

summer training at JadooWorks

production processes in character animation



JadooWorks is a Bangalore based animation company. With a strength of about 150 people, the company does commercials for Indian television but the focus has been on production works for the US and French markets. The production unit has 2 studio divisions for 2-d and 3-d animations respectively. It also has a gaming unit.

During the period of training, the production processes in animation was studied. Hands on experience with some production techniques was attempted. Some of the training assignments developed by the company were attempted for better and quicker understanding of concepts.

project schedule

2D animation

week 1

sketching
study of character development
study of expressions through body and facial elements
simple key framing and in-betweens
scripting and story-boarding
scene building and animatics
key-framing of character
line-testing and corrections
background development

week 2

background development (computer)
line-testing and corrections
clean-up drawings
ink and paint of cleaned-up drawings
compositing

3D animation

week 3

basic modelling techniques
simple assignments to explore polygon and nurbs modelling
development of character, Chili in 3D
development of background for scene1

week 4

mapping and texturing
background enhancement using textures
study of animation of butterfly
rigging of the character(bones)
animation using keyframes
testing of animation
correction using graph editor
rendering

out of the box animation

Pre-Production

Idea and story conception
stylizing scheme of animation
character development
planning of execution
building of library
animatics

Production

animation
actual key-framing and in-betweens
line testing and corrections

Post-Production

compositing and editing
sound
special effects



Pre-Production

idea and story conception

In the beginning the story and flow of the story is discussed. The length of the animation is decided.

stylizing scheme of animation

The look or style of animation is decided. Various options are weighed and

script and sound

A script to direct the animation is written. The script is timed and subsequently sound recorded as per the script. This sound becomes the base on which the animations are made.

character development

The character is developed in parallel. The style of the character and the background in tune with the look is matched and corrected. Simple prototypes are animated to test the look and feel of the animation



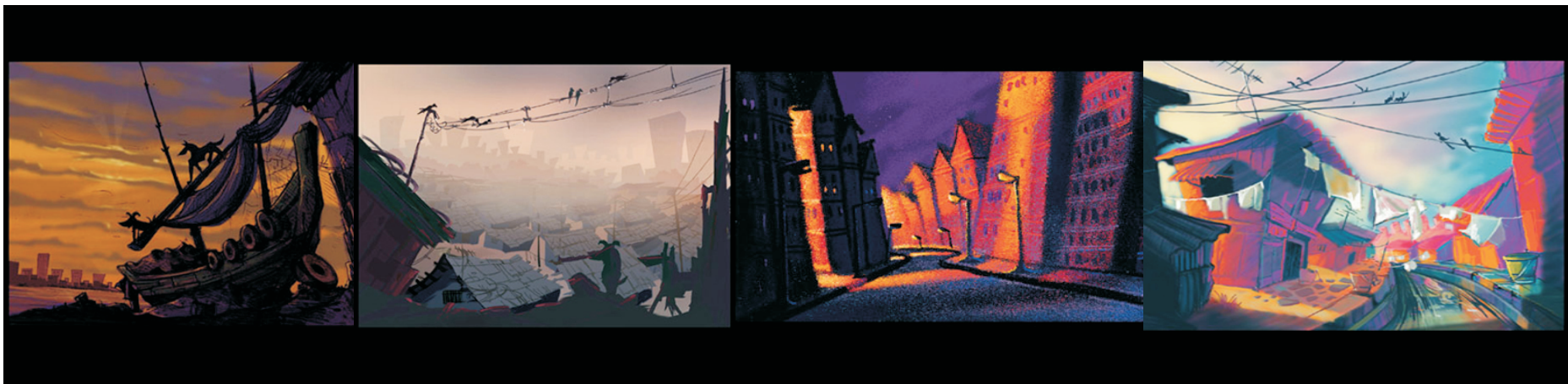
Pre-Production

story-boarding

The story-boarding based on sound and script helps build the scene. It decides exactly what gets animated and how the animation works in the particular scene. Camera movement is also decided. A rough scene of how the final animation would go is made.

animatics

The scene is now run with the sound to see if the animation works. No actual animation is done but duration of scene with dialogue is checked. Corrections can now be made to make the scene interesting.



Pre-Production



library

Once the character is finalized and the storyboarding done, a library of poses and expression for the character is made. This would also contain the colour codes to be followed.



Production

background

The backgrounds are now completely developed with respect to the storyboard and camera movement

animation

key-framing

The main key-frames of the animation are made. In-betweens are drawn either manually or in flash. Timing of animation and the pace is checked. Sound check is also done to see if animation conforms to the flow

clean-up and compositing

Final drawings of the animation are made and composited together with the background and sound.



Post-Production

editing

The final composited animation is edited for corrections and making one uniform piece. Sound is again recorded with this edited version. Special effects if any is added and additional sounds are also recorded. Final output is tested and edited subsequently. Credits and titling is now put in to the completed animation

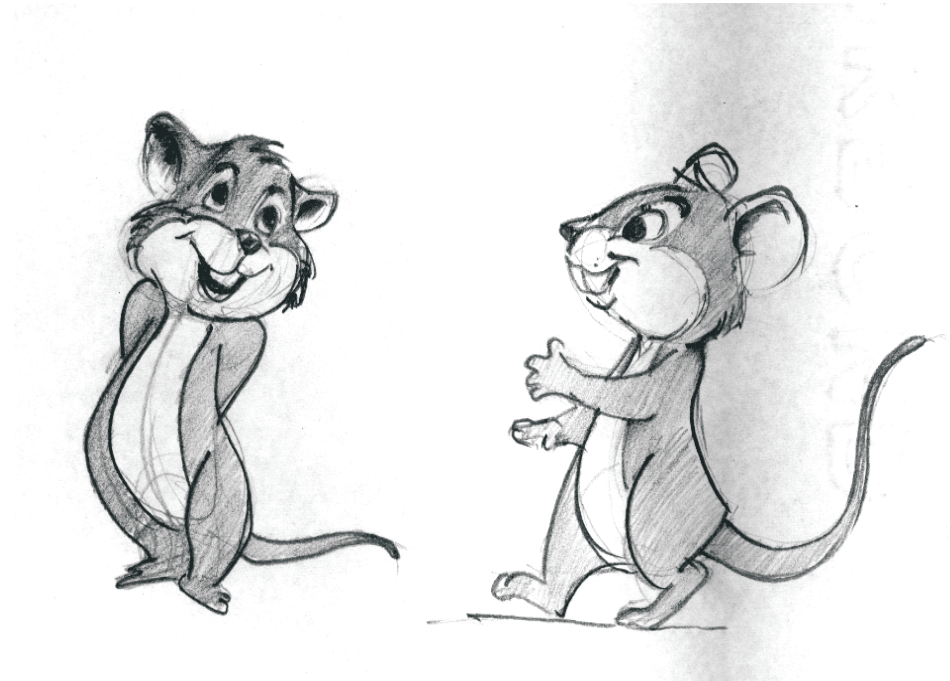


training experience

sketches

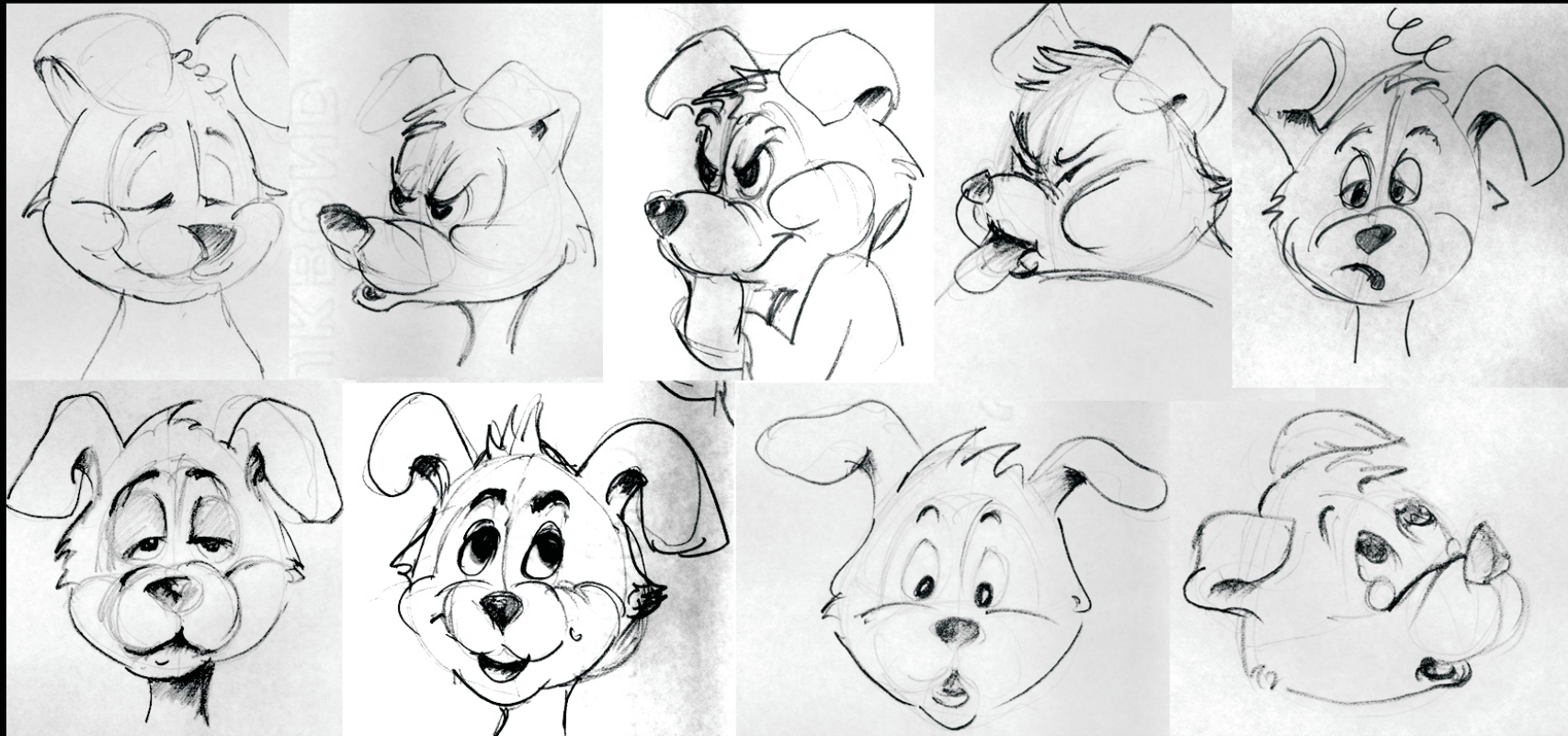
Well known characters were imitated and their features studied

Facial features which contribute to the character and mood was drawn.

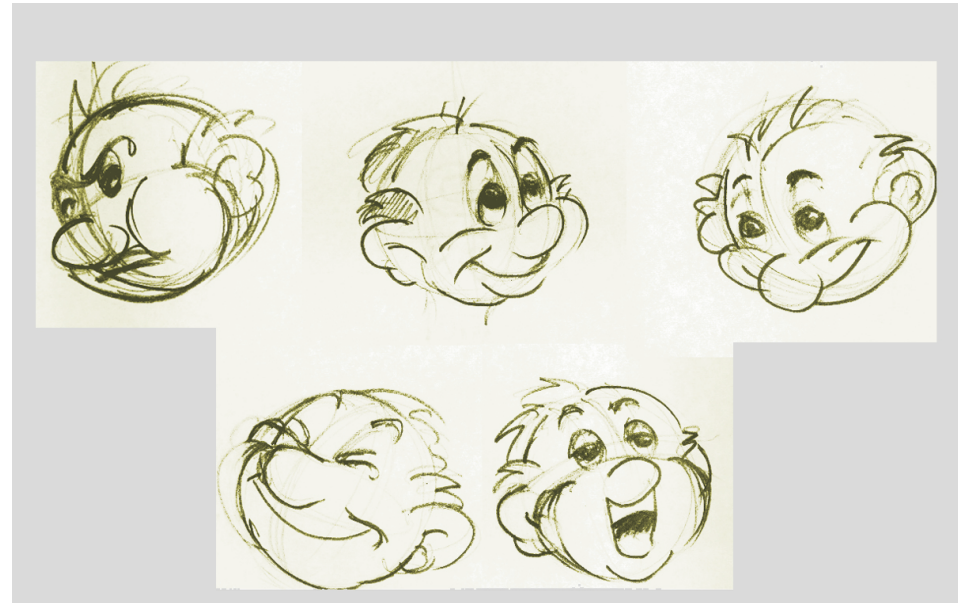


training experience

2D



training experience



2D

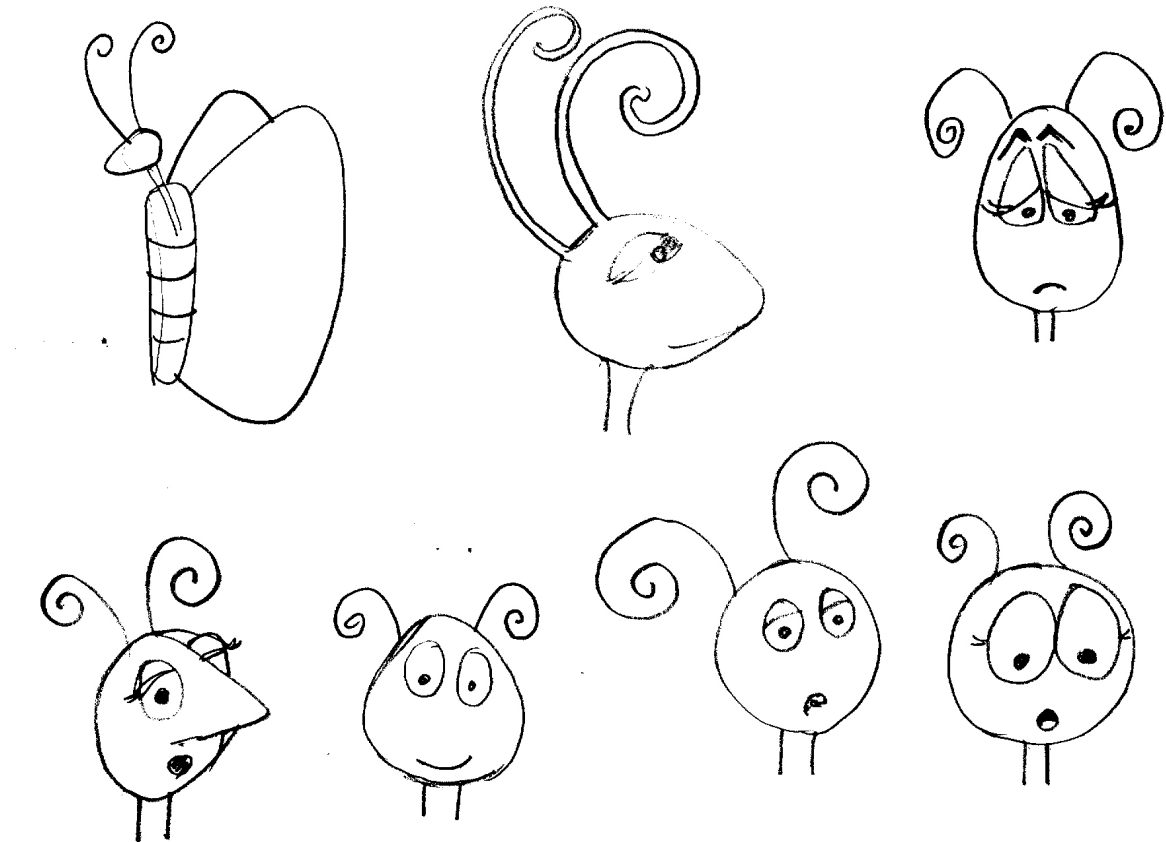
head positions



training experience

character development

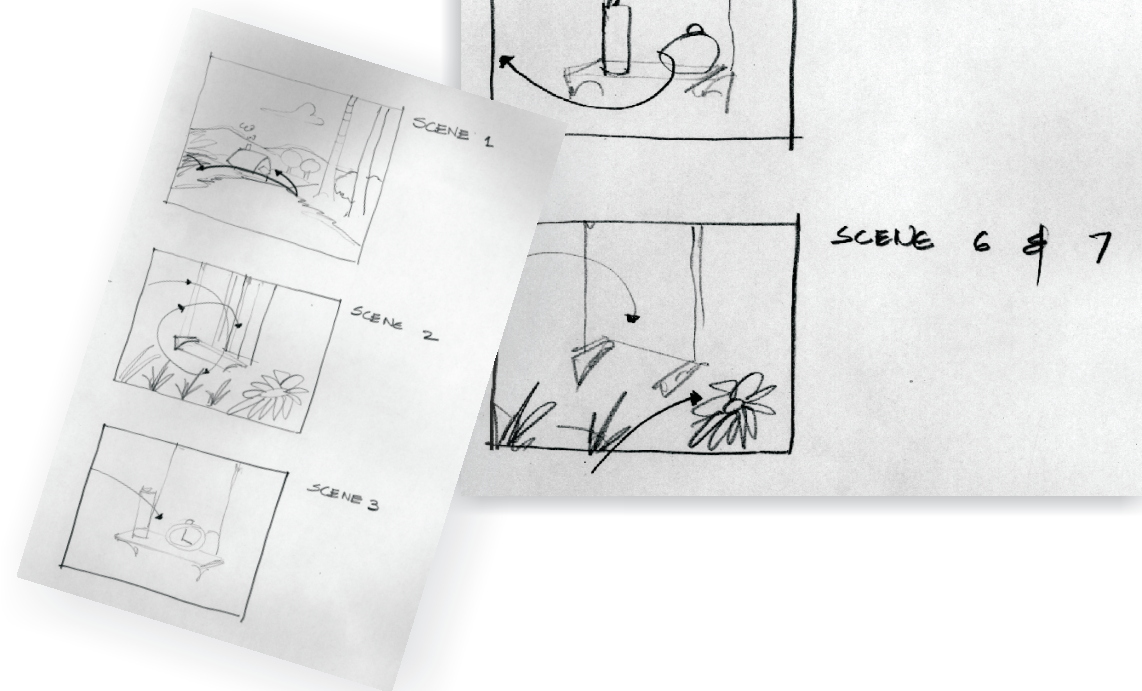
Chili, the curious little butterfly was developed. Initially the head had been detailed out, and later simplified. Long tentacles were chosen for animating and adding to characters mood or behaviour.



training experience

script writing and story-boarding

To show the inquisitiveness of Chili, a simple story was written. Chili enters a house and is mesmerized by the ticking of an alarm clock. The clock so happens to go off shortly scaring Chili out of her wits and back into the garden. The scenes showed it from Chili's point of view, progressing into the house and exiting the same way.



training experience

key framing

Each scene was then taken up and key frames done followed by in-betweens. Speed and pace of the animation was checked by line testing. More in-betweens meant a slower and more gentler movement while lesser in-betweens resulted in a fast paced rapid movement.

cleanups

Clean-up drawing of the same were made for compositing and ink n paint. Animo was used for the same. Backgrounds were developed in photoshop. Final output was taken in mov format.

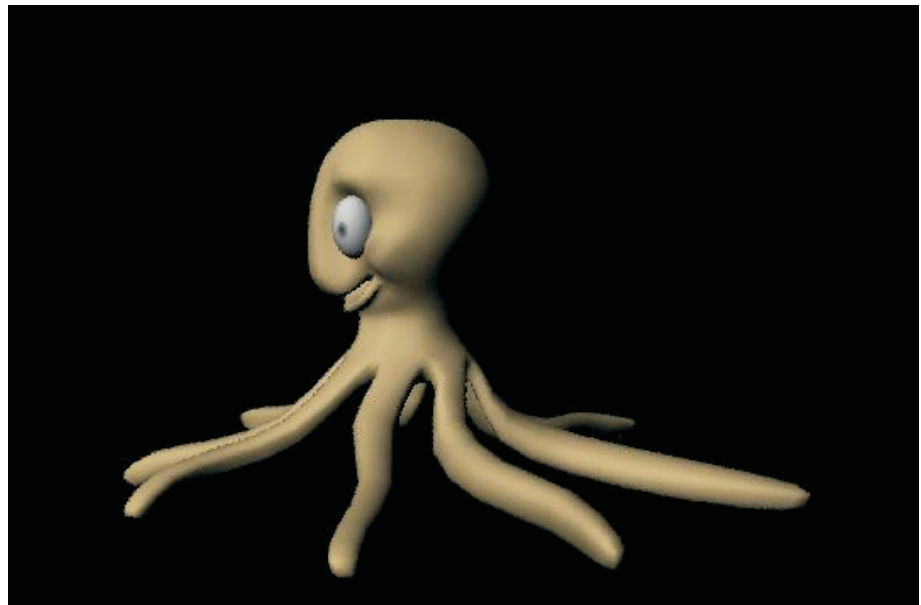


training experience

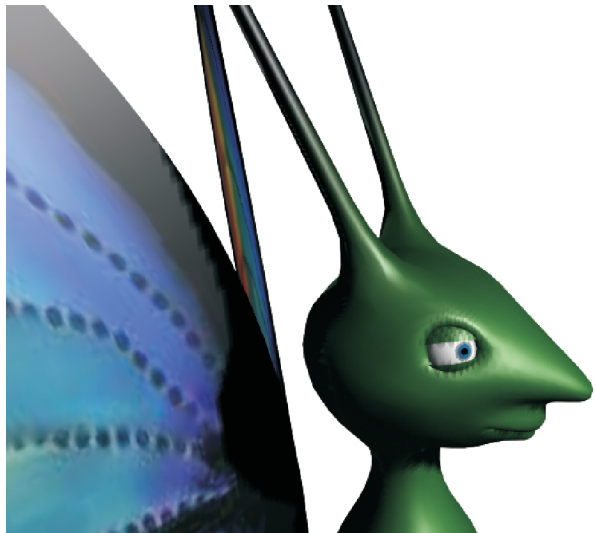
modelling

assignment character models were given as an introduction to modelling. Rules for planars to be followed while making the head portion. this allows for ease in animating the mouth as required.

3D



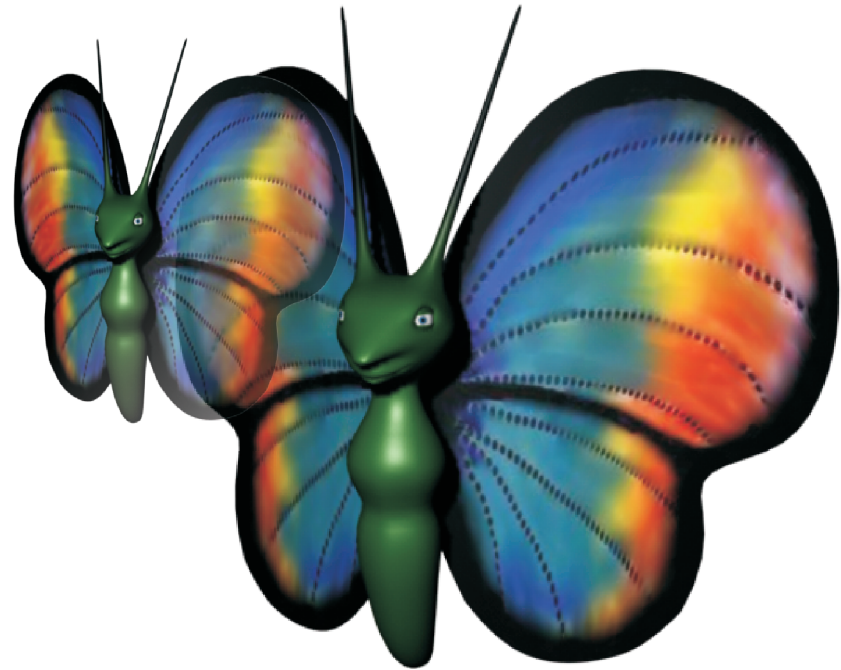
training experience



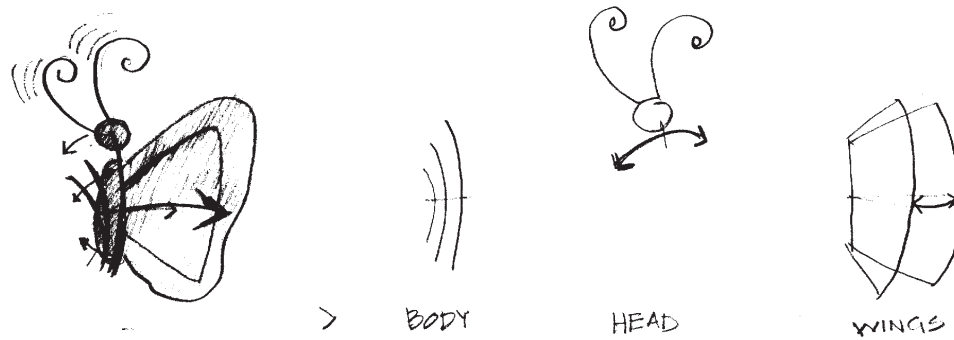
modelling

the same character was taken up for 3D modelling. Textures was now explored and different painting techniques used.

Chilli could now be given a more coincret form in 3D.

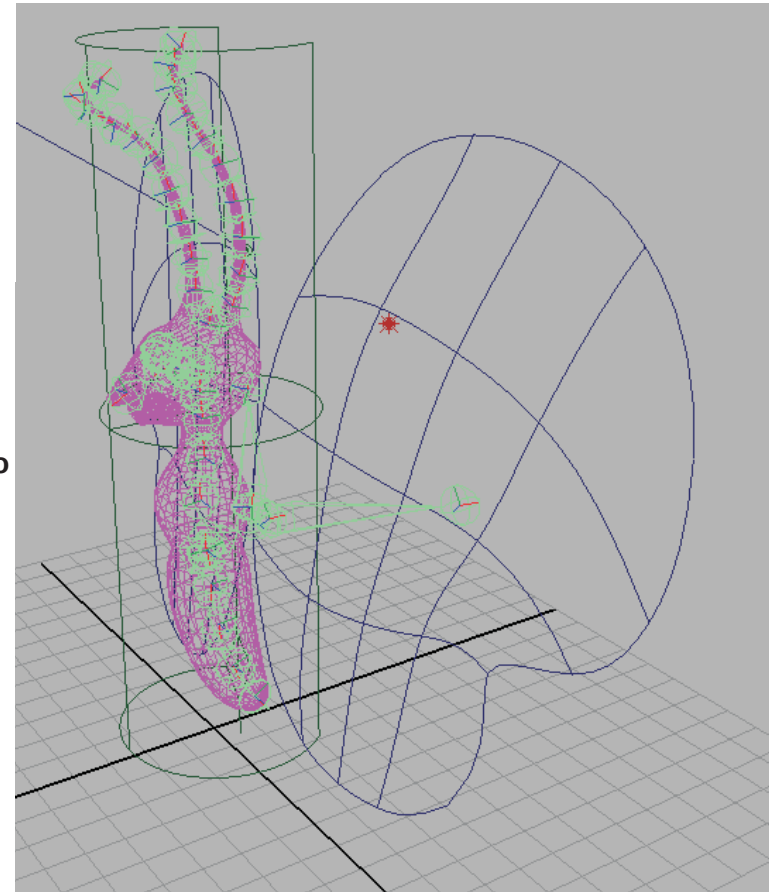


training experience



rigging

rigging meant putting bones or pivot points into the models. A simple animation was also tried out to understand bone hierarchy in animation.



acknowledgement



My sincere thanks to the staff of JadooWorks especially Ms.Shaibani Azam, Ms. Payal and Mr. Senthil Kumaran. A special thanks to Mr. Shivaji who scanned all the drawings for my 2D line-tests