



# The VFX Process Behind Battleborn

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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

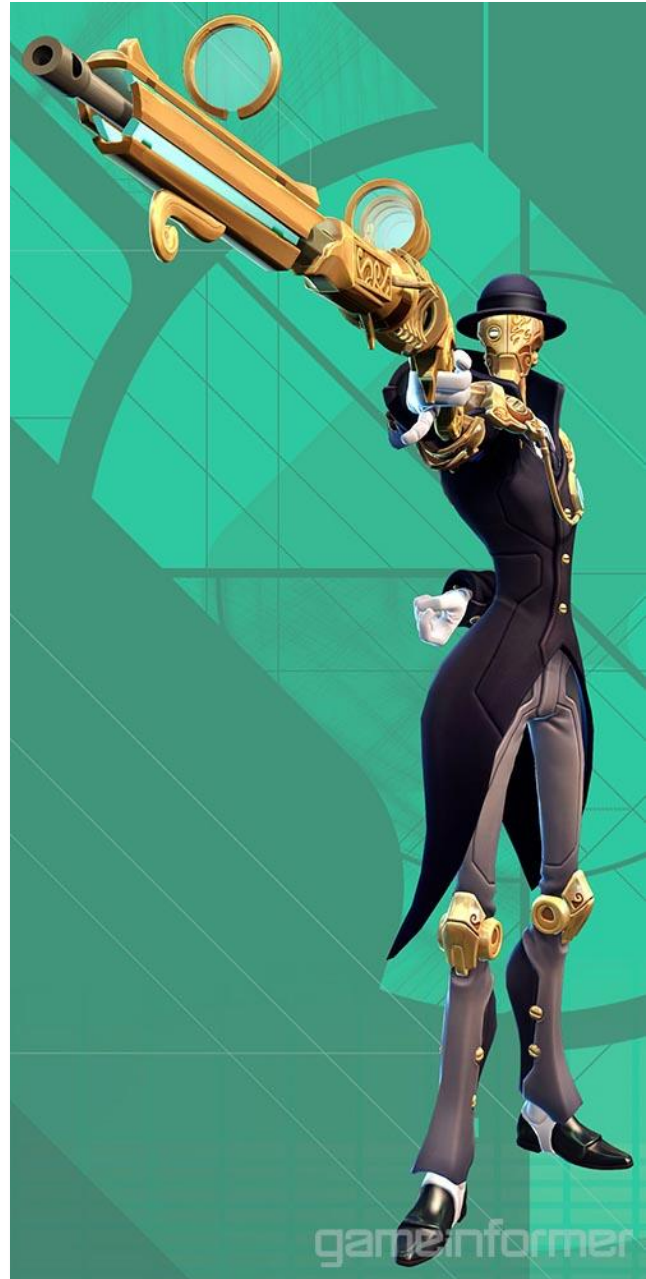




# WHY A STYLIZED LOOK?

## A WAY TO STAND OUT

- Experiment
- Creative Investigation
- Variable FX



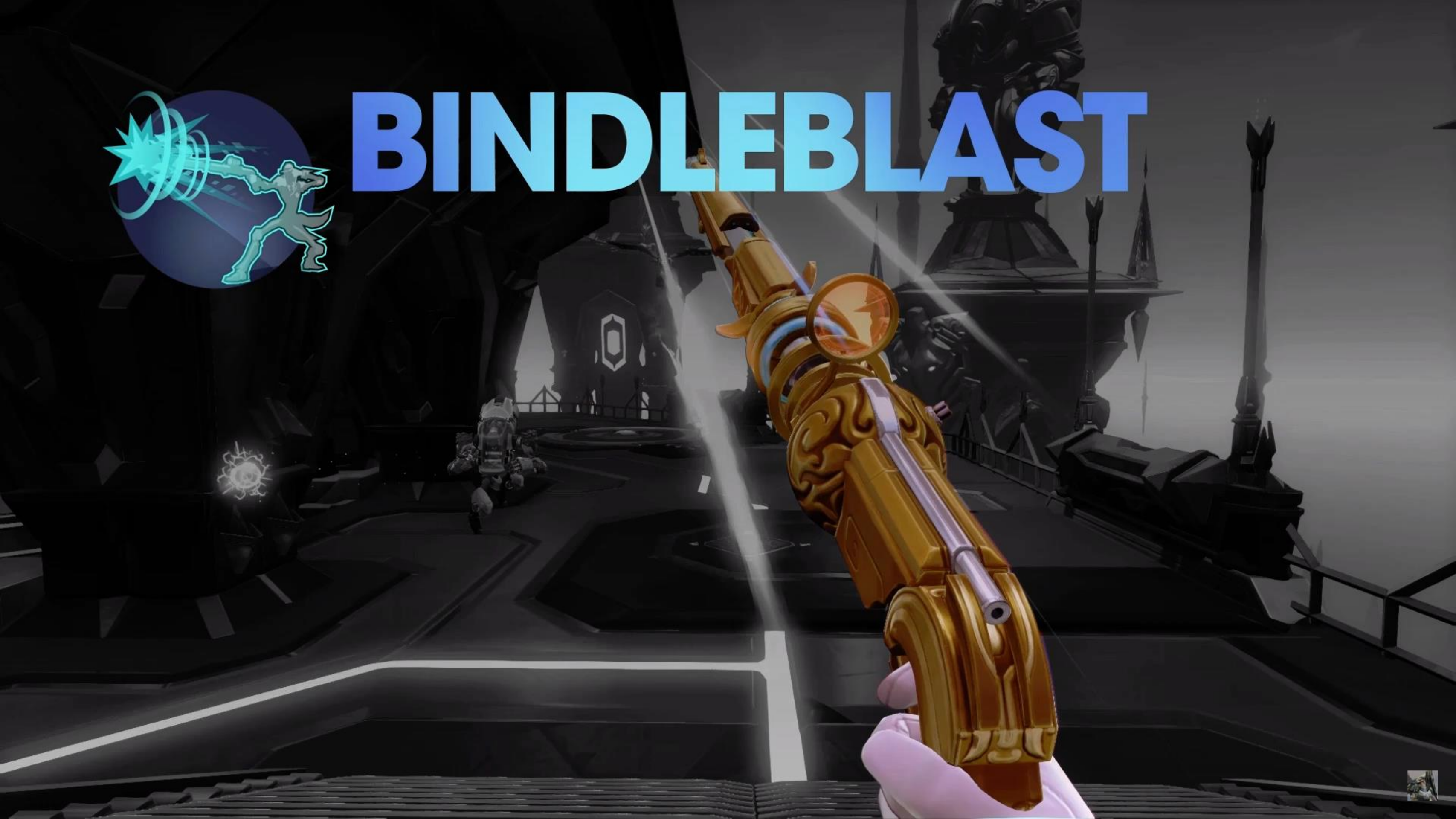








# BUNDLEBLAST





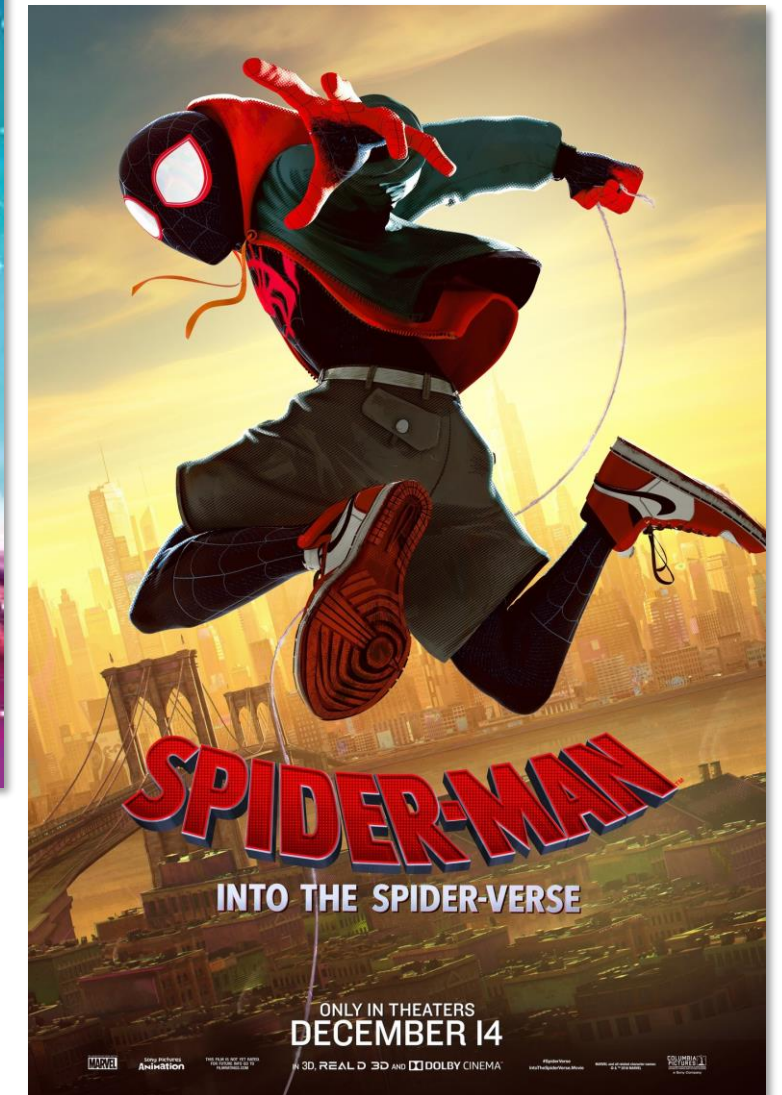
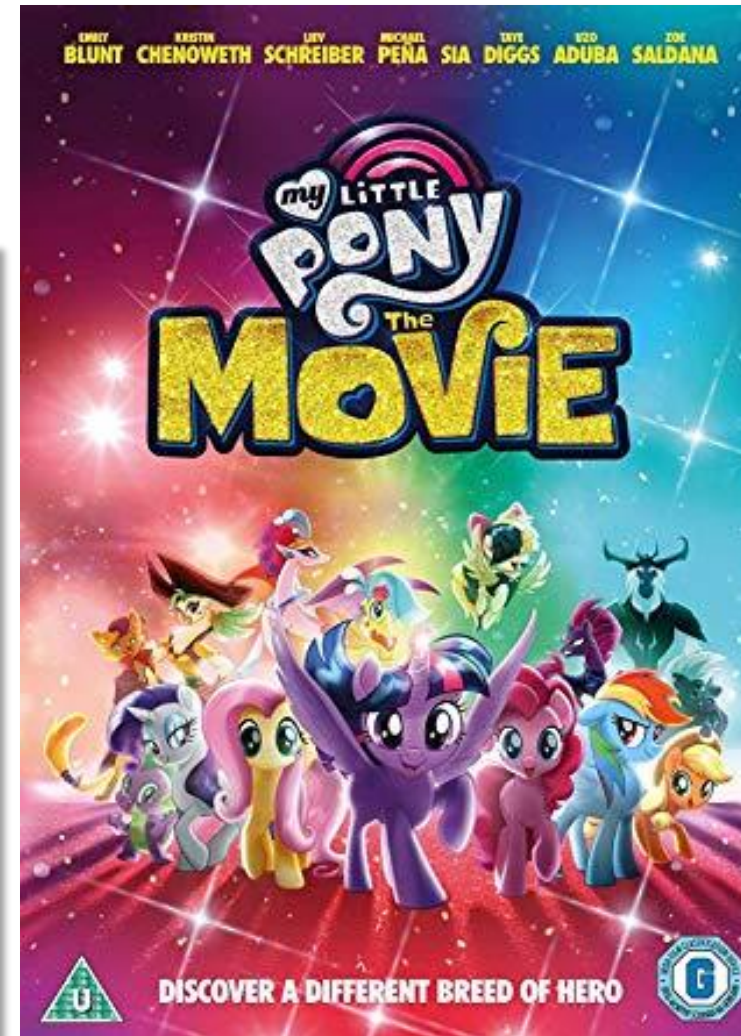
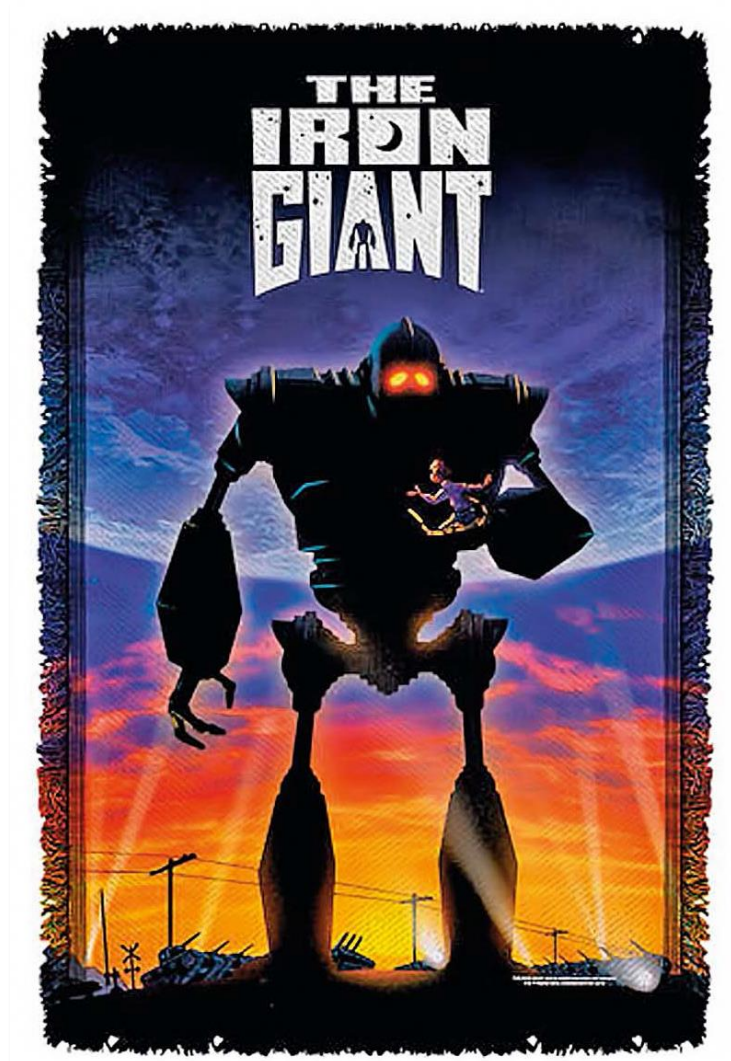




# CONCEPT & DEVELOPMENT OF A STYLE

## WORKING IN 2D

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



# CONCEPT & DEVELOPMENT OF A STYLE

## WORKING IN 2D

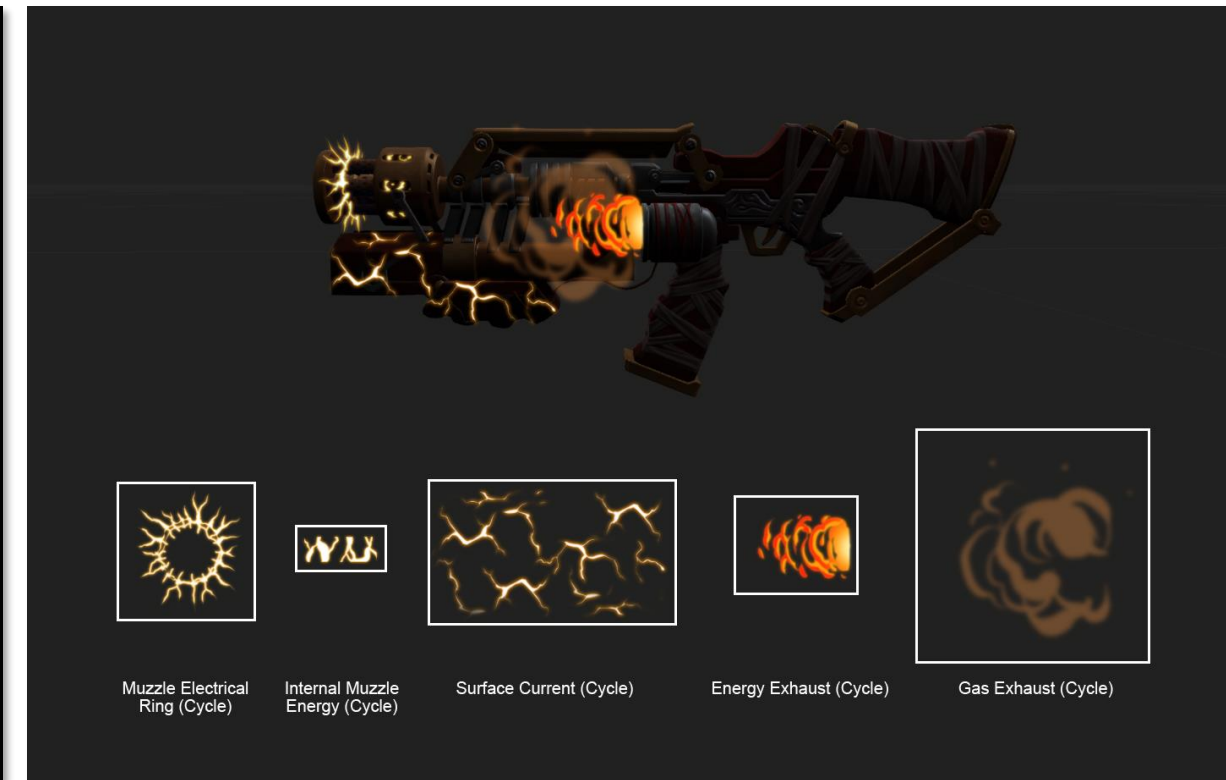




# CONCEPT & DEVELOPMENT OF A STYLE

## WORKING IN 2D

- Developing a rapport and system
- Feedback and iteration





# CONCEPT & DEVELOPMENT OF A STYLE

## WORKING IN 2D

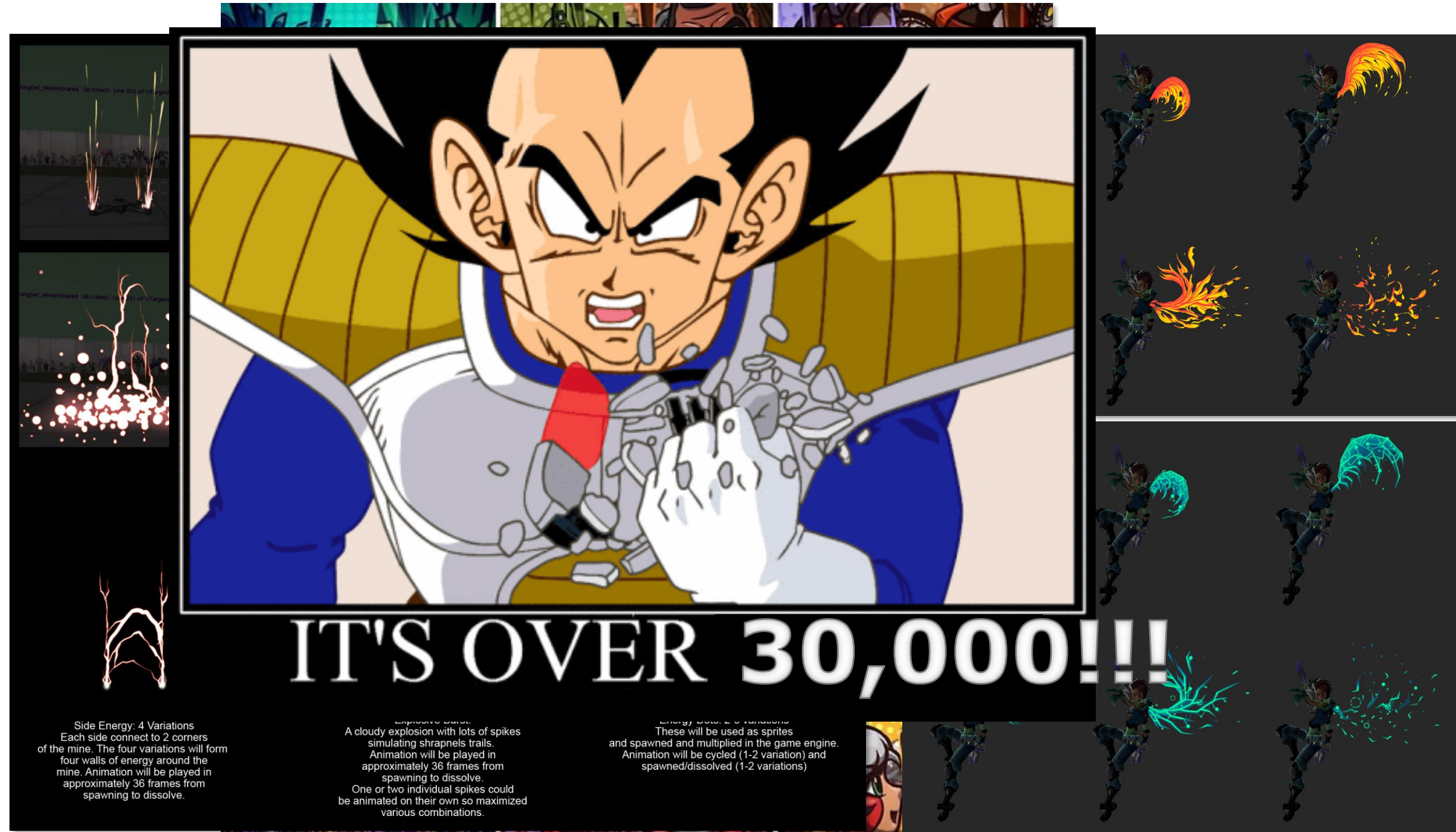




# CONCEPT & DEVELOPMENT OF A STYLE

## WORKING IN 2D

- Seung Kim
- Over 30,000 frames!

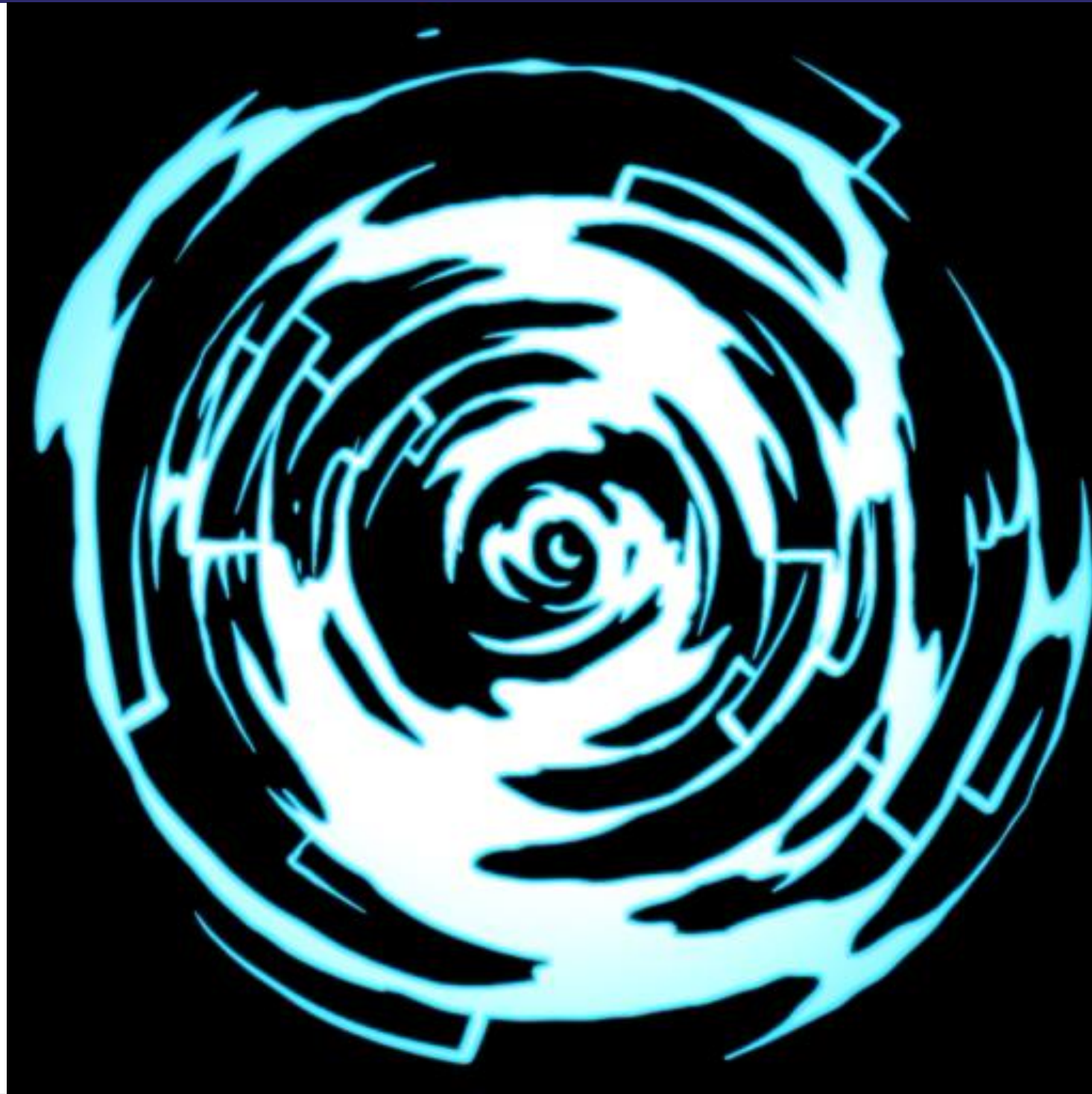




# CONCEPT & DEVELOPMENT OF A STYLE

## WORKING IN 2D

- Growing creativity







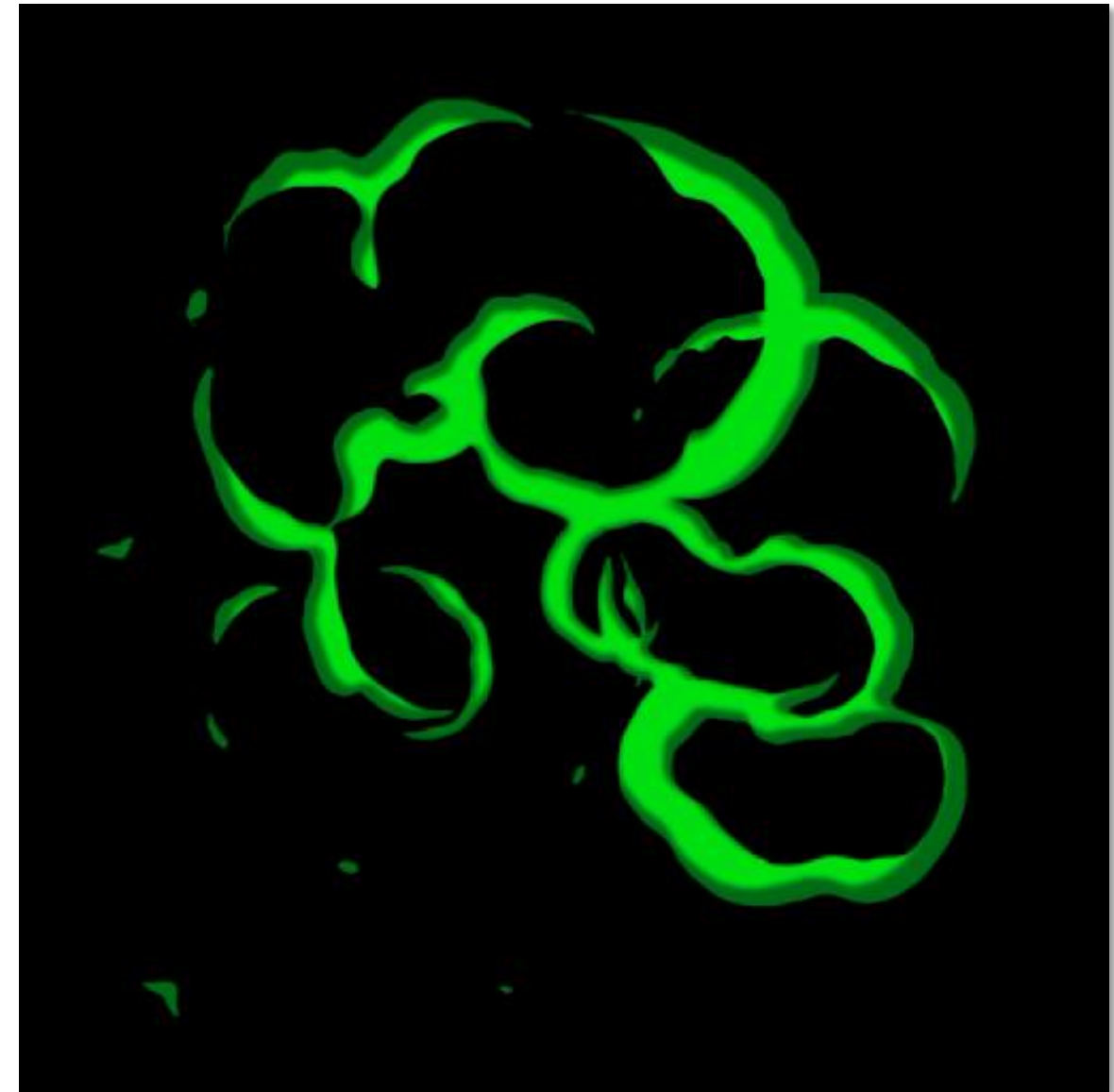
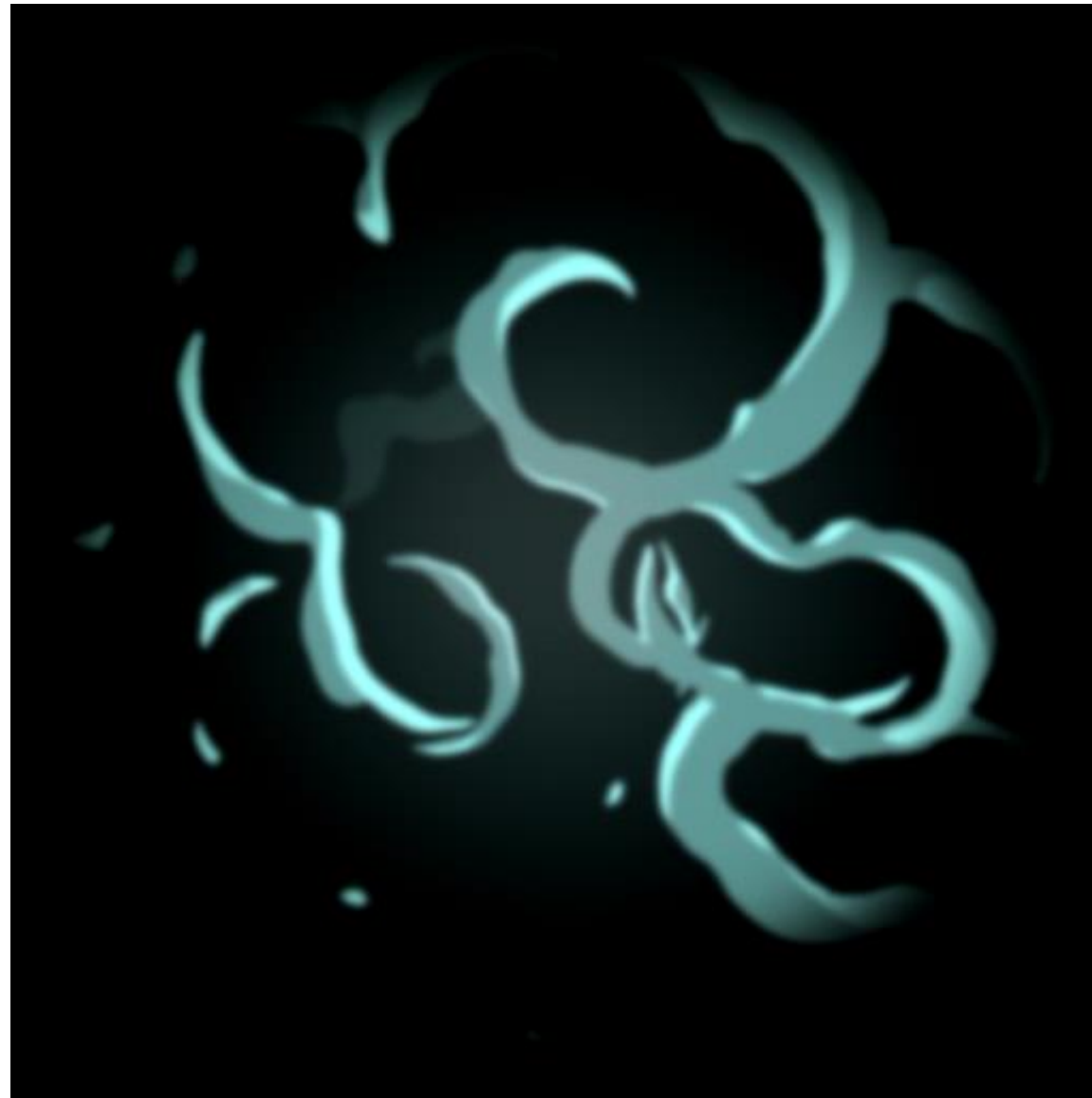
# HEDRONIC ERUPTION





# CONCEPT & DEVELOPMENT OF A STYLE

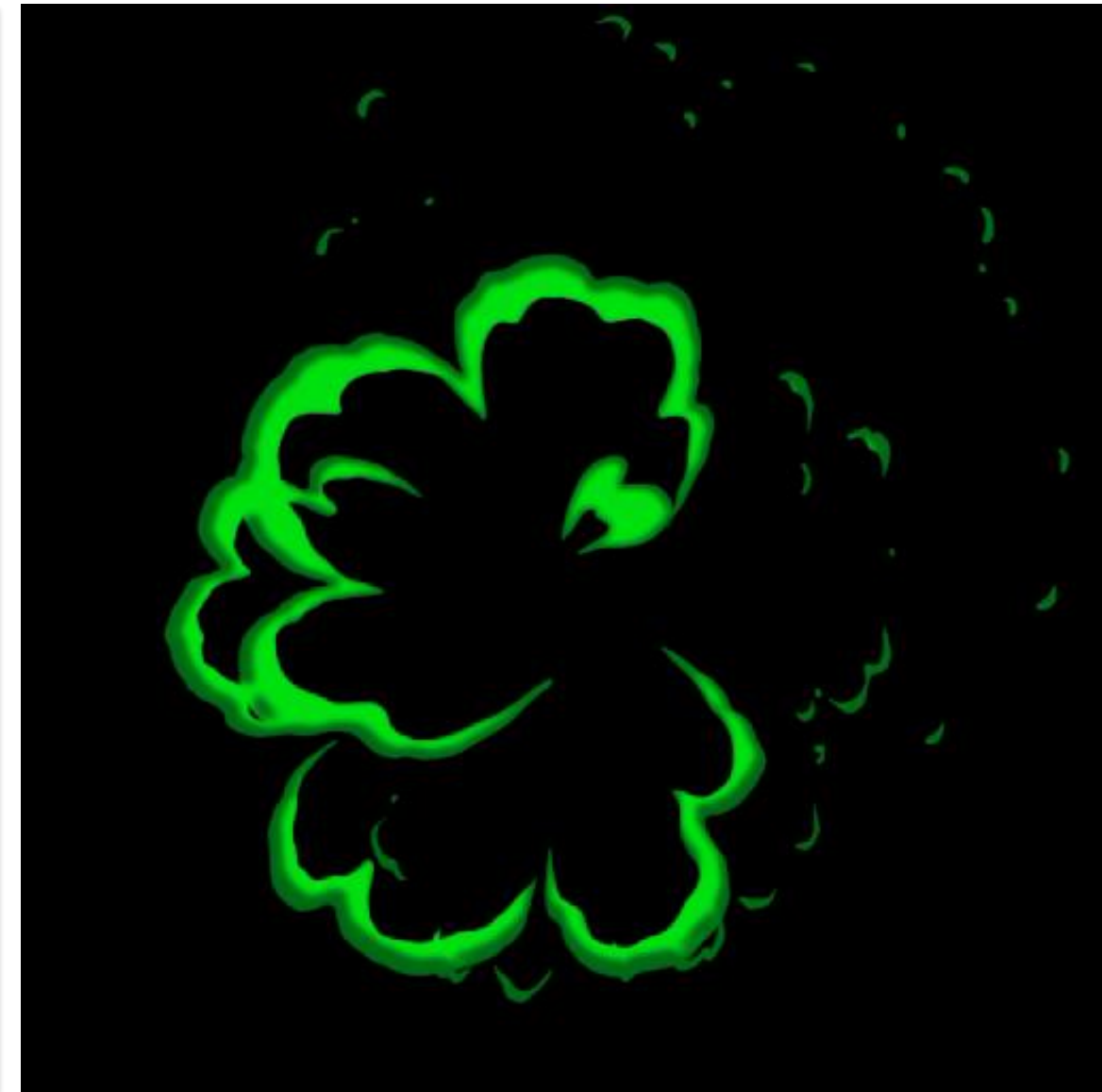
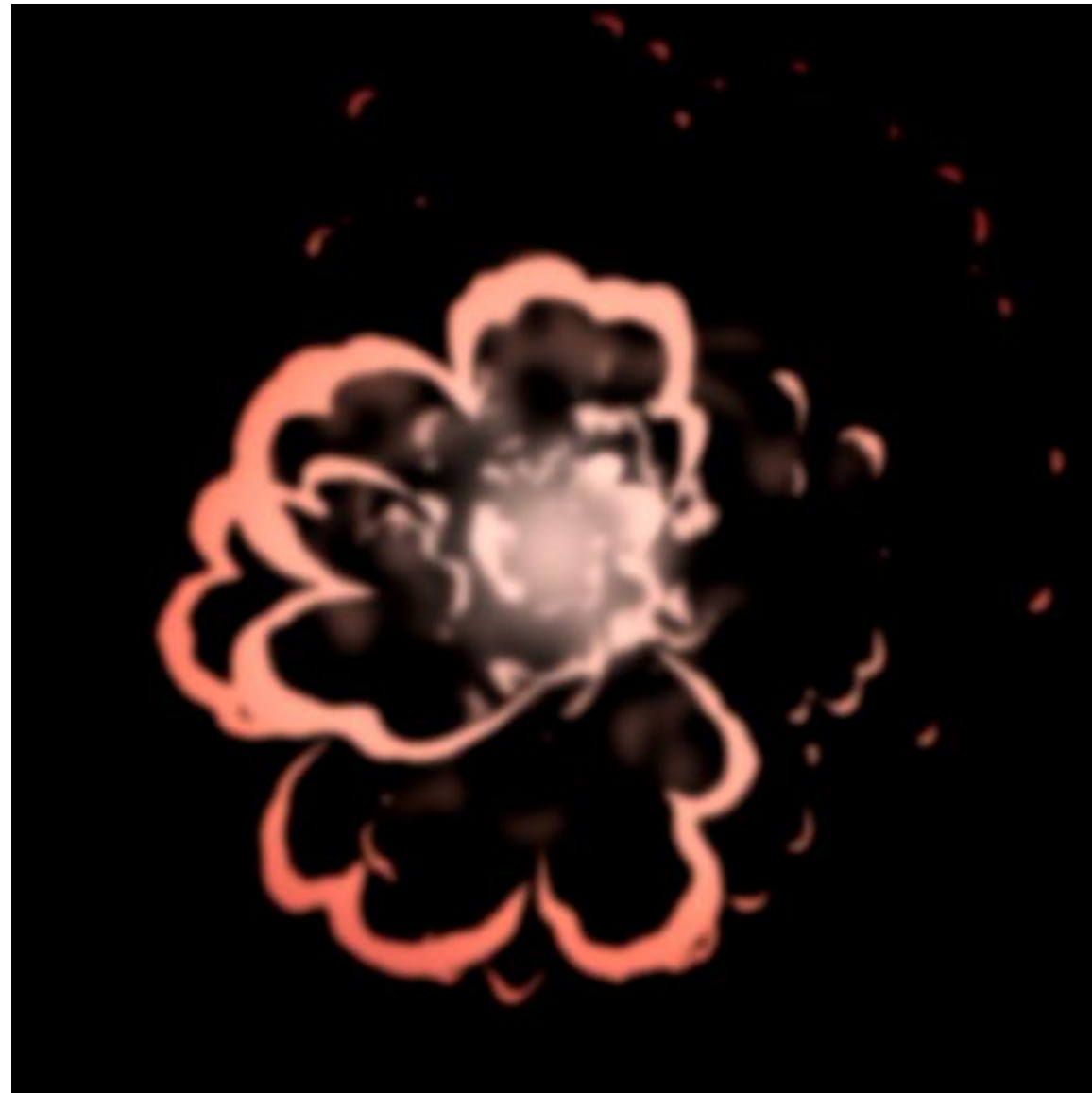
## WORKING IN 2D





# CONCEPT & DEVELOPMENT OF A STYLE

## WORKING IN 2D





# CONCEPT & DEVELOPMENT OF A STYLE

## WORKING IN 2D

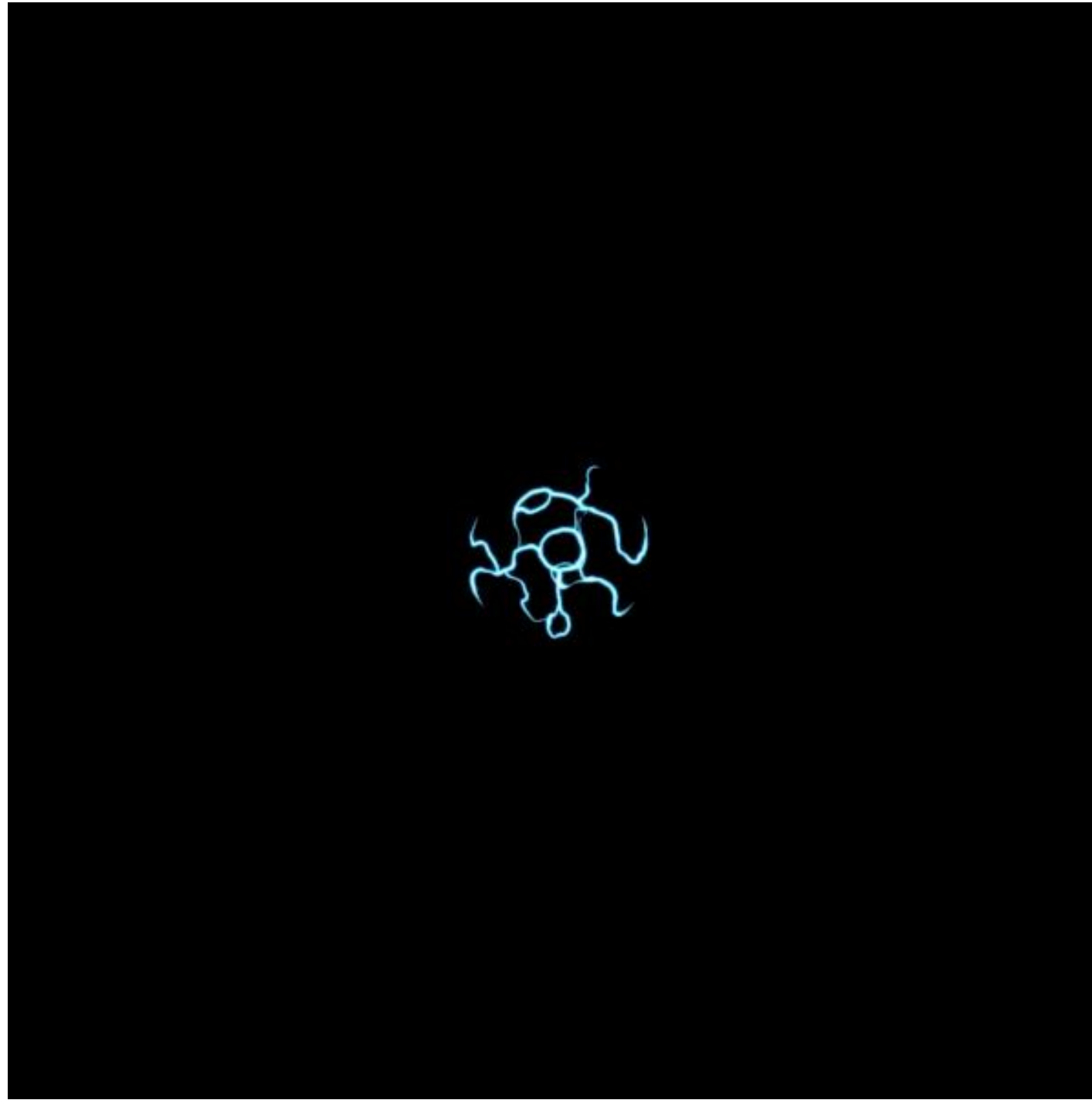
- 12 Principles of animation
- No skipped frames

- 
- 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

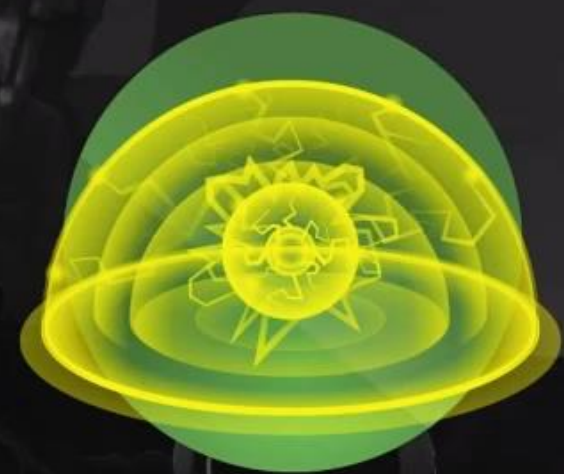


# CONCEPT & DEVELOPMENT OF A STYLE

## WORKING IN 2D

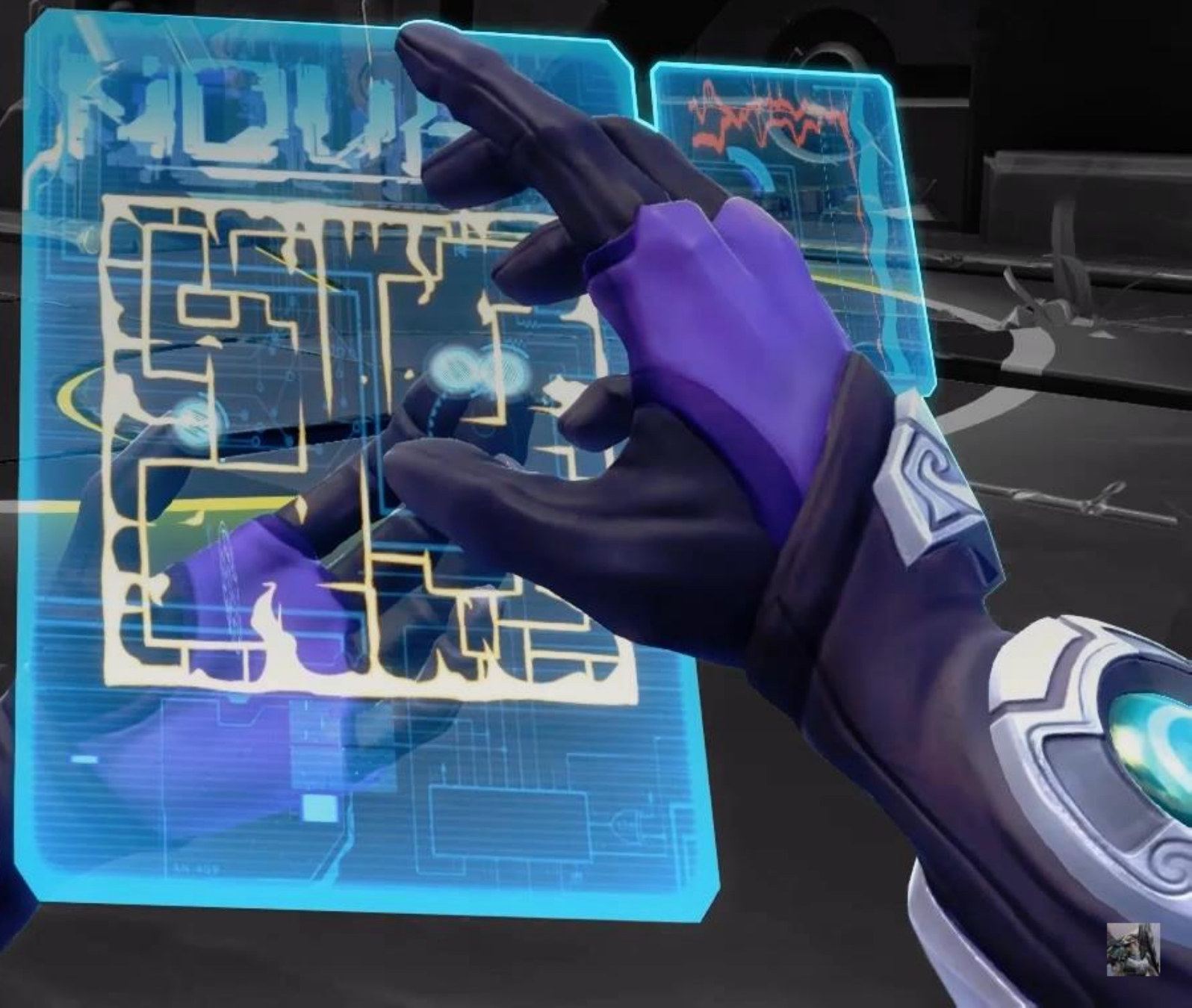






# BLACK HOLE

PULLS IN ENEMIES AND

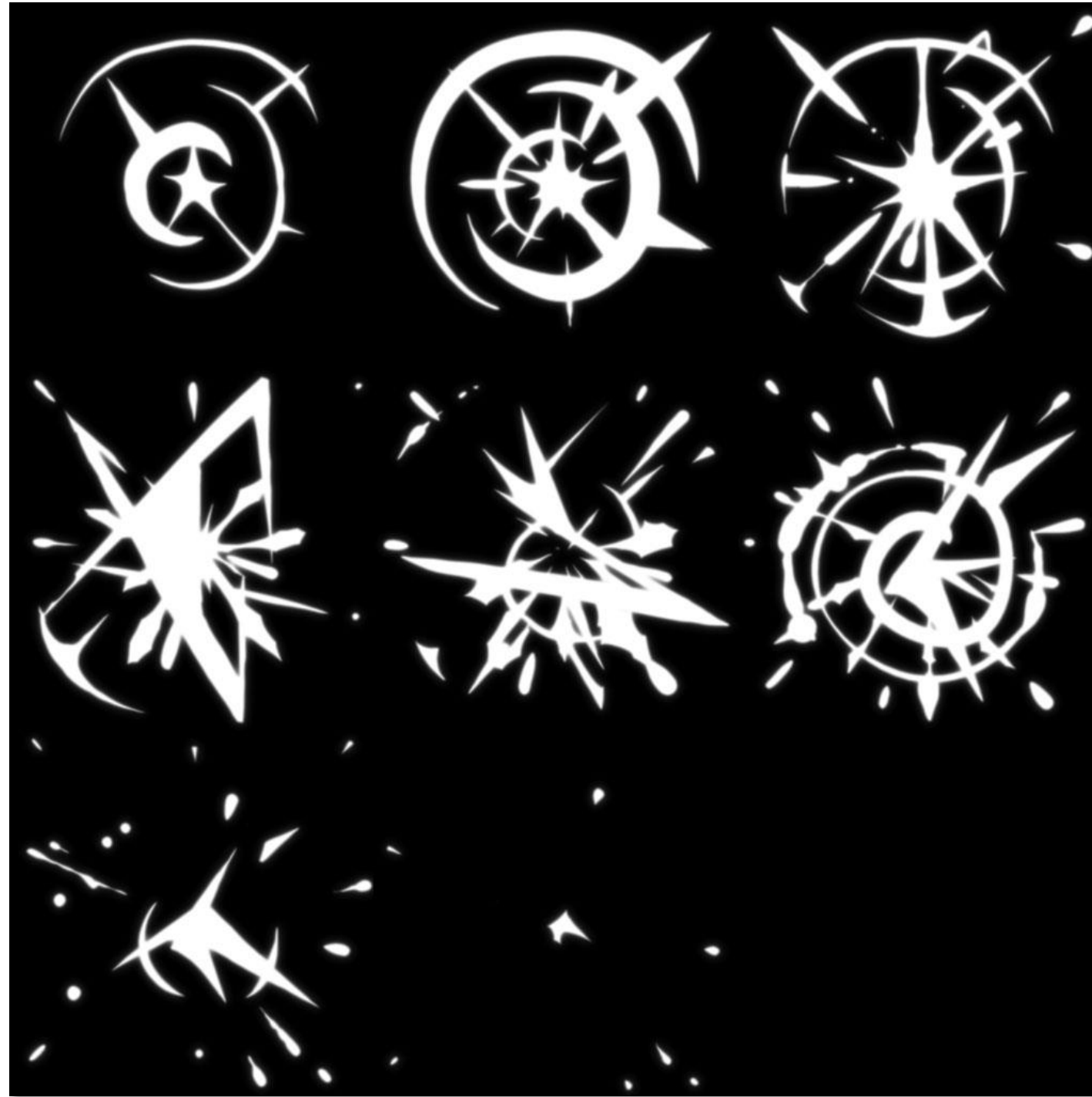




# CONCEPT & DEVELOPMENT OF A STYLE

## 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 = 4x11	
10 = 2x5	42 = 6x7	
12 = 2x6	43 = 3x14	
13 = 3x4	44 = 4x11	
14 = 2x7	45 = 5x9	
15 = 3x5	46 = 6x8	
16 = 2x8	47 = 7x7	
17 = 4x4	48 = 6x8	
18 = 2x9	49 = 7x7	15 = 150
19 = 3x6	50 = 5x10	14 = 147
20 = 2x10		





# CONCEPT & DEVELOPMENT OF A STYLE

## DEVELOPING A STYLE GUIDE

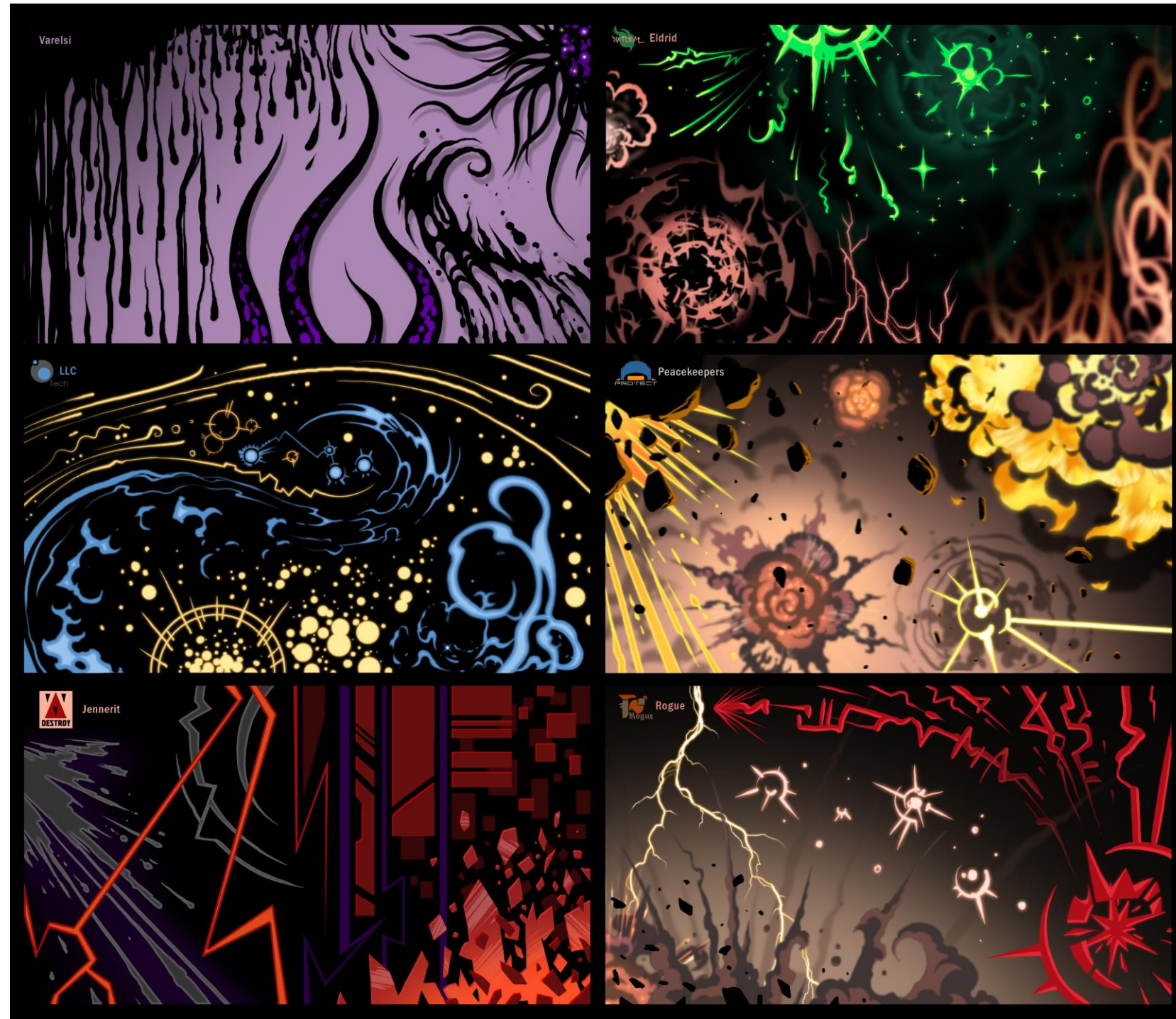




# CONCEPT & DEVELOPMENT OF A STYLE

## DEVELOPING A STYLE GUIDE

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





# CONCEPT & DEVELOPMENT OF A STYLE

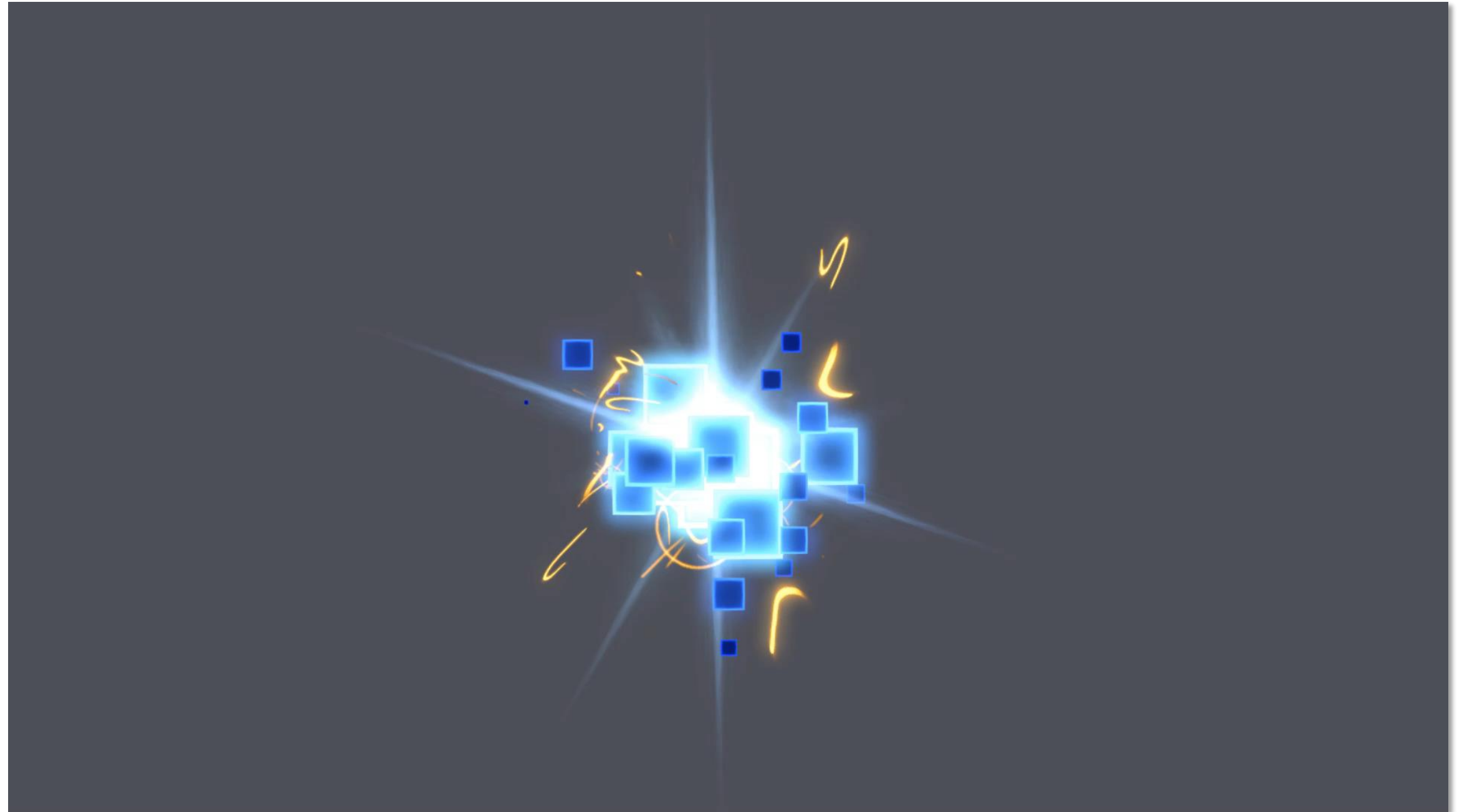
## DEVELOPING A STYLE GUIDE





# CONCEPT & DEVELOPMENT OF A STYLE

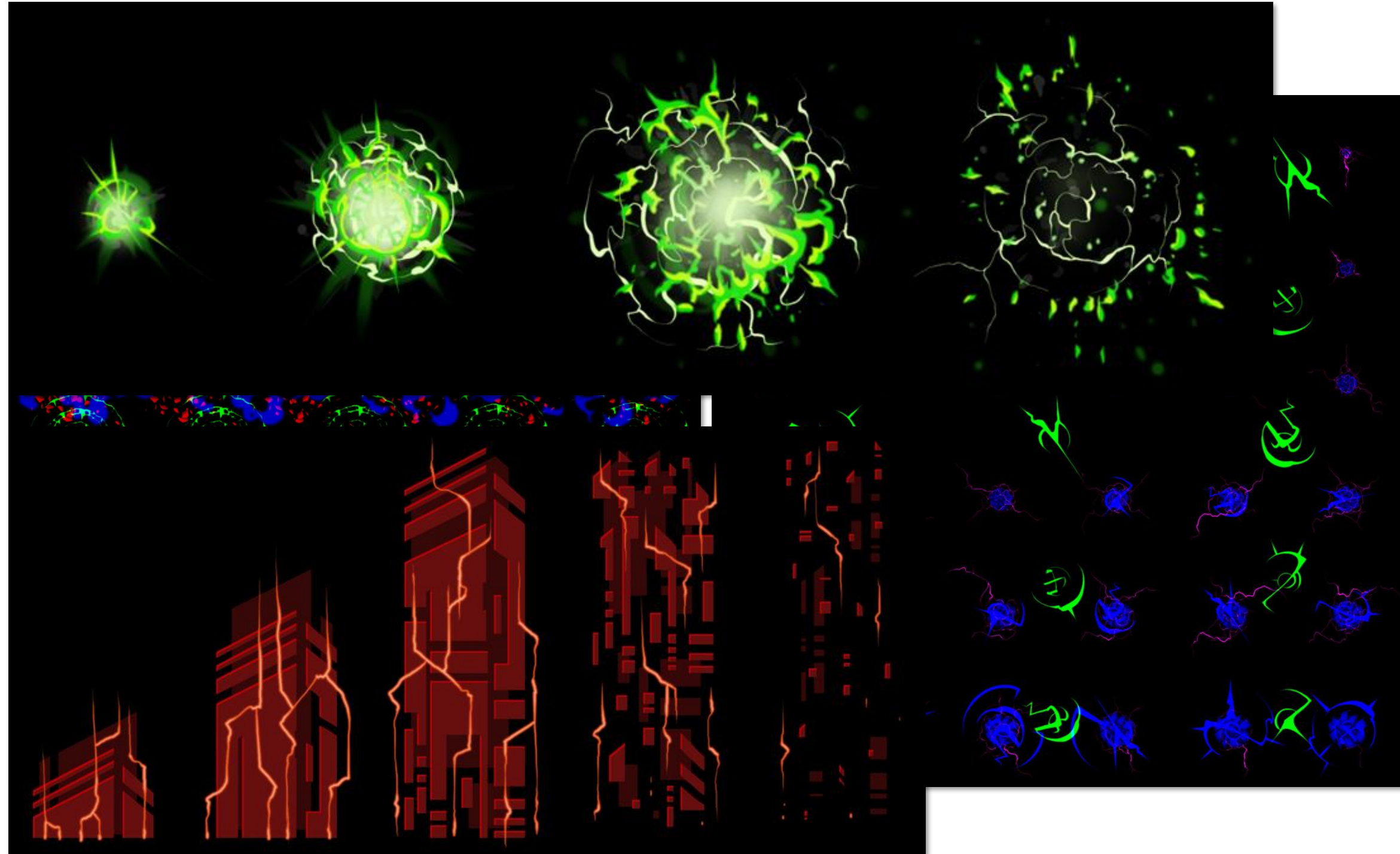
## DEVELOPING A STYLE GUIDE



# IMPLEMENTING STYLE & CHARACTER

## ASSEMBLING THE ANIMATIONS

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

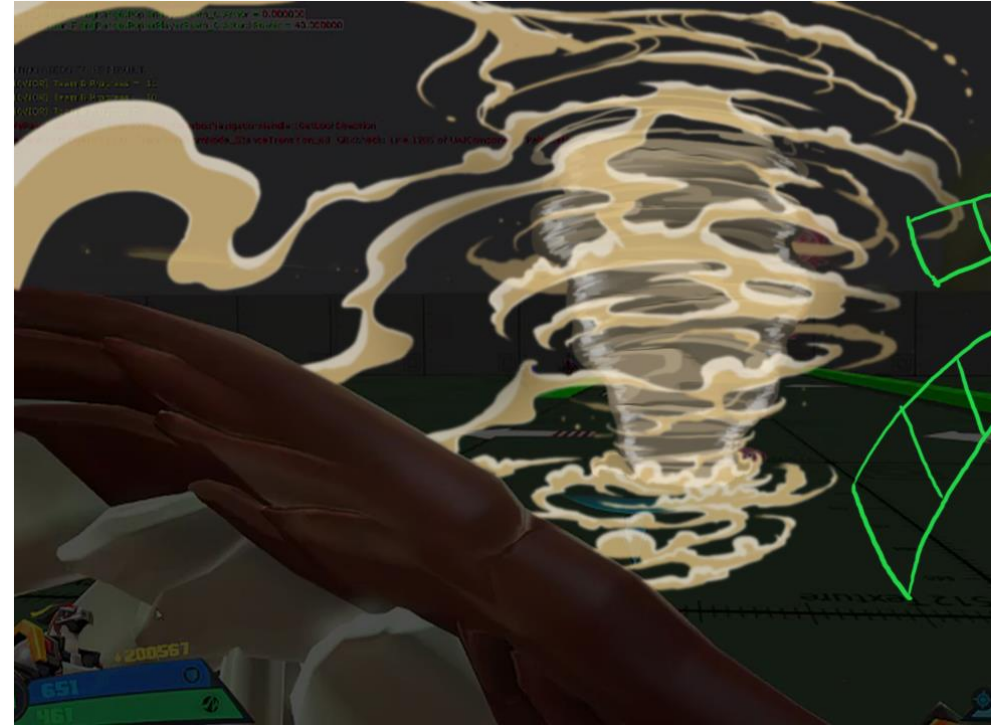




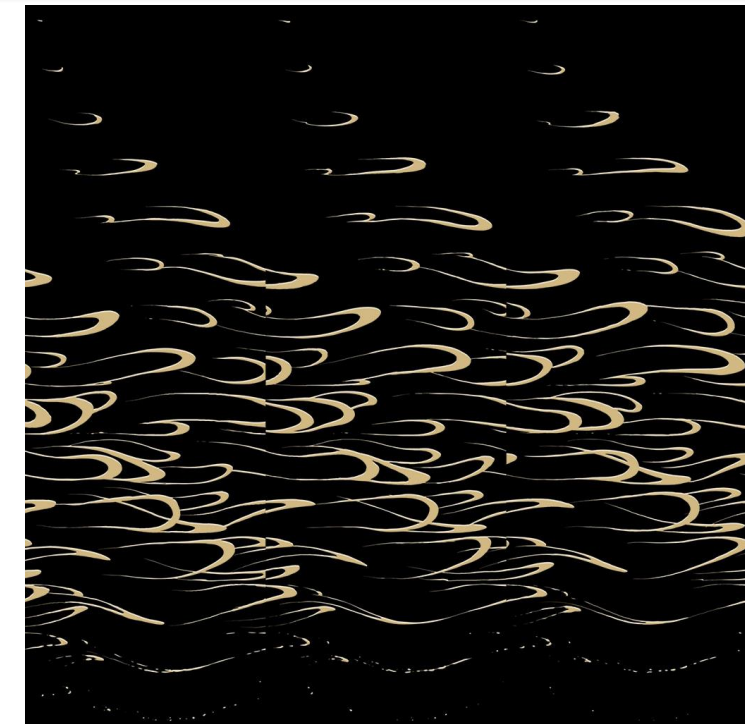
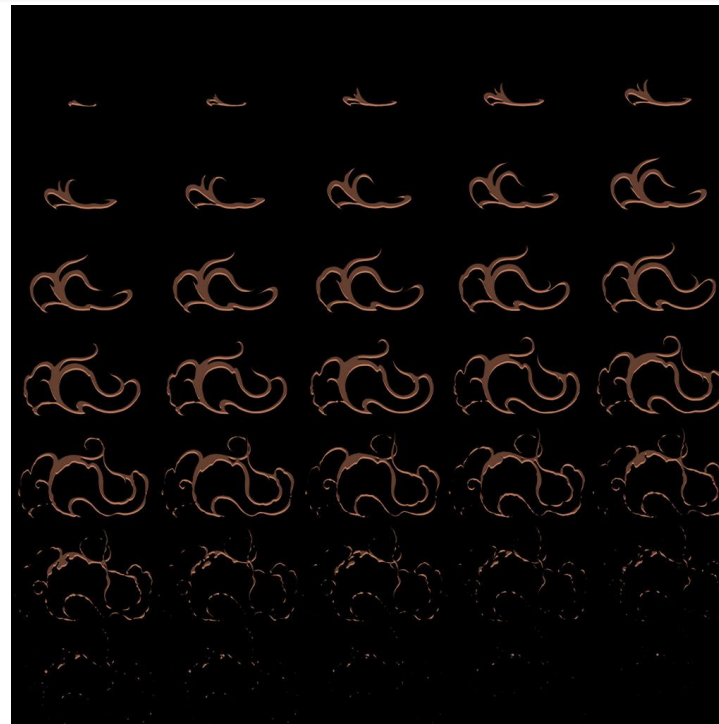
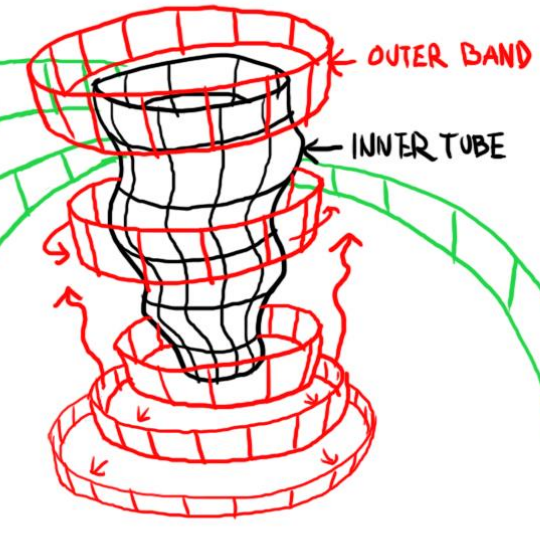
# IMPLEMENTING STYLE & CHARACTER

## ADDING 2D TO A 3D ENVIRONMENT

- Extra dimension
- Specific UV mapped meshes



Mesh Break Down for Tornado



# IMPLEMENTING STYLE & CHARACTER

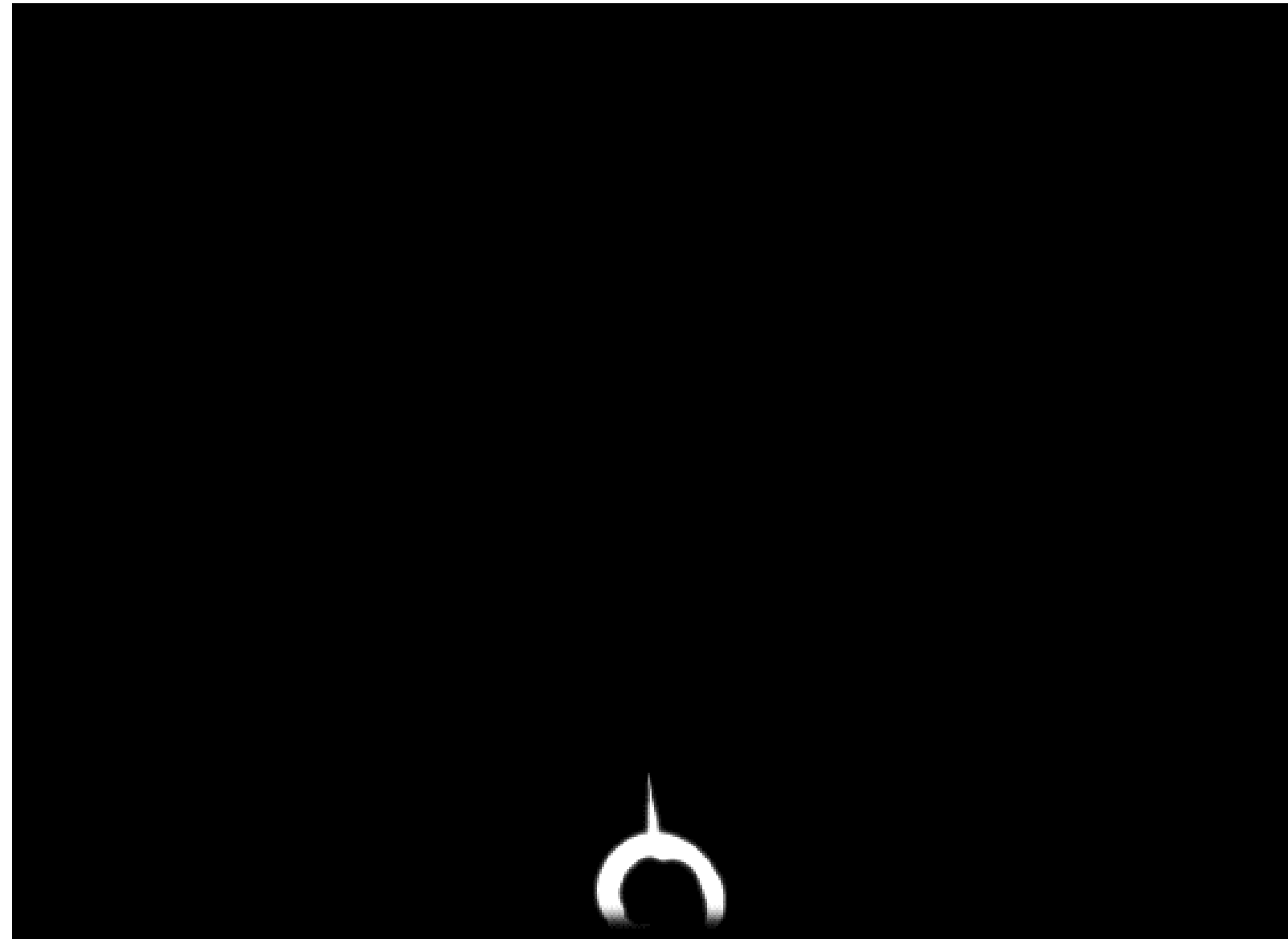
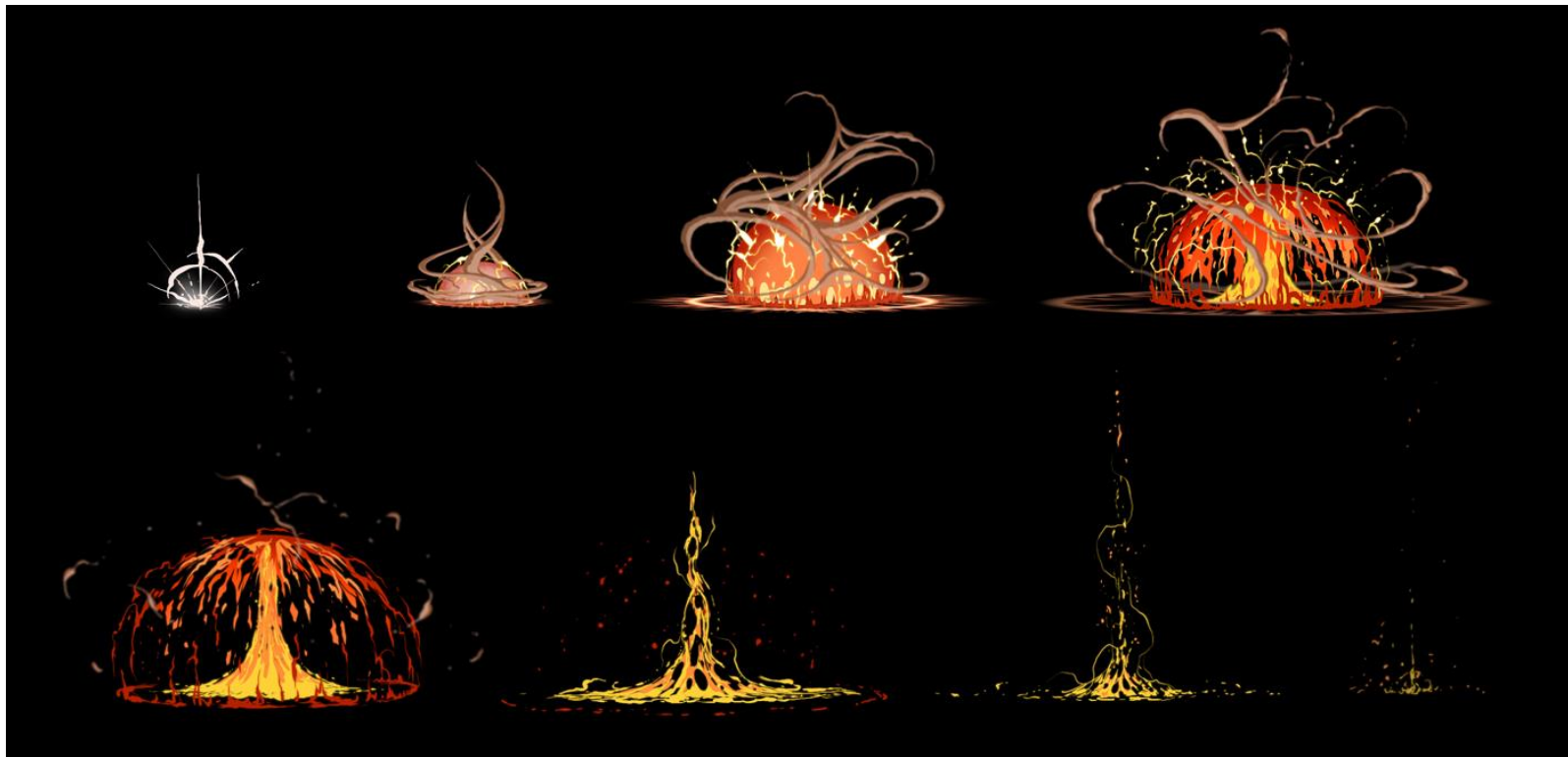
## ADDING 2D TO A 3D ENVIRONMENT

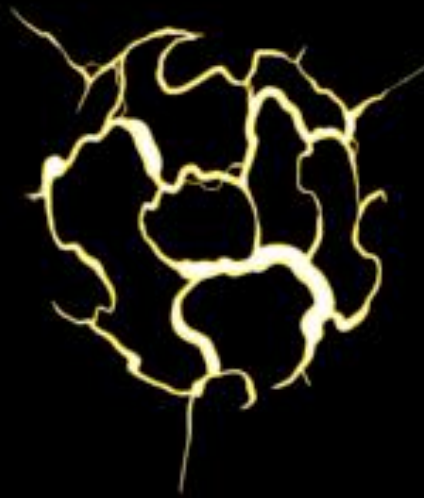
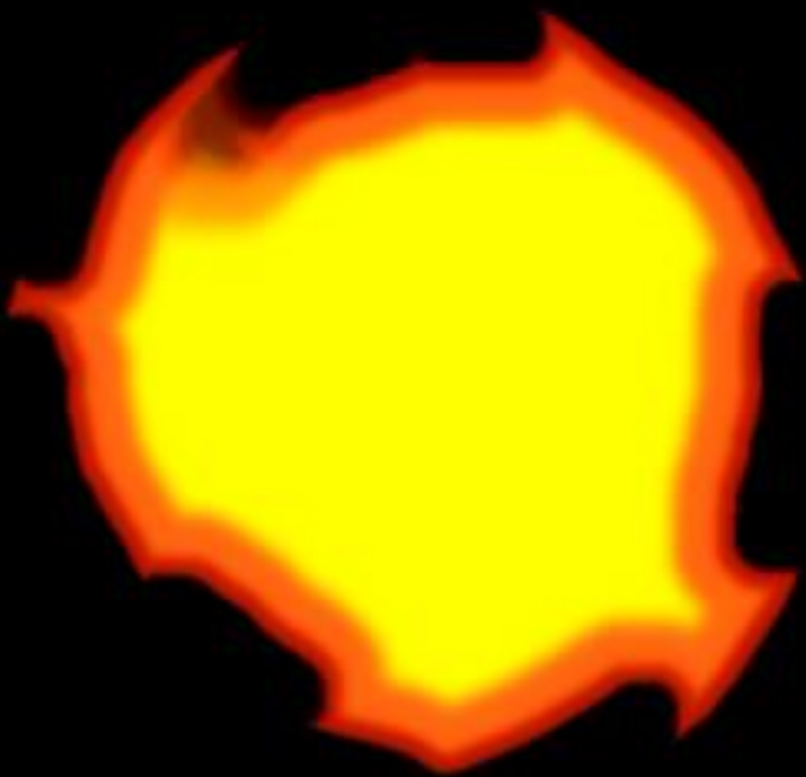




# IMPLEMENTING STYLE & CHARACTER

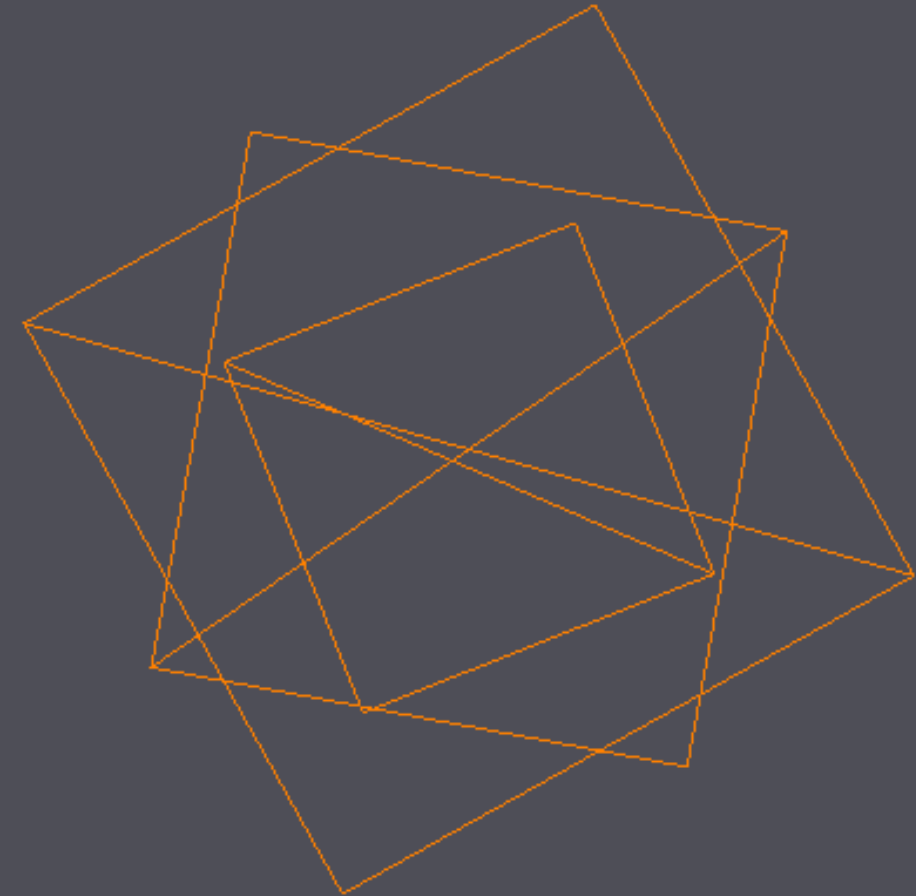
## ADDING 2D TO A 3D ENVIRONMENT







# 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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## PERSONALIZING CHARACTER FX









# IMPLEMENTING STYLE & CHARACTER

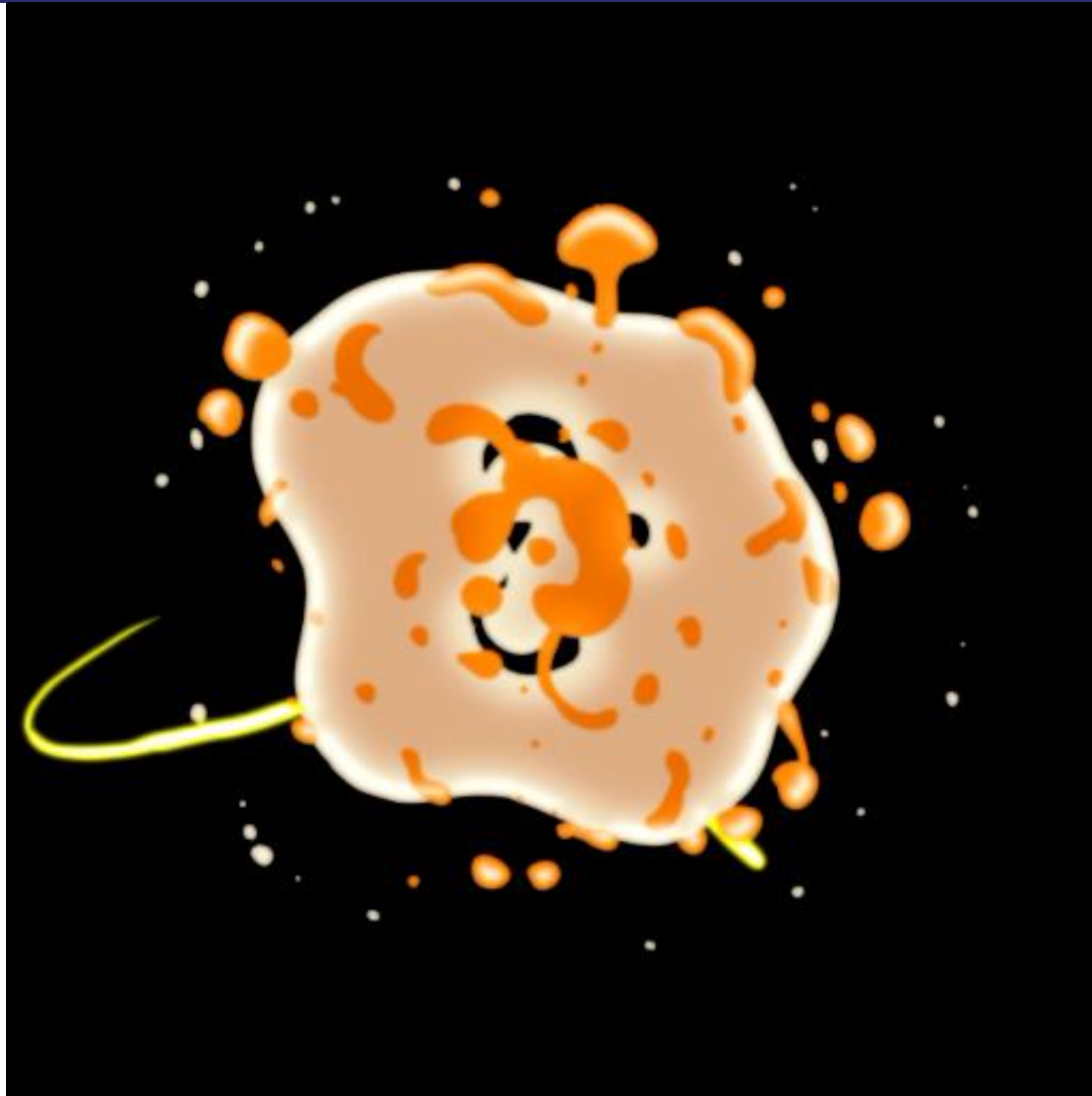
## PERSONALIZING CHARACTER FX





# IMPLEMENTING STYLE & CHARACTER

## PERSONALIZING CHARACTER FX



# 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?

