Hey, guys!

It's a new experimental format where I want to analyze animation and show what useful tips you can integrate into your workflow. I created this text as a script for the video that I promised you in the summer (veeeeery slow content creator, I know😅), but recently I thought that it's possible to share with you this doc as an article. Why not?

So we will talk about this short animation.
https://www.instagram.com/p/CdWPcKMPFl9/?utm_source=ig_web_button_share_sheet

Btw you can follow this studio, personally, I found a lot of inspiration in their blog and already created a tutorial about mouth rig based on their video. https://youtu.be/2NxisQ548-c

Probably you already noticed that the animation looks so smooth and it is fantastic.
I would select several factors why it looks amazing:
- Timing and spacing
- Principles of animations
- Very natural secondary actions
- Beautiful design

Let's talk about each of them one by one.

1. Timing and spacing

It's base and without good skills in this field, animation won't look convincing.
A couple of words about the difference between these two definitions. Timing is the space between keyframes. In other words, it's how much time you give for this or that action. You work with timing when you work with block poses and see how they look on the timeline and when they should be changed. Spacing is about HOW you set transition between 2 keyframes: where you have acceleration or deceleration, it's about interpolation of the keyframes that you change in graph editor using curves.

Let's come back to the video. What do we have? Well, here are pretty simple main poses: we see the character from side, then she rotates to the camera.
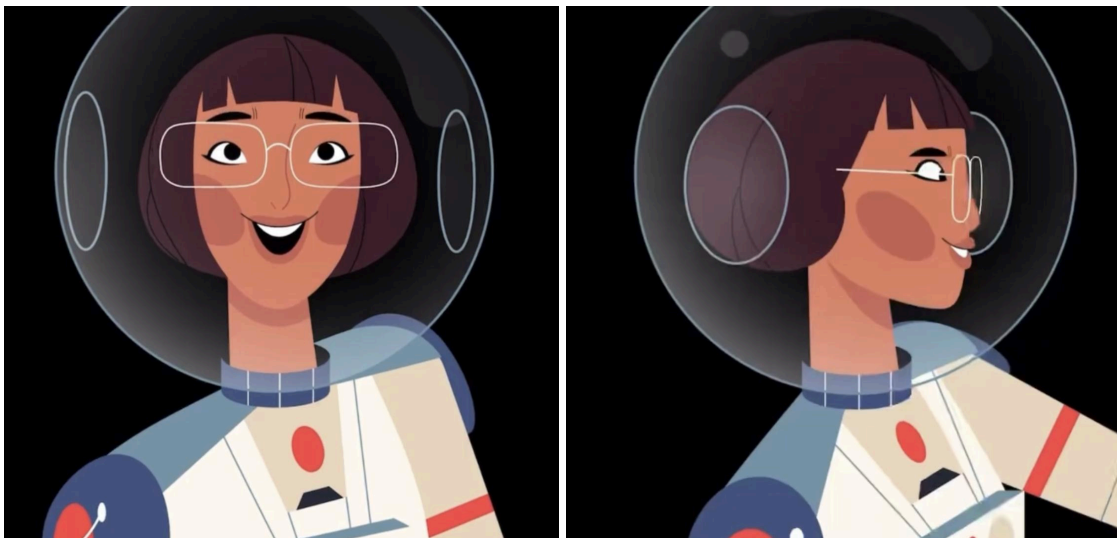
But without realistic timing even for these 2 poses animation won't work. Just imagine if the character rotates in 10 sec. It doesn't look realistic for sure. That's why we have less than a sec for the main action - rotation. When I checked student's homeworks I always talked about it, because it's very common mistake in animation - making action too fast or too slow. Obviously, a ball can't fall on the ground for 5 seconds. It's too slow. And at the same time, this action shouldn't take a couple of frames. You can say that it depends on the story and animation style - sure, but I show these examples because right now we talk about more realistic style✨ How you got what I mean😋

And of course, if the animator has only these 2 poses for the character we probably won't discuss this video because it's quite boring.

And here we should talk about
2. **Principles of animation**

I am pretty sure that you heard about them and even use them in your projects. But just in case I show you the full list so you can take a look and refresh them in your memory:
● Squash and stretch
● Anticipation
● Staging
● Straight-ahead action and pose-to-pose
● Follow-through and overlapping action
● Slow in and slow out
● Arc
● Secondary action
● Timing
● Exaggeration
● Solid drawing
● Appeal

It doesn't mean that you and other animators should use all of them in one video, you can choose what matches your goal and helps you to tell a story. Let me show you what animator used in this animation

● **Squash and stretch** - very mild effect. You can see it on the head, eyes, hair
● **Anticipation** - before she smiles and opens her mouth

● **Staging** - exactly this animation looks like a tiny part of the big video so probably there is a background that gives us more context and concentrates our attention on the character even more
● **Follow through and overlapping action** - take a look at the hair animation. It doesn't freeze after head rotation. And also it reacts to the head rotation with a tiny delay.

- **Slow in and slow out** - veeeery smooth curves in graph editor
- **Arc** - head rotation is a good example

- **Secondary action** - we will talk about them a bit later
- **Solid drawing** - to animate this action you probably have to know how anatomy works, projections of the head, and body. It helps to create an illusion of volume even when you work just with flat shapes. More about this principle you can watch in my past video

https://youtu.be/QwCK-OP4Jds

- **Appeal** - design looks so friendly and sweet without any comments ☺

3. Very natural secondary actions

And as promised let's discuss secondary actions a bit more detail. I believe that exactly these tiny actions make the character looks very natural. But what are secondary actions?

"*Secondary actions are gestures that support the main action to add more dimension to character animation. They can give more personality and insight to what the character is doing or thinking*".

Here it is pupil's actions, hand animation and face animation. All these details concentrate our attention and help us to realize what's going on in the scene.

Pay attention that pupils animation starts before the main action of the head and body rotation. That's how it happens in real life when you notice something interesting and only after that react to it with your body. I use this trick very often in my scenes.
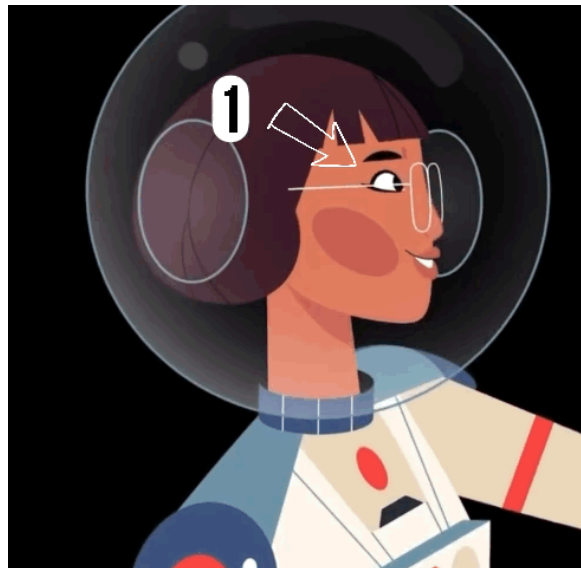
A hand goes down when the character rotates to the camera because the character doesn't concentrate on it anymore. So we shouldn't do it as well.

I really love how the animator worries about our attention and doesn't overdose us with many useless details.

As for face animation, you probably noticed that even eyebrows have anticipation before go up and mouth has a tiny squash effect before it opens.

So you can use this principle not only for big parts of the body such as hands, legs or head. But also for face details😎

And also I just can't ignore that here is a perfect mix of short quick actions (for face and head) and looong and smooth action (for the body). It could be a couple of keyframes but the body doesn't freeze in the main pose after rotation, meanwhile, the head and face have a lot of actions.
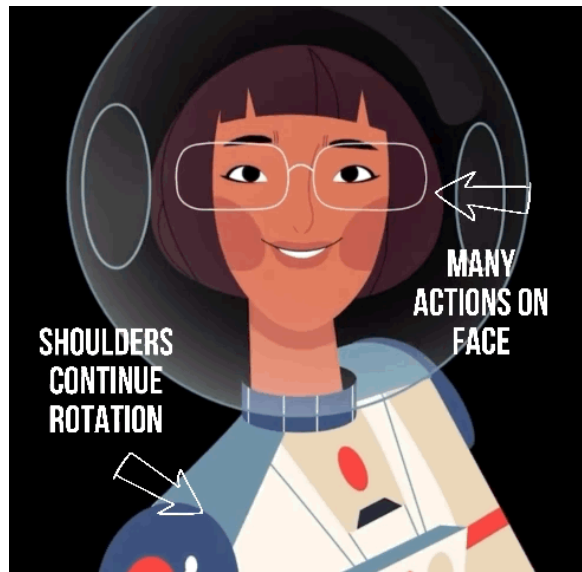
So that's all. I hope this article was useful and you got the dose of inspiration 💖

Let me know in the comments if you want more in this format.