Summer Internship Report

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Abstract

This report is a short description of my four week internship carried out as compulsory component of the M.Des course. The internship was carried out in Hopmotion studios in May 2016. Since I am interested in animation, the work was concentrated on character animation, rigging, coloring and layering . It also provided an experience of working in an animation studio.

Hopmotion is a digital 2D animation studio engaged in creating broadcast quality content for clients in India and around the world.There works include TV animated series Choti Anandi.

 During this period at the Hopmotion studios we got hands on experience with many job roles. We also

got chance to work on the live project which included the character animation and creation of props.

The following text contains my activities that I have contributed to achieve my stated objectives. In the following chapter a description of the organization Hopmotion and the activities is given. After this a reflection on my functioning and the learning goals achieved during the internship are described. Finally I give a conclusion on the internship experience according to my learnings..

Acknowledgement

I would like to extend my sincere gratitude and thanks to Mr.Anish Patel and Mr. Neel for giving me the opportunity to intern at Hopmotion Studios. I would also like to thank the faculties of IDC for their support and guidance.

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Introduction

STUDIO

Hopmotion studios is a digital 2D animation.The studio comprises of the Creative team and the artists division. The creative team comes up with the idea or story. Storyboard artists creates the latter i.e , draws each scene, sketches each character and even the backgrounds. The artists division has to convert the story board to models, backgrounds, texture. The models are then pictured, clothed, animated and composited. The studio must have sufficient IT set up and creative competence. IT infrastructure includes software as well as hardware. The entire team, including the animation director, the backgrounds director, department heads, production coordinator, animators, etc ,work in synchronization with each other.

Choti anandi- TV series by Hopmotion studios

Modern Activity- web series

Projects

The studio has many ongoing projects both from the Indian market and international. The main project that they are presently working on is the Choti Anandi which is a TV animated series currently airing on colors TV channel. It is a fun filled series that showcases an 8 year small girl named Anandi who is brave and mischievous and is known to find innovative and unique ways to solve the problems of her village folks.

Other projects includes Modern Activity, Kung Fu Singh and Ninja Patel. These are the web show created by the Hopmotion studios.

Kung fu Singh and Ninja Patel are web series created in Hopmotion Studios

Script
Storyboard | Character, Prop & Location Design | Audio Recording
Animatic | Layout & Posing
Character, Prop & Background Colour Styling | Sound Breakdown
Animation
Animation Clean Up
Ink & Paint
Compositing
Export - Render
To Post Production

PROCESS

During this internship we had the chance to learn about the business model of the studio.

It all starts with the generation of an idea and its development. A member of the studio will sponsor an idea, and will take it through a selection procedure. If it is adopted, this idea will start to be fleshed out giving a storyline and some scenes. These are further developed by producing storyboards, similar to strip comics, which start to capture the "look" and feel of the show and many of the characters and scenes. This process finishes by making "reels", video mocks of the cartoon, to see if it stands by itself. If it doesn't flow or work, it's back to the drawing board.

The art department then starts to work on this project making 2D characters and adding animation. They produce backgrounds, sets which have to be dressed, and then scenes can be cut – characters animated. Toon Boom is used as the main software in this studio . The Music and other sound effects are worked on by outsoucing it a different studio or even to freelancers.

The scenes are polished - shading, lighting and illumination added to give a deep and realistic feel to the animation, and finally they are "rendered" - all the layers of technical information are put together to form the frames. Any remaining technical issues are resolved at this stage, and the final episode is ready for release.

TOON BOOM HARMONY SOFTWARE

Toon boom software is 2-D animation software used by many from the biggest to small ambitious design studios. It is an efficient and creative environment for artists that gives the user ability to create his entire project in one tool.

Drawing on layers: In Toon Boom Harmony, a drawing is composed of four embedded layers:

- **Overlay Layer**
- **Line Art Layer**
- **Colour Art Layer**
- **Underlay Layer**

In general, Line Art and Colour Art layers are used. The Underlay and Overlay layers are used for advanced purposes

Draw and paint can be done in all layers, but if one prefer working in a single layer, can do everything in Line Art.

Underlay

The Underlay layer can be used like any other of the art layers available in the drawing, but since it is situated behind everything else, you can use it to create a matte for a quick line-test, write notes or store your rough animation

Overlay

The Overlay layer can be used as any other of the art layers available in the drawing, but since it is situated on top of every other, it can be useful for writing notes about the colour model or animation or to draw the highlight and tone shapes.

Rigging of characters

First we created a simple rig with stick figures. We had drawn a set of body parts in different layers. These were independent of each other.

When you want a part to follow another one, such as the forearm following the arm, you can attach the layers one to the other. This creates a child layer attached to its parent layer.The advantage of parenting layers is that the child layers will follow the parent smoothly without having to select them or create a series of keyframes.


Parts of body in hierarchy
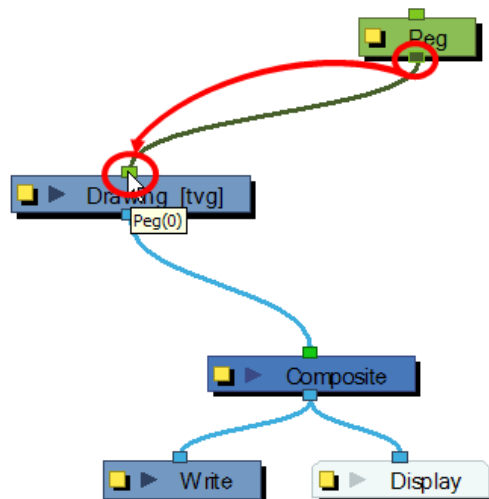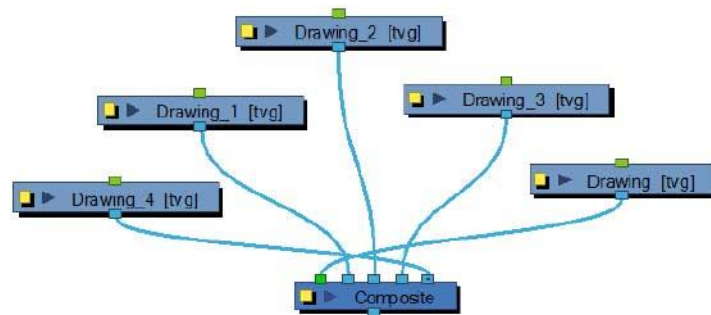
Creating hierarchy through network view

The drawings are connected to a Composite module. A Composite module takes all the drawing layers connected in it and flattens them into a single image which allows to organize the network and manipulate the drawing easily. The Composite module is useful when you have to deal with a lot of modules in the Network view.

Animating using pegs

A Peg layer is a trajectory that contains no drawings on which you can hook the drawings

A peg layer is mainly used to control a series of drawing layers. If there are several drawing layers, hook those to a peg layer and have them follow a trajectory as a unit.

Network view
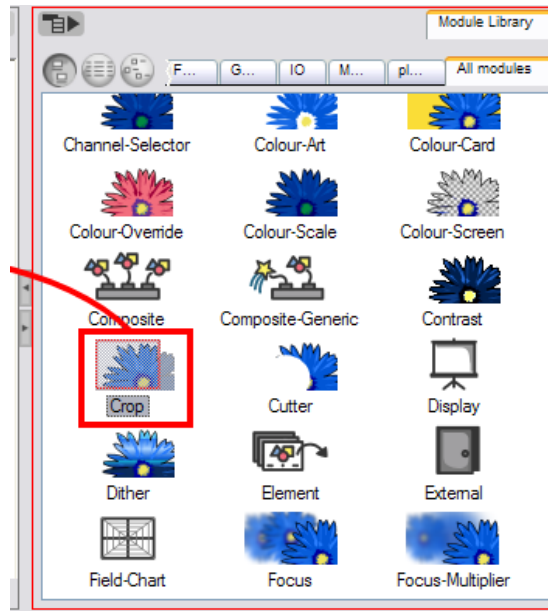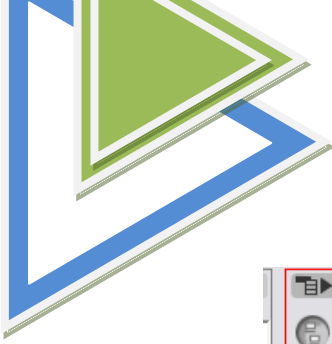
In Toon boom software drawings are limited. Any changes or modifications are made in that one drawing layer. The animation of these layers are done on the pegs through which they are connected.
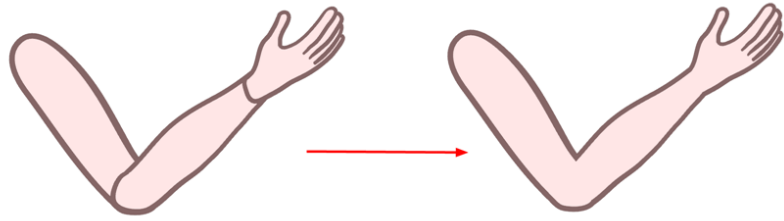
Filters

Toon boom software also provides a library of tools called filters. The filters are quick and easy to apply. It only affects the layer with the values it is given. The most common filter that we used is the cutter and auto patch tool.
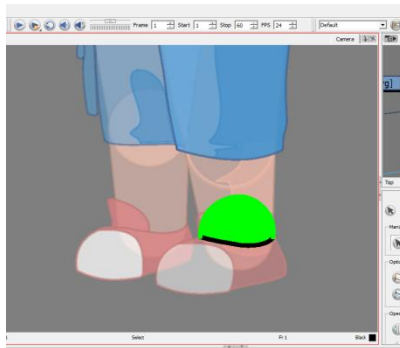
Creating shadows and highlights

With the Shadow effect, you can turn a drawing into a shadow. It will render it into a grey, semi-transparent, slightly blurry silhouette.
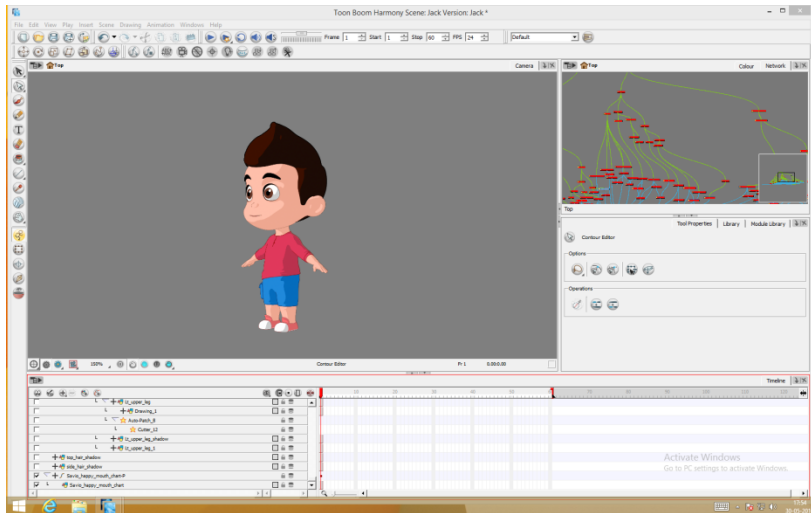
Auto patch application

Cutter application

Auto Patch filter

Auto Patch filter can be used for masking the joints of body parts when they are created in hierarchy.

Cutter filter

The Cutter cuts out a portion of an image using a matte drawing. These can be used for joining the two layers and masking them in process.

Rigging of character Jack in Toon boom harmony

WORK PROFILE

Our job profile included various tasks starting from the basic animation of objects, character rigging, character animation, studying lightening and shadow and learning the whole process of production of animated TV series.

Exploration

During the first week we were given the liberty to explore their work by watching the snippets of tv and web series they worked upon. We had access to all the files ranging from script to animatics and completed episodes.

Exercises

We had done a lot of traditional animation in our course modules but our exercises included all the fundamental concepts of animation, exercises such as bouncing ball, simple pendulum, sliding chain.
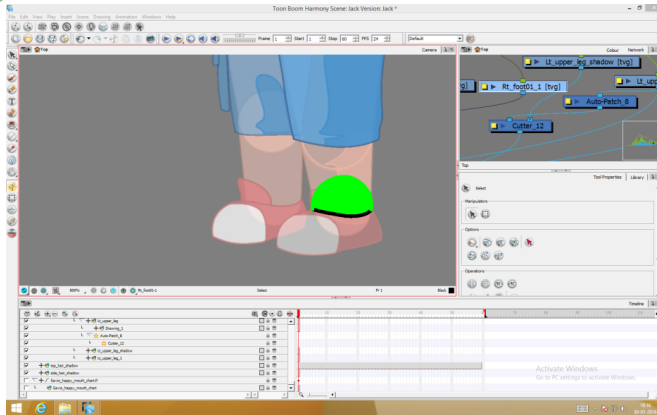
Adding filters: applying cutter to the joining layers
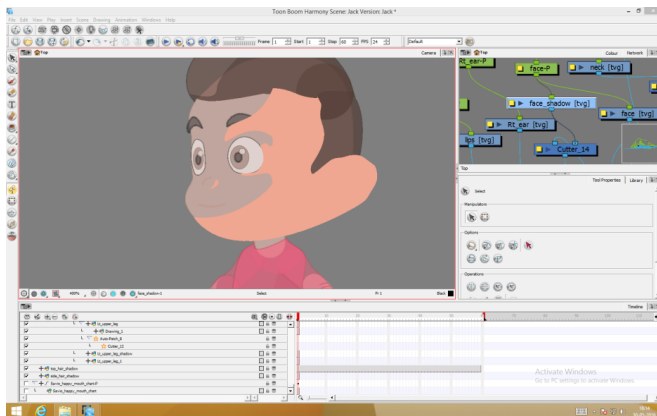
These were done in toon boom harmony software which has a different concept of animating the objects through use of pegs and drawings

Starting with a simple stick figure we learned the rigging of the bones. Walk cycle, lifting weights are the some of the exercises using the rigging

Character design and rigging

Each one of us was given a different view of a character and was told to draw the character and rig it. Add shadows and highlights to character at last.
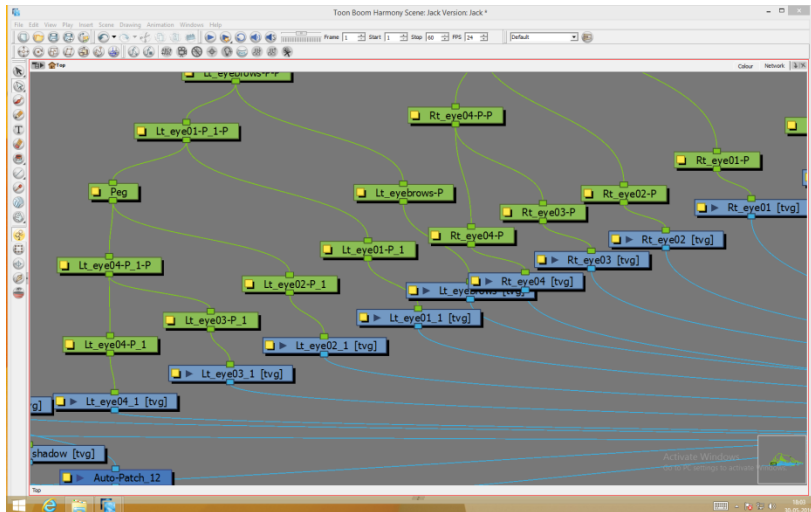
Network view of the Jack character

Props

The studio works on many projects outsourced from outside. Our job included creating props for the animated series Camp cwe. These props ranged from small glasses to big furnitures. While creating these props one has to consider the usability of props. Accordingly they are divided into layers and made.

Conclusion

On the whole, this internship was a fruitful experience. I have gained new knowledge, skills and interacted with many people from this industry. I achieved several of my learning goals. I got insight into professional practice. I learned the different facets of working within a studio. I experienced that team management, as in many organizations, is an important factor for the progress of projects.

 Related to my field I learned more about the functioning of studio that produces TV cartoon series. There is still a lot to discover and to improve.

Furthermore I experienced that it is of importance that the team leader understands the team, their weakness and their strengths. It helps in overall efficiency of the production team.

The internship gave me an insight into different process of animation. This helped me to define what skills and knowledge I have to improve in the coming time. At last this internship has given me new inputs and motivation to further explore the animation techniques and advanced softwares trending in this industry.