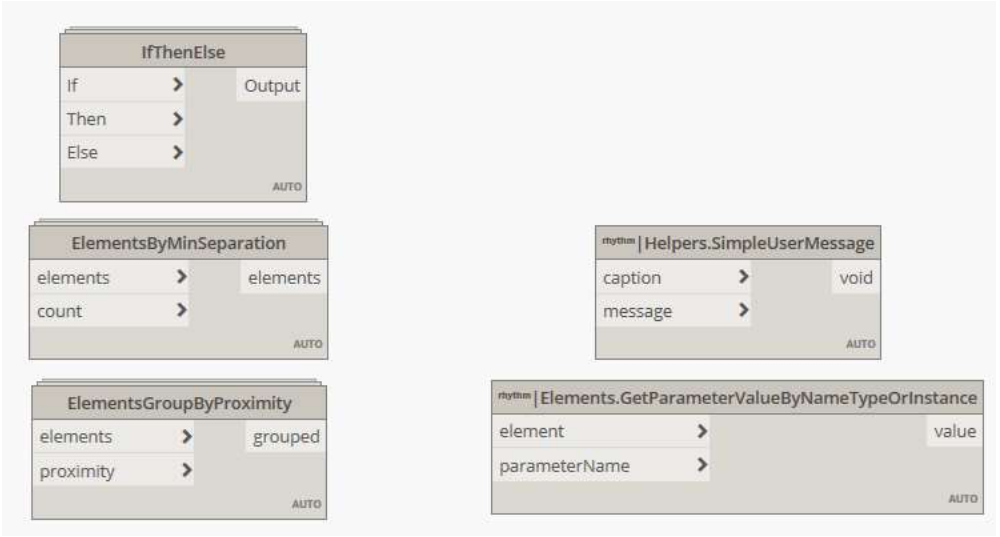


1.5m minimum separation
Cluster seats by adjacency
Exhaust options, take best outcome

Custom Nodes

Custom Node: Rhythm v.2020.2.13

Custom Node: Crumple v.1.0.4



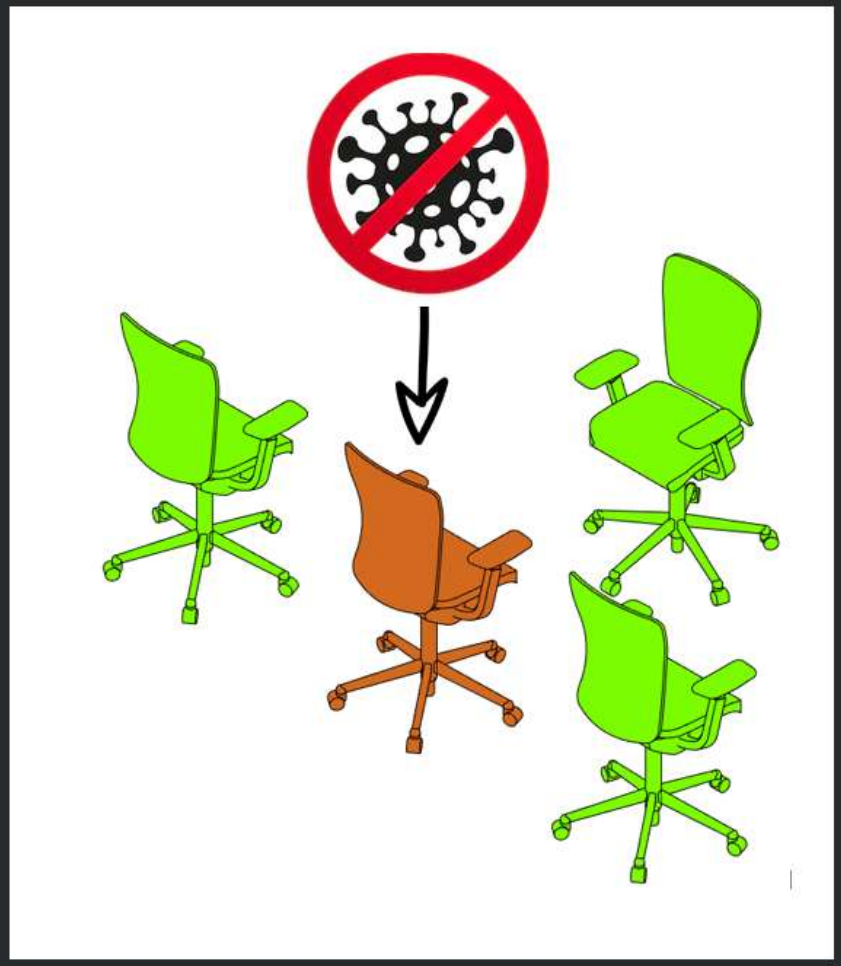
Versioning

Revit 2020.2.2
Dynamo 2.3.0

Without further ado

Files on github

https://github.com/aussieBIMguru



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