

GDC

# The VFX Process Behind Battleborn

Ashley Lyons  
VFX Artist of Gearbox Software

**GAME DEVELOPERS CONFERENCE**

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# A QUICK INTRODUCTION

## HELLO, MY NAME Is...

- Ashley Lyons
- Senior VFX artist
- Five years at  
Gearbox Software





# A QUICK INTRODUCTION

## WHAT IS BATTLEBORN?

- Fast paced, light-hearted FPS
- Stylized look
- MOBA elements



# A QUICK INTRODUCTION

## TODAYS TOPICS INCLUDE

- Why stylized VFX
- Conception
- Implementation



# WHY A STYLIZED LOOK?

## A WAY TO STAND OUT

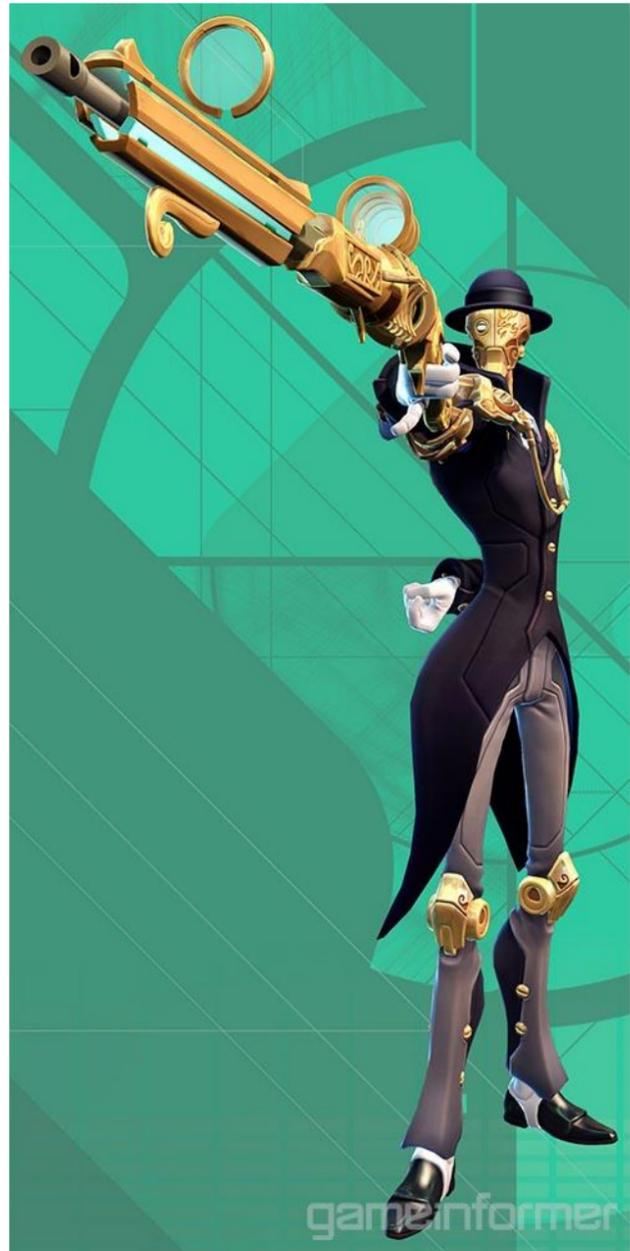
- Exaggerated characters
- Complimented environments



# WHY A STYLIZED LOOK?

## A WAY TO STAND OUT

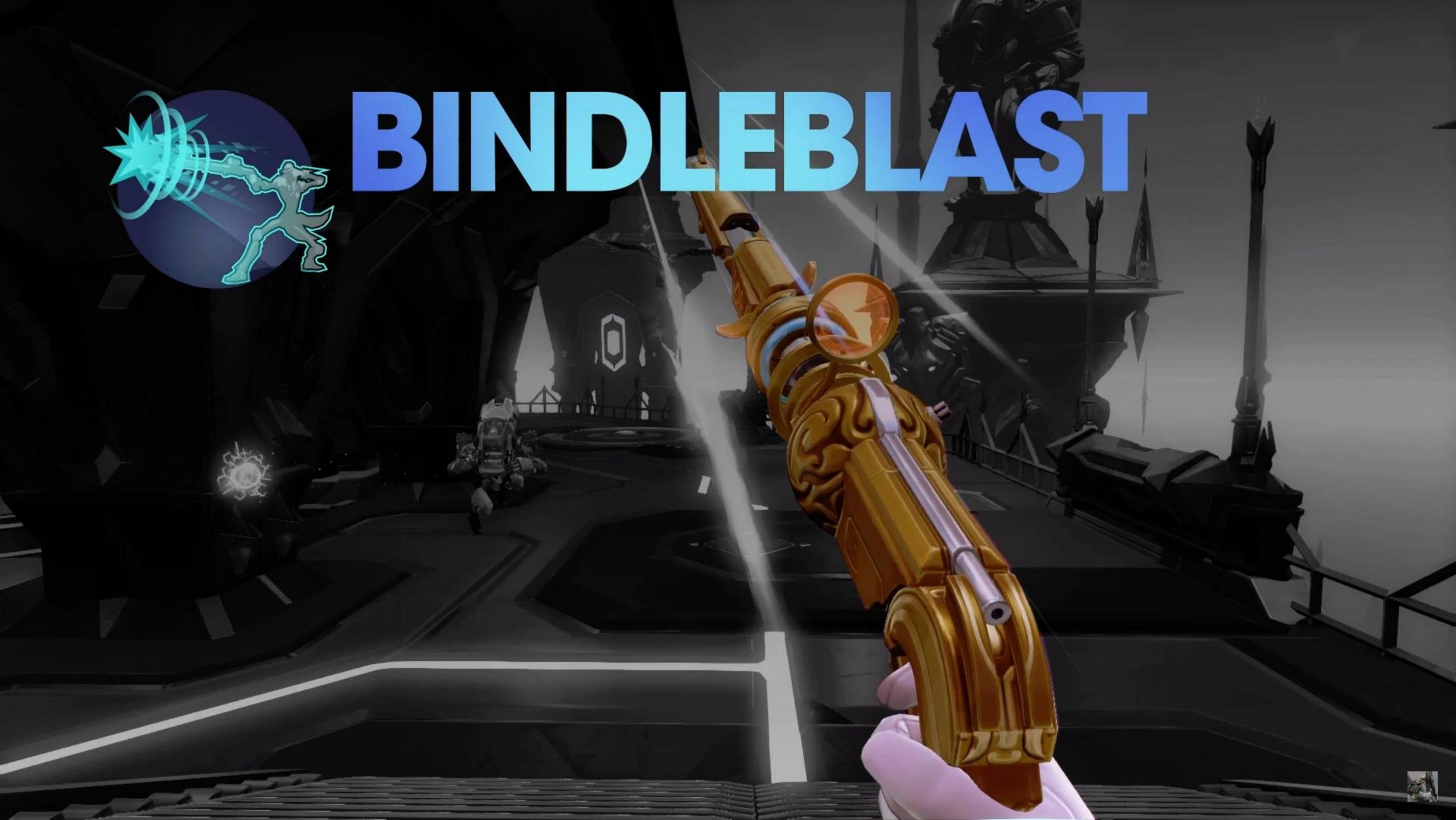
- Experiment
- Creative Investigation
- Variable FX







# BUNDLEBLAST

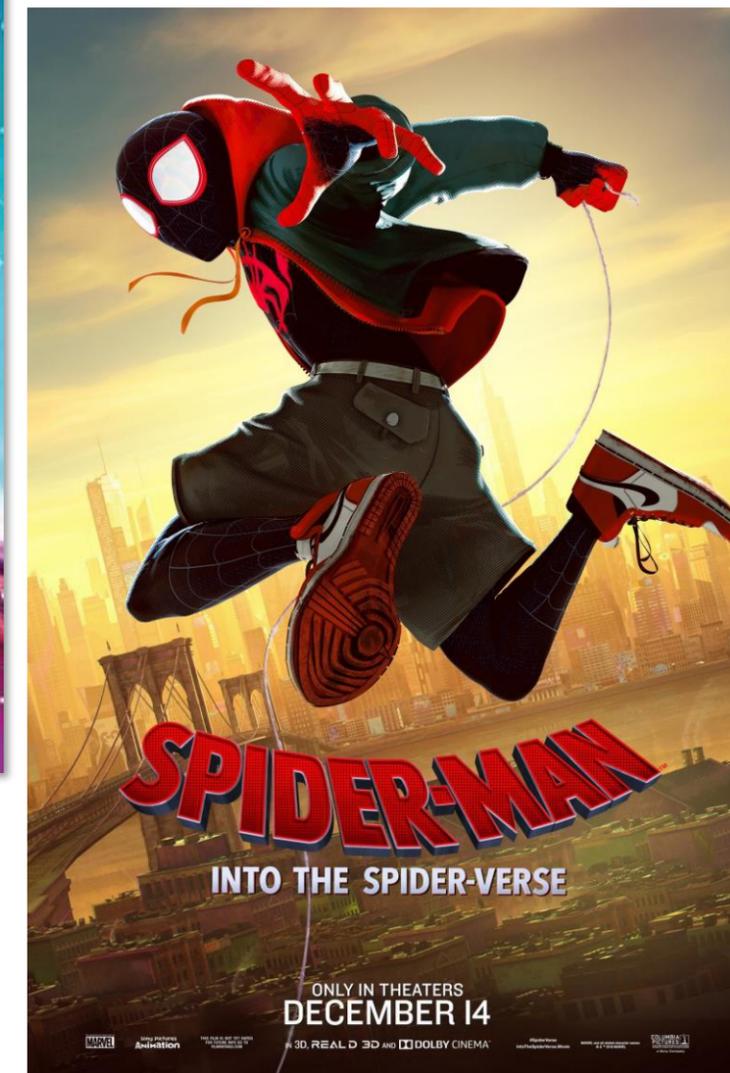
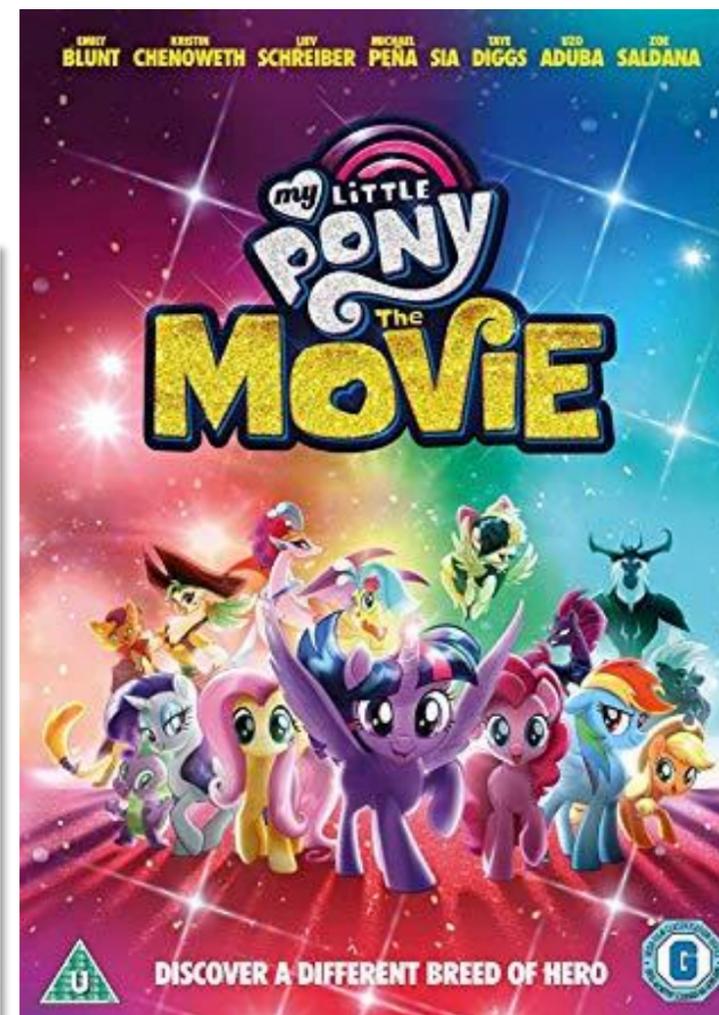




# CONCEPT & DEVELOPMENT OF A STYLE

## WORKING IN 2D

- The Iron Giant
- My Little Pony Movie
- Into the Spider-verse



# CONCEPT & DEVELOPMENT OF A STYLE

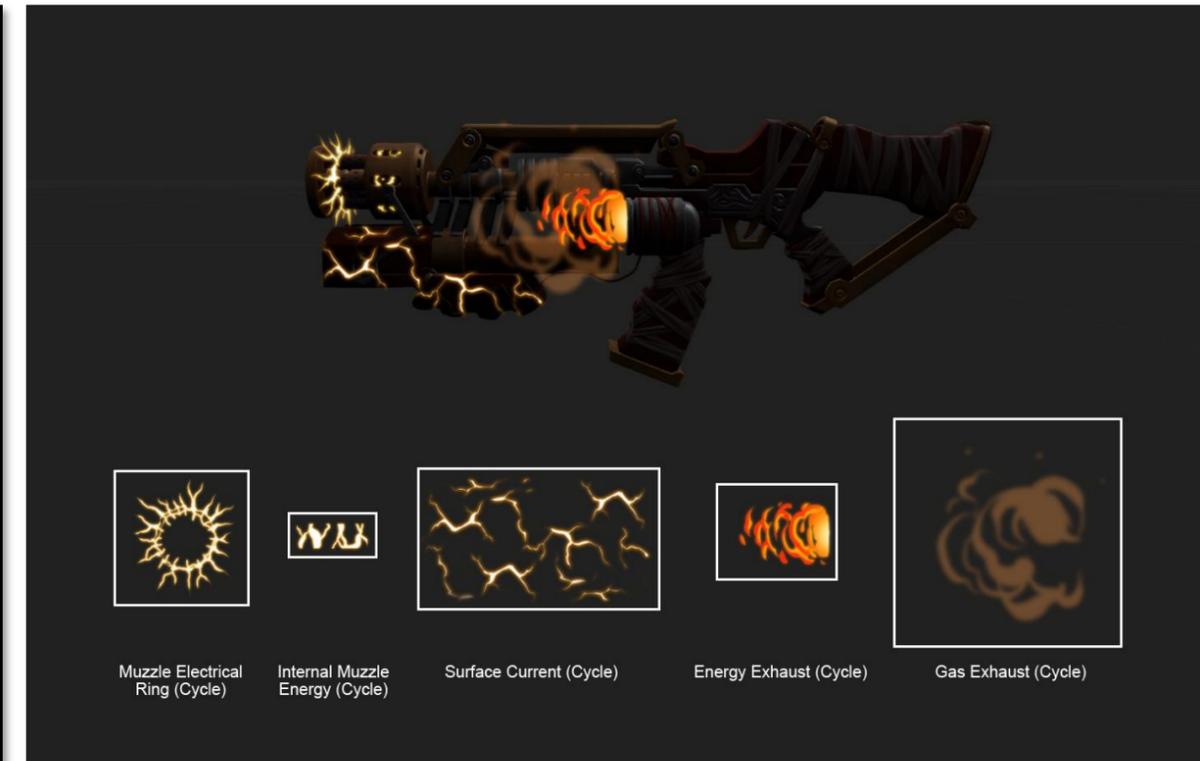
## WORKING IN 2D



# CONCEPT & DEVELOPMENT OF A STYLE

## WORKING IN 2D

- Developing a rapport and system
- Feedback and iteration



# CONCEPT & DEVELOPMENT OF A STYLE

## WORKING IN 2D



# CONCEPT & DEVELOPMENT OF A STYLE

## WORKING IN 2D

- Seung Kim
- Over 30,000 frames!

**IT'S OVER 30,000!!!**

**Side Energy: 4 Variations**  
 Each side connect to 2 corners of the mine. The four variations will form four walls of energy around the mine. Animation will be played in approximately 36 frames from spawning to dissolve.

**Explosion**  
 A cloudy explosion with lots of spikes simulating shrapnel trails. Animation will be played in approximately 36 frames from spawning to dissolve. One or two individual spikes could be animated on their own so maximized various combinations.

**Energy**  
 These will be used as sprites and spawned and multiplied in the game engine. Animation will be cycled (1-2 variation) and spawned/dissolved (1-2 variations)

# CONCEPT & DEVELOPMENT OF A STYLE

## WORKING IN 2D

- Growing creativity



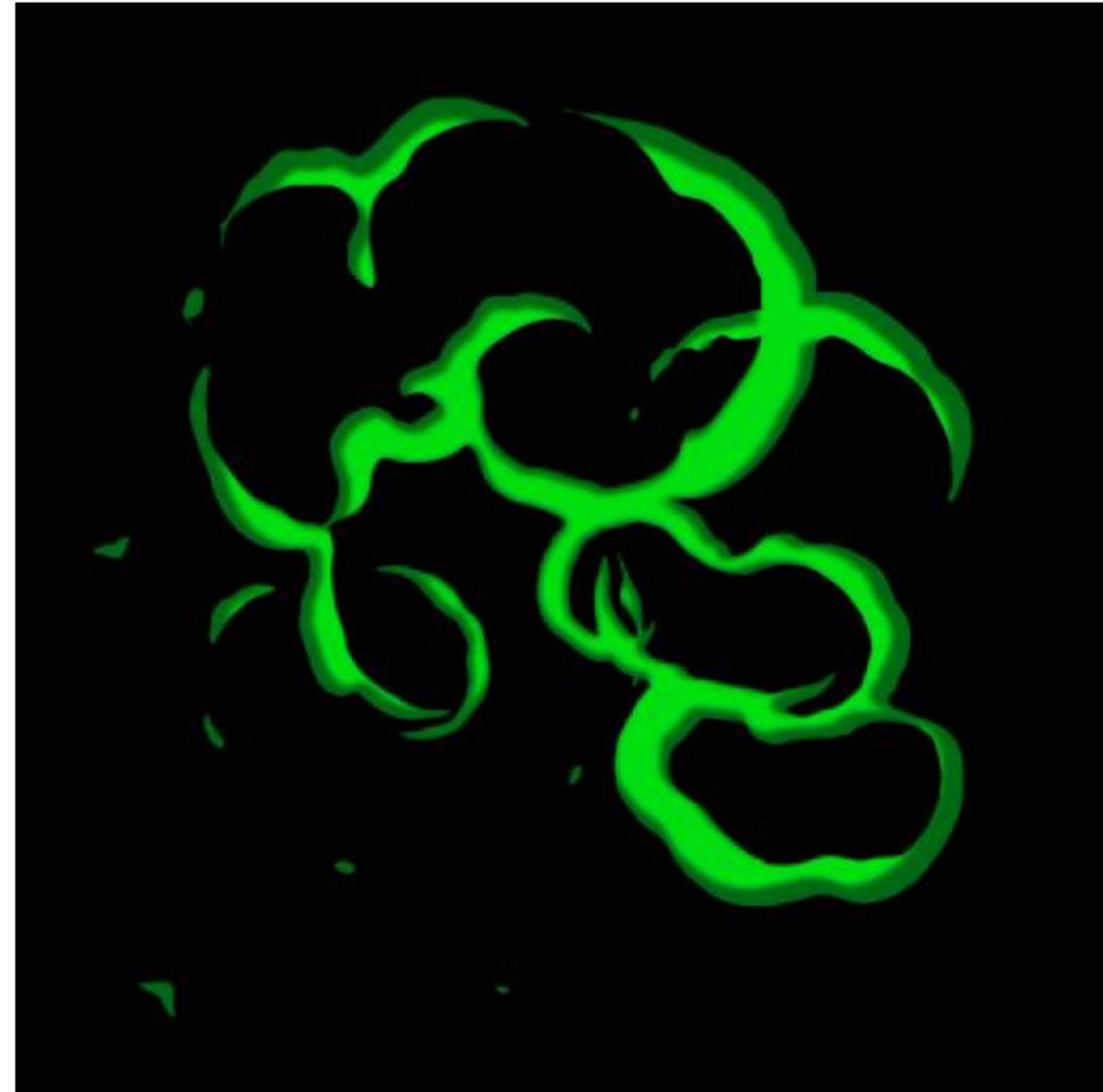
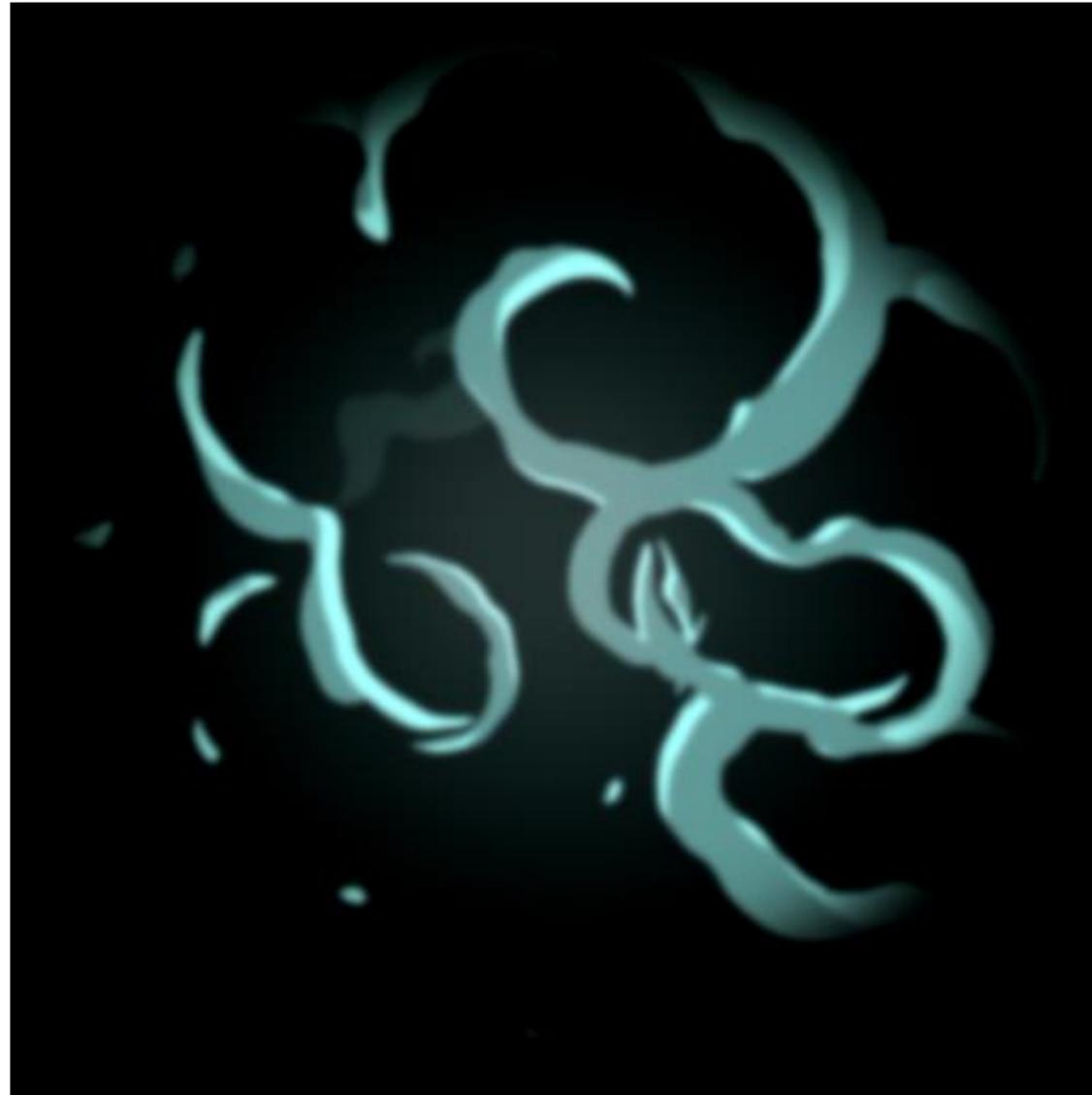


# HEDRONIC ERUPTION



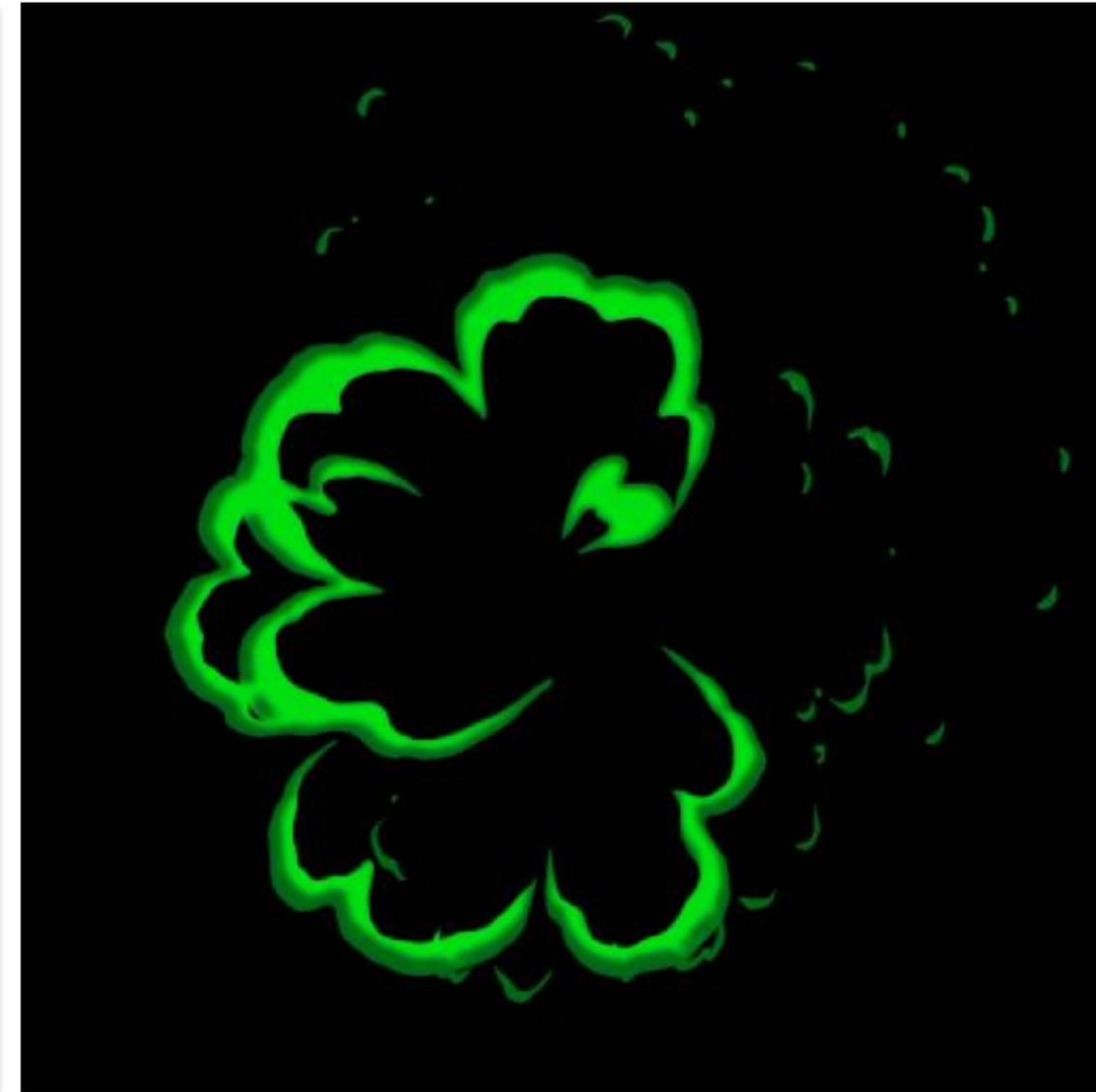
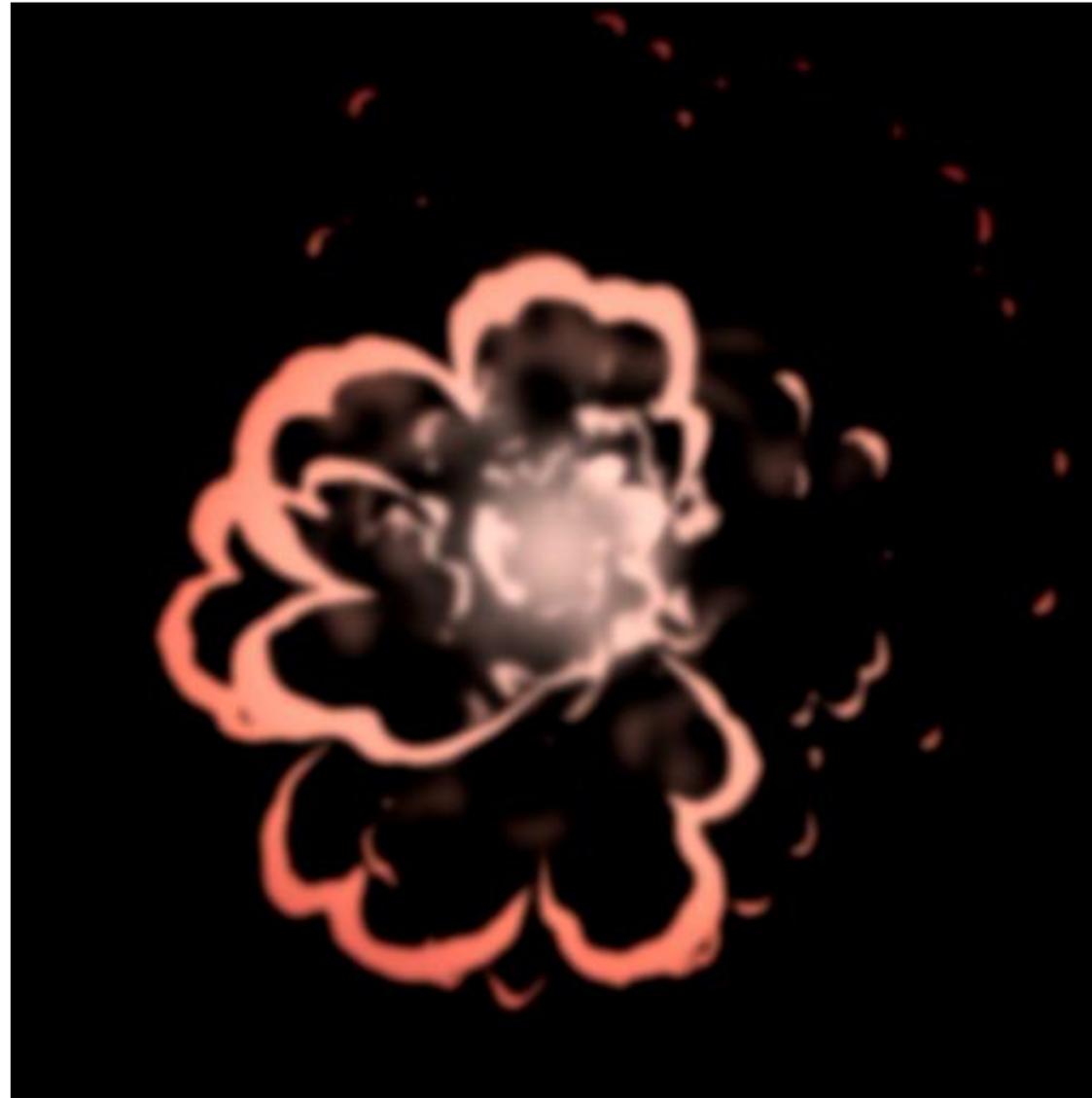
# CONCEPT & DEVELOPMENT OF A STYLE

## WORKING IN 2D



# CONCEPT & DEVELOPMENT OF A STYLE

## WORKING IN 2D



# CONCEPT & DEVELOPMENT OF A STYLE

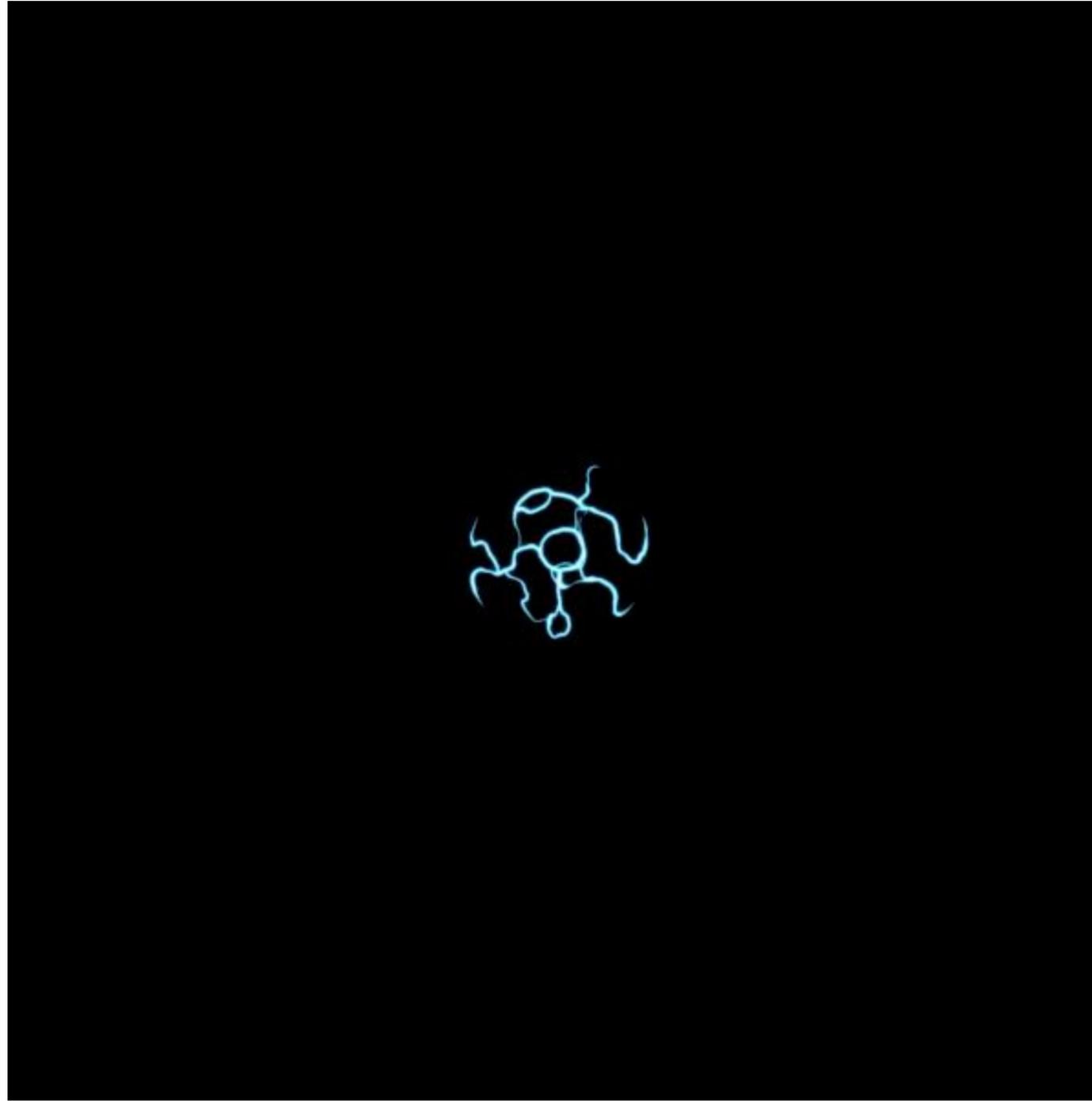
## WORKING IN 2D

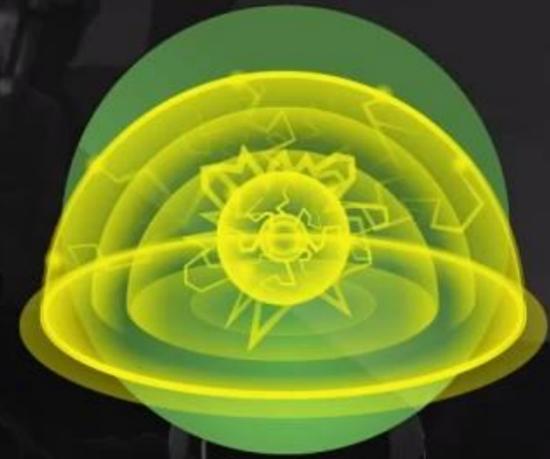
- 12 Principles of animation
- No skipped frames

- 
- Squash and Stretch
  - Anticipation
  - Staging
  - Pose to Pose Action
  - Straight Ahead Action
  - Follow Through Action
  - Overlapping Action
  - Slow In and Slow Out
  - Arcs
  - Secondary Action
  - Timing
  - Exaggeration

# CONCEPT & DEVELOPMENT OF A STYLE

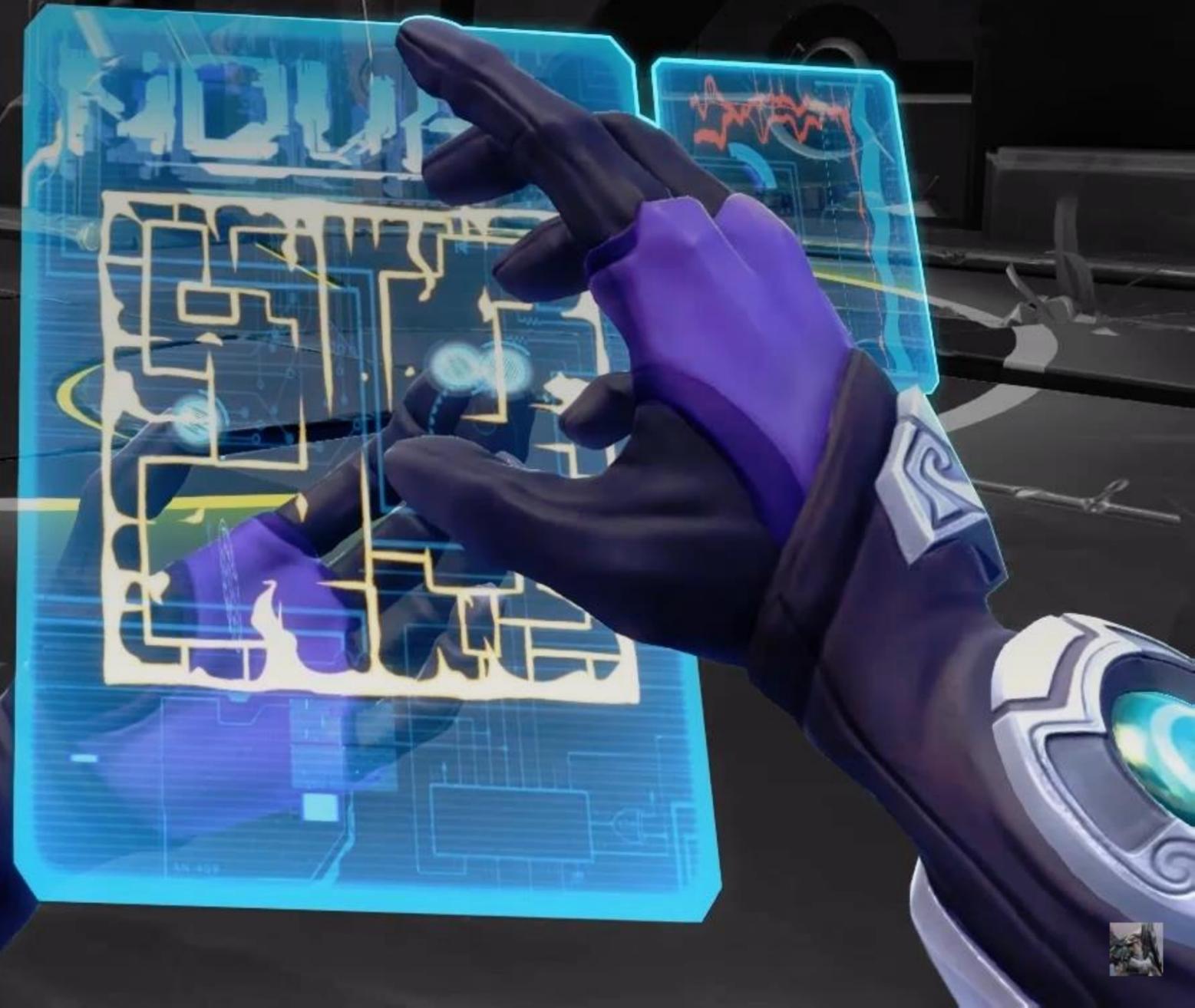
## WORKING IN 2D





# BLACK HOLE

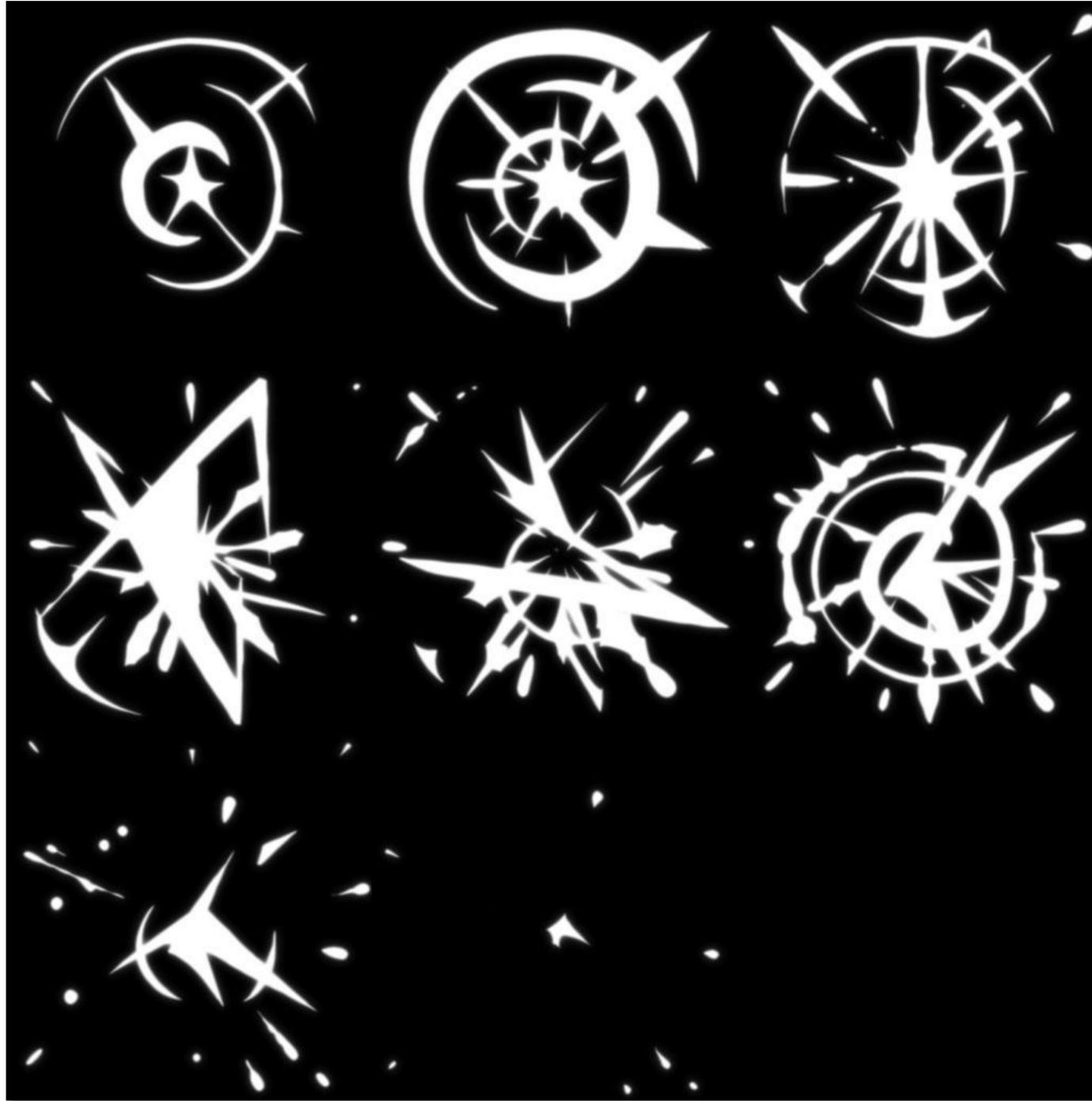
PULLS IN ENEMIES AND



# CONCEPT & DEVELOPMENT OF A STYLE

## WORKING IN 2D

- Spark/explosion



# CONCEPT & DEVELOPMENT OF A STYLE



# CONCEPT & DEVELOPMENT OF A STYLE

## WORKING IN 2D

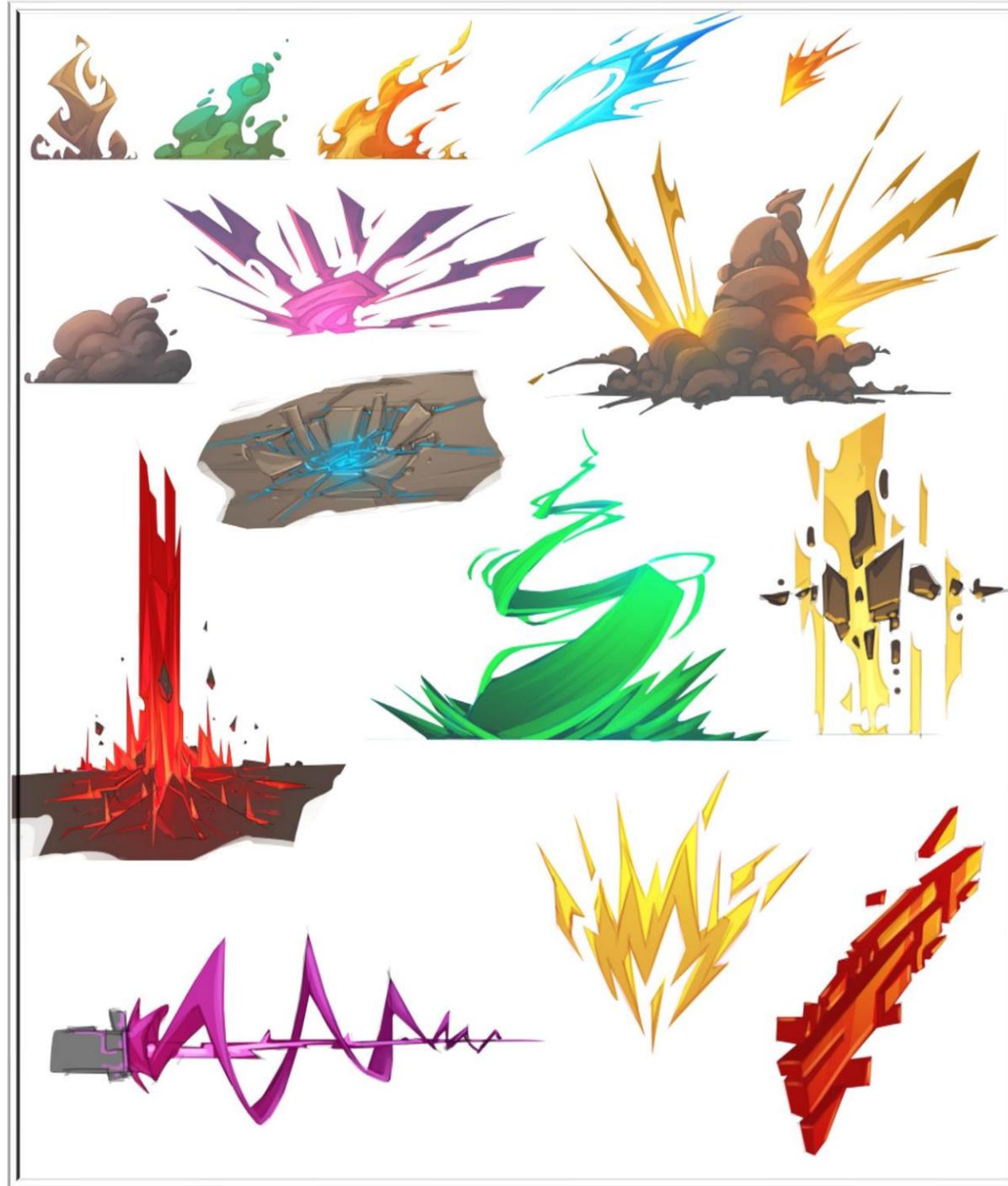
- A frame rate guide
- Over 3600 individual FX

2048x2048 Flipbook Calculations		
Total Number of Frames = x and y Amount of Frames	Number of Frames = Number of Pixels per Frame	
04 = 2x2	38 = 2x19	02 = 1024
06 = 2x3	39 = 3x13	
08 = 2x4	40 = 4x10	
09 = 3x3	41 = 4x10	
10 = 2x5	42 = 6x7	
12 = 2x6	43 = 7x7	
14 = 2x7	44 = 4x11	
15 = 3x5	45 = 5x9	
16 = 2x8	46 = 6x8	
18 = 2x9	47 = 7x7	
20 = 2x10	48 = 6x8	
	49 = 7x7	
	50 = 5x10	
	51 = 3x17	
	52 = 4x13	
	53 = 5x11	
	54 = 6x9	
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# CONCEPT & DEVELOPMENT OF A STYLE

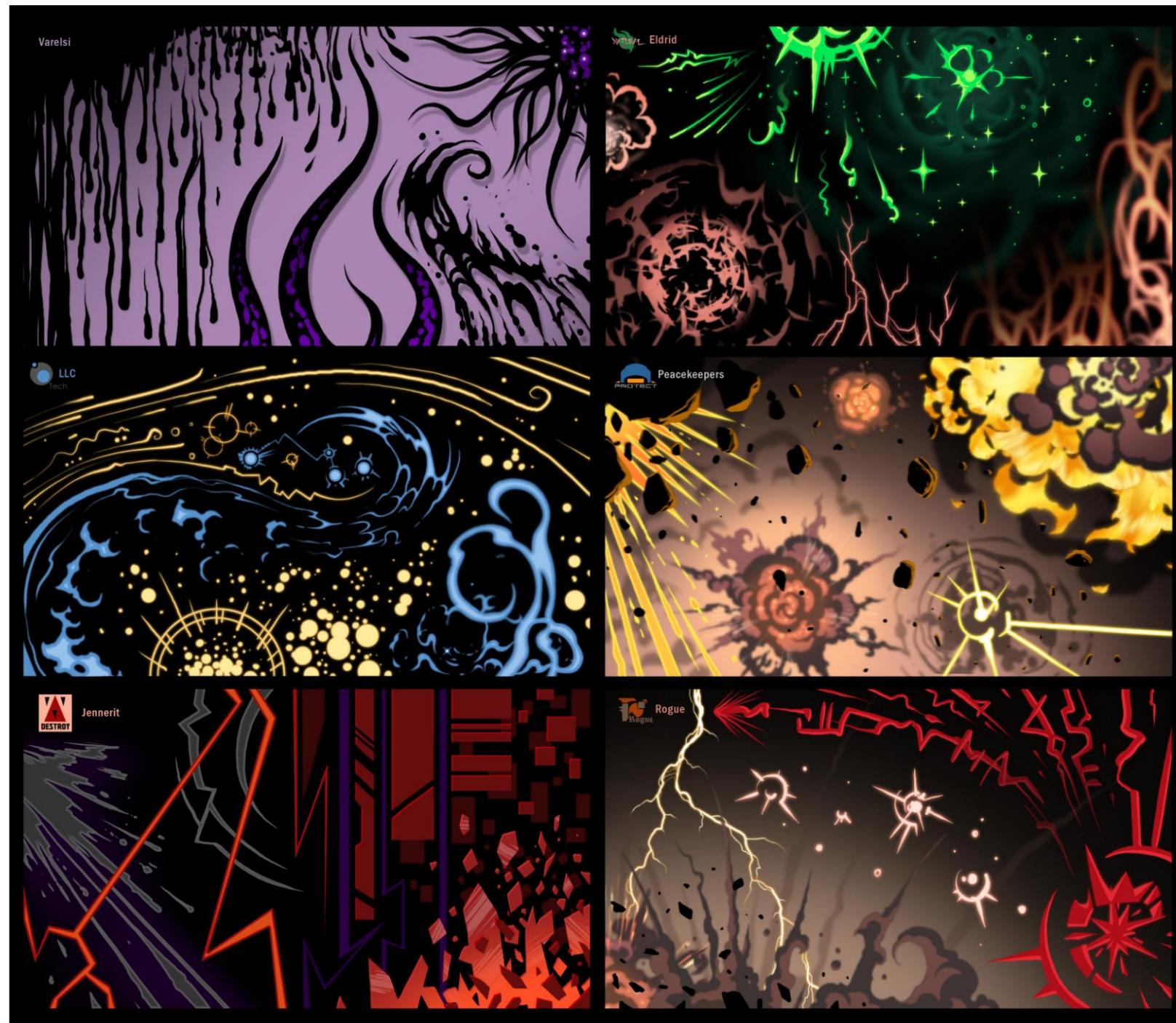
## DEVELOPING A STYLE GUIDE



# CONCEPT & DEVELOPMENT OF A STYLE

## DEVELOPING A STYLE GUIDE

- Why have one?
- Cemented a look
- Differentiated the factions



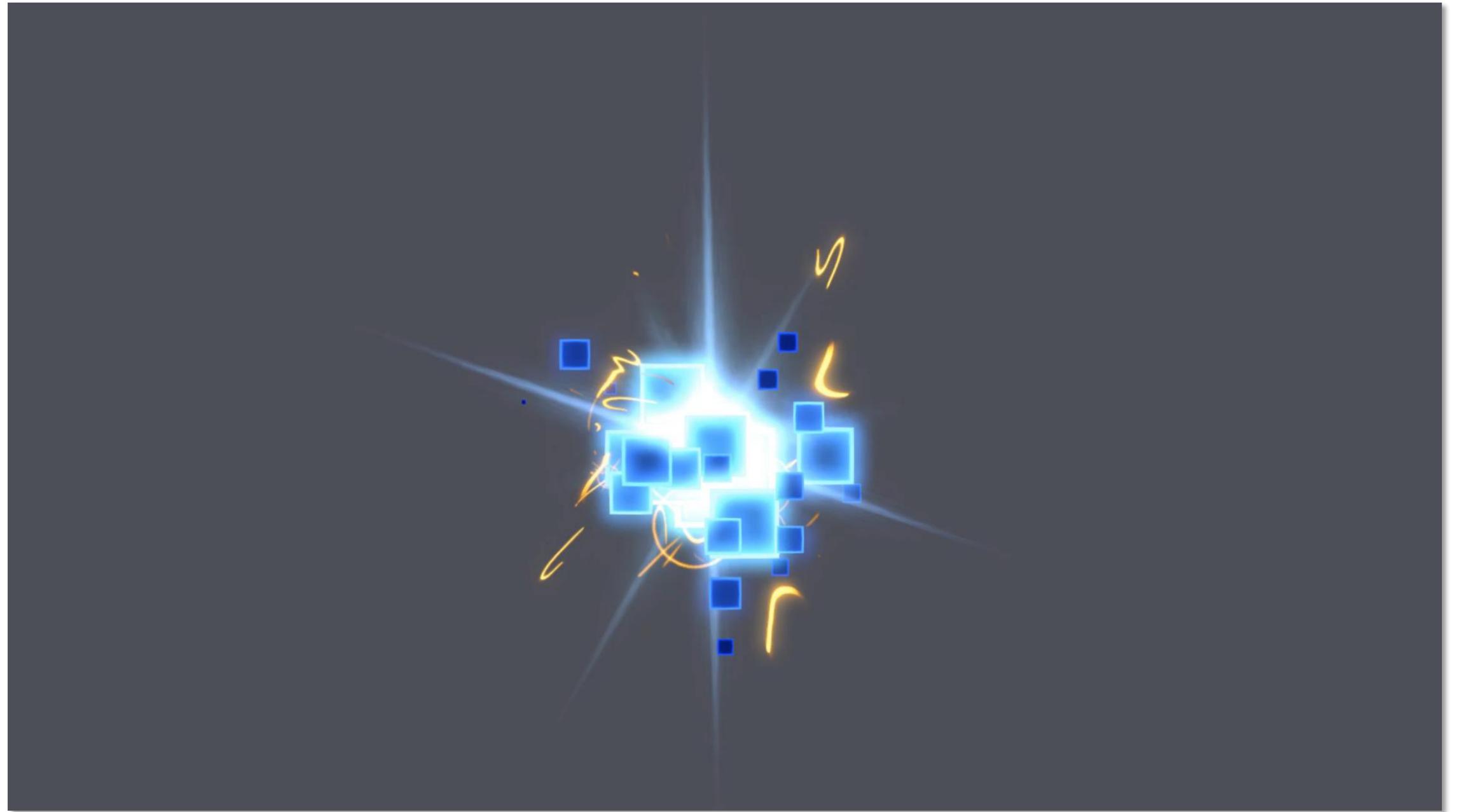
# CONCEPT & DEVELOPMENT OF A STYLE

## DEVELOPING A STYLE GUIDE



# CONCEPT & DEVELOPMENT OF A STYLE

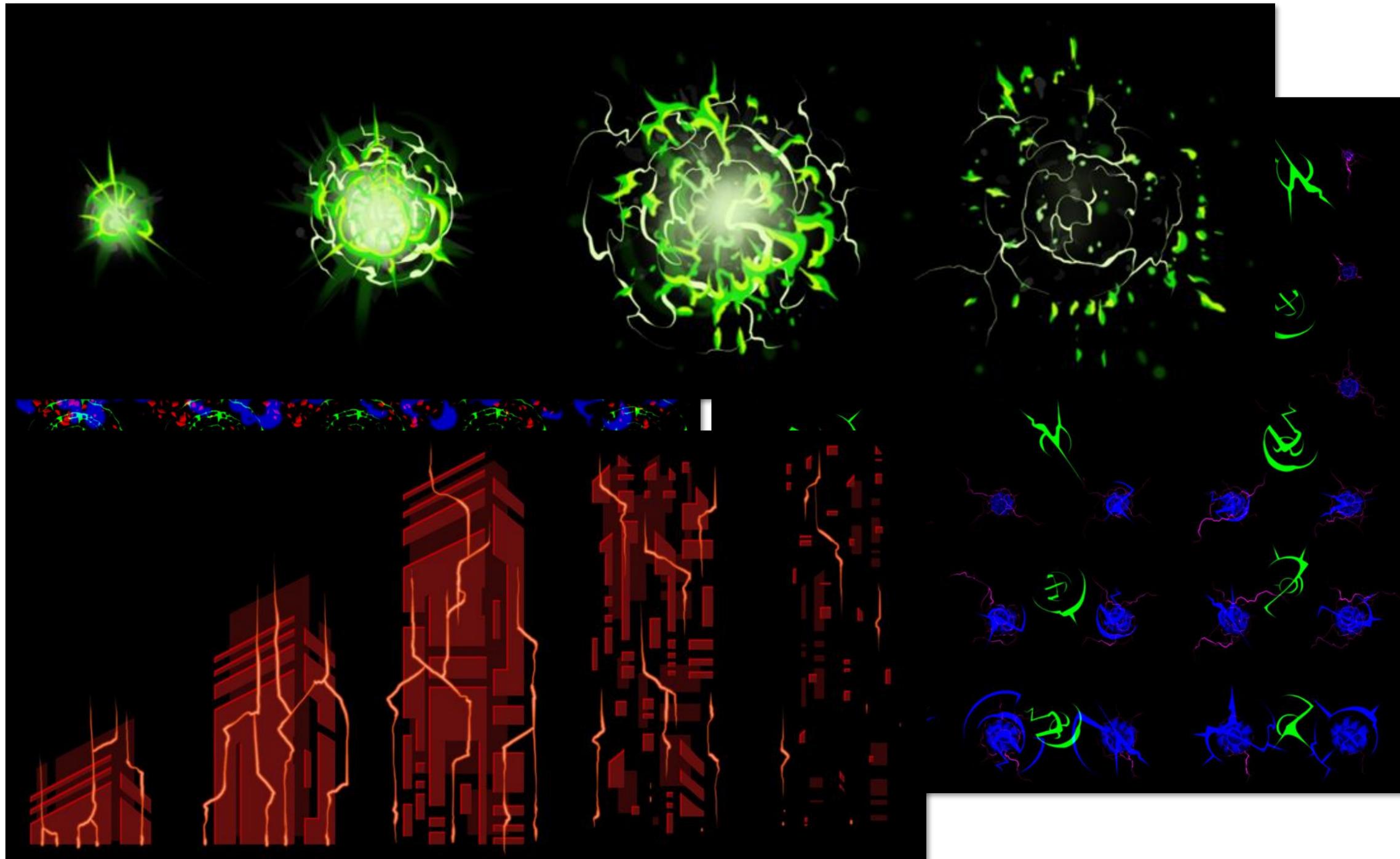
## DEVELOPING A STYLE GUIDE



# IMPLEMENTING STYLE & CHARACTER

## ASSEMBLING THE ANIMATIONS

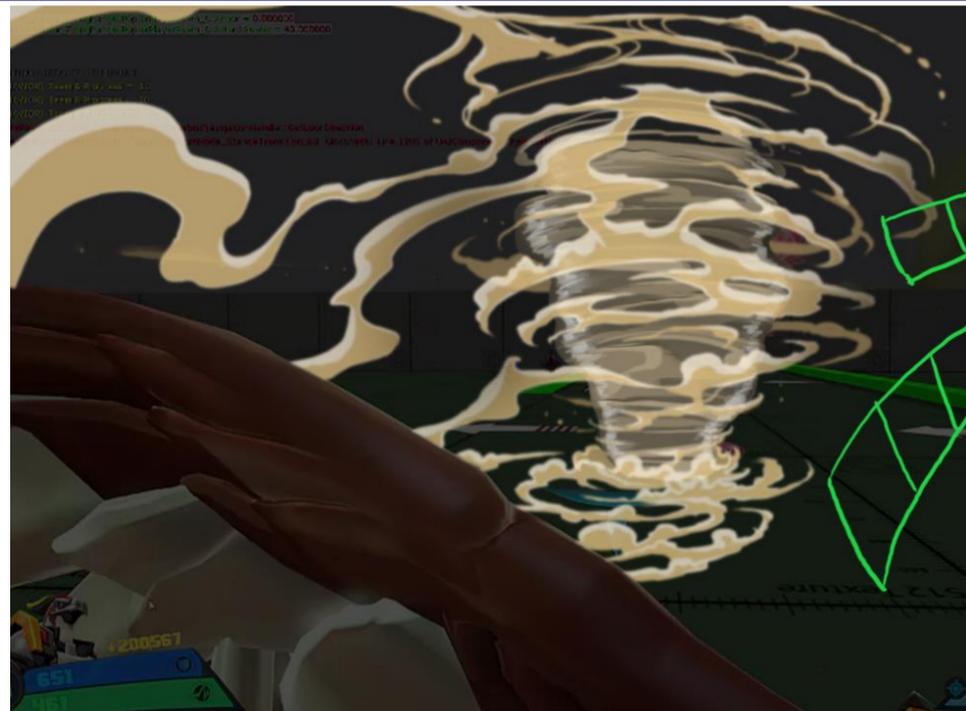
- Within 2 – 3 colors
- Little to no gradients
- Much gray-packing



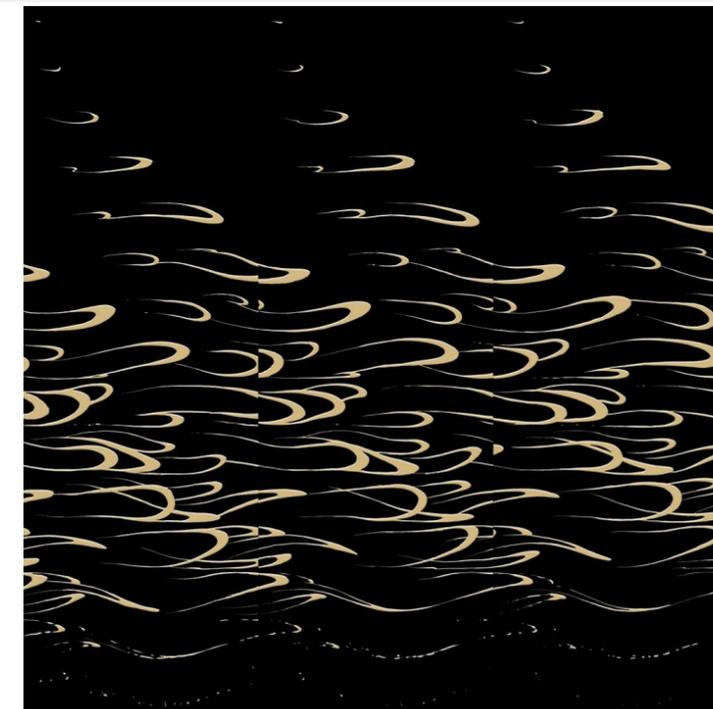
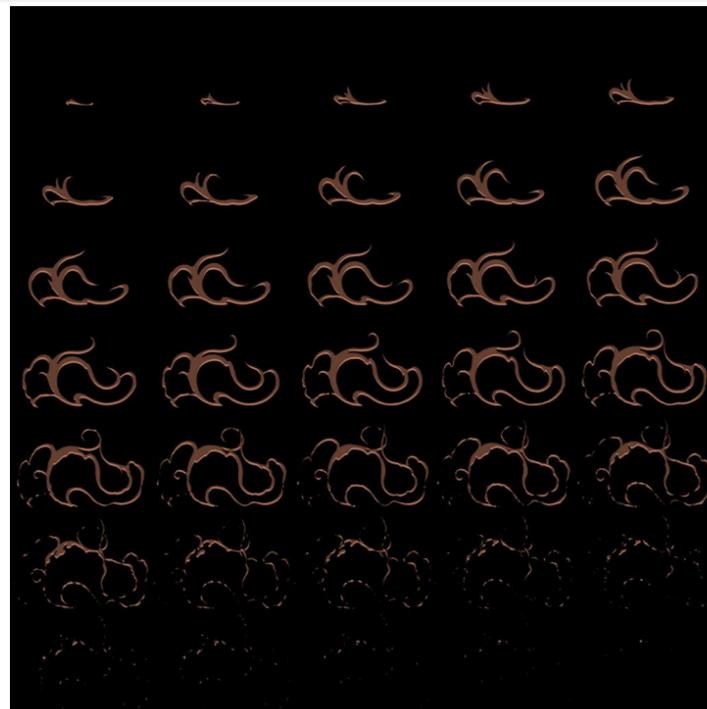
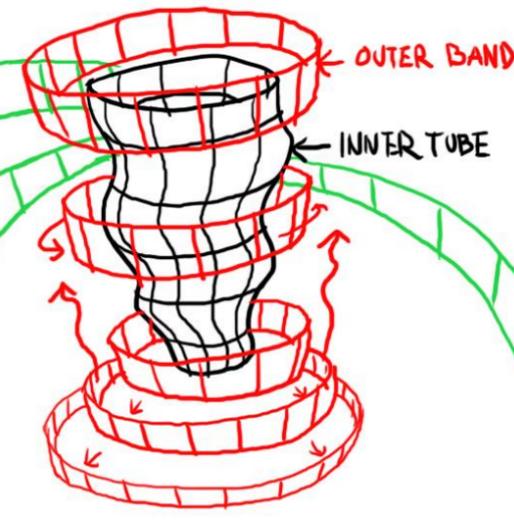
# IMPLEMENTING STYLE & CHARACTER

## ADDING 2D TO A 3D ENVIRONMENT

- Extra dimension
- Specific UV mapped meshes



Mesh Break Down for Tornado



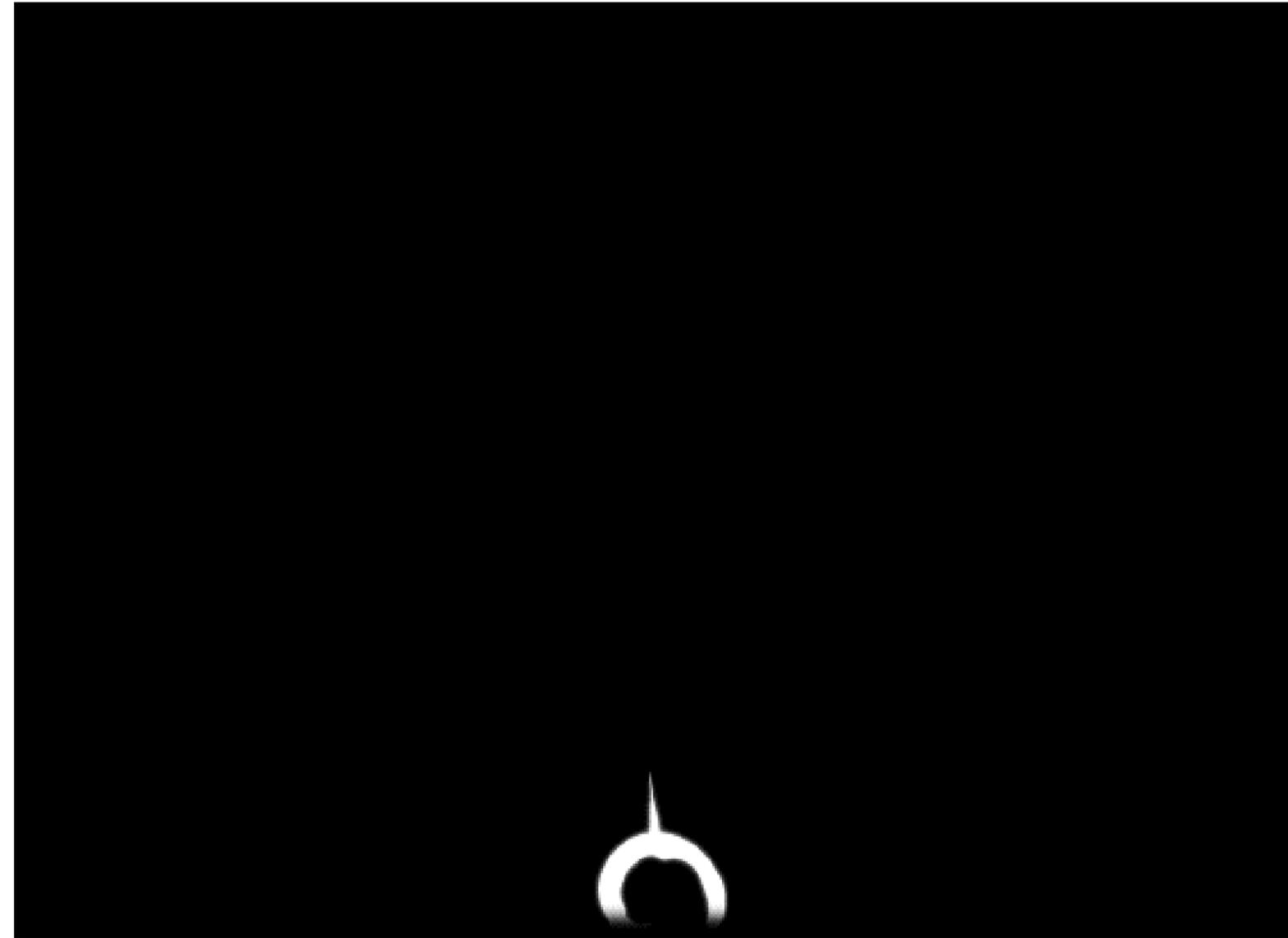
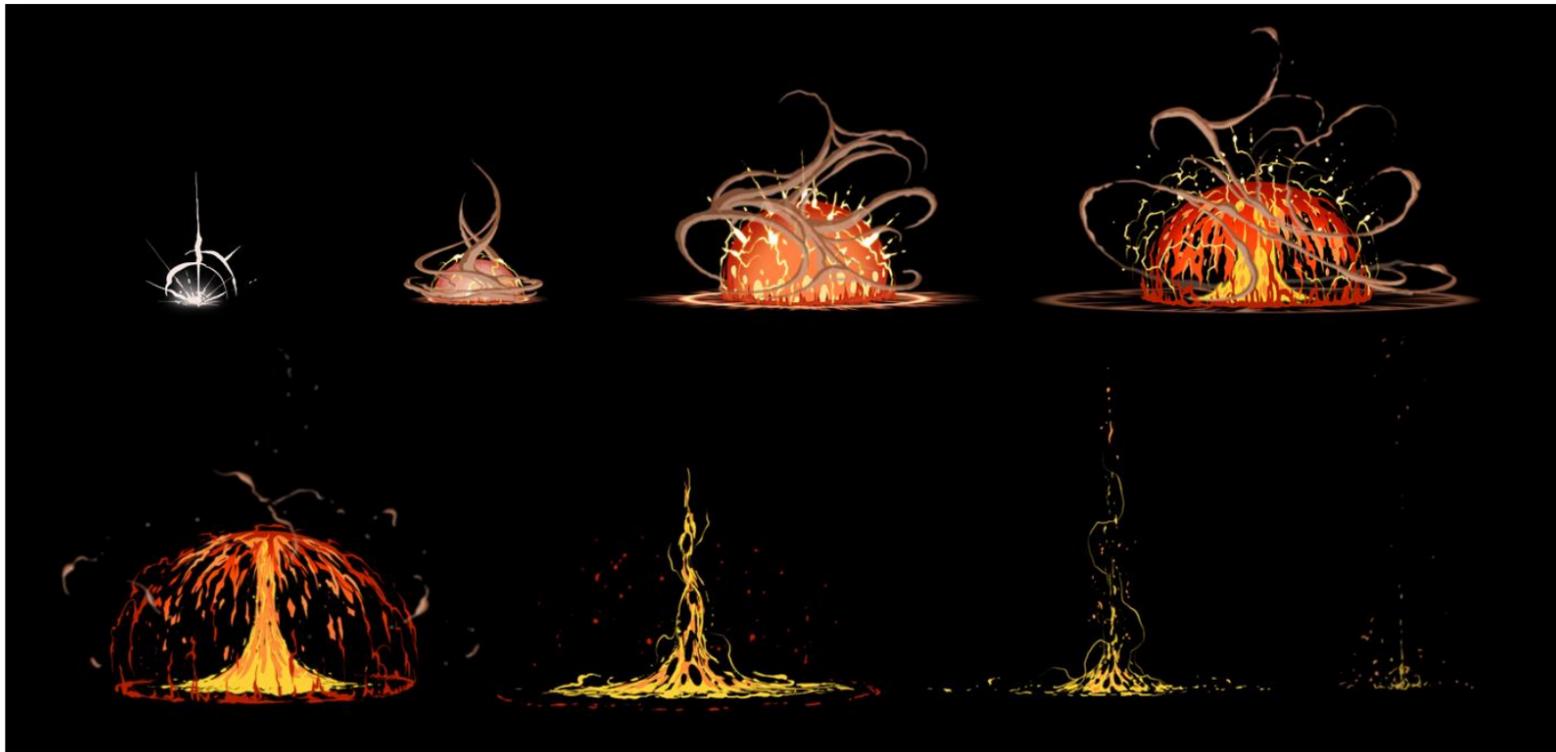
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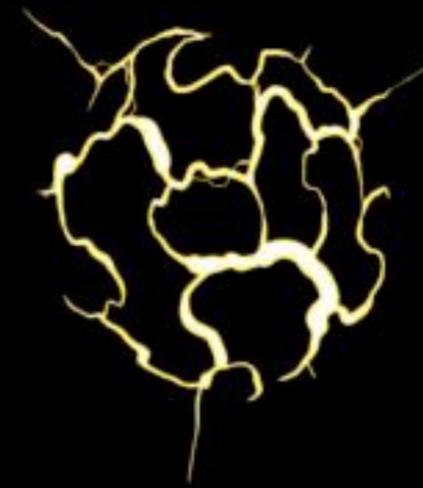
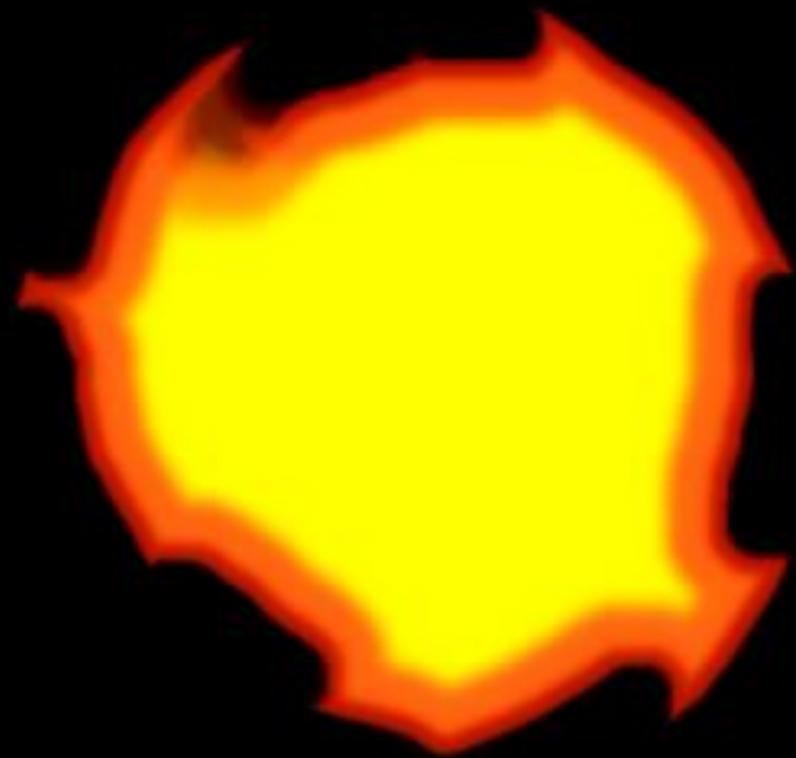
## ADDING 2D TO A 3D ENVIRONMENT



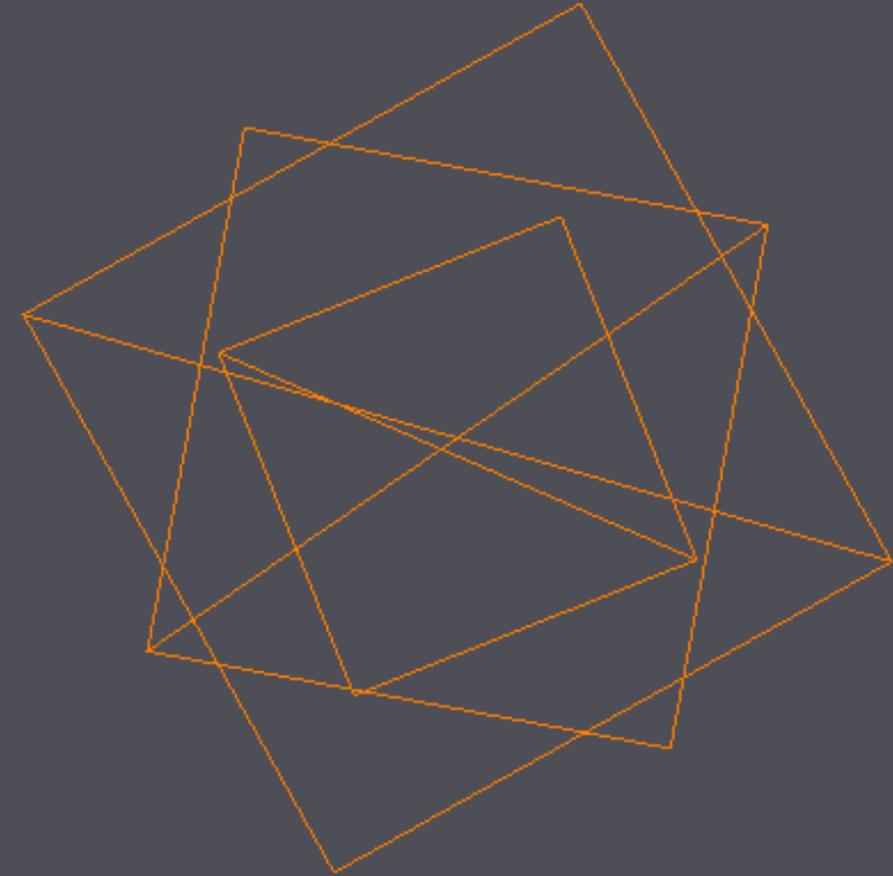
# IMPLEMENTING STYLE & CHARACTER

## ADDING 2D TO A 3D ENVIRONMENT





# IMPLEMENTING STYLE & CHARACTER



# IMPLEMENTING STYLE & CHARACTER

## PERSONALIZING CHARACTER FX

- Applied principles of animation
- Squash and stretch
- Ownership



# IMPLEMENTING STYLE & CHARACTER

## PERSONALIZING CHARACTER FX



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## PERSONALIZING CHARACTER FX



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# IMPLEMENTING STYLE & CHARACTER

## PERSONALIZING CHARACTER FX





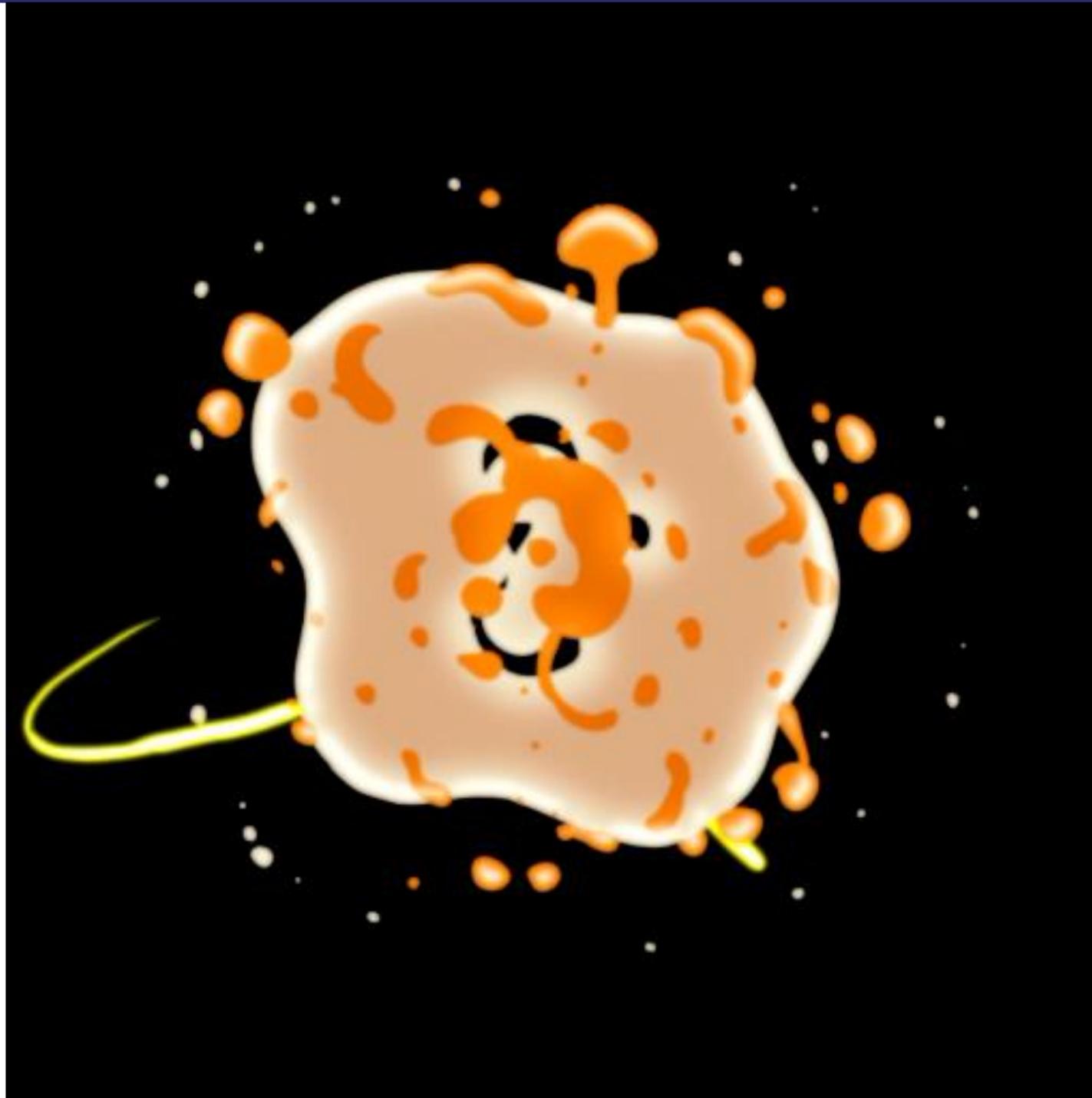
# IMPLEMENTING STYLE & CHARACTER

## PERSONALIZING CHARACTER FX



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# IMPLEMENTING STYLE & CHARACTER

## PERSONALIZING CHARACTER FX



# IMPLEMENTING STYLE & CHARACTER

## PERSONALIZING CHARACTER FX





# IMPLEMENTING STYLE & CHARACTER

## AVOIDING FX SOUP

- Color vomit
- Critiques
- Player feedback



# CONCLUSION

## SOME THINGS TO CONSIDER...

### Help or Hinder?

- Why use stylized FX?

### Is The Universe Cohesive?

- Does everything belong

### During The Concepting Phase...

- Try new things
- Avoid the "fx soup" look
- Consider VFX as a character



# CONCLUSION

## I WOULD LIKE TO THANK

- Michel Gagne and the Gearbox FX team
- GDC
- The audience

thank you!

# CONCLUSION

**@FXBL4CKOUT**

- Questions?

