A BENCHMARK 3D-ENVIRONMENT FOR GAME TESTING

What 3D-environment are we building?

BUGS TO IMPLEMENT

TO IMPLEMENT

Gadgets	Time To Action - doors opening/closes with button
	Do not work / wrong impact
Geometry	Falling through floor
	Getting stuck
	Can walk through walls
Game state issues	Doors, can/can't walk through
Physics	Basic, such as jump height
Game logic	Sequence of events

Total 8 bugs

MAYBE LATER

|	
Visual	Textures missing, wrongly stretched or scaled
	Flashing artifacts
	Visual clipping
	Other visual bugs
Gadgets	Enter and drive off with a vehicle

NOT IMPLEMENTED

Gadgets	Dispersals after pick up
Transitional	Audio and character movement transitions
Physics	Complex, such as action and reaction don match
Persistence	Counted actions saved to a state/score
Network	Scattered movement from network dysfunction
Performance	General performance problems
Fatal	Crashes

THE CITY
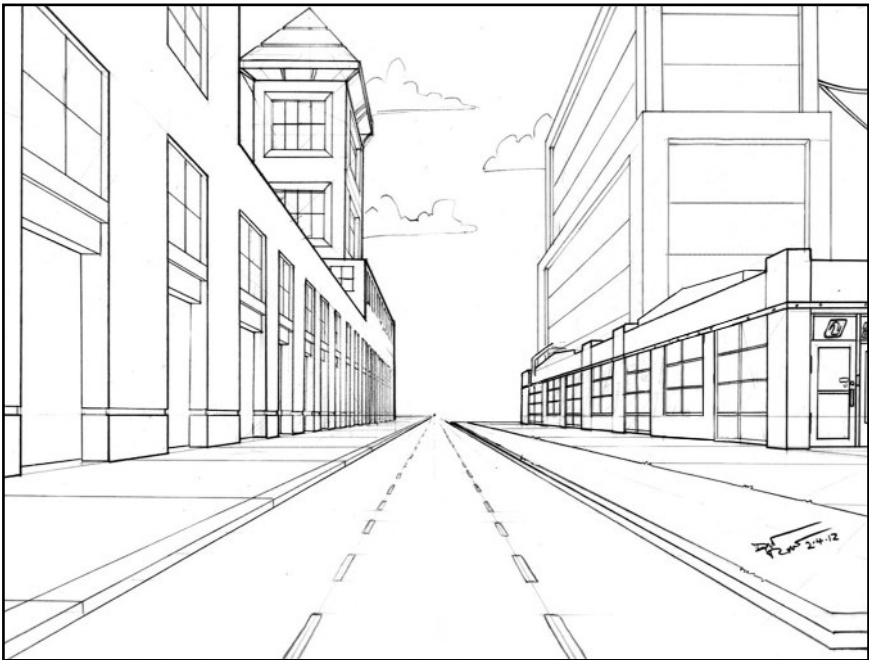
BASIC

ASSETS

Road, straight
Road, intersection
Houses, 7-10 types

Total: ~ 9-12 assets

TEXTURES

Road textures
House textures

Total: ~ 9-12 textures

BUGS

Geometry - can walk through walls
Physics - Basic, such as jump height

Total 2/8 bugs

INTERMEDIATE

+ ASSETS

Doors, 1-3 types
- (Windows, 1-3 types)
Button
Street lights
Traffic lights
Cars 3-6

+ 7-15 assets
Total: 16-27 assets

+ TEXTURES

Door textures
- (Window textures)
Button texture
Car textures
Light textures

+ 7-15 textures
Total: 16-27 textures

+ BUGS

Gadgets - TTA, doors opening/close time
Game state - Doors can/can't walk through
Sequence of events

+3 bugs
Total 5/8 bugs

DETAILED

+ASSETS

Trees
Street items; waste
bins, signs, plants
Bridge/elevator
Other gadgets

+ ~5 assets
Total: ~ 21-32 assets

+ TEXTURES

Tree textures
Street item textures
Bridge/elevator texture
Gadget textures

Total: ~21-32 textures

+ BUGS

Gadgets - Do not work/wrong impact
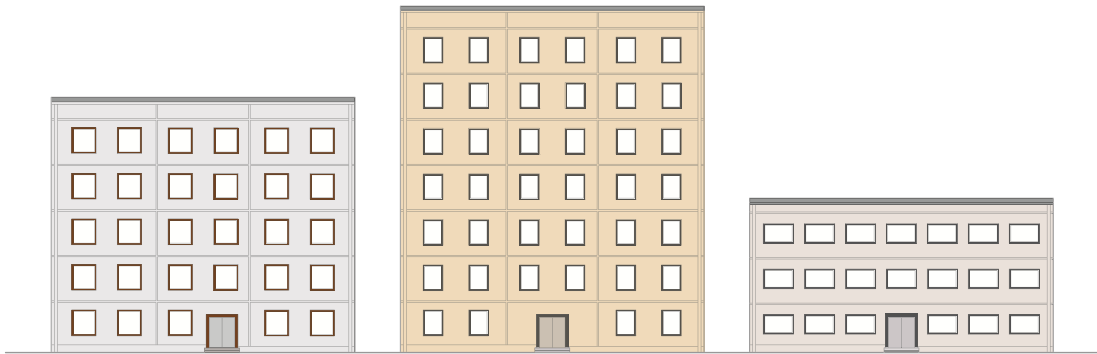(Gadgets - Enter/drive off with a vehicle)

+1 bugs
Total 6/8 bugs
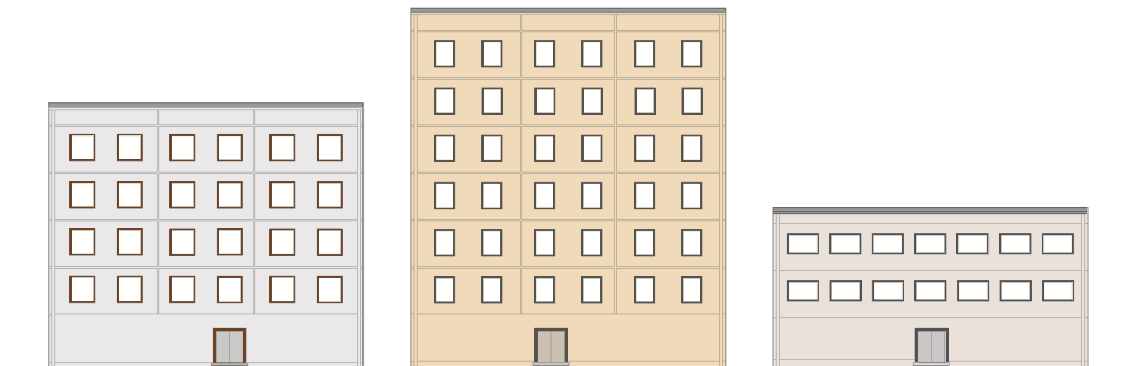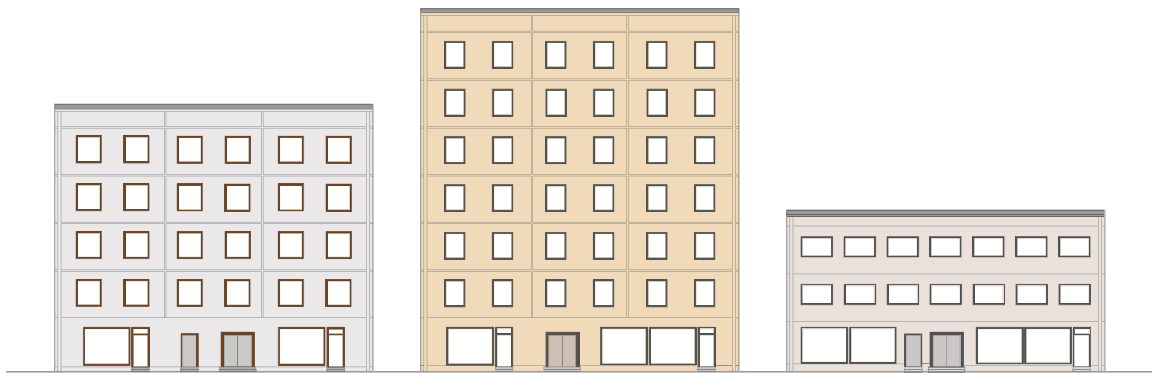
BUILDINGS AND DOORS

ELEVATIONS BUILDINGS
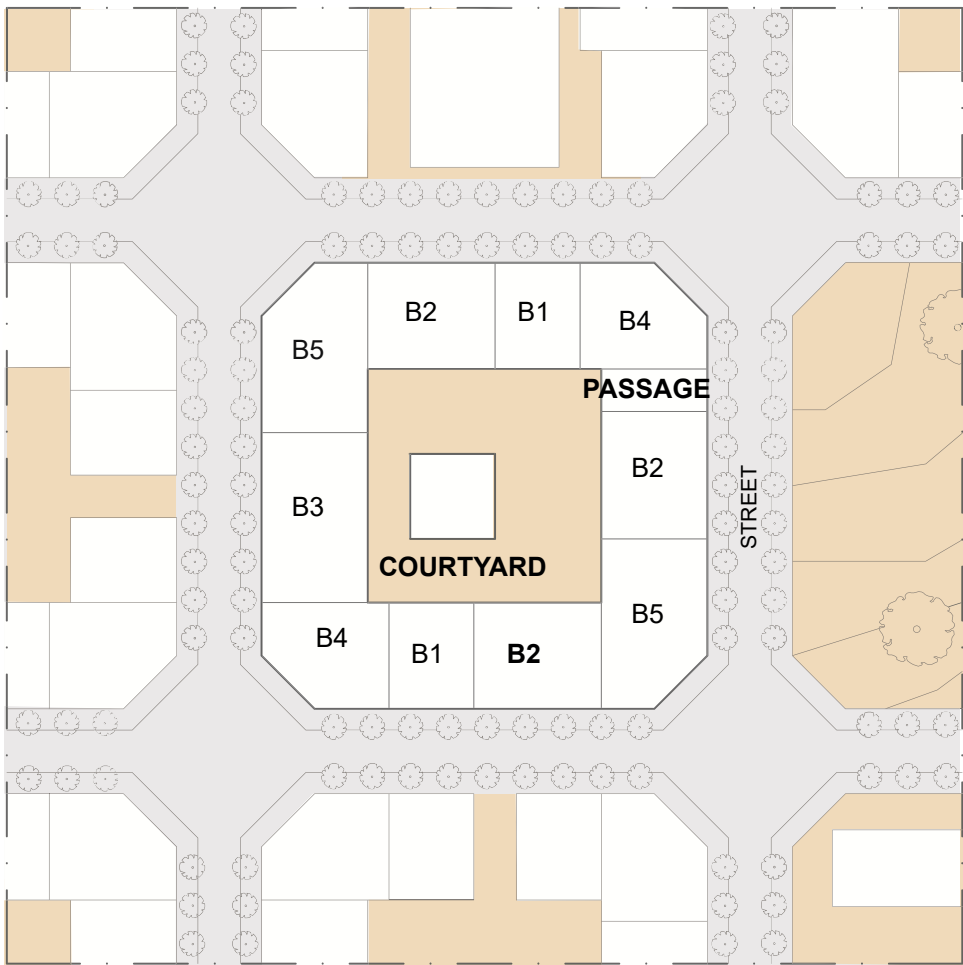
1. BASIC FIXED BUILDINGS
Generated once, fixed

2. GROUND FLOOR LEFT BLANK
Door placed randomly

3. REGENERATED BOTTOM FLOOR
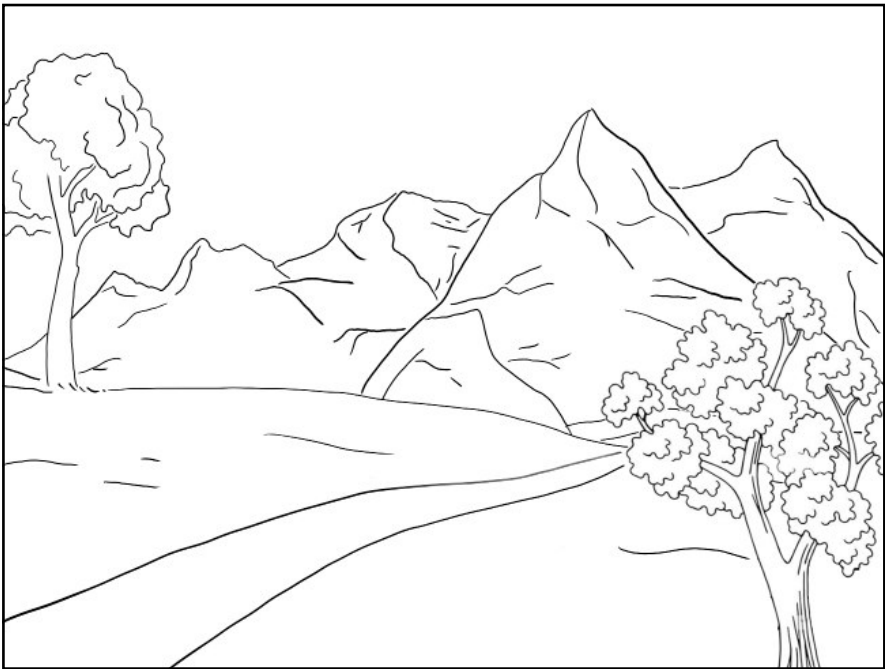*Bottom floor regenerated*

PLAN, GENERATED BLOCK

B5 B2 B1 B4

PASSAGE

B3 B2

COURTYARD B5

B4 B1 B2

STREET

4. INTERNAL COURTYARD ACCESSED BY PASSAGE
Moved around as a piece in the block

2023-06-02

PARK OR TERRAIN

BASIC

INTERMEDIATE

DETAILED

BASIC

ASSETS

Terrain
Trees, 1-3 types
Path

Total: 3-5 assets

TEXTURES

Terrain texture
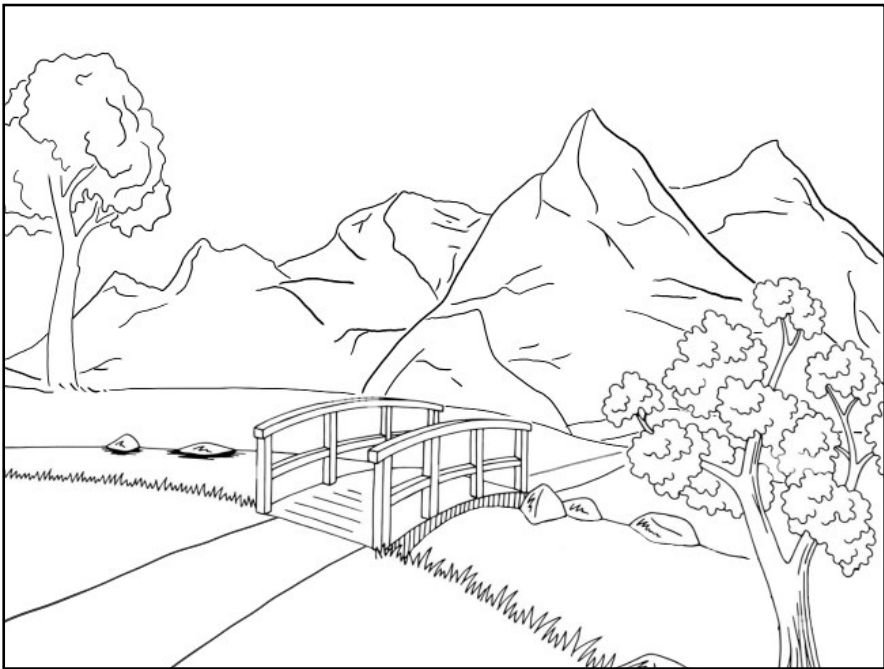Tree textures
Path texture

Total: 3-5 textures

BUGS

Geometry - Getting stuck
Geometry - Falling through the floor

Total 2/9 bugs

INTERMEDIATE

+ ASSETS

Bridge
Button
Stones 1-3 types

+ 3-5 assets
Total: 6-10 assets

+ TEXTURES

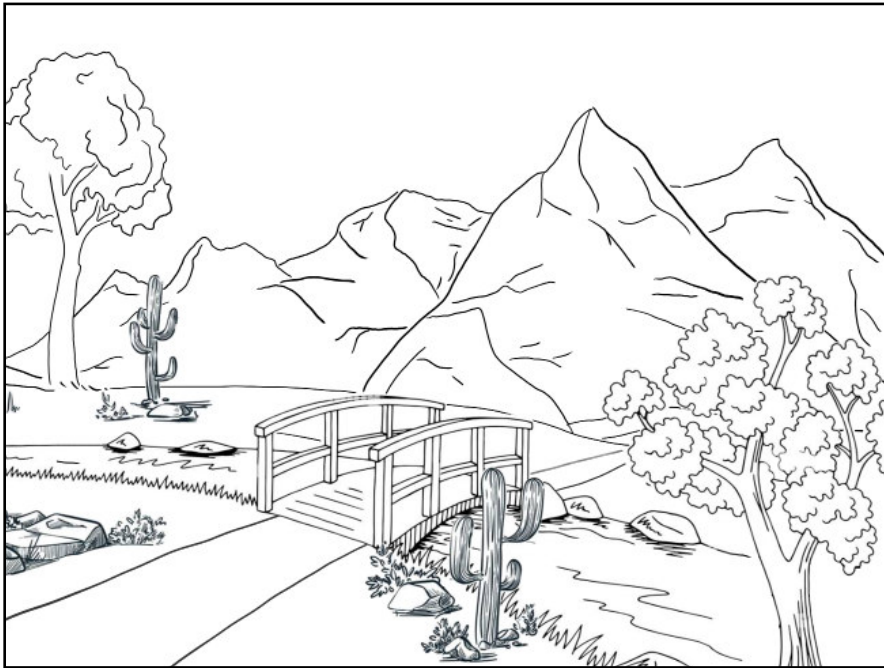Bridge texture
Button texture
Stone texture

+ 3-5 textures
Total: 6-10 textures

+ BUGS

Gadgets - TTA, doors opening/close time
Game state - Doors can/can't walk through
Sequence of events

+3 bugs
Total 5/9 bugs

DETAILED

+ASSETS

Plants, 3-5 types
River/Water
Rocks

+ ~5-7 assets
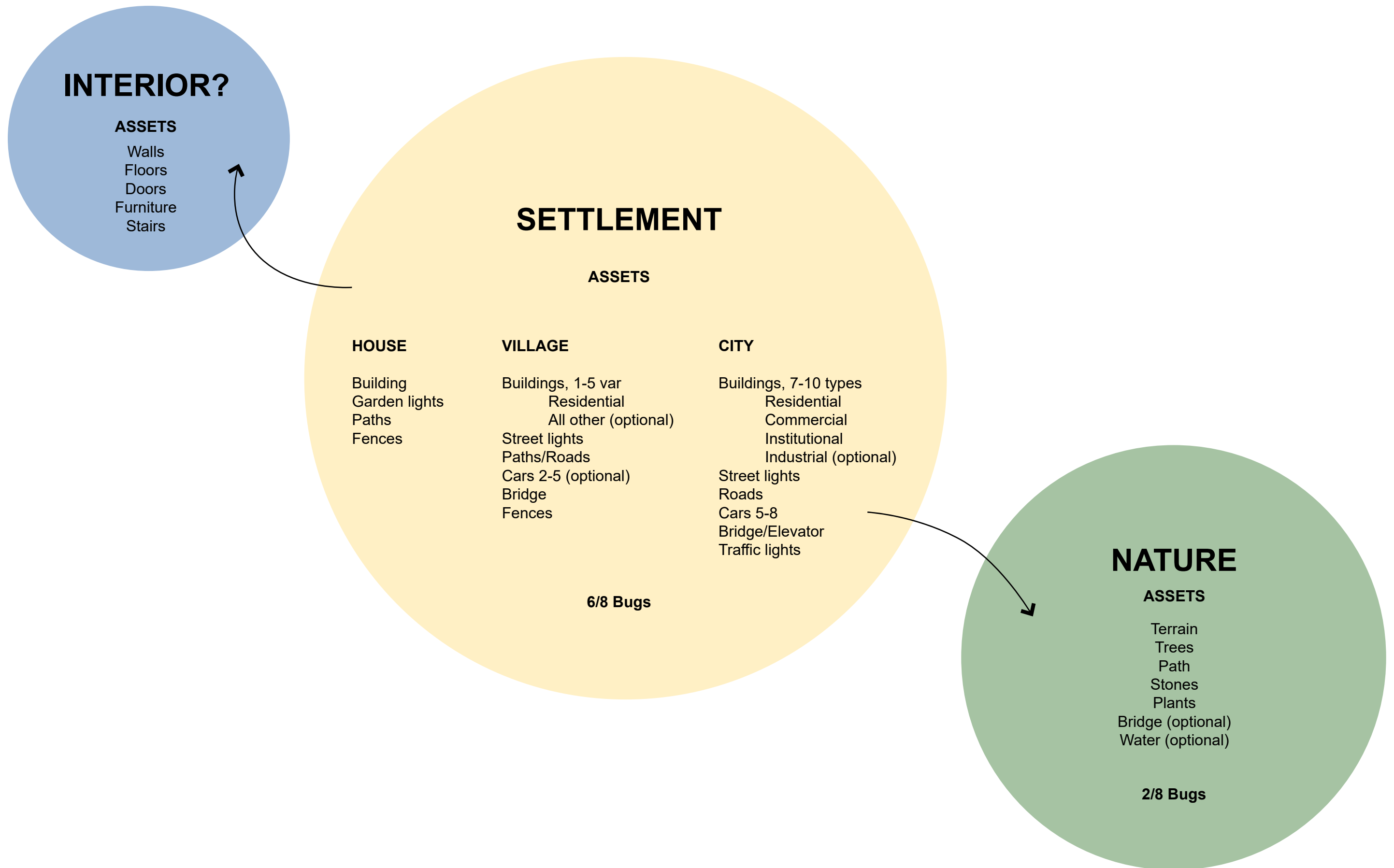**Total: ~15-17 assets**

+ TEXTURES

Plant textures
Water texture
Rock textures

+ ~5-7 textures
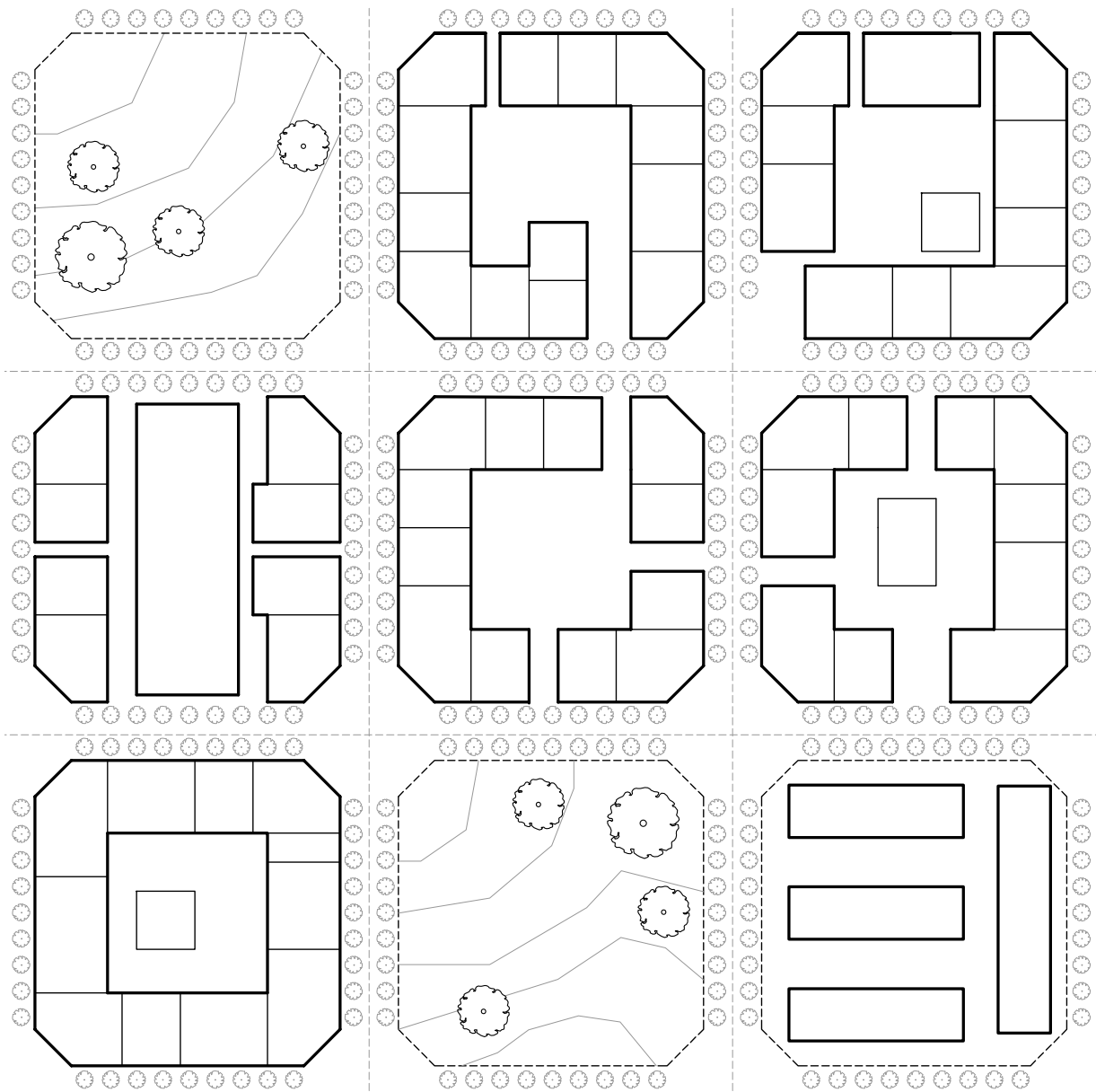**Total: ~15-17 textures**

+ BUGS
(Water-related bugs)

+0 bugs
Total 5/9 bugs

INTERIOR?

ASSETS

Walls
Floors
Doors
Furniture
Stairs

SETTLEMENT

ASSETS

HOUSE

Building
Garden lights
Paths
Fences

VILLAGE

Buildings, 1-5 var
    Residential
    All other (optional)
Street lights
Paths/Roads
Cars 2-5 (optional)
Bridge
Fences

CITY

Buildings, 7-10 types
    Residential
    Commercial
    Institutional
    Industrial (optional)
Street lights
Roads
Cars 5-8
Bridge/Elevator
Traffic lights

6/8 Bugs

NATURE

ASSETS

Terrain
Trees
Path
Stones
Plants
Bridge (optional)
Water (optional)

2/8 Bugs

2023-06-02

SETTLEMENTS
PROCEDURALLY GENERATED

CITY

VILLAGE

FOR OTHER AREAS OF AI RESEARCH

How could the benchmark be of interest?

What applications could be imagined and what would be required?