Digital Learning Environment for Design - www.dsource.in

Design Course **Clay Animation Module - 3** Basic Animation by Prof. Phani Tetali and Swati Agarwal IDC, IIT Bombay

Source: https://www.dsource.in/course/clay-animationmodule-3

- 1. Introduction
- 2. Basic Set, Lighting and Color Script
- 3. Character Sculpting
- 4. Studying the Movement
- 5. Animating the Character
- 6. Processing the Image
- 7. Timing
- 8. Links
- 9. Video
- 10. Exercise
- 11. Design Tools
- 12. Contact Details



Digital Learning Environment for Design - www.dsource.in

Design Course Clay Animation Module - 3 Basic Animation

by Prof. Phani Tetali and Swati Agarwal IDC, IIT Bombay

Source: https://www.dsource.in/course/clay-animationmodule-3/introduction

1. Introduction

- 2. Basic Set, Lighting and Color Script
- 3. Character Sculpting
- 4. Studying the Movement
- 5. Animating the Character
- 6. Processing the Image
- 7. Timing
- 8. Links
- 9. Video
- 10. Exercise
- 11. Design Tools
- 12. Contact Details

Introduction

Animation is all about movement. Animators use the language of movement to communicate their thoughts and ideas.

An animator doesn't only breathe life into inanimate objects but they also create the illusion of the physical world on a miniature set.

When you animate a character from outside you have to deal with what's inside him as well. It's important to give your character a personality.

In this module we will cover the production and its processing part.



Digital Learning Environment for Design - www.dsource.in

Design Course Clay Animation Module - 3

Basic Animation by Prof. Phani Tetali and Swati Agarwal IDC, IIT Bombay

Source:

https://www.dsource.in/course/clay-animationmodule-3/basic-set-lighting-and-color-script

1. Introduction

- 2. Basic Set, Lighting and Color Script
- 3. Character Sculpting
- 4. Studying the Movement
- 5. Animating the Character
- 6. Processing the Image
- 7. Timing
- 8. Links
- 9. Video
- 10. Exercise
- 11. Design Tools
- 12. Contact Details

Basic Set, Lighting and Color Script

The look and feel of the film is decided beforehand, even prior to the storyboarding. The art director of the film determines the treatment and colors that will suit the film.

Basic Set:

The entire sequence was shot in a studio where a small set was created. The set was lit in a way that made it look so real, real enough to make you think you are in that part of the world.

Lighting:

A very dramatic lighting was created intentionally, so that the character and its actions can be seen in a silhouette form but, at the same time you see the finer details of the character.



Digital Learning Environment for Design - www.dsource.in

Design Course Clay Animation Module - 3 Basic Animation

by Prof. Phani Tetali and Swati Agarwal IDC, IIT Bombay

Source: https://www.dsource.in/course/clay-animationmodule-3/basic-set-lighting-and-color-script

1. Introduction

- 2. Basic Set, Lighting and Color Script
- 3. Character Sculpting
- 4. Studying the Movement
- 5. Animating the Character
- 6. Processing the Image
- 7. Timing
- 8. Links
- 9. Video
- 10. Exercise
- 11. Design Tools
- 12. Contact Details

These were the shots that were captured under basic lighting that was setup in the studio. But to impart the right mood and to enhance the advancing darkness, we need a color script.



Color Script:

Selecting colors that were closer to the murkier shades of green, screaming yellow's and deep reds, like a sap green, canary yellow and dark maroon were preferred; to recreate the abandoned terrains, soaked under the relentless sun, with leaves that were burnt red and fallen.

The results of the color scheme after preparing and executing it can be seen in the images below. You must be familiar with Tim Burton's movies following a similar color palette.



Digital Learning Environment for Design - www.dsource.in

Design Course **Clay Animation Module - 3** Basic Animation by Prof. Phani Tetali and Swati Agarwal IDC, IIT Bombay

Source: https://www.dsource.in/course/clay-animationmodule-3/basic-set-lighting-and-color-script

1. Introduction

- 2. Basic Set, Lighting and Color Script
- 3. Character Sculpting
- 4. Studying the Movement
- 5. Animating the Character
- 6. Processing the Image
- 7. Timing
- 8. Links
- 9. Video
- 10. Exercise
- 11. Design Tools
- 12. Contact Details





Digital Learning Environment for Design - www.dsource.in

Design Course Clay Animation Module - 3 Basic Animation

by Prof. Phani Tetali and Swati Agarwal IDC, IIT Bombay

Source: https://www.dsource.in/course/clay-animationmodule-3/character-sculpting

Introduction
Basic Set, Lighting and Color Script
Character Sculpting
Studying the Movement
Animating the Character
Processing the Image
Timing
Links
Video
Exercise
Design Tools
Contact Details

Character Sculpting

Costume:

The costume for Ninja has been designed using a black piece of cotton cloth. But while using the same, fabric needs to be handled carefully. Choose a material which is stable and slightly stiff. Light fabric has a tendency to move on its own.

Occasionally, the animators prefer to get their puppet's clothing sculpted from silicone or latex. However, fabricated costumes add richness; giving your puppet a sense of individuality.

Since it is stop motion you need to create every action, frame by frame. Even the movement of secondary actions should be in a flow.

For example Ninja's red belt, will have a wire attached to the cloth so that it can be animated accordingly.



Digital Learning Environment for Design - www.dsource.in

Design Course **Clay Animation Module - 3** Basic Animation by Prof. Phani Tetali and Swati Agarwal IDC, IIT Bombay

Source: https://www.dsource.in/course/clay-animationmodule-3/character-sculpting

Introduction
Basic Set, Lighting and Color Script
Character Sculpting

- 4. Studying the Movement
- 5. Animating the Character
- 6. Processing the Image
- 7. Timing
- 8. Links
- 9. Video
- 10. Exercise
- 11. Design Tools
- 12. Contact Details



Eyes:

The easiest way to make eyes is using white glass beads, using the hole as a pupil that can be manipulated with a toothpick.



Digital Learning Environment for Design - www.dsource.in

Design Course Clay Animation Module - 3 Basic Animation

by Prof. Phani Tetali and Swati Agarwal IDC, IIT Bombay

Source: https://www.dsource.in/course/clay-animationmodule-3/character-sculpting

1. Introduction

- 2. Basic Set, Lighting and Color Script
- 3. Character Sculpting
- 4. Studying the Movement
- 5. Animating the Character
- 6. Processing the Image
- 7. Timing
- 8. Links
- 9. Video
- 10. Exercise
- 11. Design Tools
- 12. Contact Details

Feet:

We used m-seal to make the shoes. There was a gap left in between on purpose so that we could pin the character to the ground while animating it.



And... Finally

Here comes the Warrior.



Digital Learning Environment for Design - www.dsource.in

Design Course **Clay Animation Module - 3** Basic Animation by Prof. Phani Tetali and Swati Agarwal IDC, IIT Bombay



Source: https://www.dsource.in/course/clay-animationmodule-3/character-sculpting

- 1. Introduction
- 2. Basic Set, Lighting and Color Script
- 3. Character Sculpting
- 4. Studying the Movement
- 5. Animating the Character
- 6. Processing the Image
- 7. Timing
- 8. Links
- 9. Video
- 10. Exercise
- 11. Design Tools
- 12. Contact Details

Digital Learning Environment for Design - www.dsource.in

Design Course Clay Animation Module - 3 Basic Animation

by Prof. Phani Tetali and Swati Agarwal IDC, IIT Bombay

Source: https://www.dsource.in/course/clay-animationmodule-3/studying-movement

1. Introduction

- 2. Basic Set, Lighting and Color Script
- 3. Character Sculpting
- 4. Studying the Movement
- 5. Animating the Character
- 6. Processing the Image
- 7. Timing
- 8. Links
- 9. Video
- 10. Exercise
- 11. Design Tools
- 12. Contact Details

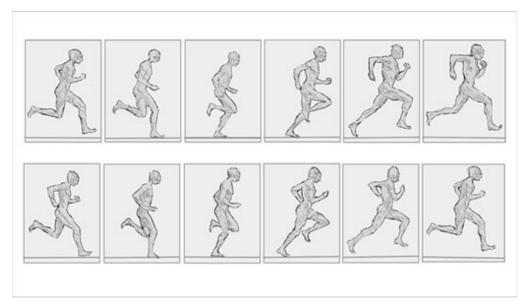
Studying the Movement

Before animating your character it's always better to study the real movement first. This does not mean that you need to copy the action frame by frame. Straight copying a real action can look strangely lifeless, as animation is an art, not just a skill. You need to add your own degree of caricature and stylization into your animation to make it look believable.

The animator is aiming something more than mere imitation. Your characters are actors and as an animator you need to know how to create a performance. Get into the character and act like it, feel the situation he is going through.

The best reference for a human movement is you, yourself.

- Where are you putting your weight?
- Which part of the body is being used?
- What muscles are being stretched?



Time yourself using a stopwatch to get a sense of how fast or slow your puppet should move.

Go and watch people involved in motion activities such as doing a ballet dance or playing football. Study their action, body gesture. Drawing them in your sketchbook will help in improving your observation skills.

Digital Learning Environment for Design - www.dsource.in

Design Course Clay Animation Module - 3 Basic Animation

by Prof. Phani Tetali and Swati Agarwal IDC, IIT Bombay

Source: https://www.dsource.in/course/clay-animationmodule-3/animating-character

1. Introduction

- 2. Basic Set, Lighting and Color Script
- 3. Character Sculpting
- 4. Studying the Movement
- 5. Animating the Character
- 6. Processing the Image
- 7. Timing
- 8. Links
- 9. Video
- 10. Exercise
- 11. Design Tools
- 12. Contact Details

Animating the Character

For a 2D animation you would probably plan every movement and divide it up into 'key' positions, and then plan all the in-between drawings. Clay animators don't work this way. Once you get started you need to go on until you are finished.



Walk or run cycle varies depending upon the mood of your character, the environment and the situation



Have you noticed while running there is a point when both your legs are in air; to animate such action we use a

Digital Learning Environment for Design - www.dsource.in

Design Course Clay Animation Module - 3 Basic Animation

by Prof. Phani Tetali and Swati Agarwal IDC, IIT Bombay

Source: https://www.dsource.in/course/clay-animationmodule-3/animating-character

Introduction
Basic Set, Lighting and Color Script

- 3. Character Sculpting
- 4. Studying the Movement
- 5. Animating the Character
- 6. Processing the Image
- 7. Timing
- 8. Links
- 9. Video
- 10. Exercise
- 11. Design Tools
- 12. Contact Details

stand to hold the character.

If you study walk cycles and run cycles thoroughly you will notice that movements originate from the centre of the body - the pelvis. The legs should be pulled forward from the hip area and adjust the head and shoulders accordingly, so as to balance the pose and distribute the weight equally.

Initially you may not feel confident enough for creating the movement; in this case you can always refer to movement from real life. But, from now on you can also be very observant of all the activities that are happening before you. If your friend suddenly falls down the staircase, memorize his actions and positions in your head, while you give him a hand to help him up.



Digital Learning Environment for Design - www.dsource.in

Design Course **Clay Animation Module - 3 Basic** Animation

by Prof. Phani Tetali and Swati Agarwal IDC, IIT Bombay

Source: https://www.dsource.in/course/clay-animationmodule-3/processing-image

1. Introduction

- 2. Basic Set, Lighting and Color Script
- 3. Character Sculpting
- 4. Studying the Movement
- 5. Animating the Character
- 6. Processing the Image
- 7. Timing
- 8. Links
- 9. Video
- 10. Exercise
- **11. Design Tools**
- 12. Contact Details

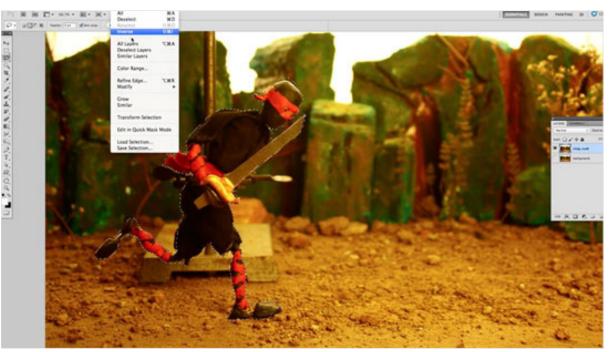
Processing the Image

Since the camera is not moving in this shot, before bringing your character on the set, capture one image of the background, where the entire scene is going to take place.



Select your image, make an inverse selection and delete.

「日本」「人人人人人人」



Digital Learning Environment for Design - www.dsource.in

Design Course Clay Animation Module - 3 Basic Animation

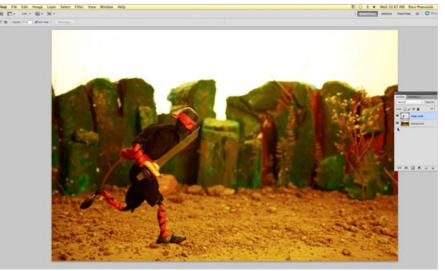
by Prof. Phani Tetali and Swati Agarwal IDC, IIT Bombay

Source: https://www.dsource.in/course/clay-animationmodule-3/processing-image

1. Introduction

- 2. Basic Set, Lighting and Color Script
- 3. Character Sculpting
- 4. Studying the Movement
- 5. Animating the Character
- 6. Processing the Image
- 7. Timing
- 8. Links
- 9. Video
- 10. Exercise
- 11. Design Tools
- 12. Contact Details

Another alternative option is, instead of erasing, create a layer mask. Using Layer Mask you can also bring back your deleted area anytime. It just hides the area and will not really delete it. This way you can also recall the shadows. Take a soft brush with the lower opacity and get the shadows.



So here are your final images:



Digital Learning Environment for Design - www.dsource.in

Design Course Clay Animation Module - 3

Basic Animation by Prof. Phani Tetali and Swati Agarwal IDC, IIT Bombay

Source: https://www.dsource.in/course/clay-animationmodule-3/timing

Introduction
Basic Set, Lighting and Color Script
Character Sculpting
Studying the Movement
Animating the Character
Processing the Image
Timing
Links
Video
Exercise

- 11. Design Tools
- 12. Contact Details

Timing

Correct timing can add meaning to every movement. A still puppet often conveys more character than a continuously moving one. Giving holds is necessary as it helps the audience to see and understand the action far more clearly.

For example, take this shot where Ninja gets up from the ground in extreme anger.



We did the timing using time remapping in after effects. It can be also done in other software's like monkey jam or adobe premiere.

Timing here is essential in illustrating the emotional state of the character. This animation sequence has already been timed while shooting but here some pauses were given, and we worked on speed variation so as to achieve the kind of emotion we want to have.

Digital Learning Environment for Design - www.dsource.in

Design Course Clay Animation Module - 3

Basic Animation by Prof. Phani Tetali and Swati Agarwal IDC, IIT Bombay

Source: https://www.dsource.in/course/clay-animationmodule-3/links

1. Introduction

- 2. Basic Set, Lighting and Color Script
- 3. Character Sculpting
- 4. Studying the Movement
- 5. Animating the Character
- 6. Processing the Image
- 7. Timing
- 8. Links
- 9. Video
- 10. Exercise
- 11. Design Tools
- 12. Contact Details

Links

My M. Des. final year claymation project at IDC: • http://vimeo.com/65547084

It's making

• http://www.behance.net/gallery/The-Recipe-of-Gajar-ka-Halwa/8558493

Coraline-doll hair: • https://www.youtube.com/watch?v=1y-UG-ZNTDM

Paranorman-production:

- https://www.youtube.com/watch?v=JJNK_VGOPss
- https://www.youtube.com/watch?v=cl3JZi_Vp4I

Making of Shawn the Sheep:

https://www.youtube.com/watch?v=NMEgleCAvNc

The Nightmare Before Christmas: character making:

https://www.youtube.com/watch?v=a5jcNw0TzOk

Frankenweenie:

https://www.youtube.com/watch?v=sxcikdUO0vc

Digital Learning Environment for Design - www.dsource.in

Design Course **Clay Animation Module - 3** Basic Animation by

Prof. Phani Tetali and Swati Agarwal IDC, IIT Bombay

Source: https://www.dsource.in/course/clay-animationmodule-3/video

Introduction
Basic Set, Lighting and Color Script
Character Sculpting
Studying the Movement
Animating the Character
Processing the Image
Timing
Links
Video
Exercise

- 11. Design Tools
- 12. Contact Details

Video



Clay Animation Module - 3

Digital Learning Environment for Design - www.dsource.in

Design Course Clay Animation Module - 3

Basic Animation by Prof. Phani Tetali and Swati Agarwal IDC, IIT Bombay

Source: https://www.dsource.in/course/clay-animationmodule-3/exercise

1. Introduction

- 2. Basic Set, Lighting and Color Script
- 3. Character Sculpting
- 4. Studying the Movement
- 5. Animating the Character
- 6. Processing the Image
- 7. Timing
- 8. Links
- 9. Video
- 10. Exercise
- 11. Design Tools
- 12. Contact Details

Exercise

In the last module Clay Animation Module - 2

You had to design 2 characters: • Barocca - a single eyed giant monster and

• Mondala - an atrocious cat. and build their armatures.

Here in this exercise for Clay Animation Module-3, you will have to:

- Sculpt your models using clay, fabric or any other material.
- Then act like Barocca, decide a walking style for him.
- Get into the character and walk like him.
- Film it or sketch it and then attempt to translate that walk into the puppet.
- Try to stylize the walk.
- Basically your walk should define the personality and express the mood.

Do the same with Mondola, although it would be a little difficult to act like a cat! • Make them walk across the screen.

Digital Learning Environment for Design - www.dsource.in

Design Course Clay Animation Module - 3

Basic Animation by Prof. Phani Tetali and Swati Agarwal IDC, IIT Bombay

Source: https://www.dsource.in/course/clay-animationmodule-3/design-tools

1. Introduction

- 2. Basic Set, Lighting and Color Script
- 3. Character Sculpting
- 4. Studying the Movement
- 5. Animating the Character
- 6. Processing the Image
- 7. Timing
- 8. Links
- 9. Video
- 10. Exercise
- 11. Design Tools
- 12. Contact Details

Design Tools

Animation Design:

Animation is a method of photographing successive drawings, models or even puppets to create an illusion of movement in a sequence. Animation Tool is developed by IDC, IIT Bombay. It is an interactive web space where students can learn about the basics of animation. There are four main types of animation that are commonly used: 2D Traditional Animation, 2D Computer Animation, Stop Motion Animation, and 3D Computer Animation. There's also something called Experimental animation, where you can mix different types of animation together. The Animation Tool teaches things like Straight Ahead, Pose to Pose, Stretch and Squash, and Slow in Slow out, which are all important for making animations look good.

For more information visit: https://dsource.in/tool/animation_tool/



Digital Learning Environment for Design - www.dsource.in

Design Course Clay Animation Module - 3 Basic Animation

by Prof. Phani Tetali and Swati Agarwal IDC, IIT Bombay

Source: https://www.dsource.in/course/clay-animationmodule-3/contact-details

1. Introduction

- 2. Basic Set, Lighting and Color Script
- 3. Character Sculpting
- 4. Studying the Movement
- 5. Animating the Character
- 6. Processing the Image
- 7. Timing
- 8. Links
- 9. Video
- 10. Exercise
- 11. Design Tools
- 12. Contact Details

Contact Details

This documentation was done by Swati Agarwal, IDC, IIT Bombay.

You can get in touch with her at swati.8833[at]gmail.com

You can write to the following address regarding suggestions and clarifications:

Helpdesk Details: Co-ordinator Project e-kalpa Industrial Design Centre IIT Bombay Powai Mumbai 400076 India

Phone: 091-22-2159 6805/ 091-22-2576 7802 Email: dsource.in[at]gmail.com