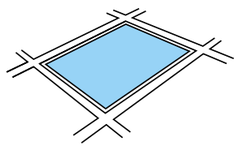
Chair for Information Architecture

HS11 | NEW METHODS IN URBAN SIMULATION

Exercise 04
workflow example [1]

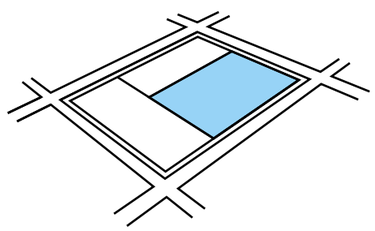
URBAN SCALE

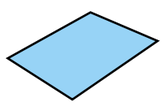


'Block' (e.g. defined by streets)

'Street'

BUILDING SCALE

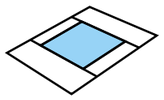


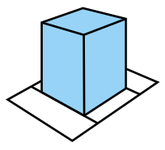


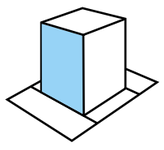
[1] LOT LEVEL

'Shape' created out of 'Block' by subdivision or created manually using 'Create Shape Tool' [2]

Lot subdivision using split in x and z direction according to setbacks and building disposition to define building footprint. [3]







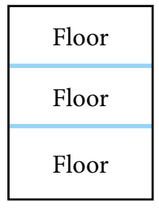
[2] BUILDING LEVEL

extrusion of the footprint

`extrude(distance)`

component split into faces

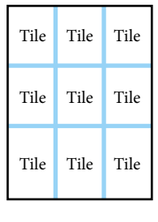
`comp(f){selector}`

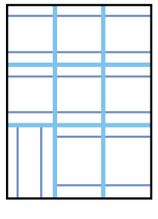


[3.1] FACADE LEVEL 1 [4]

split in y direction into Floors

`split(y) {}`

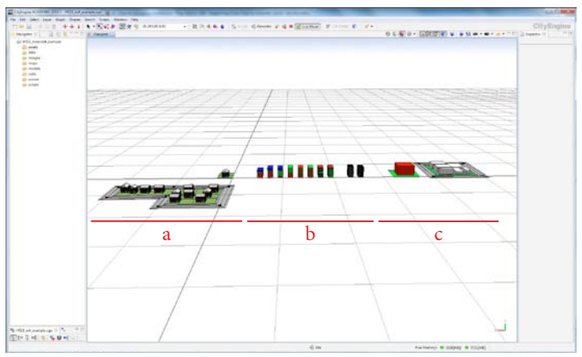


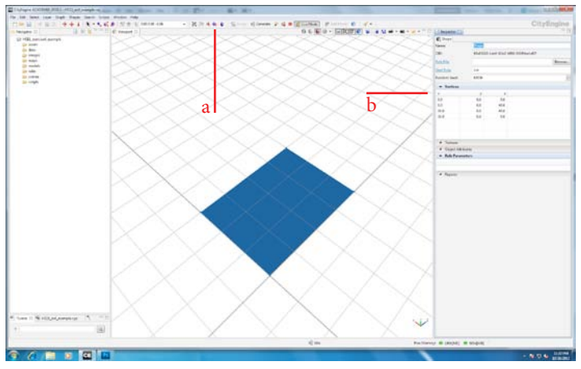


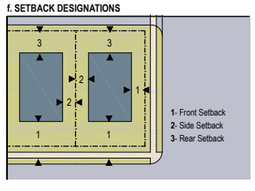
[3.2] FACADE LEVEL 2 [4]

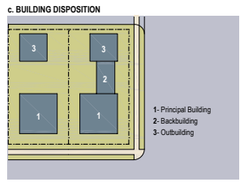
split in x direction into Tiles

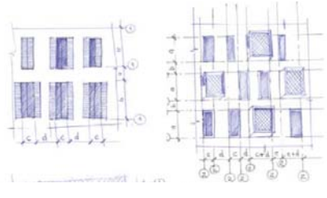
subsplit / extrude / insert further details











[1] dowload and import the CE project, take a look at the rule files:
`HS11_exercise4_example`

scene of the example file:

a) single building example
rule file:
`HS11_ex4_example.cga`

b) split examples
rule file:
`HS11_E04_split_examples.cga`
note: different start rules applied per shape

c) offset / setback examples
rule file:
`HS11_ex4_offset_setback.cga`

[2] generating shapes manually

a) use 'Create Shape Tool'

b) draw shape vertices and/or edit them numerically

[3] implement your findings on building disposition and dimensions from your SmartCode surveys

[4] implement your findings on facade patterns from your SmartCode surveys

ETH
Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich