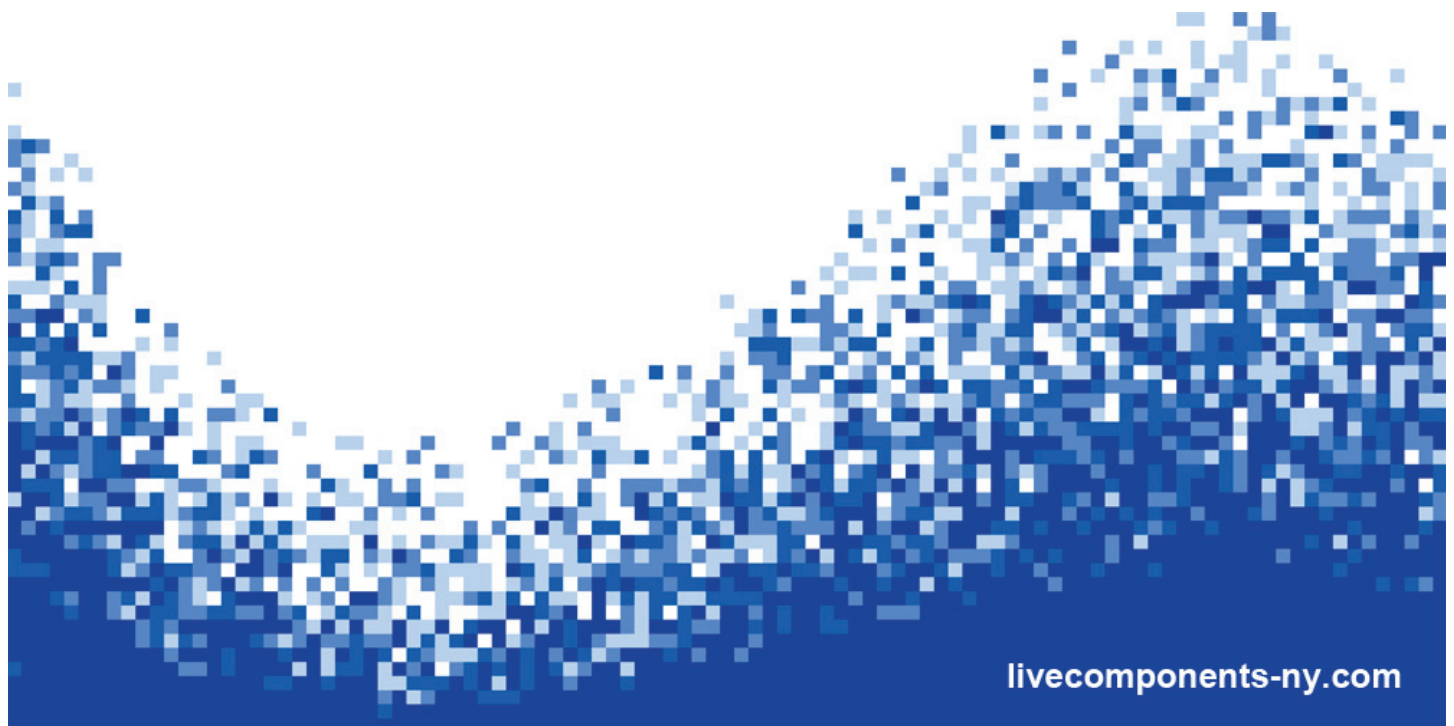


1_4 Gradient Pixelization



Step1 : Image Sampling and Optimization

- You can apply any image by using image sampler. And you can also use hexagonal grid points or surface grid points as base points

1. SqGrid (Square Grid)

- P : default
- S : default
- Ex : 100
- Ey : 50

2. Image Sampler -> extract gradient value 0.0~1.0

- X Domain : 0.0 To 100
- Y Domain : 0.0 To 50.0
- Channel : Color Brightness
- File Path : any image you want

3. Sort (Sort List)

- K : Image Sampler
- A : SqGrid(P)

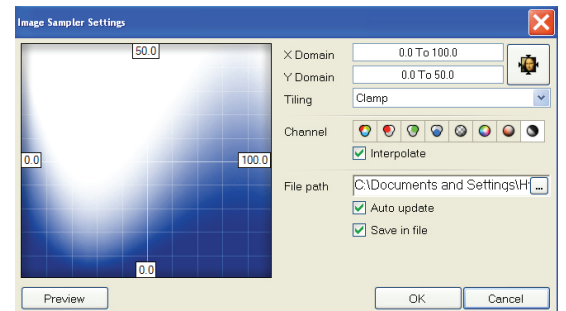
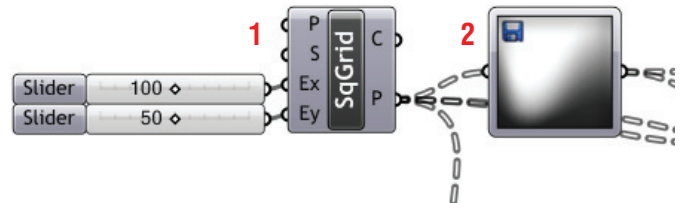
4. Item (List Item)

- L : Sort(K)
- i : 0

5. A-B (Subtraction)

- A : Image Sampler
- B : Item(E)

"This is for stretching the gradient value to 0.0(min) and 1.0(max)"



6. Rev (Reverse List)

- L : Sort(K)

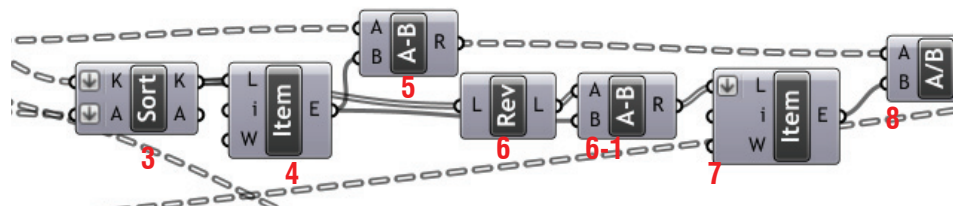
6-1. A-B (Subtraction)

- A : Rev(L)
- B : Item(E)

7. Item (List Item)

- L : Rev(L) -> Flatten!
- i : 0

8. A/B (Division)



Step2 : Gradient Probability Sampling

“gradient” value for each point is translated to “probability” value of selection.

8. F(x) (F1)

- F : $\text{Clnt}(X*100) / 100$ -> to simplify the values

- x : A/B(R)

9. Range (Range)

- D : 1.0

- N : 100 -> to get series of values(0.00 to 1.00)

10. F(x,y) (F2)

- F : x=y

- x : Range(R) -> Graft!

- y : F(x) (r) -> Flatten!

11. Lng (List Length)

- L : F(x,y) (r)

12. Repeat (Repeat Data)

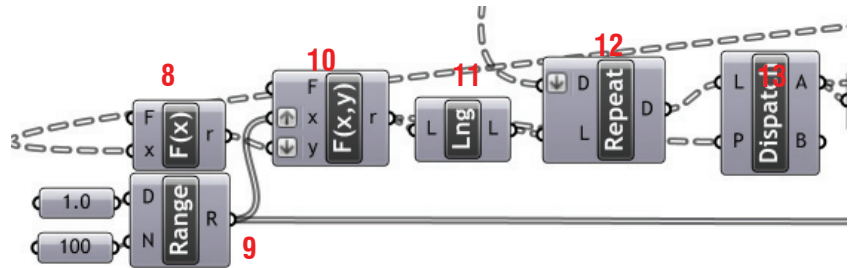
- D : SqGrid(P)

- L : Lug(L)

13. Dispatch (Dispatch)

- L : Repeat(D)

- P : F(x,y) (r)



“A of Dispatch is showing the number of points for each probability (0.00~1.00) ”

14. Lng (List Length)

- L : Dispatch(A)

15. A-B (Subtraction)

- A : Lug(L)

- B : 1

16. Range(Range)

- D : A-B(R)

- N : A-B(R)

17. AxB(Multiplication)

- A : A-B(R)

- B : 9.Range(R) -> Graft

18. Int (Integer)

- AXB(R) -> to get the number of points to reduce

19. Reduce (Random Reduce)

- L : Range(R)

- R : Int

20. Item (List Item)

-> Final Points Group A

- L : Dispatch(A)

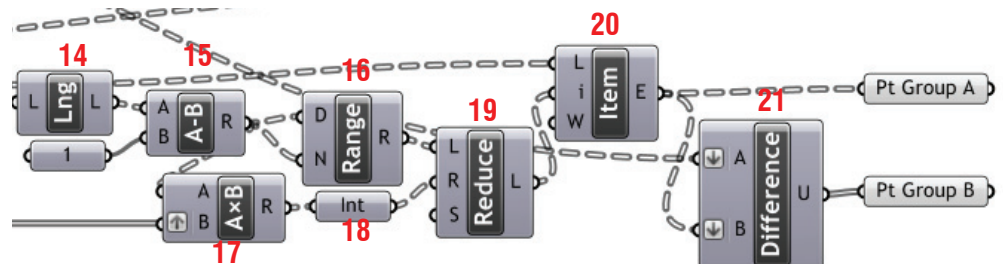
- i : Reduce(L)

21. Difference (Set Difference)

-> Final Points Group B

- A : SqGrid(P)

- B : Item(E)



“By using Graph Mapper, you can also divide the points into more various types; 3, 4, 5,...types. Also you can control the proportion of the different types and random seeds just as the animation on this project page.”

Appendix
- Definition map

