

FPT University
Capstone Project

ART OF
JAM

A short 2D animation by
Quang Tung Nguyen & Minh Quan Tran

Instructed by
M.D Ngoc Tuan Nguyen

Introduction

The following work shows the process from start to finish of creating the full animation for our short film: "JAM".

This 2D Animation works is created entirely by Quang Tung & Minh Quan during four months of the last semester.

This work is the achievement of the process of learning, experience during the study time at university and the support and guidance of an instructor - M.D Ngoc Tuan Nguyen.

CONTENTS

I. Pre-production

- A. Concept idea
- B. Design
- C. Storyboard
- D. Animatic

II. Production

- A. Animation
- B. Coloring

III. Post-production

- A. Background music
& Sound effects
- B. Export/Rendering
- C. Editing

I. PRE-PRODUCTION

- A. Concept idea
- B. Design
- C. Storyboard
- D. Animatic



● PRE-PRODUCTION

PRODUCTION

POST-PRODUCTION

Introduction

Title	Length	Genre	Property
JAM (Eng.) ĐỀ NÉN (Viet.)	6:20	Drama Comedy	Resolution: UHD Frame by frame

Title explanation

Jam doesn't only stand for "traffic jam", but also represents a character who is "jammed" in negativity and depression, causing errors to the whole mechanism.

Programs used



Miro



Pinterest



Storyboarder



Photoshop



Illustrator



After Effect



FreeMusicArchive



freesound



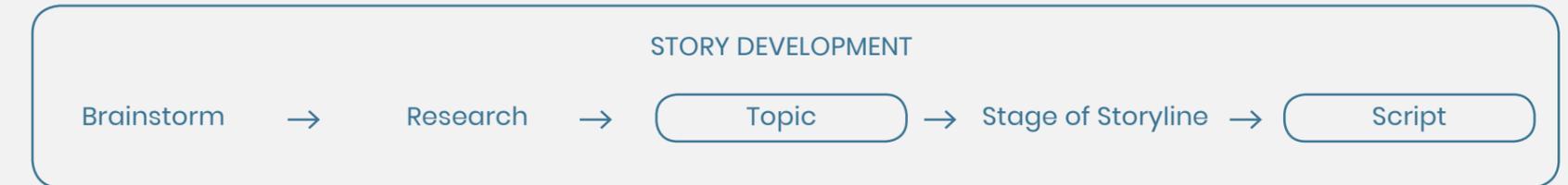
Media Encoder



Premiere Pro

IA. Concept Idea

This has been our workflow since we set our minds on the concept idea. In our first steps, together we carried out research and brainstormed everything we'd had in mind, hence classified them into topics. Then, the unsuitable topics were eliminated.



Brainstorm



miro.com



● PRE-PRODUCTION

PRODUCTION

POST-PRODUCTION

IA. Concept Idea

Nevertheless, we got stuck with unrealistic and illusional ideas because this was our first attempt at animation short film. After a while, we spent time on researching and figuring out how to deal with storytelling and we finally found out our problems.

"Write what you know."

"Go ahead write about monsters, and explosions and car chases, but put something into it that talks about your own life, how you feel."

Pete Docter – Director of Pixar films: Inside out, Up, Monster Inc.

Take on his wise words of storytelling, we restart by a new way of approaching: this time we pay attention to small things and we think of every simple thing around and about us.

Topic

Family
Impatience

Ideas

Our ideas đơn giản đến từ chính cảm giác và trải nghiệm khi lưu thông trên đường, khi phải dừng đèn đỏ, phải đi nhanh để kịp đèn Xanh,...

Và chúng tôi nhận ra chung tôi có chung 1 vấn đề là về our impatient, sống trong 1 xã hội gấp gáp, chúng tôi dễ dàng mất kiên nhẫn với những thứ nhỏ bé trong cuộc sống, nhất là khi tôi nổi nóng với 2 đứa em nhỏ của mình.



dantri.com



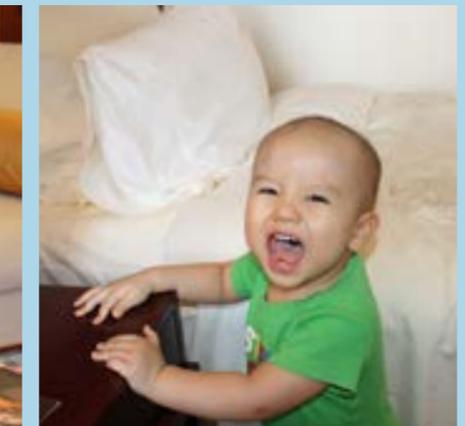
pexels.com



9gag.com

Ideas Recap

Brothers Conflict
Traffic lights
Impatient
Understanding



Hình ảnh của tôi và 2 đứa em, who always pissed me off.



● PRE-PRODUCTION

PRODUCTION

POST-PRODUCTION

Story structure

1/ Once upon a time...

2/ Everyday...

3/ Until one day...

4/ Because of that...

5/ Because of that...

6/ Until finally...

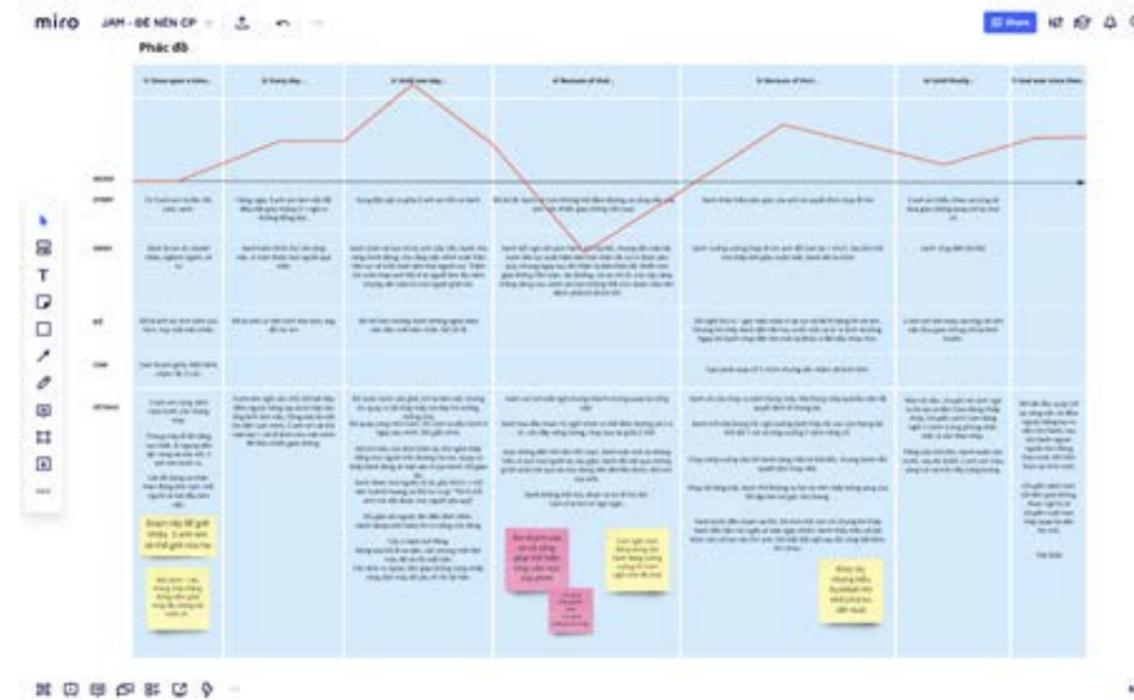
7/ And ever since then...

Source: Pixar storytelling rules

IA. Concept Idea

Stage of Storyline

We use Story structure và Stage of Storyline in order to easily co-writing and fixing the script.



Stage of Storyline Diagram - miro.com

Message

“Everyone has to struggle with their own problems, be thoughtful and try to understand each other so life could be a better place.”

Script

Once upon a time, there are 3 brothers Red, Yellow, Green.

Everyday, they work together to light up the traffic lights in a nearby intersection.

Until one day, Red keeps on nagging Green on his lack of seriousness at work. However, this act is counterproductive and made Green more rebellious. Therefore, Green tries to take Red's position, literally.

Because of that, Red becomes furious and leaves his job. Green is still very joyful since he gets more chance to show himself, which allows vehicles to move around more.

Because of that, there is a tremendous traffic jam at the intersection. Due to this matter, Green finally acknowledges his brother's difficulties and how bad he's hurt Red.

Because of that, Green is determined to go and search for Red. On his way, Green must face the ordeals and falls right into Red.

Because of that, Red understands Green's deeds and forgives him for his mistakes.

Until finally, two brothers reconcile and reunite with Yellow. And ever since then, all three brothers work together harmoniously.



● PRE-PRODUCTION

PRODUCTION

POST-PRODUCTION

IB. Design

After coming up with the concept idea, we have tried to find ways to visualize that idea, in order that it can deliver our message in the most fulfilling, complete and humorous.

→ Concept art

Research
Attributes

→ Character design

Main Characters
Side Characters

→ Background design

Exterior Design
Interior Design
Items Design



Alike.

3D Animated Short Film - 2015 - Spain
Directed by Daniel Martínez Lara and Rafa Cano Méndez.

In 2016, Alike received the Goya Award for best animated short film. The animated short is a story of the relationship of a father and his son who live in a society "where order and work ethic literally choke the colour and creativity out of its inhabitants"

Inspirations

Both of us are fans of this comedy genre with infused message.

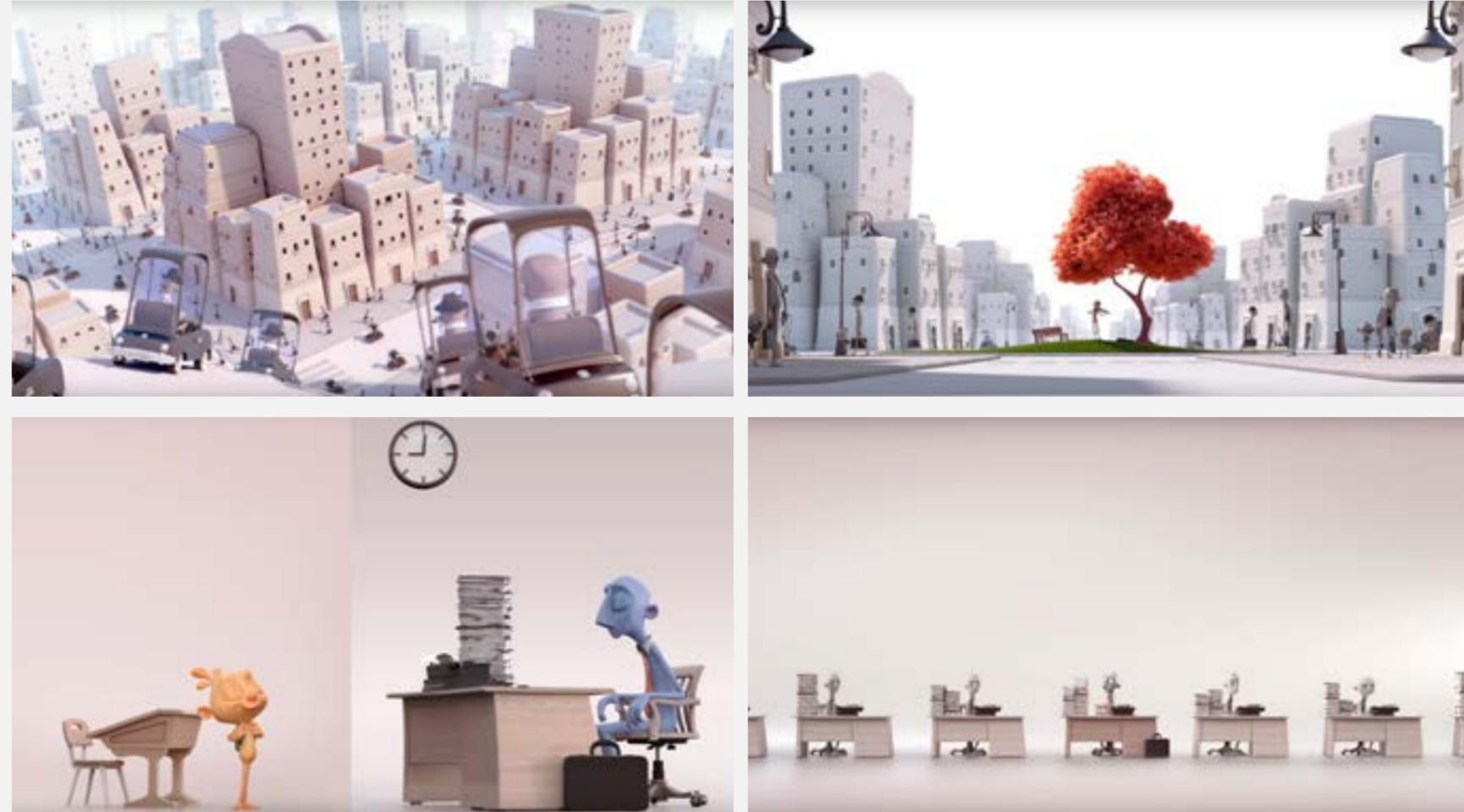


The amazing world of Gumball.

Animated TV series - 2011 - United States
Created by Ben Bocquelet, 2015.

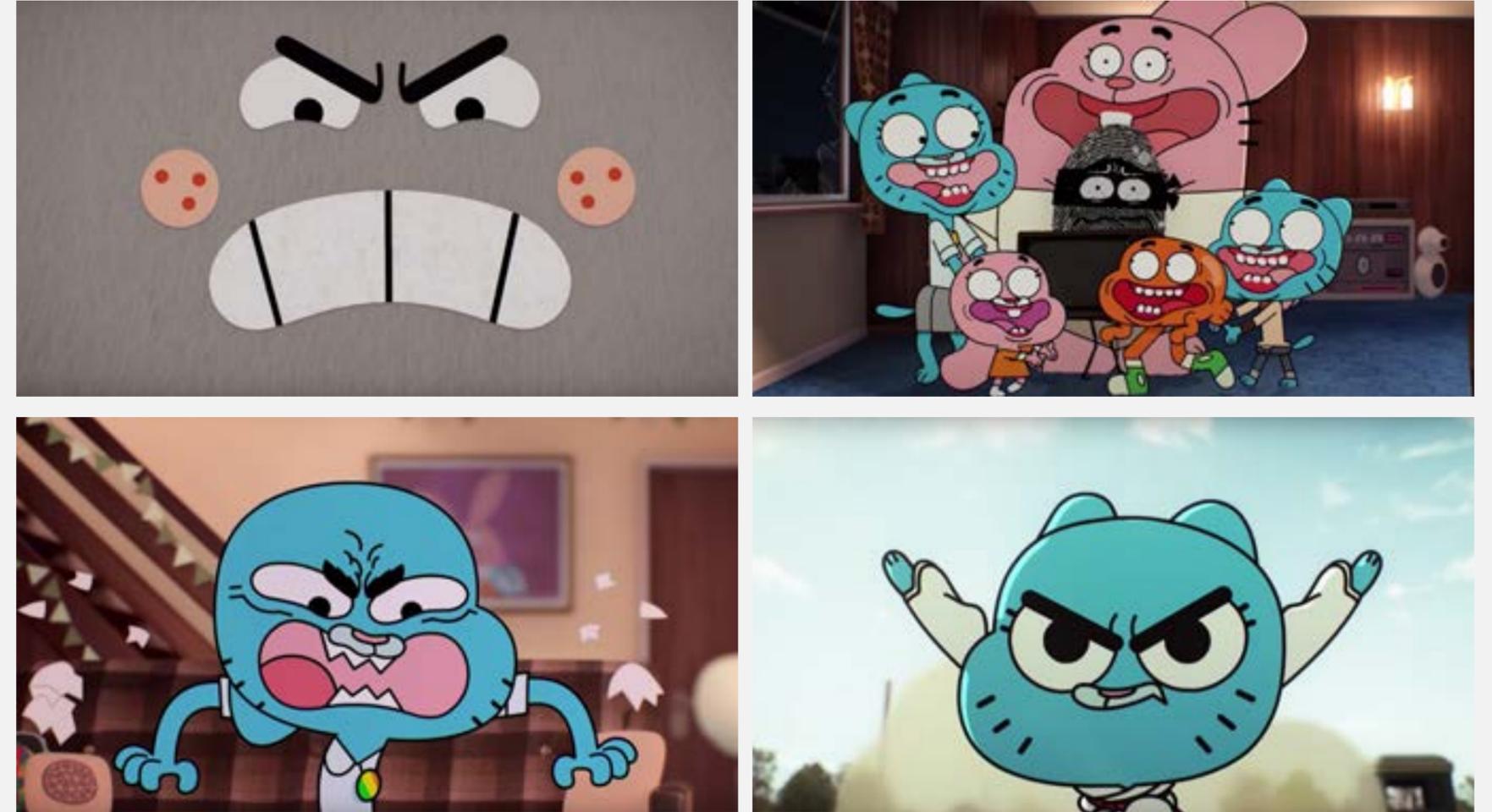
Bocquelet based several of the series' characters on rejected characters from his previous commercial work and making its premise a mixture of "family shows and school shows", which Cartoon Network was heavily interested in.

Inspirations of Art Concept and Design



In terms of art concept and design, we head to "Alike" direction, since it has a very simple yet effective expression.

Inspirations of Expression and Action



One of our main inspirations is the TV series "The Amazing World of Gumball".



● PRE-PRODUCTION

PRODUCTION

POST-PRODUCTION

IB. Design

Research

Before coming up with the film's art concept, we had to carry out a lot of researches in order to determine the film's design decision.



Research

Together we looked for references and categorized them into different boards to make it easier for keeping track. Pinterest.com was used for a lot of times here.

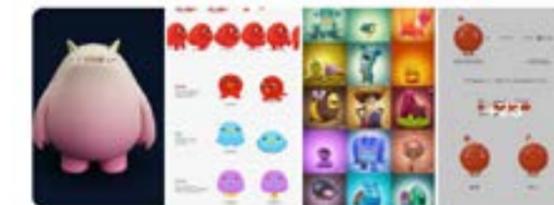
Logo



Concept Art references



Character references



Side character references



Background references



Source: [pinterest.com](https://www.pinterest.com)



PRE-PRODUCTION

PRODUCTION

POST-PRODUCTION

IB. Design

Moodboard

We collected bunches of inspirations from online sources as well as daily life, such as our field trips. Then, we have them printed out, classified and stuck onto the board within similar "mood" and similar "feeling". Gradually, we shared the same visualization for the animation and could begin sketching the demos.



Concept Art

Cartoonist/ Simple/Bold



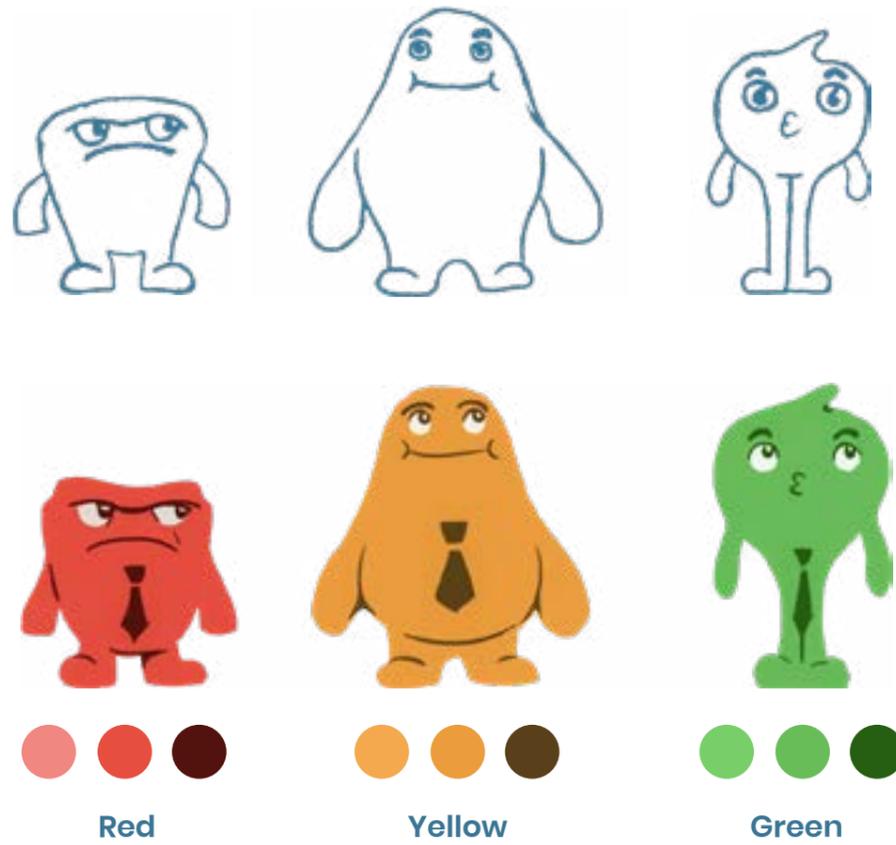


● PRE-PRODUCTION

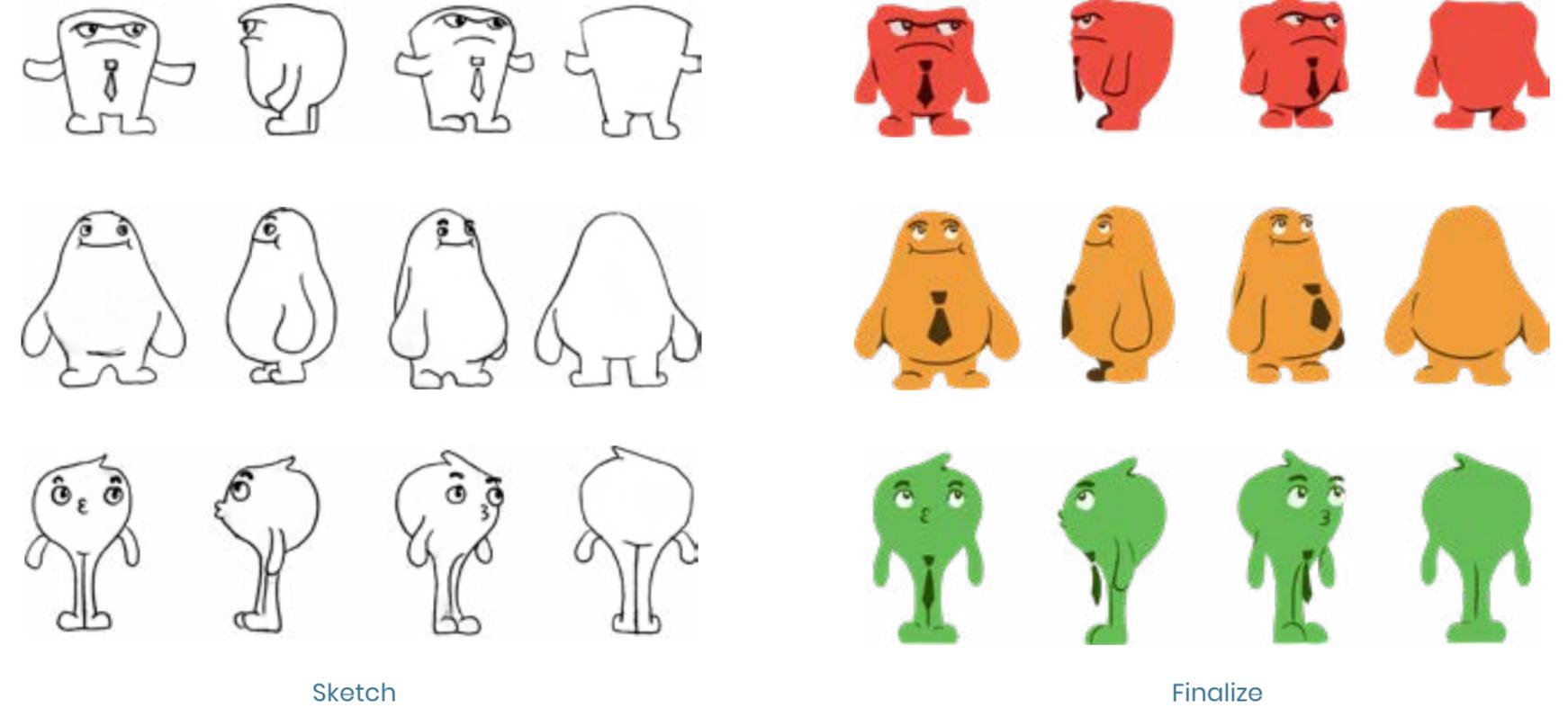
PRODUCTION

POST-PRODUCTION

Main Characters Design

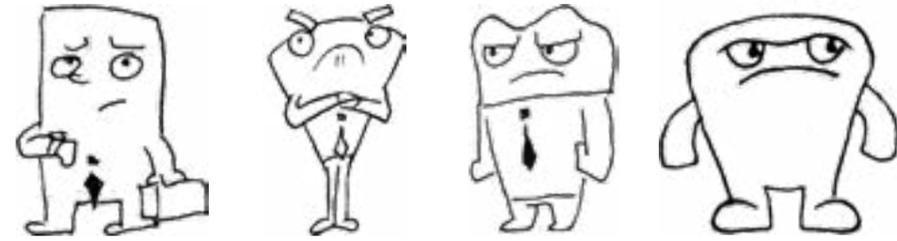


Main Character's rotation poses





References



Sketches



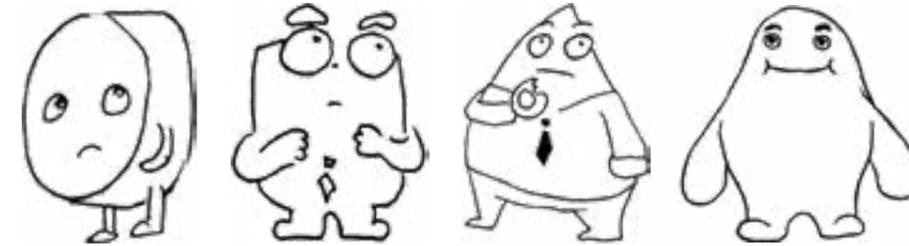
RED

The first brother, who is grumpy, timid, reserved and short-tempered.

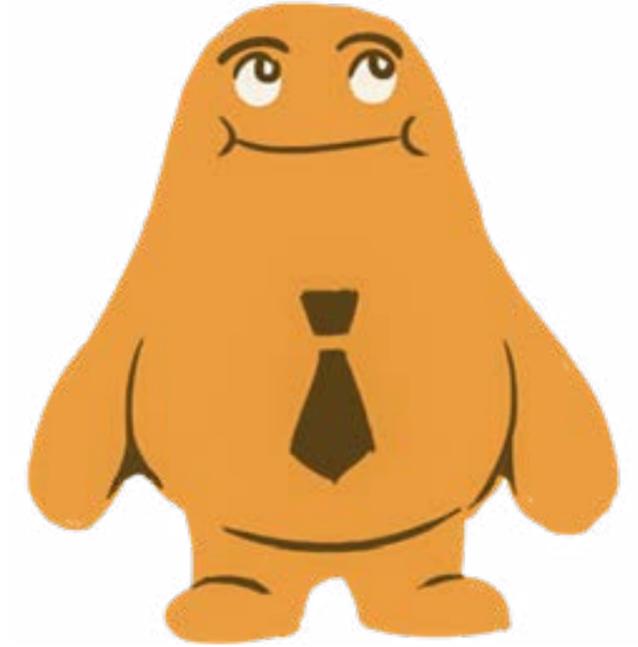
Main Characters Design



References



Sketches



YELLOW

The middle-brother, who is kind and slow on the uptake.

Main Characters Design



References



Sketches



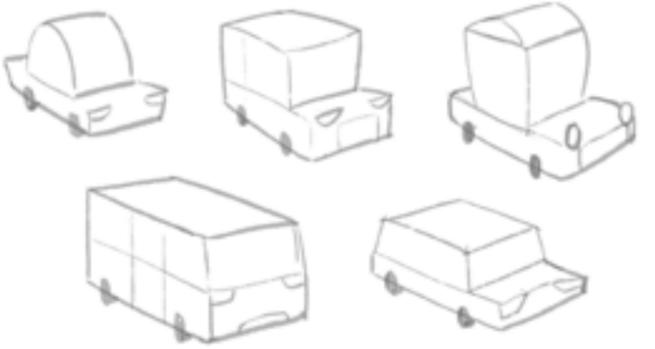
GREEN

The youngest one, a dynamic, mischevious, reckless and indiscreet person.

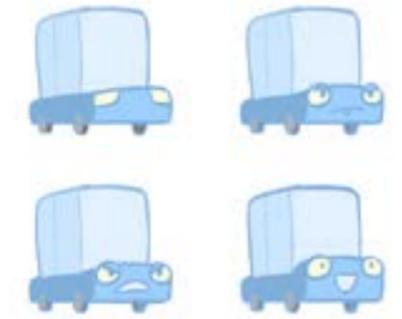
Main Characters Design



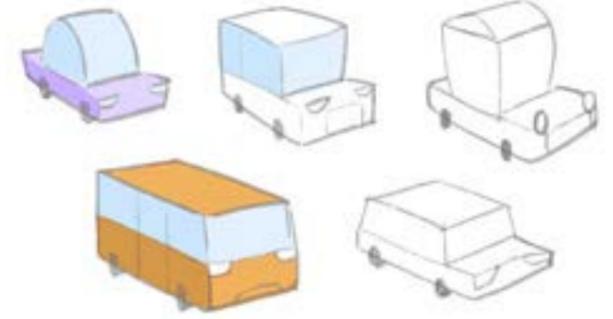
Early Sketch



Sketch



Emotions



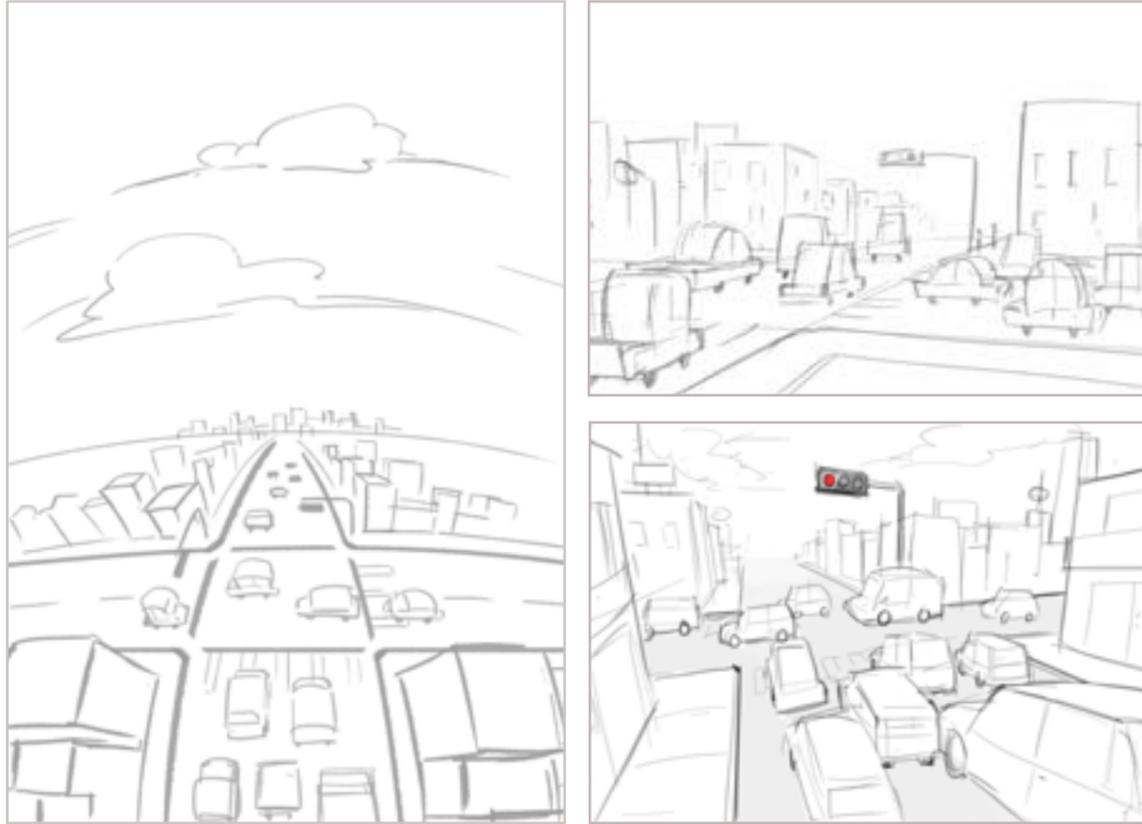
Final

Side Character's Design

IB. Design

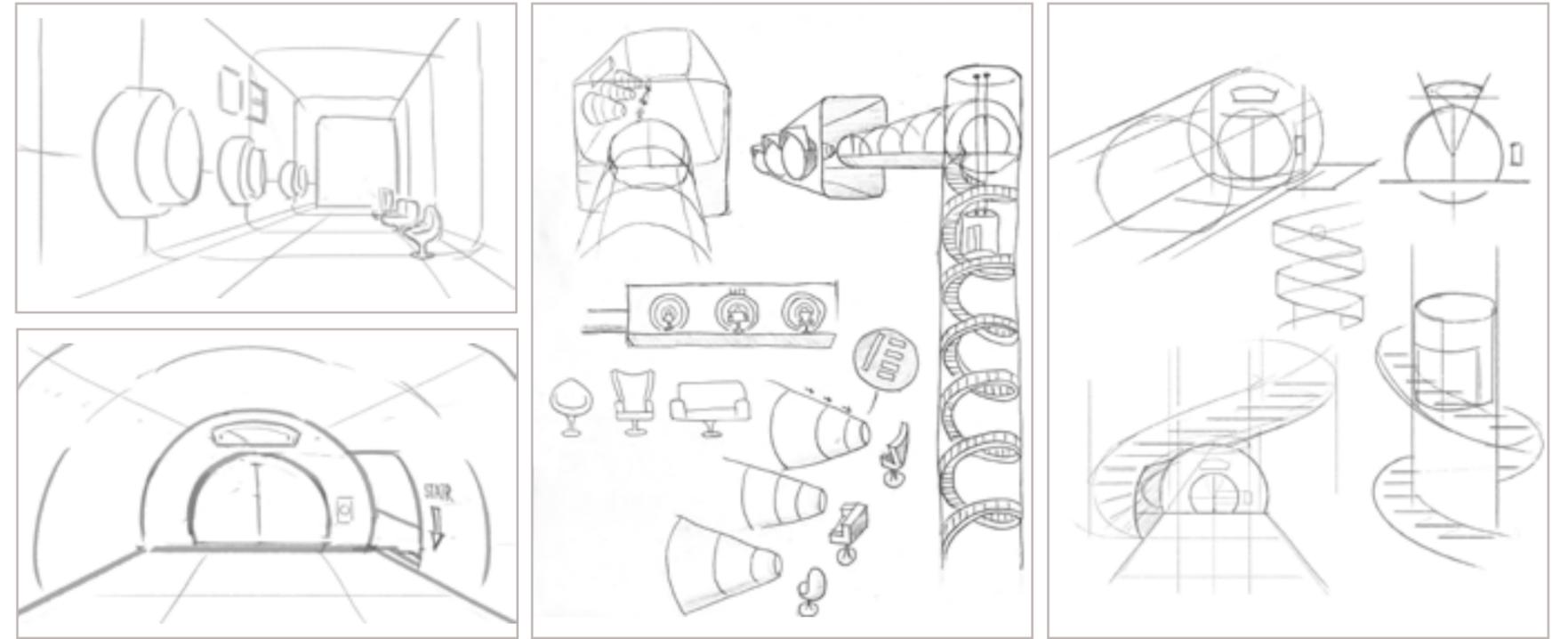
Background

After having Concept Art, we then build the world our characters live in, where the story begin. This should start with early sketches of the environments,



Background

“Traffic Light Building” structure, where 3 brothers work and the story begin.

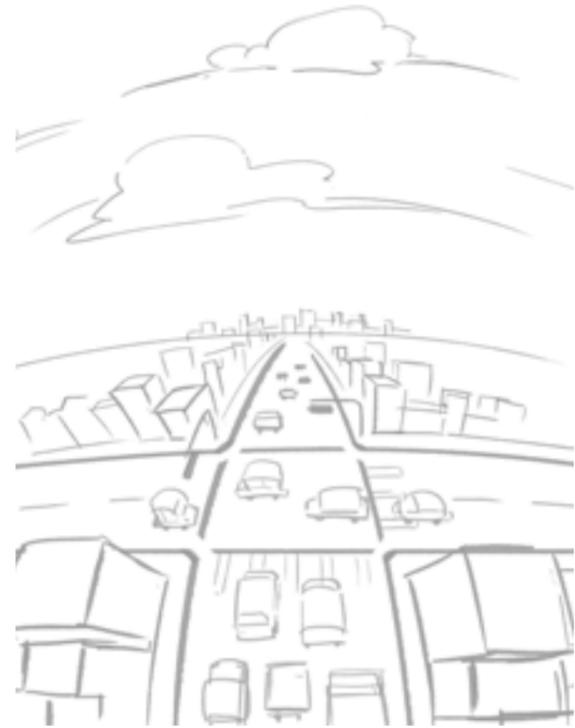




● PRE-PRODUCTION

PRODUCTION

POST-PRODUCTION



Early sketch



Line

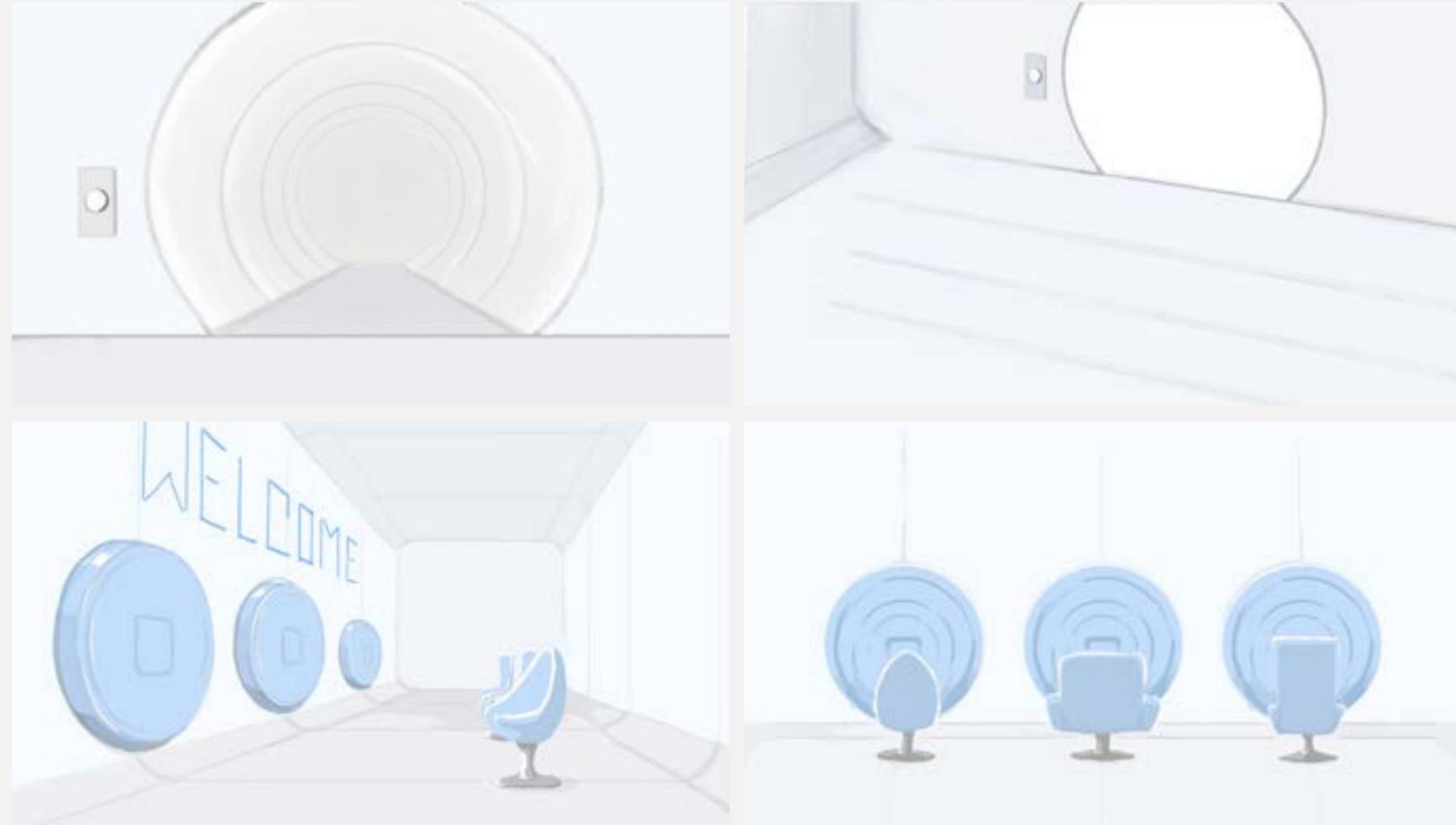


Finalize

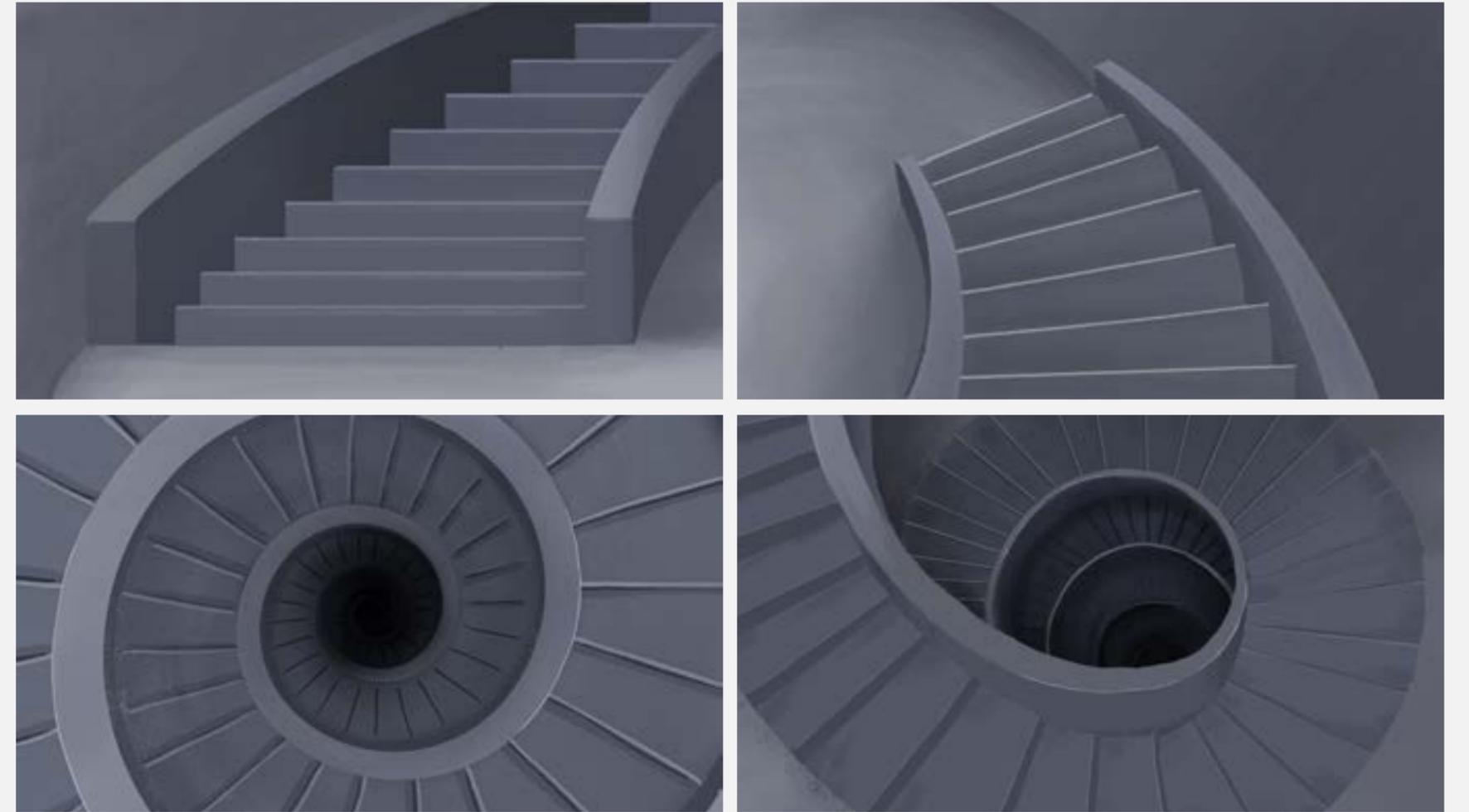
Background Design/Exterior



Background Design/Exterior



Background Design/Interior/Working Room



Background Design/Interior



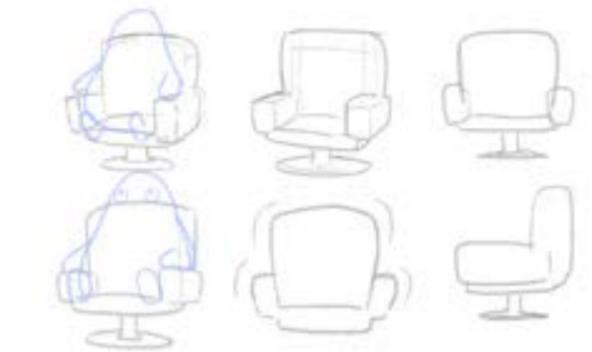
● PRE-PRODUCTION

PRODUCTION

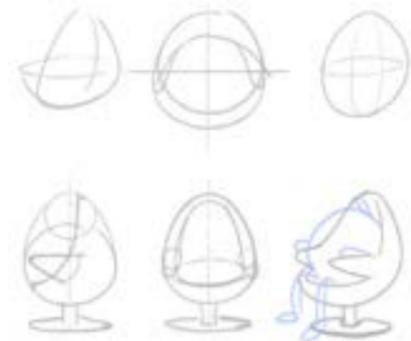
POST-PRODUCTION



Red is the first brother: timid, aggressive and distant so his chair has a tendency to be closed, curvy and solemn.



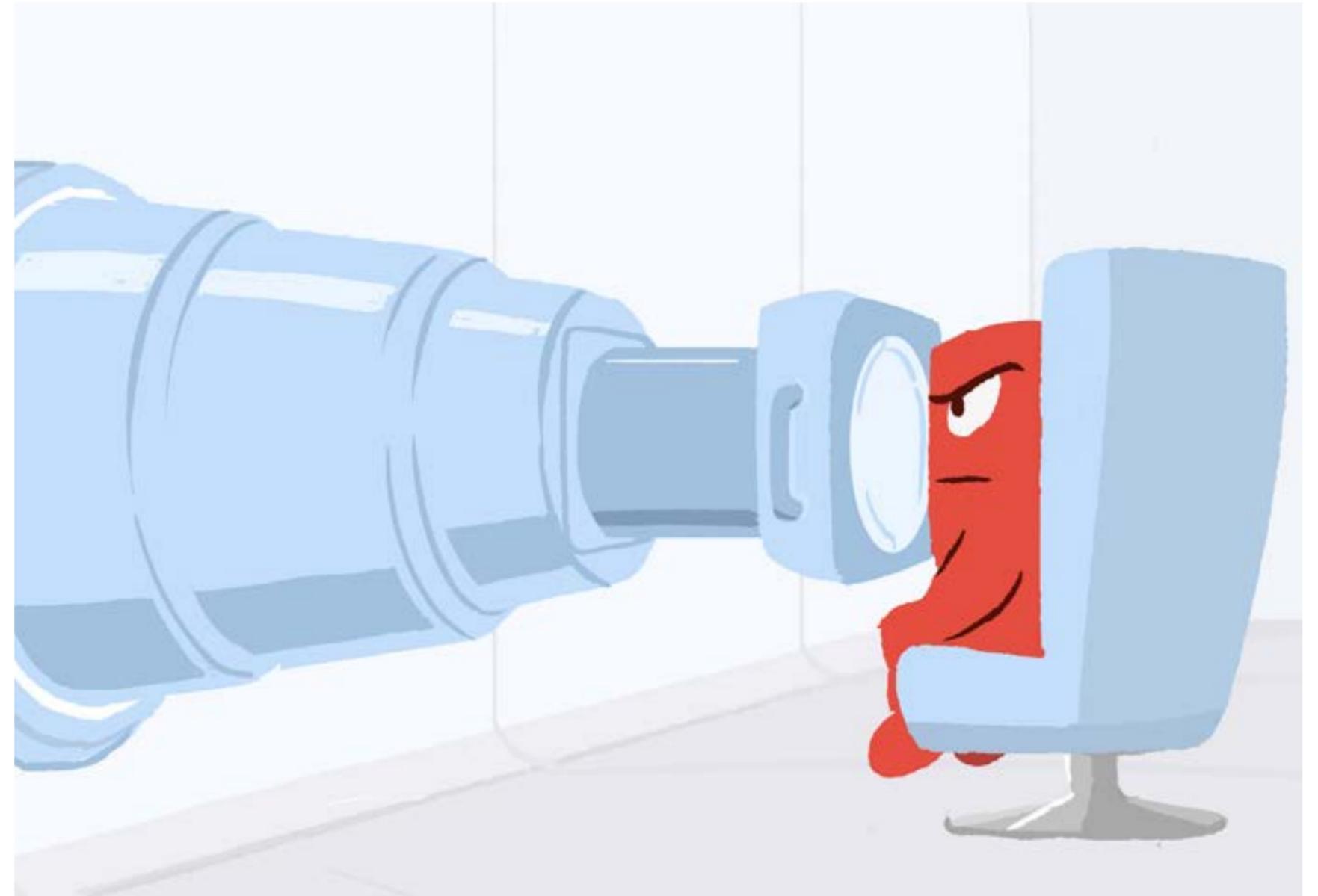
Orange is the middle brother: kind-hearted, slow on the uptake yet very loving so his chair has a tendency to be dull, stable and opened.



Green is the youngest brother: flexible, dynamic and childish so his chair has a tendency to be comfortable and customized.

Items Design

The chair of each character should show their own characteristic and personality.





● PRE-PRODUCTION

PRODUCTION

POST-PRODUCTION

IC. Storyboard

Within all the materials needed, now it's time for us to tell our story on board.



Storyboard Sketch on papers

250 frames on paper
with bunch of squished paper ball

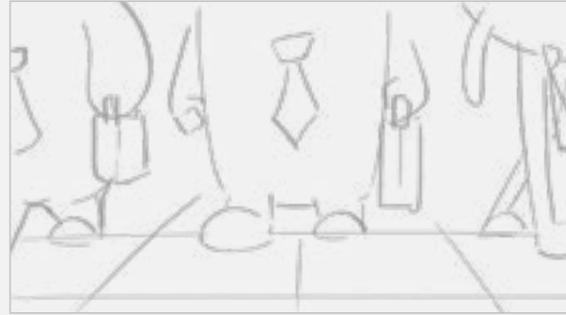
	B	C	D	E	F	G	H	I	J	K
1	Cảnh	Phần đoạn	Đoạn nhỏ	Cảnh		Phần cảnh	Động tác máy	Transition	Sound effect	Âm thanh nền
2	1	I. Mở đầu	A. Trên con đường đi làm / Giới thiệu 3 anh em ngày bé	Toàn		Trên nền trời hiện lên title phim, lúc này vừa hồng sáng. Camera đi xuống, hiện ra thành phố, ở giữa là ngã tư. Tiếng chim chóc chiu chít. Mọi cô thua thớt xe cộ trên đường. Bình minh lên, ánh sáng bắt đầu toả ra rộng hơn	Tilt -> Fix			
3				Trung - lấy chân nhân vật		Bước chân của 3 anh em đi thẳng về phía camera.	Dolly back		tiếng bước chân	tiếng đường phố
4	2			Trung	need clean up	[Khung ảnh] Đồ ngày bé, đồ chơi đồ chơi	Fix			
5	3			Trung - lấy chân nhân vật		Nhìn ngang bước chân của 3 anh em	Truck - phải sang trái theo hướng đi		tiếng bước chân	
6	4									
183	180			cận mặt Xanh qua vai Đỏ		Xanh khóc mếu máo	Fix			Tiếng khóc của Xanh
184	181			cận		"TING" đồng hồ thang máy chỉ số 0 của mở ra, Xanh và Đỏ vội buông nhau, trong thang máy có bóng Cam	Fix			
185	182			toàn		Cam ôm nệm mắt mếu	Fix			
186	183			cận		Cam vồng tay qua Đỏ và Xanh, Xanh và Đỏ mặt bất ngờ	Fix	pan từ dưới lên theo mặt của 3 anh em		
187	184			trung - góc chính diện 3 anh em		Cam ôm bóng 2 anh em lên, nhắm mắt lại cười. Xanh cười toe toét. Đỏ hơi bất ngờ rồi cũng cười	Fix			
188	185			trung - góc chính diện 3 anh em		Cam ống bóng 2 anh em. Chân Xanh cong lên,	Fix			màn đen đóng lại từ 2 bên
189	186			toàn - góc chính diện		2s màn đen	Fix			
190	187					"TING" của mở. Đỏ đứng giữa chỉnh lại cà vạt cười. Xanh đang co giãn tay. Cam đứng yên	Fix			
191	188			trung - góc chính diện 3 anh em		3 anh em bước ra khỏi thang máy vui vẻ	Fix			chớp của flash máy ảnh, frame thành ảnh.
192	189			toàn - góc chính diện						
193						THE END.				

Scene Checklist

The animation takes us 189 scenes.
Having a checklist like this help us a lot on controlling length of each part, the details of each scene, transitions from scene to scene, which sound effect/background music should be used. Everything should be noted and we can response each other clearly.

I. OPENING SCENES

A. On the way to work

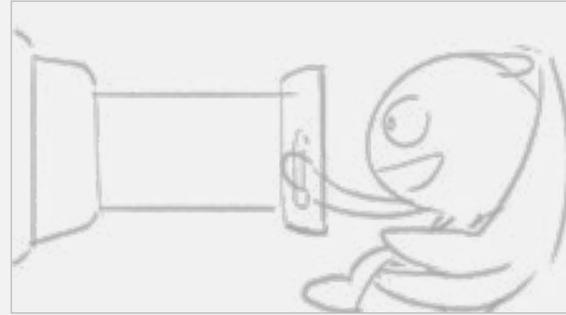


Scene 02

Shot size: Medium
Transition: Dolly back
Script: 3 brothers are walking to work

II. JOB INTRODUCTION

B. Green in action

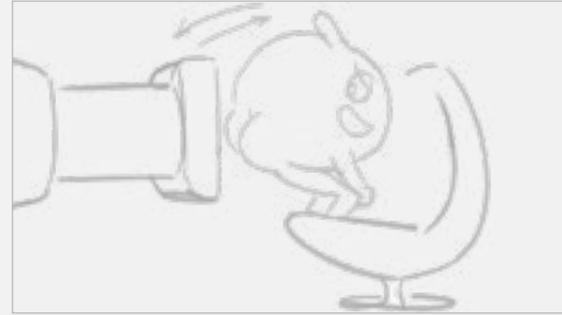


Scene 53

Shot size: Medium
Transition: Zoom in
Script: Green is ready for his turn of lighting.

III. RED'S ANGERS

B. Second anger



Scene 81

Shot size: Medium
Transition: Pan left to right
Script: Green is messing up green light with his butt.

IV. AFTER RED LEFT

A. Green's dominance



Scene 127

Shot size: Long
Transition: Fix
Script: Green is lighting both redlight and green light.

V. REUNITE

A. A tough adventure



Scene 141

Shot size: Close-up
Transition: Dolly back
Script: Green is focus on running through the hall to look for Red.

V. REUNITE

B. Brothers meet up



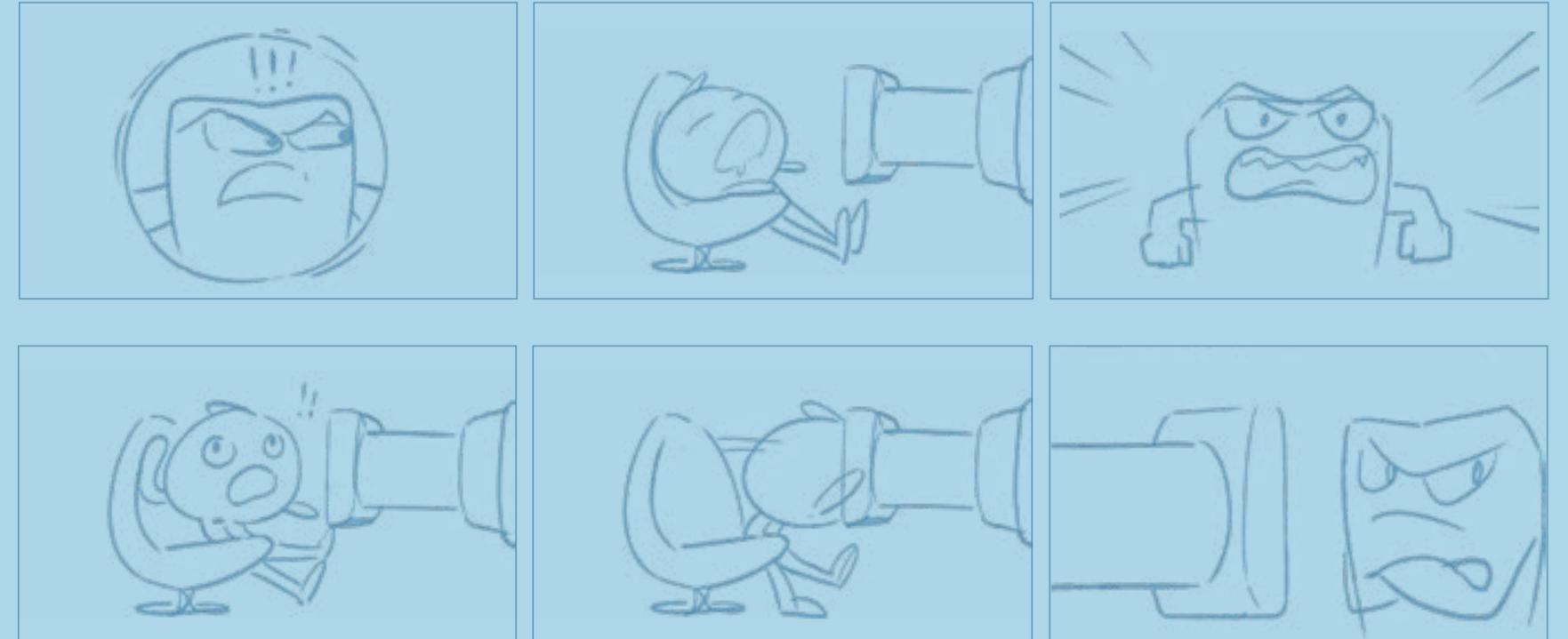
Scene 81

Shot size: Medium to Long
Transition: Zoom out
Script: Yellow hug both of his brother up high and all of them smile.

Examples of frames in Storyboard

I.D. Animatic

At this step we draw more of storyboard in order to visualize the actions in frame and to do the timing of the film



Jam

II. PRODUCTION

- A. Rough Animation
- B. Animation
- C. Coloring

2019



PRE-PRODUCTION

● PRODUCTION

POST-PRODUCTION

IIA. Rough Animation

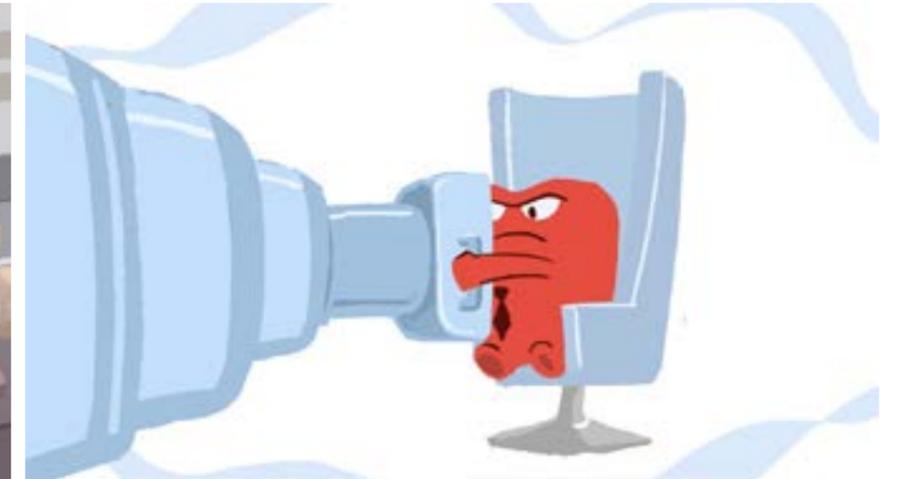
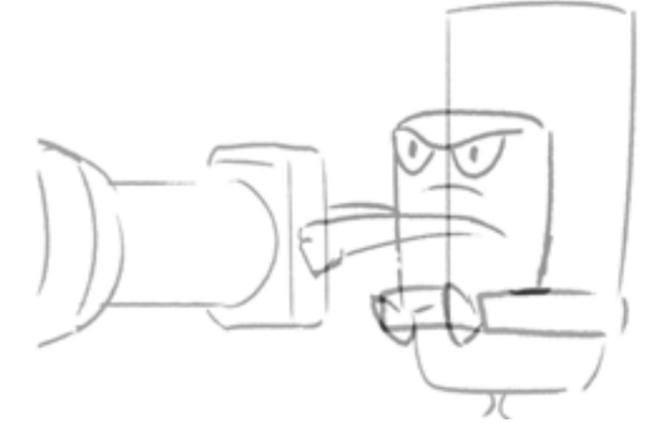
We were deeply inspired by the exaggeration of actions in “The amazing world of Gumball”. The character design in JAM was a tough challenge for us when converting its movements to unreal anatomies. Therefore, we must cover the movements of characters to create a base. Then, the exaggeration wouldn't be too biased.

IIB. Animation

After having finished the rough animation with our wanted motions, we began our cleaning up process, including refining the drawing lines.

IIC. Coloring

With clean line art, we start working on coloring. We have ourselves a color palette of every thing environments and background in the movie.

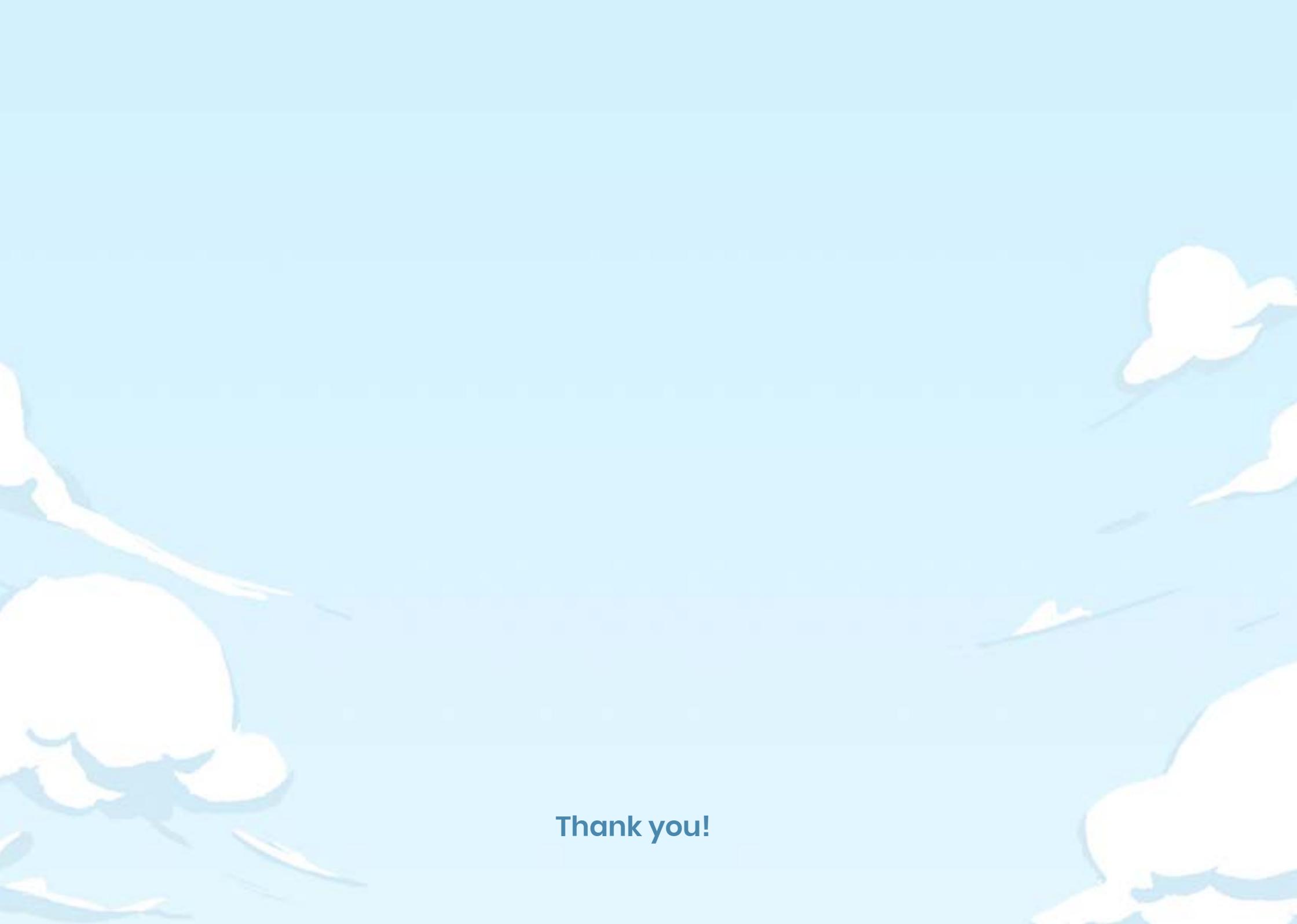


Rough Animation → Animation/Coloring



Some shots in the film

Some shots in the film

The image features a light blue background with a horizontal gradient bar across the middle. Stylized white clouds are scattered around the edges. The text "Thank you!" is centered at the bottom.

Thank you!