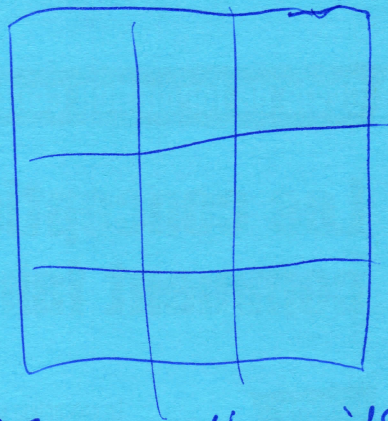


## Hashed Space 1)

- add (HashSpace1)
- remove ( " )
- update ( " )
- new ( <sup>int dimensions</sup> Space Construct ), double gridSize
- Search (Space Condition) 1D - 3D
- remove ( " ), update ( " )



## HashSpace1

- get Bounding Box

## Space Interval

## Space Position

## Space Construct

- create 1D - 3D
- get Number Of Dimensions
- create Conditions
  - nearest
  - in Area

## Hashed Space 2

Space Condition

Space Position {

double[] coordinates  
} static SpacePosition at(...)

Nearest

In Area

Space Interval {

Space Position from, to  
} static SpaceInterval (from, to)

Near Condition {

Space Position near

Hash Space {

SpaceInterval getBoundingBox()  
}

In Area Condition {

Space Interval inside

## Hashed Space {

int dimensions

HashMap < ~~Double~~<sup>Integer</sup>, Object > space

HashMap < Object, Space Position > Last Position  
Interval

HashMap mapForPosition (Space Position pos, boolean create)

assert if (pos.coordinates.length == this.dimensions)

HashMap cur = this.space  
for (int i = 0; i < this.dimensions; i++) {

cur = cur.get (pos.coordinates[i] / this.gridSize)

if (cur == null) return null;  
return cur;