FINAL YEAR PROJECT

VFX BASED SHORT FILM - WAR FOR GREEN -POST PRODUCTION

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This Report Presented in Partial Fulfillment of the Requirements for the Degree of Bachelor of Science in Multimedia and Creative Technology

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APPROVAL

This Project titled **"POST PRODUCTION OF A VFX BASED SHORTFILM-WAR FOR GREEN"**, submitted by **Adnan Rahman,** to the Department of Multimedia and Creative Technology, Daffodil International University, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Multimedia and Creative Technology and approved as to its style and contents. The presentation has been held on **8 September 2019**.

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DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Mr. Arif Ahmed Associate Professor, Department of MCT** Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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ACKNOWLEDGEMENT

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ABSTRACT

The team of "War for Green" aimed only to create project which should be remembered. People can learn and relate something that is how to save the green tree, how to make our country as a green country. We are trying to giving some message through this project. This project is based on VFX. That's why we need to create a good composition and had to work hard. We had organized our team and our working perspective. We had developed our story by doing brain storming, discussing each other every single part of this project that how we thought. We are trying to let people know that green nature is most important thing to live, and also animals. That's why we should protect the green nature. Here we give a negative power for destroying the nature as metaphorical use for destroying the nature but also, we give protectors power for saving the nature. We used special effects by using software Boujou 5.0 and for 3D modeling 3Ds Maya, Autodesk Max. for final editing adobe premiere pro and some of relative software's.

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CHAPTER ONE

Introduction

We use our short film as a symbolic form where we want to give a clear message to our audience. At first, we are thinking many ideas and story for our project. We want to make our projects as VFX basis so we think this is the suitable story for our project. At first, we show how deforestation and green house change our climate and effects in our life. In our short film we show one villain and three heroes. Villain and three heroes have supernatural power. People who cut plants and damage our climate represent of our story villain and People who plants trees and want to save our nature represent our heroes. In this short film we try to show villain damage our plants by his destructive power. Villain wants to make his world different where villain can do anything whoever is willing to do it. But our heroes want to save our nature from this powerful villain. So, our heroes want to fight against villain to keep our nature suitable so that our next generation peoples and animal can live peacefully in this world.

1.1 Software we used for this project

Here we use software for our project:

1.Adobe Photoshop (Design, Texturing, Matte painting)

2.Adobe Illustrator (Motion Graphics)

4.Autodesk 3ds Max (Modeling)

5. Autodesk Maya (Modeling)

6.Adobe Premiere Pro (Editing, Color Correction, Color Grading)

7.FL Studio (Audio editing and effects)

1.2 Work Flow

Stages of our Project

We divided our work in three steps:

1. Pre - Production

2. Production

3.Post -Production

To make a successful VFX it is important to work in three steps. So, we follow this rule and so that we can make a successful project.

CHAPTER TWO

Pre- Production

2.1 Concept:

For making a successful project at first, we need a good concept. So, we try to make a good concept which can give an effective message to our audience.

Now-a- days we see the natural disaster. Deforestation is considered to be one of the contributing factors to the climate change. People who are cutting plants they don't think of our future generation and climate. On the other hand, many people want to save our nature.

When this concept came to our mind, we decided to make a story. We want to represents our story by our creative work.

2.2 Story

Scene 1:

At first, we show how deforestation and green house effects our life and if it is continuously happening what types of problems face our future generation and world.

Scene 2:

Dr. Reza is a Epigenetics specialist. Dr. Reza researching genetics and DNA about tree.

Dr. Shariar who is a cytologist researching about metabolic process so that tress can grow rapidly.

Dr. Azharul who is a plant physiologist researching about plant morphology.

Dr. Adi is a phytochemistry specialist. From the plant many chemicals emitted which is the researching subject of Dr.Adi.

Scene 3:

One day Dr. Azharul sleep on his table and he see a dream. In his dream Dr. Azharul see that Dr. Reza and Dr. Shahriar standing on an unknown place. Suddenly they see a man and the man come to them. Then he said to them that the nature is in dangerous. The man instructs them (azharul, reza, shahriar) to save the nature and the man give them (reza, shariar, azharul) to supernatural power. After that the man disappear from there.

Scene 4:

One day Dr. Adi is researching on his lab. Suddenly he saw that something is emitted from a small tree. Dr. Adi keep his on the tree and suddenly the flash is happening.

Dr. Adi open his eyes and he can see that he is laid down on ground. He saw that this is not his lab. This is another place where lots of poisonous plant and clay leaves situated. The tress are moving. Then Adi see a cave and walking towards to the cave. The cave is closed and from there he can see a bluish light. Then he enters the cave and see a tree. Suddenly from the tree lots of roots come out and surrounded him. The roots catch Adi and forcefully give chemical inside the mouth of Adi. Then Adi open his eyes and from his eyes emitted bluish light.

Scene 5:

After getting bad power Adi ruin plants by his destructive power.

Scene 6:

One day reza, shariar and azharul work in their home. Reza switch on television to see news. In this news he saw that someone does destruction of plants and damage nature. Then reza knock shariar andazharul to see the news.

All of them worried to see the news and then discuss about the matter. They decided to save the nature from this devil and shariar said that its time to war for green. All of them then go out from the room

Scene 7:

Then Adi make landing with his super power. Azharul landing with black smoke. Reza come with super speed and Shariar landing with his power. Reza, azharul and shahriar go towards the Adi with super speed and Adi also come towards them with super speed. Azharul, shahriar and reza throw their power towards Adi and Adi also throw his power towards them. All power conflicts and create a huge blast.

Scene 8:

Adi make nay clones from his body. Adi clones fight individually with reza, azharul, shariar. Reza kills adi's one of the clones. Shahriar and azharul also kill aid's clone individually.

Scene 9:

Then Adi come near shahriar and kill shariar. Reza and azharul then give all their power to shahriar. Reza and azharul die for losing their power. Shariar getting back to his life again and he became more powerful. Shariar then go to Adi and kill Adi through his power.

2.3 Story Board

After finishing story it's time to make storyboard. Story board is very important because if we can make a good story board and can do our project according to our project, we can make a successful project.

So, we make a story board layout and after that we type it

2.4 Storyboard Layout:

Scene:	01	Shot:	01	Scene:	02	Shot:	01	Scene:	02	Shot:	02

মানুষ গাছ কাটছে।এর ফলে পরিবেশের কি ধরনের ক্ষতি হচ্ছে দেখানো হবে। ব্যাকগ্রাউন্ডে ভয়েস থাকবে।	ডঃ শাহরিয়ার সে একজন সাইকোলোজীষ্ট।তিনি কোষ বিদ্যাই পারদর্শী । মেটাবলীক প্রসেসের মাধ্যমে গাছে নতুন কিছু সংযোগের মাধ্যমে যাতে গাছের দ্রুত বৃদ্ধি ঘটে এটা সে গবেষণা করে।ব্যাকগ্রাউন্ডে ভয়েস থাকবে।	ডঃআজহারুলএকজন উদ্ভিদ ফিজোওলজিস্ট । তিনি উদ্ভিদের মরফোলজি নিয়ে গবেষণা করেন।ব্যাকগ্রাউন্ডে ভয়েস থাকবে।
	Matt painting, 3d laboratory	trolley,mid shot,matte painting and 3d labrotary

Figure 2.4.1: Storyboard Layout

Scene:	02	Shot:	03	Scene:	02	Shot:	04	Scene:	03	Shot:	01

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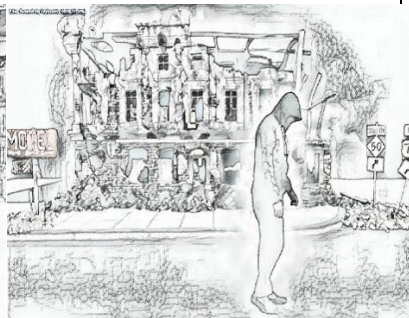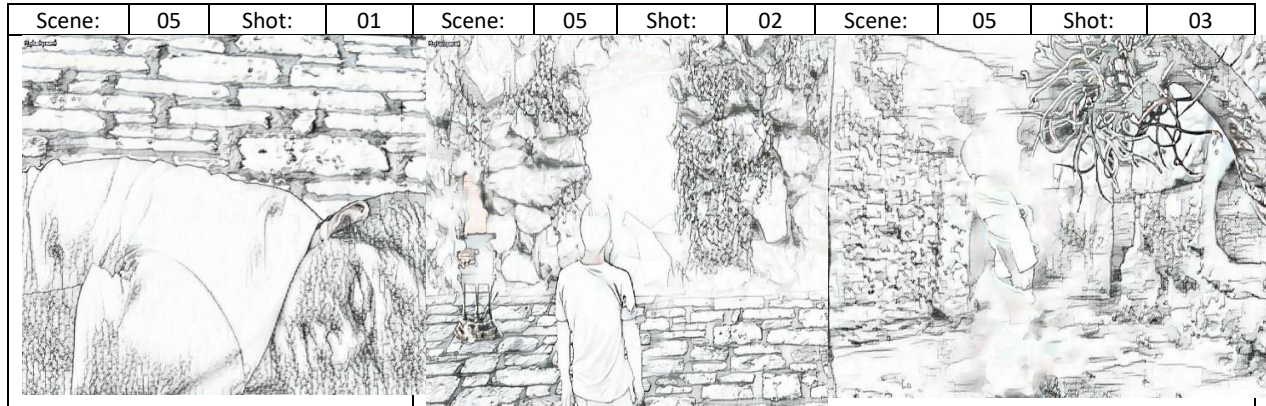|		
ডঃ রেজা একজন এপিজেনেটিক্স বিশেষজ্ঞ ।তিনি উদ্ভিদের জেনেটিক্স ও ডিনএ নিয়ে গবেষণা করছেন ।ব্যাকগ্রাউন্ডেভয়েস থাকবে । নিয়ে গবেষণা করছেন ।	ডঃ আদি একজন ফাইটোকেমিস্ট ।যিনি উদ্ভিদ থেকে নিরগত বিভিন্ন রাসয়নিকদ্রব্যনিয়ে গবেষণা করছেন। ব্যাকগ্রাউন্ডে ভয়েস থাকবে ।	আজহারুল গবেষণা করতে করতে তার ল্যাবে একদিন ঘুমিয়ে যাবে । ঘুমের মধ্যে সে স্বপ্ন দেখবে।
Trolley shot, Matte painting,3d laboratory	Trolley shot, mid shot, Matte painting,3d laboratory	close shot. Matte painting and 3d laboratory

Figure 2.4.2: Storyboard Layout
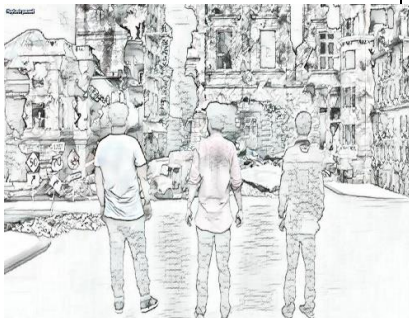
Scene:	03	Shot:	02	Scene:	03	Shot:	03	Scene:	04	Shot:	01

Figure 2.4.3: Storyboard Layout

(স্বপ্নের ভিতরে) রেজা, আজহারুল,শাহরিয়ার একটা অপরিচিত জায়গায় দাড়ানো থাকবে।	হটাৎ তাদের সামনে একজন অচেনা মানুষ পাওরের মাধ্যমে উপস্থিত হবে।অচেনা মানুষ তাদেরকে বলবে। ডায়লগ – Here you are. It is a deal between us. Forget about your work, family and love. I couldn't let them between us. All of you are mine. War for green	আদি গবেষণা করতে গিয়ে তার ল্যাবে রাখা একটি ছোটগাছ থেকে নিলাভ কিছু নির্গত হতে দেখবে।আদি সেটাতে হাত দিবে তখন একটা ফ্লাস ঘটবে।
Long shot,3d building		

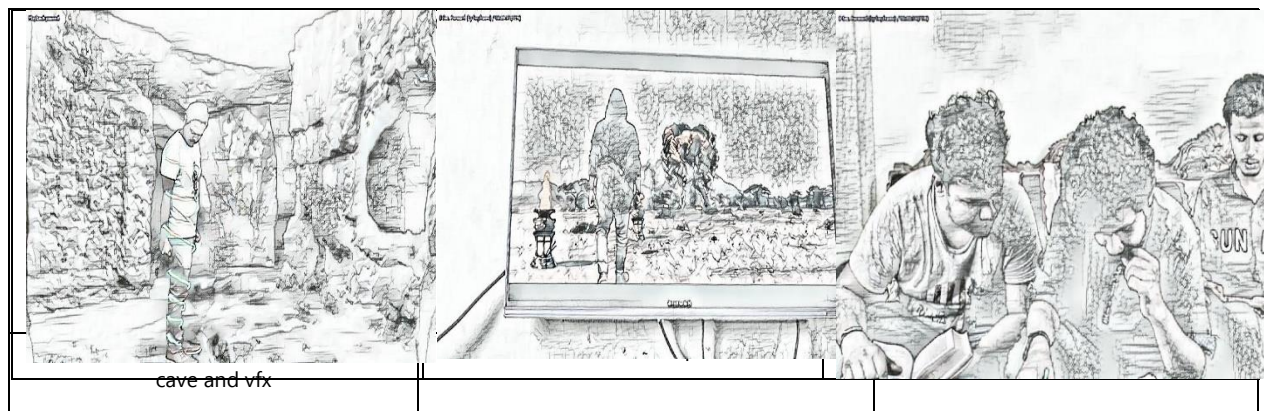| Scene:	05	Shot:	01	Scene:	05	Shot:	02	Scene:	05	Shot:	03

দেখানোহবে আদি মাটিতে শুয়ে আছে।সে চোখ মেলে দেখবে সে অন্য জগতে চলেআসছে।যেখানে চারপাশে অনেক বিষাক্ত গাছ এবং লতাপাতা দিয়েঘেরা।গাছপালা গুলো নড়াচড়া করতে থাকবে।	এরপর আদিহাটতে থাকবে এবং সামনে একটা গুহা দেখতে পাবে যেটা থেকে নীল আলো বের হচ্ছে।সে গুহার ভিতরে প্রবেশ করবে।	আদি দেখবে অড্ডুধ একটা গাছ তার সামনে দাড়িয়ে আছে।গাছ থেকে শেকড় এসে তাকে জড়িয়ে ধরবে এবং তার মুখে কালো কেমিকেল দিবে।
3d environment	Wide shot, behind the shoulder shot	over the shoulder shot, matte paing,3d cave and vfx

Figure 2.4.4: Storyboard Layout

Scene:	06	Shot:	01	Scene:	06	Shot:	02	Scene:	07	Shot:	01

Figure 2.4.5: Storyboard Layout

cave and vfx		

Scene:	07	Shot:	02	Scene:	07	Shot:	03	Scene:	07	Shot:	04

Figure 2.4.6: Storyboard Layout

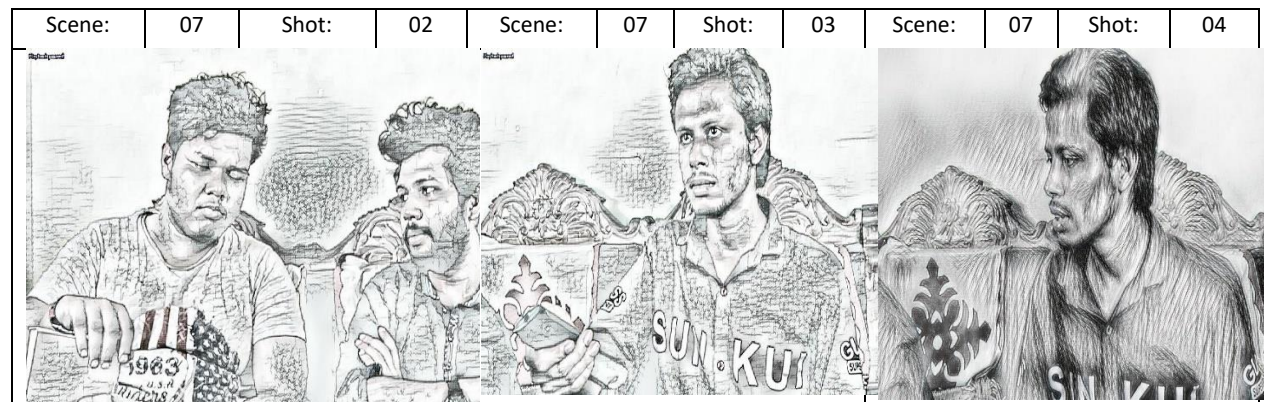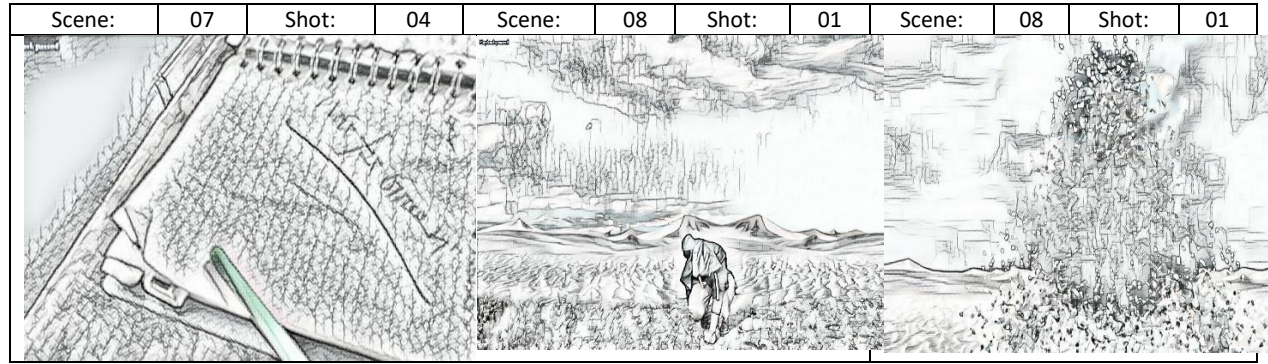|		
আজহারুল শাহরিয়ারকে জিজ্ঞেস করবে।ডায়লগ - আজহারুল —তোর গবেষণার কি অবস্থা ? শাহরিয়ার — এই তো প্রায় শেষ। একটি বিষয় নিয়ে ভাবছি। রেজা টিভির রিমোট অন করবে। রেজা খবর দেখবে।	ডায়লগ- রেজা- নিউসটা দেখছিস (শাহরিয়রকে) শাহরিয়র- নিউসটা খুবই ভয়াবহ(আজহারুলকে) আজহারুল- হুম যা দেছি এটা তো শুধু আমাদের জন্য নয়ই গোটা বিশ্বের জন্যই ক্ষতির বিষয় হয়ে দাড়াবে।	ডায়লগ- শাহরিয়র- হতাশ হয়ে কিছু একটা করা দরকার। দেরি হবার আগে একটা ব্যবস্থা করতে হবে। আজহারুল- আমিও তাই ভাবতেছি। শাহরিয়র তার খাতাই লিখবে ওয়ার ফর গ্রীণ। তারপরে সবাই রুম থেকে চলে যাবে।

Scene:	07	Shot:	04	Scene:	08	Shot:	01	Scene:	08	Shot:	01

|		
ডায়লগ- শাহরিয়র- হতাশ হয়ে কিছু একটা করা দরকার। দেরি হবার আগে একটা ব্যবস্থা করতে হবে।আজহারুল- আমিও তাই ভাবতেছি।শাহরিয়র তার খাতাই লিখবে ওয়ার ফর গ্রীণ।	ডায়লগ-রেজা-নিউসটা দেখছিস (শাহরিয়রকে)শাহরিয়র- নিউসটা খুবই ভয়াবহ(আজহারুলকে) আজহারুল- হুম যা দেছি এটা তো শুধু আমাদের জন্য নয়ই গোটা বিশ্বের জন্যই ক্ষতির বিষয় হয়ে দাড়াবে।	আদি সুপার পাওয়ারের মাধ্যমে মাটিতে আবতরন করবে।আজহারুল কালো ধোয়ার মাধ্যমে আসবে।শাহরিয়ার পাওয়ারের মাধ্যমে আসবে।রেজা পাওয়ার দৌড়ের মাধ্যমে

Figure 2.4.7: Storyboard Layout

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Scene:	08	Shot:	02	Scene:	08	Shot:	02	Scene:	07	Shot:	02
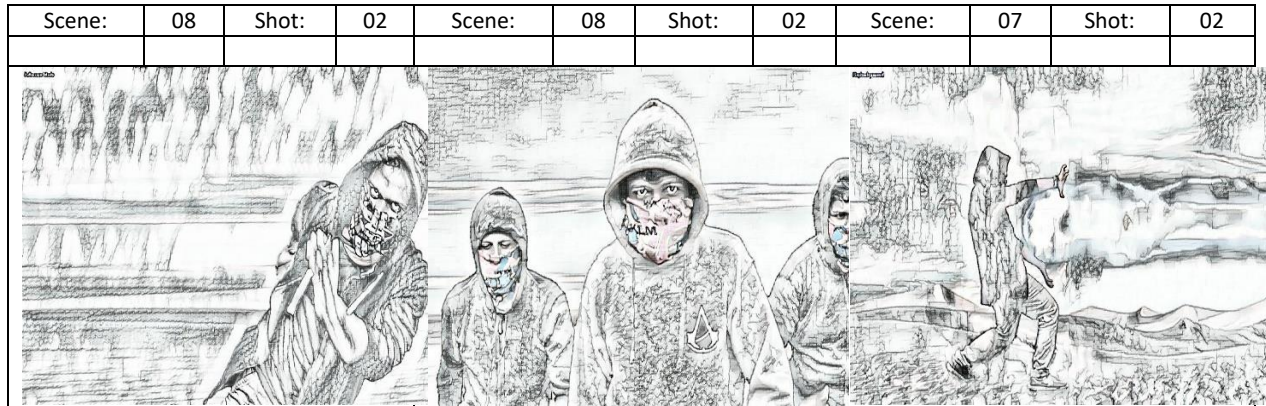
আদি সুপার গতিতে তিনজনের দিকে এগিয়ে আসবে। ওরা তিনজনও সুপার গতিতে আদির দিকে আসবে। আদি তিনজনের দিকে পাওয়ার মারবে। ওরা তিনজনও আদির দিকে পাওয়ার মারবে।		পাওয়ার গুলো মুখোমুখি সংঘর্ষে একটা বিস্ফোরণ ঘটবে।
wide shot, vfx, matte painting		

Figure 2.4.8: Storyboard Layout

Scene:	08	Shot:	02	Scene:	08	Shot:	02	Scene:	09	Shot:	01
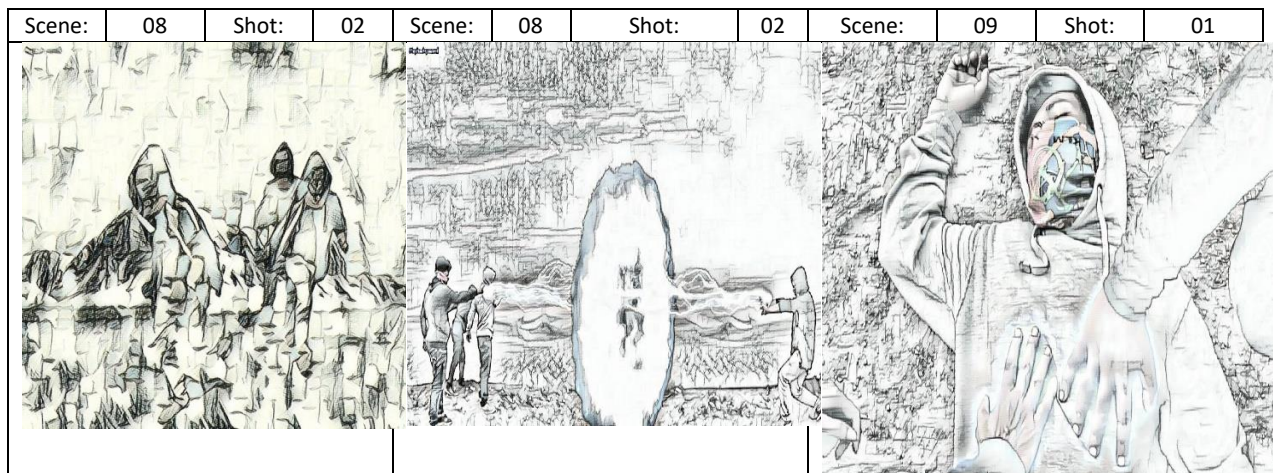
		আদি শাহরিয়ার কে মেরে ফেলবে ।রেজা ও আজহারুলশাহরিয়ার কে বাঁচানোর জন্য তাদের পাওয়ার দিয়ে দিবে এবং তারা মারা যাবে।

Figure 2.4.9: Storyboard Layout

Scene:	09	Shot:	01	Scene:		Shot:		Scene:		Shot:	

শাহরিয়ার তার জীবন ফিরে পাবে এবং আরও শক্তিশালী হয়ে যাবে।তারপর শাহরিয়ার আদনান কে ধ্বংস করবে।		
Vfx, matte painting		

Figure 2.4.10: Storyboard Layout

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2.5 Location

We finish our story and storyboard. Our next step is shooting. For shooting we need a suitable place. According to our script we need both indoor and outdoor shooting. So, we searching many days for shooting. After searching many days, we select two places for outdoor shooting. We face some problem to select indoor shooting location. Because we don't get a good decorated indoor location. Somehow, we find a good shooting location after many days.

2.6 Talent List

We don't hire any professional actor so that we can show our acting talent. Beside professional actor is very expensive so we acting in our own short film and try to our best. Here is the list of our actors.

1.Adnan Rahman   3. Shariar Nasim

2. Ishtiak Reza   4. Azharul Islam

2.7 Props and Equipment's

Here is the list of our props and equipment's

1.Green Screen   5. Mobile

2. Self-made dolly track   6. Audio Recorder

3. Tripod   7. Mattress

4. Light Setup   8. Table

CHAPTER THREE

CAMERA

3.1 Canon EOS 750d Specification:

Figure 3.1.1: Camera

3.1.1 Image Sensor:

We use canon 750d for our project. This is compact DSLR camera.

Max resolution is 6000x4000.Effective pixels 24 mega pixels. Type

22.3x14.9 mm CMOS.ISO 100-12800.ISO is expandable up to 25600.

Max shutter speed 1/4000 sec.

Color filter type is primary color.

Figure 3.1.2: 750D Camera

3.1.2 Image Processor:

There have used type-DIGIC 6 processor. This processor delivered more realistic photos and

Videos. This processor maintain dynamic range, light and shadows.

3.1.3 Lens:

We use 18-55mm STM zoom lens. This is great for wide angle shots.

Figure 3.1.3: 18-55 mm zoom lens

We use 55-250mm IS STM zoom lens.For this budget this is great lens.55- 250 is a telephoto lens.Forget about blurry photos and shaky videos; Vibration Reduction (VR) helps keep your photos sharp and your videos steady.

Figure 3.1.4: 55-250mm zoom lens

We also use 50mm 1:1.8 STM prime lens50 mm prime lens great for sharper images and videos. We use 50mm lens for getting close

Shots. This lens working good in low light.

Figure 3.1.5: 50 prime lens

3.1.4 Focusing Type:

CMOS sensor which create CMOS sensing Element

Auto Focus system

Manual Focus system

Automatic Choice

3.1.5 Manual Choice

Contrast detection & phase detection autofocus system which ensure

Your accuracy of focusing speed

19 cross-type sensors

3.1.6 EXPOSURE CONTROL

Figure 3.1.6: Exposure control

3.1.7TRIPOD

Figure 3.1.7: Tripod

We use 3 stage integrated tripod. This is made by aluminum this tripod helps us for getting tilt-up, tilt-down and pan shot.

3.2 Shooting

3.2.1 Modes

We use Auto & Manual modes. We didn't use flash. We use portrait, landscape, close-up, tilt-up, tilt-down shots. Some shot which we make for our needs.

3.2.2 Picture Style

Color Space

SRGB

3.2.3 File Type

JPEG

RAW

3.2.4 Movie Type

MOV (Video: H.264)

3.2.5 Movie Size

1280x720

3.2.6 Movie Length

Max Duration 2.5 GB

Movie Length 10 minute

3.3 Table No. 1: Budget

EQUIPMENT	EXPENDITURE
Green Screen	1000/= BDT
Camera	0000/= BDT
Light Setup	0000/= BDT
Tripod	1000/= BDT
Props	1500/= BDT
Prints	1000/= BDT
Foods	2000/= BDT
Total	6500/= BDT

3.4 Story Title

We feel from insight green is more important for human life. But it's decreases day by day. We don't think without green we can't live. This is must be a sensitive issue. We will try to send a message near the peoples about the importance of green. We spend a day for fixed our title and selected the name "War For green"

3.5 DEFENSE

3.5.1 PHASE 1

At first, we choose 3 story and share with our advisor and Dept. head. They help us to be chosen best one. They give us some new ideas also. All the time we connected with them and they help us. It is our good luck to get him as an advisor.

3.5.2 PHASE 2

At that stage we completed our project and we get our final output. We show our project in our advisor and he finds some small mistakes. We again correction our works. At last we get our expected output.

CHAPTER FOUR

PRODUCTION

At this stage we start our project. We collect our needed equipment's. We collect our costumes, camera, tripod, greenscreen. We will need a trolley but that was much costly. At last we made a trolley which cost was only 400.When we start our work, we face more problems but we overcome the problems. We tried to meet every day and searching our problems. We finding our problems then we solve our problems. At last we start our shooting and we successfully done our shooting.

4.1 Checking Our Elements

4.1.1 Camera:

We check our camera, we are taking footage and check video noise, Gain, color etc. We bought a tripod for getting smooth and stabilized footage.

Figure 4.1.1: Camera setup

4.1.2 GREEN SCREEN

After buying green screen we discuss with our teacher, he suggests us buy a deep green screen. After buying this we take a picture and send him a picture. At last he confirmed us this is perfect the screen. We bought the green screen.

Figure 4.1.2: Green screen

Figure 4.1.2: Green screen

4.1.3 Light:

We arrange a light setup from our friends. Without light setup taking some footages are impossible.

Figure 4.1.3: Light setup

For making indoor shooting must need light. Without good light anyone cannot get good color. So we first manage two light. Light setup also a important things for making a good video. So we set up light so that we can take good shot.

CHAPTER FIVE

Work Flow - 1

5.1 Set design

Here we create environment however we want actually. And smoothly focused on it that is how it looks as a real time environment. While starting shoot firstly we are going to find location that how we want actual place for shoot. We reached place minimum one and half hour before though we can't start on time several day for some production criteria but these issue doesn't harm our shooting that much. This is VFX based short film, that's why there is much more item created with software. Here some of component and shooting element was made by us. We have to arrange set that how we imaged actually and then we added with. Footages are taking up with green screen. It gives us professional shoot if setup is fully organized.

5.2 Direction

When our talents are prepared for giving shoot, then director was there and discussed for preparing the shoot that how it makes good for film. Every single shoot was taken before director have to give proper way, here we discussed well. If talents are not clear about shoot then director described every tiny piece of action. In this part director and talents are collaborate each other until the final shoot. If there is any kind of confusion, they are solving it in appropriate. Some people didn't take it as much serious as need, but know that this is supreme part of this film, also a production as well. if Director will do that in appropriate then it takes too short time as well. It's going to represent that how an artist was going to present what director want to visualize things.

5.3 Shot Direction

Before taking any kind of shoot we imaged about how we edit with post production and what types of component we are going to use with post production. How much elements we can add with. We took much time to think that what is going to show in our film. Point to be noted that this is a visual based film. We can easily add objects with matt and 3D models by using green screen. We try to take shoot simple just because of when we are on post-production then it helps us for editing. Firstly, we take some test shoot as we called NG Shoot before going to the location of knowing how it is reliable or not for final process. In film making, compositions shoot, sizes, and angles enhance how you tell your story, when two conversations are intimating one you need to close-up shoot. A wide, or "establishing" while characters are fighting in desert. Camera should never blink while taking shoot. If need you should use cut shoot many for balancing footage one shoot to another. It varies size and angle that's why it is illogical for end up with a jump-cut, which appear as if accidently shoots or frames are missing.

Wide shot   Extreme close shoot

Mid shot   Over the shoulder shoot

Two shot Trolley shot

Panning Close-up

5.4 Action shoot footage

While completing all kind of preparation in production pipeline, the most valuable part is filming. Standard cinematic frame rate is 25fps (Frame per Second). But we use 50 fps for smooth slow motion in some scenes. This part is guidance of screenplay. Director complete his or her desire shots by following the screenplay and major research in the storyboard, known as visual reference.

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Usage of technology is headway for filmmakers because now a days in blockbuster and big budget movies created by pre-visualization. In pre visualization entire film is made in CGI every single shoot and kind of scene. very important for making a good film as well. Characters can able to clarify how to make understand people. Every simple shoot should use for action scene. We take the way for make this film as much easy how people can understand easily the message what should we are going to say actually that's why we are ignored for making complicated the scene.

5.5 Shooting problem

Please note that we tried our best in this stage at present situation. We are not that much professional as we have to work for professionalism. This is a vast field of showing creativity and we are newbie actually, believe that we can change this industry. There is a vast of problems we faced actually. Know that financial problem is also notable, we need high configured computer for editing smoothly as well but we don't had actually, some days we stopped filming for lacking of shooting elements. We need smooth trolley but we haven't managed in appropriately but we made it with own hand. We need crane for taking some of action scene but we haven't managed at all caused financial issue like it is too much costly for rent. We don't have green screen stand too much wind unsettled us. Some footages need to take two or more time. Due some of inability we had to change our story some of way and it is too much heartening, note that working place is the best way of learning and we learned many things out of theory. One of the major problems is lighting, sunlight is also made us for changing time or date or scene. Also, we need badly production light just because of in VFX based film it is most important for balancing scenes. Unluckily environment betrayed us and shooting was postponed for this reason. For lighting reason when we start filming then noises are made us too much irritate, it is difficult of finding extra light where we had limitation and lack of proper light. Shoulder rig, gamble, stabilizer is also much more important but we haven't managed it properly. But 2 or more shoot we used slightly by renting it.

5.6 Storage

After completing shooting, it is most important to store footage with secure place. If any of footage had lost then it will need to take shooting again that's why we need to preserve footage. Note that money, work, times will contain in this footage. Viruses can corrupt or can lost footages that's why we can use internet-based cloud space like one drive or Google drive. Google drive is much reliable in this situation where we can access any time wherever we want and any kind of space.

Figure 5.6.1: Portable hard drive

Figure 5.6.2: Google drive

Pre-production summary

We give effort as much as possible as we can and trying to balance production pipeline as perfect as possible. While starting this project everything was pre-planned but due to some problem we need to generate or change our thought that suit our situation. We focused of filming neat and clean as much as possible for getting better output. Hopefully we get much better footage for going next step as well.

6.1 Some behind the scene picture

Figure 6.1.1: Indoor shoot

When we take indoor shot our director Shahriar persuasive us how to take shoot and how to act in this particular scene.

Figure 6.1.2: Indoor shoot

We thinking how to act in this scene and how to make the scene more perfect

Figure 6.1.3: Indoor shoot

We discuss about our script and our role in this scene. We also thinking about our indoor and light setup. We discuss about how to arrange our indoor set and which position light can be setup so that scene will be more attractive.

Figure 6.1.4: Outdoor shoot

We take our outdoor shoot. We take our outdoor shoot on green screen.

Figure 6.1.5: Outdoor Shoot

In this scene our actor Adnan Rahman acting according to script. As we work as a VFX basis short film so we take most of our shoot on green screen.

Figure 6.1.6: Outdoor shoot

We prepare our green screen according to our actor so that we don't make any mistake while take shoot.

Figure 6.1.7: Indoor shoot

Some of the happy moment while we during our shooting.

CHAPTER SEVEN

POST PRODUCTION

7.1 Group Member Tasks for This Project:

In this project, firstly we divided our whole works for this project among us part by part. Because of this division, we can work separately on our divided parts of this project and done our task in time. In this project we divided our woks among us as our specialty on each of topic. We divided tasks as which one is perfect on which topic. Before start working, we always discuss to each other about those topics in this project for perfection.

7.2 List of Tasks:

7.2.1 Story Section:

7.2.2 Task 01: Story Writer of Our Project

Azharul Islam   Shariar Nasim

7.2.3 Task 02: Story Board Designer

Azharul Islam   Adnan Rahman

Shariar Nasim   Ishtiak Reza

7.2.4 Task 03: Organizing of Story Board

Azharul Islam   Ishtiak Reza

7.2.5 Task 04: Development of Story

Azharul Islam   Shariar Nasim

Adnan Rahman   Ishtiak Reza

7.2.6 Task 05: Division of Shots

Shariar Nasim   Adnan Rahman

Azharul Islam

7.3 Direction Section:

7.3.1 Task 01: Director of this short film

Shariar Nasim

7.3.2 Task 02: Casting Directors

Azharul Islam

7.3.3 Task 03: Assistant Directors

Azharul Islam   Ishtiak Reza

Adnan Rahman

7.3.4 Task 04: Shooting

Azharul Islam   Shariar Nasim

Adnan Rahman

7.3.5 Task 05: Set Designer

Azharul Islam

Shariar Nasim

7.4 Full Editing Workflow:

7.4.1 Task 01: VFX Visualizer

Adnan Rahman   Azharul Islam

7.4.2 Task 02: VFX Supervisor

Ishtiak Reza

7.4.3 Task 03: VFX Designer

Adnan Rahman   Azharul Islam

Azharul Islam

7.4.2 Task 04: 3D Modeler & Compositing

Adnan Rahman   Azharul Islam

7.4.3 Task 05: Editing

Adnan Rahman   Shahriar Nasim

Azharul Islam   Ishtiak Reza

Each of everyone in our team does a perfect and sophisticated role in our project. Every person gave their best in their divided parts of this project and after all we reach our goal. Firstly, we should tell that this is the main stage of the full imagination of our final project where we can get many types of ideas for making this project better and better. After that, our final and very important part of this project is post-production. Literally Post=Production is a linear process of any kind of short film/film. In Post-Production firstly we divided the whole workflow in 4 parts. These parts are-

1. **3D Modeling:** In this part, all the 3D works like 3D Object Modelling, Rigging, Environment Modeling, Texturing are kept.

2. **Matt Painting:** In this section, after making 3D environment and models, we merge all the 3D object into our main raw footages.

3. **Effects:** In this s stage, we composite the effects parts like plasma blast, sand storm, divider effect, transformation effect etc. in our main footages.

4. **Final Compositing & Color Grading**: After all, we composite our whole edited clips and videos into a final stage and sequence and after that grade the color of our main project and then render the final output. After all we decided that we work on those topics which can be perfect for one. In this project I have decided to work on **3D Modeling & Matt Painting** topics.

7.5 Post Production Work Flow

7.5.1 Visual Effects:

The short form of visual effects is "VFX" where imagination get created in real world. In our short film we do various kinds of VFX.

7.5.2 Shield Effect:

In this effect firstly we remove the background using Key Light 2.0 and after that mask the scene as we need.
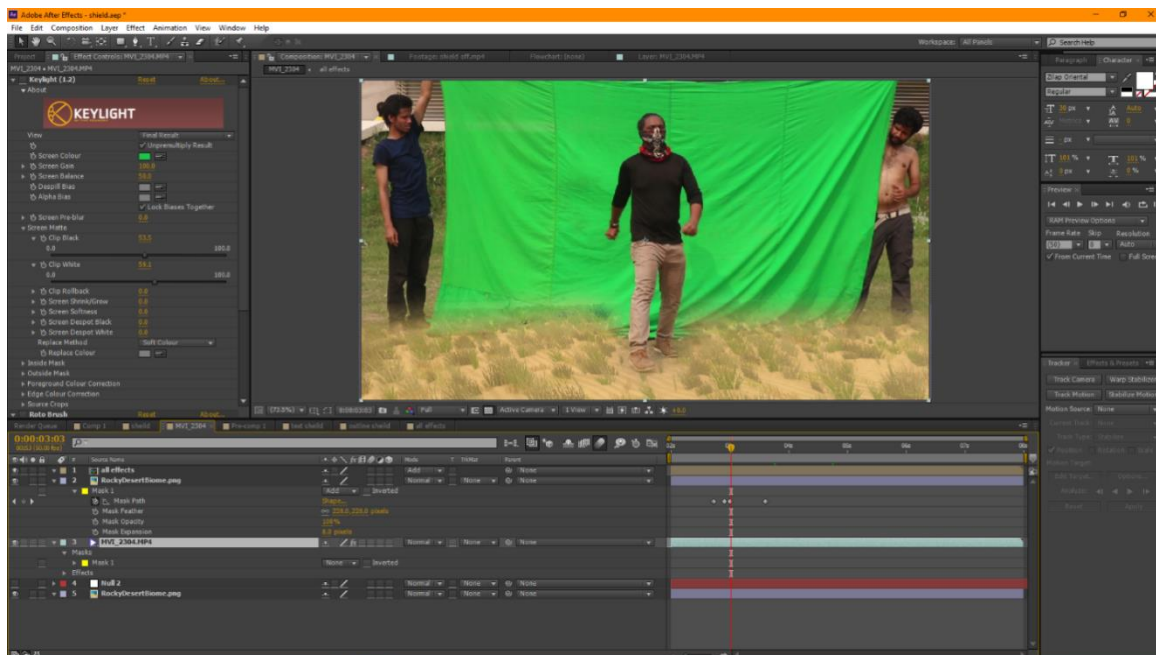
Figure 7.5.1: Transformation VFX
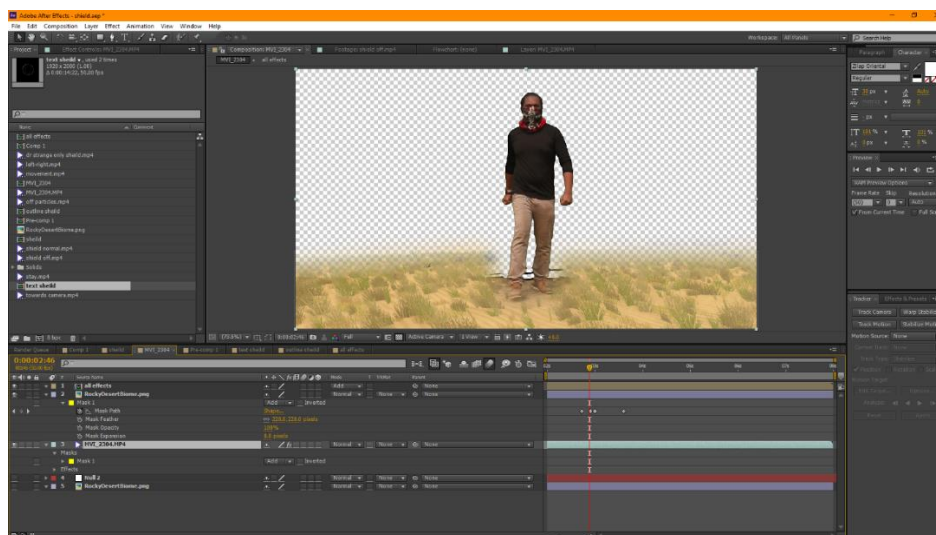
Figure 7.5.2: Transformation VFX Matt
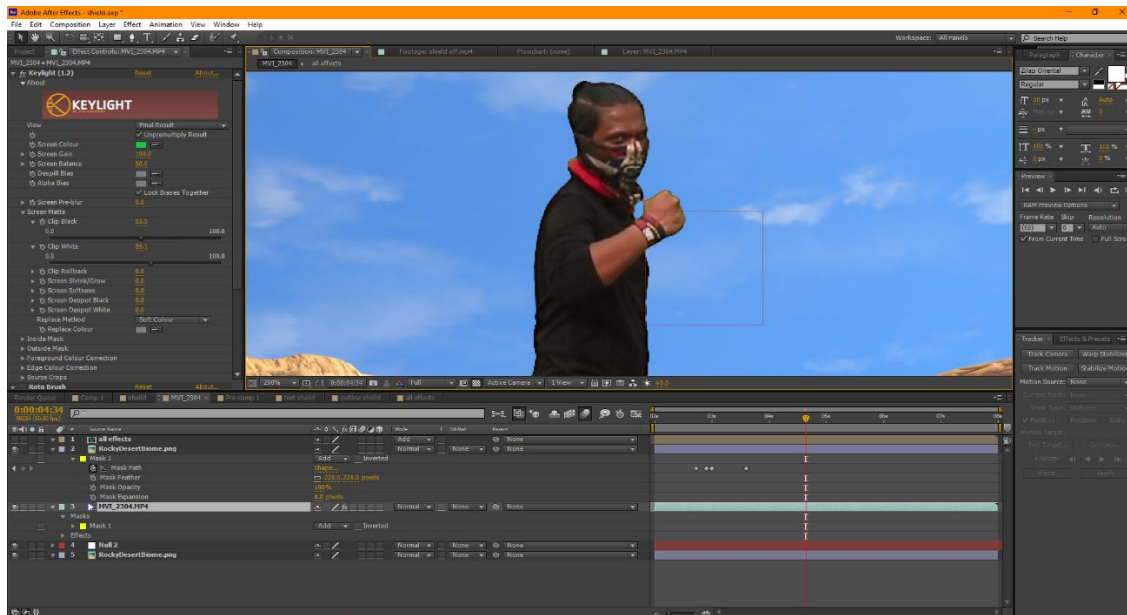
Figure 7.5.3: Shield VFX
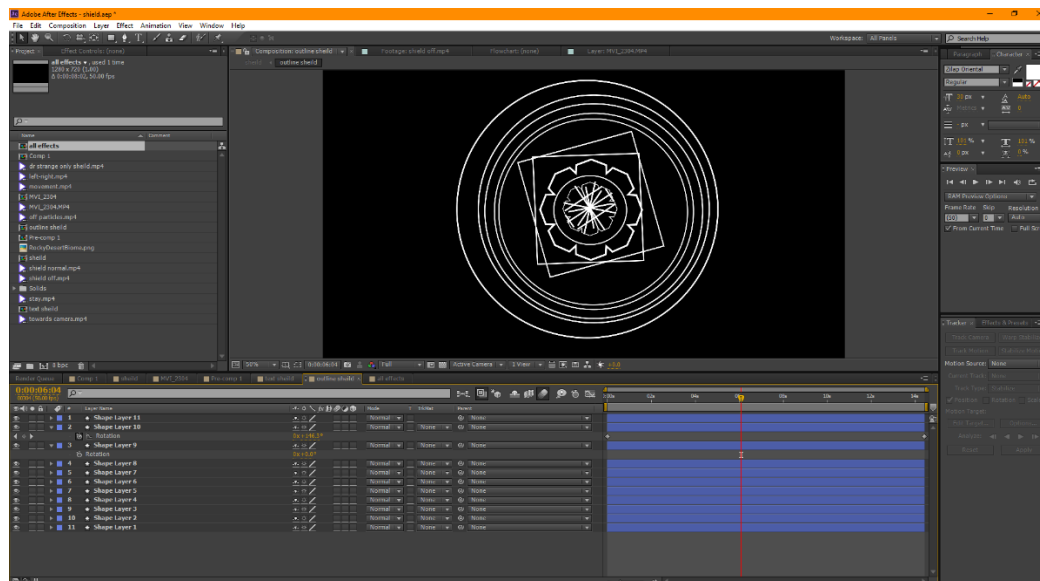
Figure 7.5.4: Shield Making

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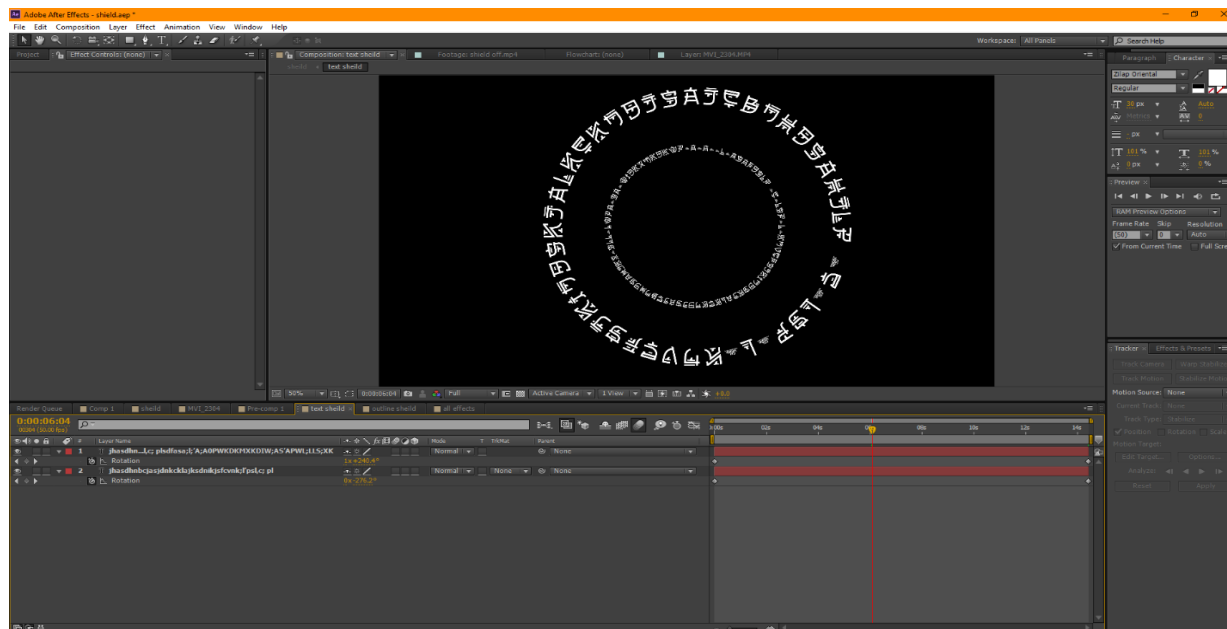
Figure 7.5.5: Shield Masking
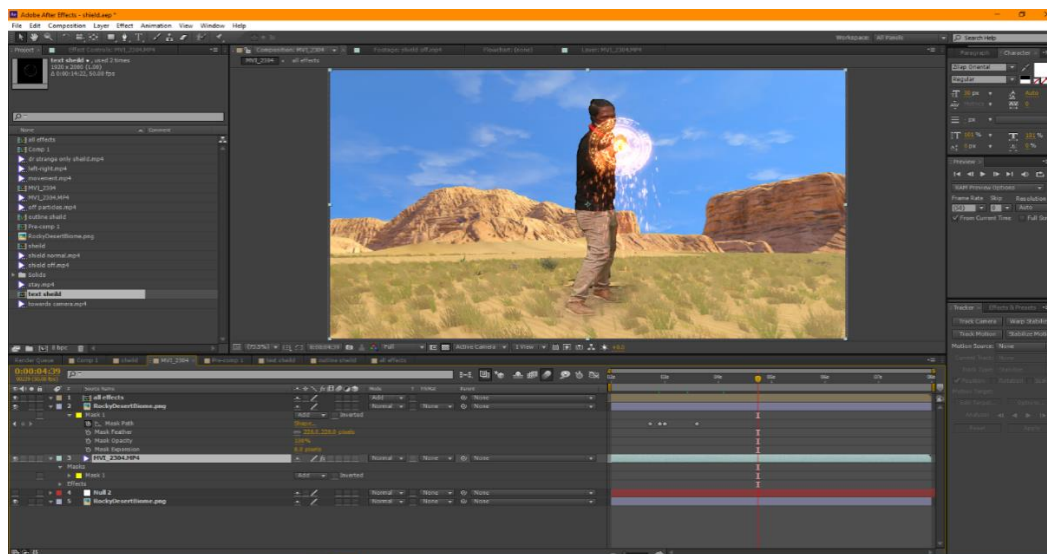
Figure 7.5.6: Shield VFX Real time
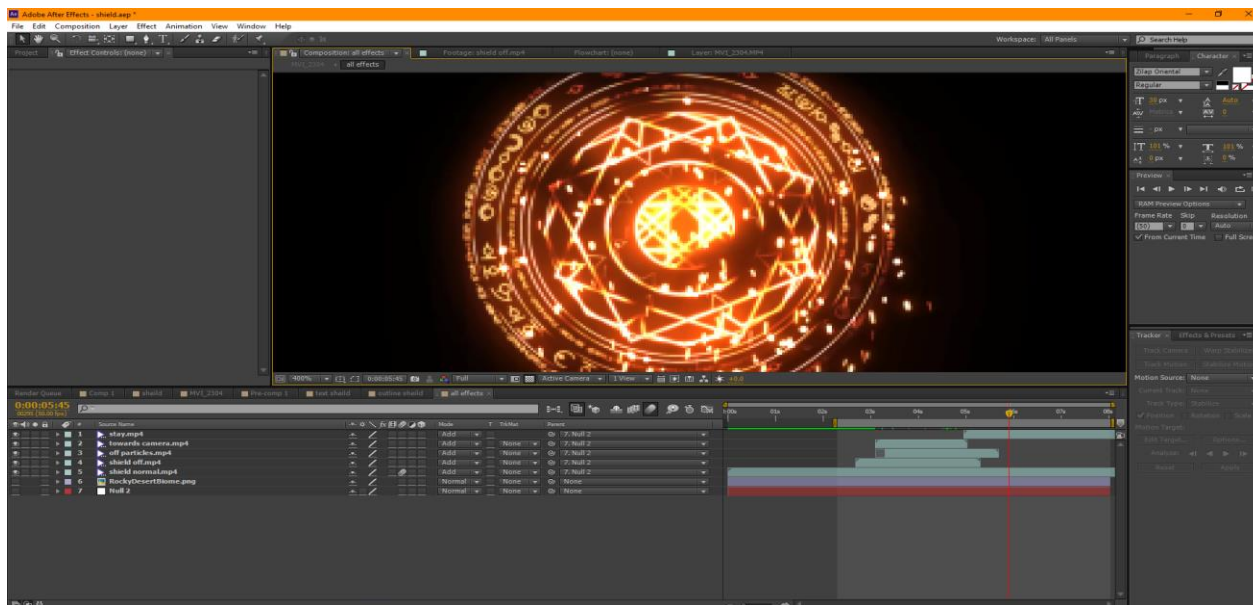
Figure 7.5.7: Shield glow making.

7.5.3 Clone Effect:

In this footage firstly we erase the background by Key Light 2.0 and then mask as we need.
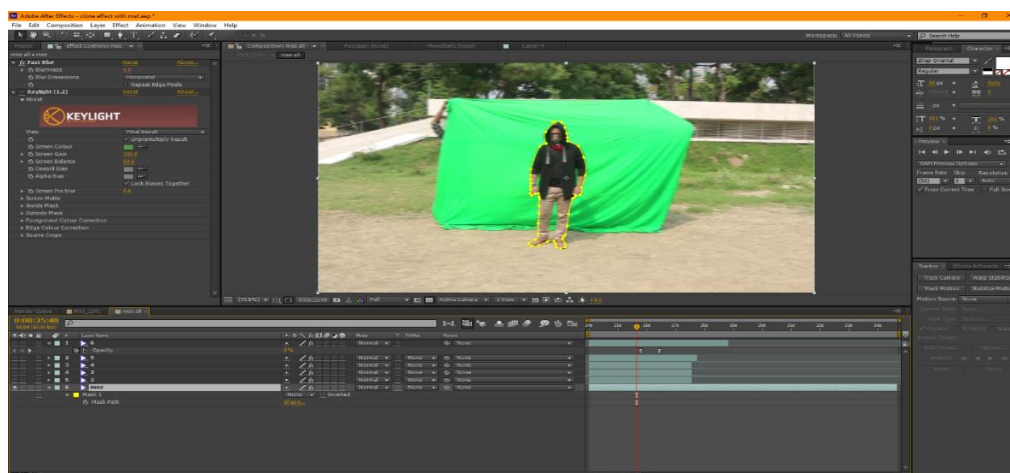
Figure 7.5.8: Real Time VFX

After that we mask the other angel of the shot and then duplicate the clips as many as we want.
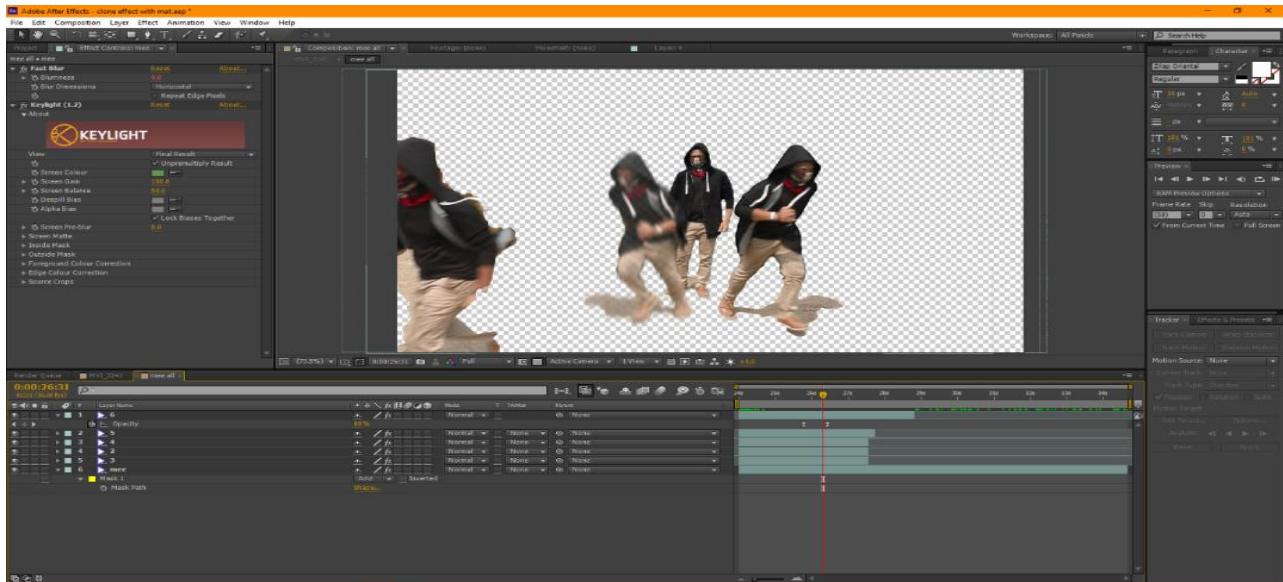
Figure 7.5.9: Clone VFX without Background

After that we add some PNG images as our matt painting works and edit them with our footages and finally render the final output.
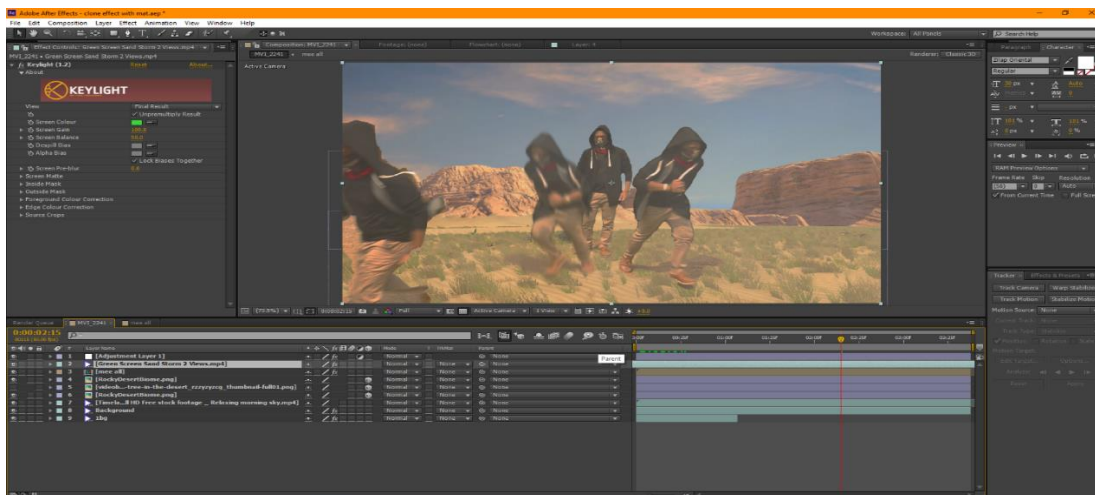
Figure 7.5.10: Clone VFX Tracking
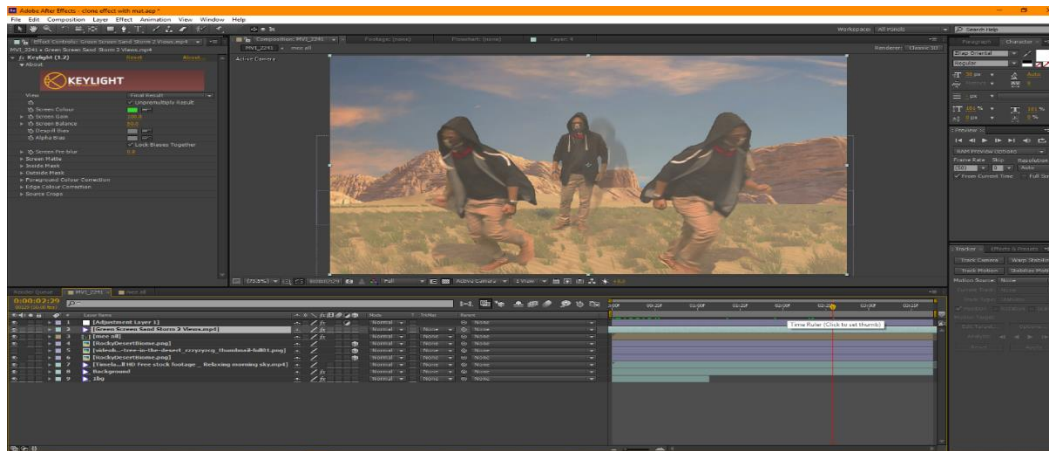
7.5.11: Clone VFX

7.5.4 3D Models:

We make also some 3D models in our project. We make our model basically in Autodesk Maya 2016 version but sometimes we also use Autodesk 3Ds Max 2016 version. Basically, we render these model in mental ray in Maya and render in 3Ds Max on V-Ray.
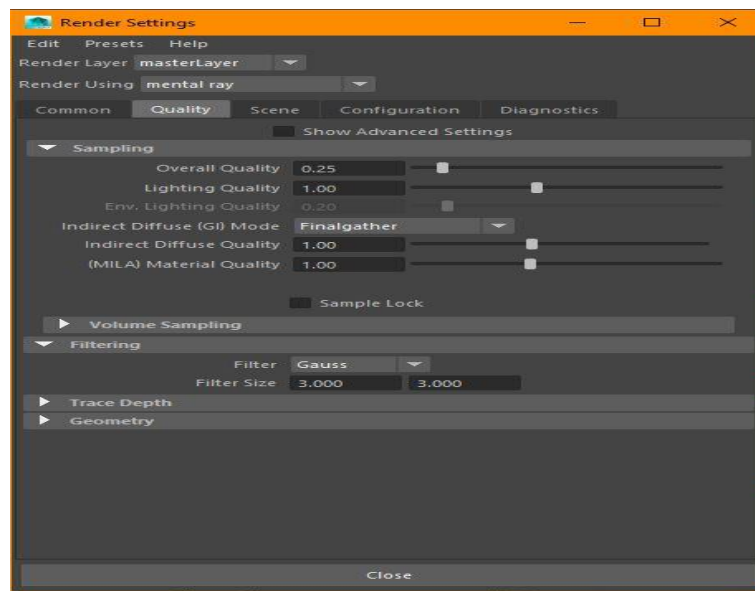
Figure 7.5.12: Render setup
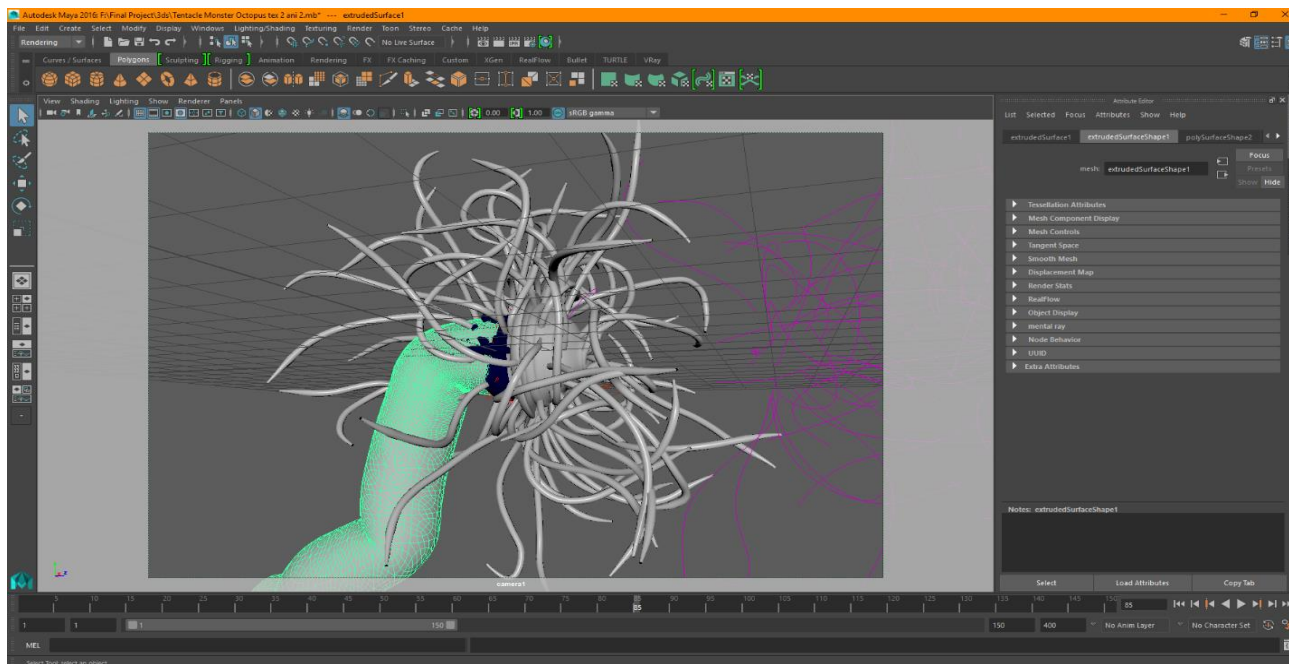
Figure 7.5.13: Monster Modeling without mapping
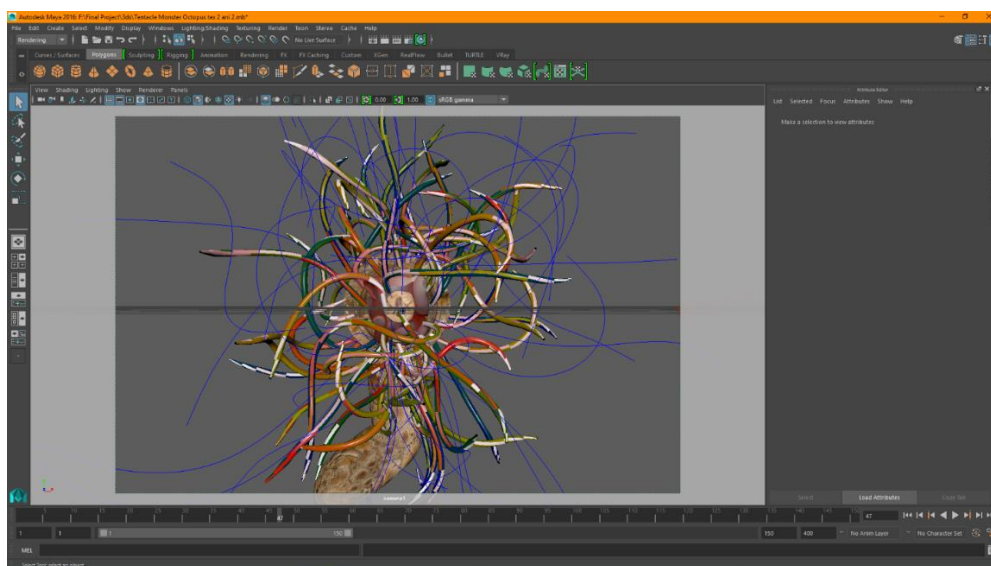
Figure 7.5.14: Monster Modeling
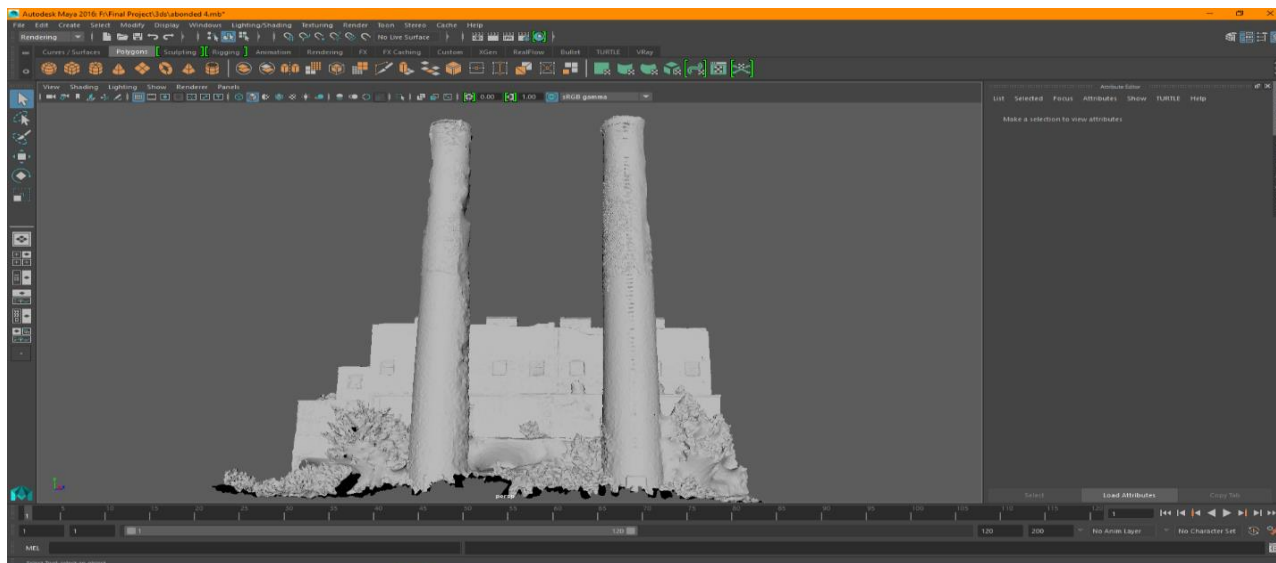
Figure 7.5.15: 3D Modeling without mapping
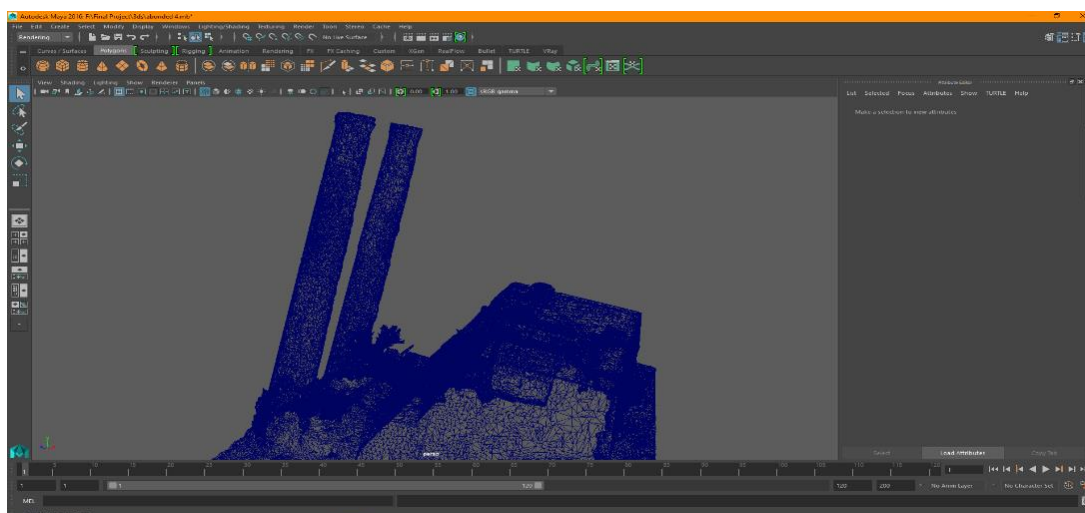
Figure 7.5.16:3D modeling Wireframe

Figure 7.5.17: 3D Building

7.5.5 Rigging:

After 3D modeling, we need to rig the model for animating it. We rigged this model in Autodesk Maya 2016 Version. After creating the 3D model of this we go to the rigging panel and click into skeleton and then create joints. After creating joints then we go to the Skin – Bind skin. For binding skin here, we use Heatmap Binding Technology for better skin binding.Here are some screen shots of rigging:
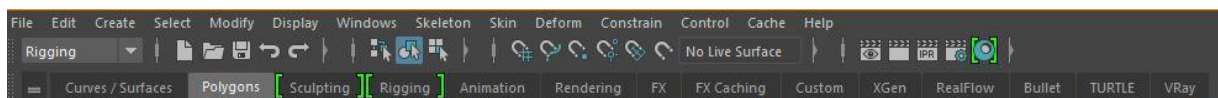
Figure 7.5.18: Autodesk MAYA Rigging Tab
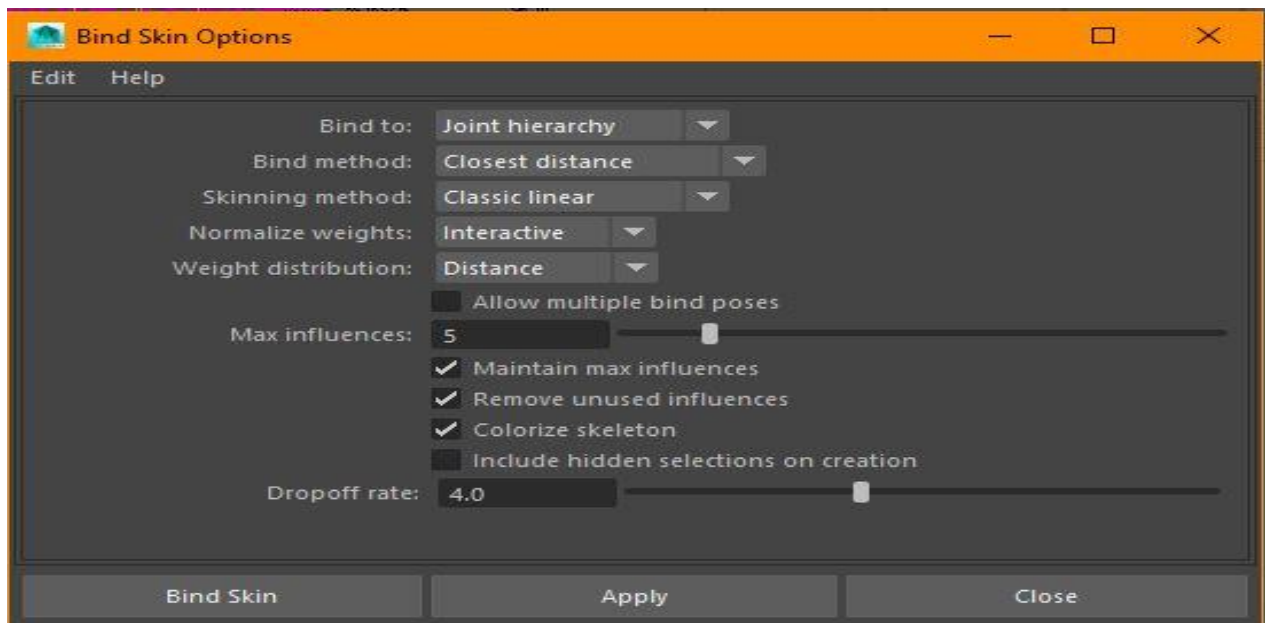
Figure 7.5.19: Bind Skin
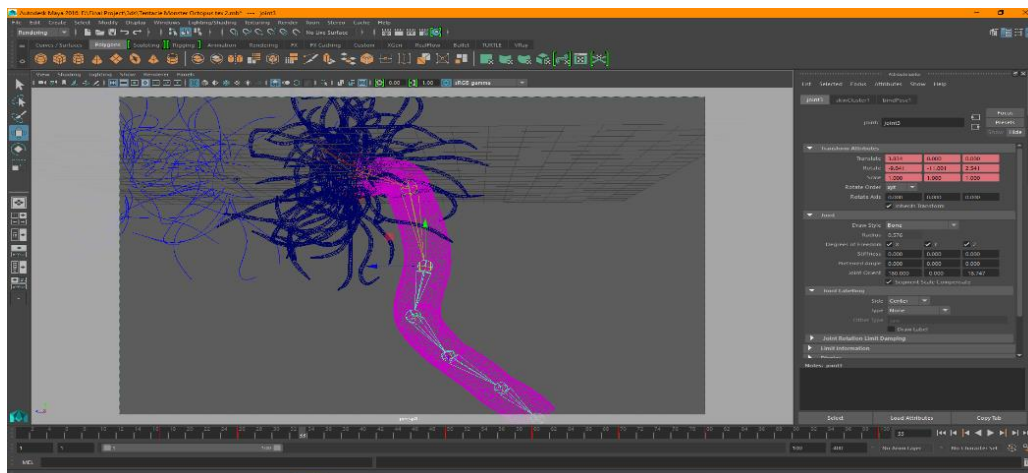
Figure 7.5.20: 3D Modeling
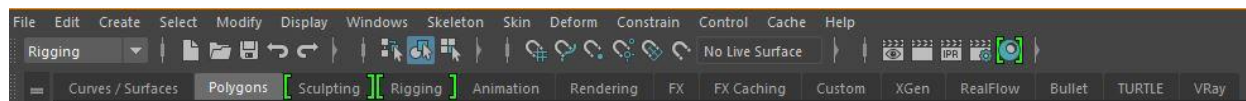
Figure 7.5.21: Autodesk MAYA Rigging Tab
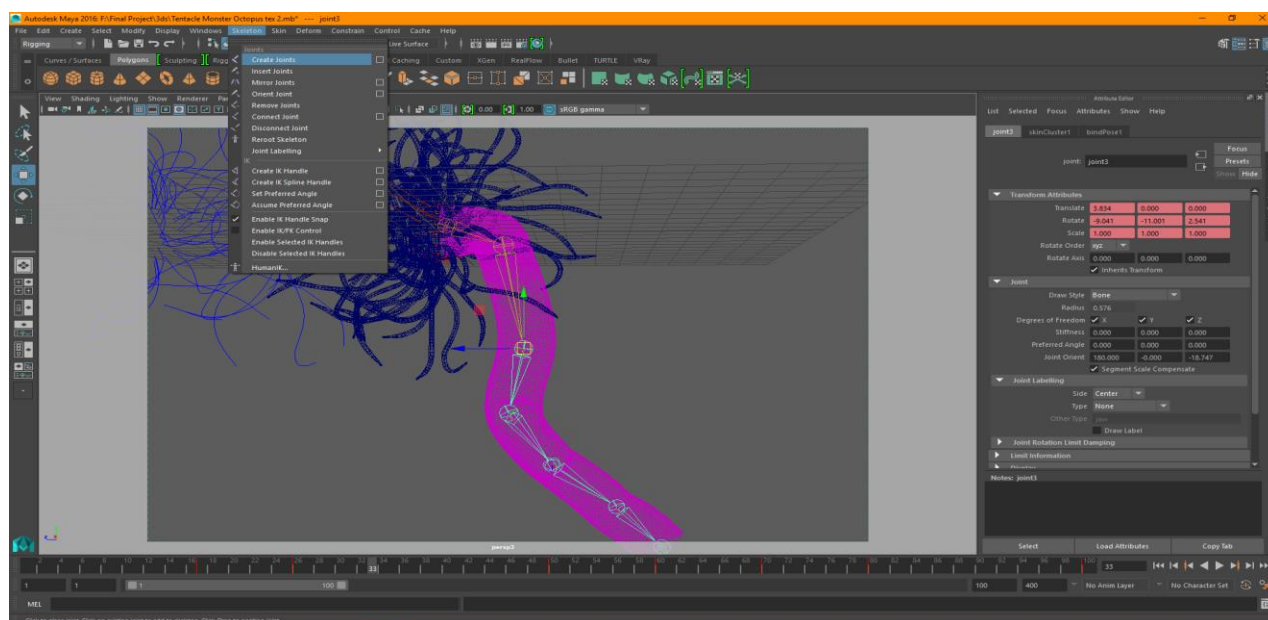
Figure 7.5.22: 3D Modeling

7.5.6 Masking:

For masking here, we use Adobe After Effects CS6.Befor masking, firstly we trim the main clip as we need. After trimming them we take pen tool and draw our specific masking as we need. Here are some screen shots of masking:
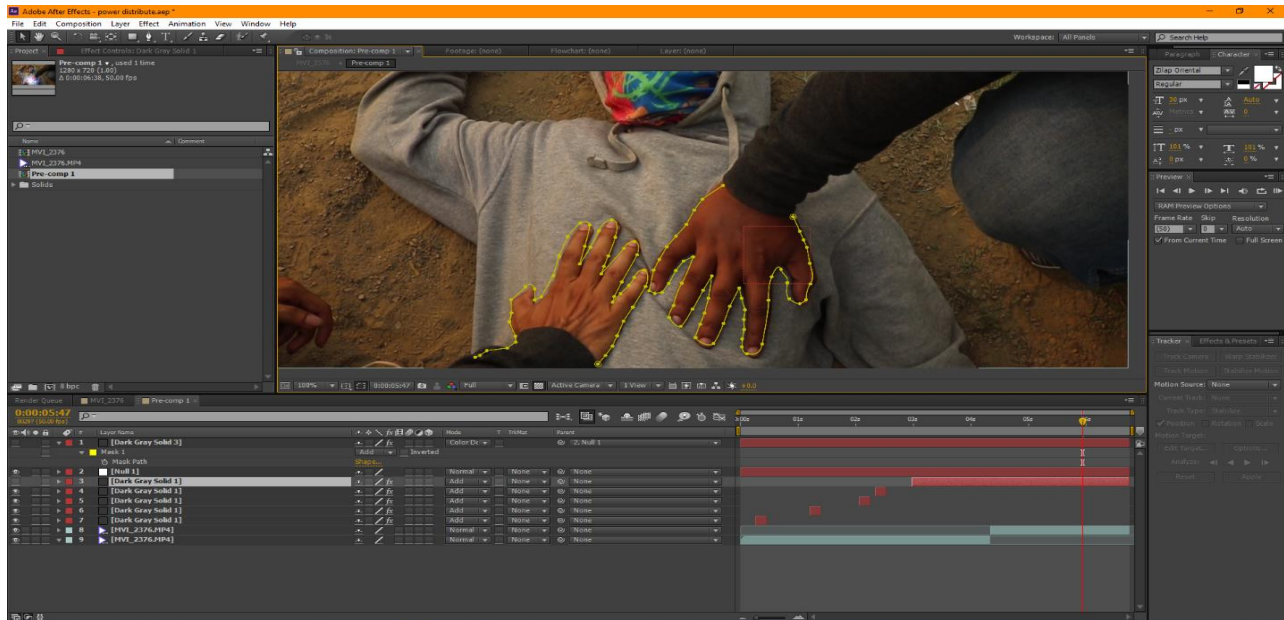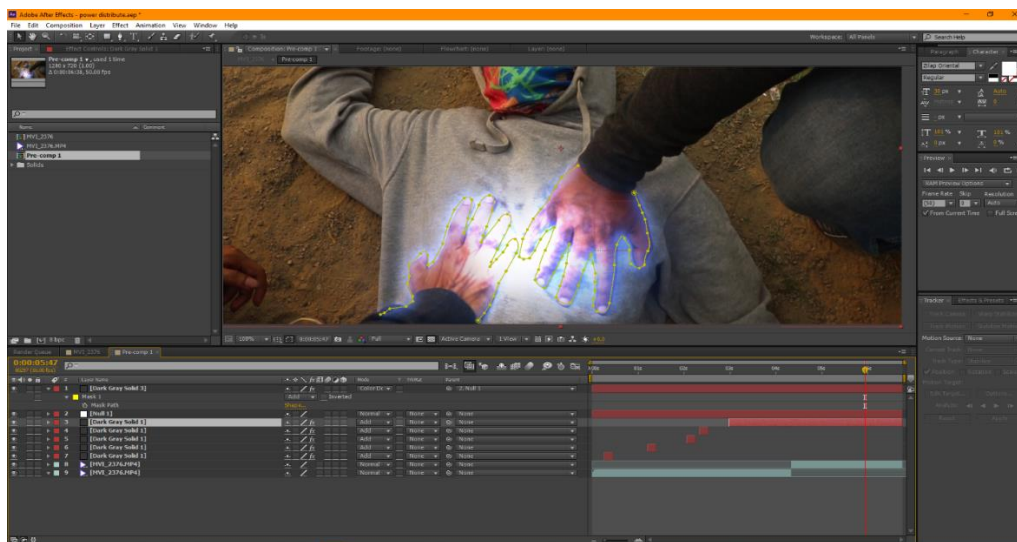
Figure 7.5.23: Power Masking
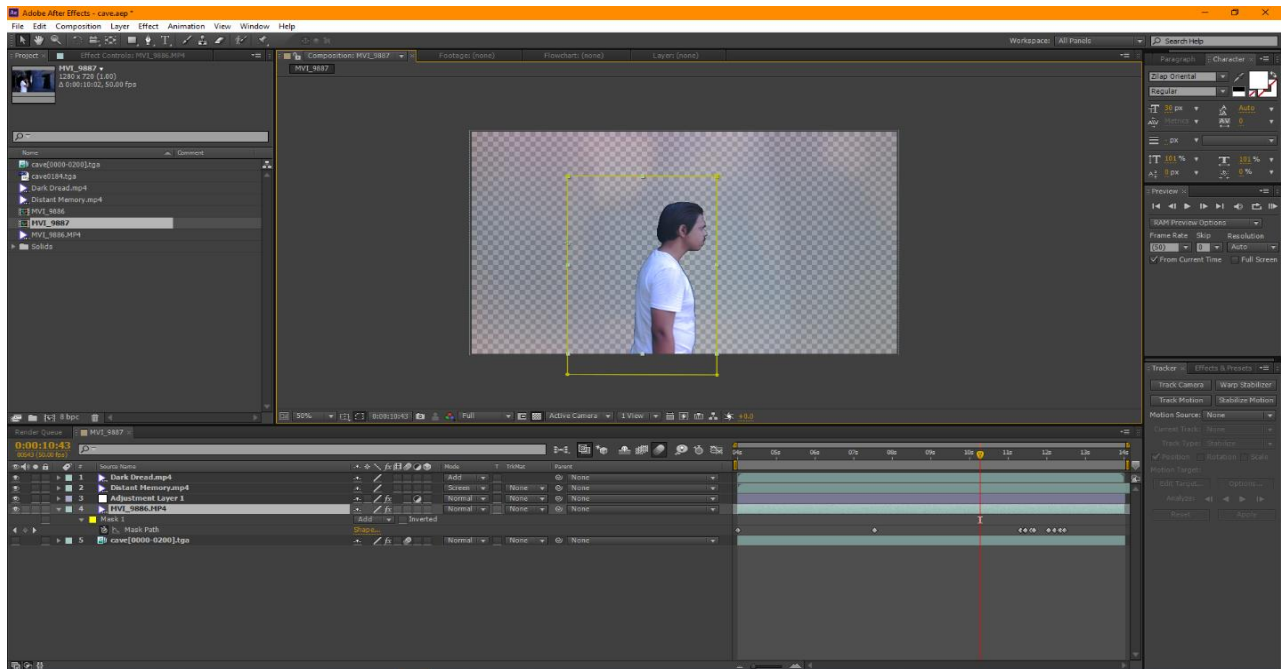

Figure 7.5.24: Power VFX

Figure 7.5.25: Tracking Movement
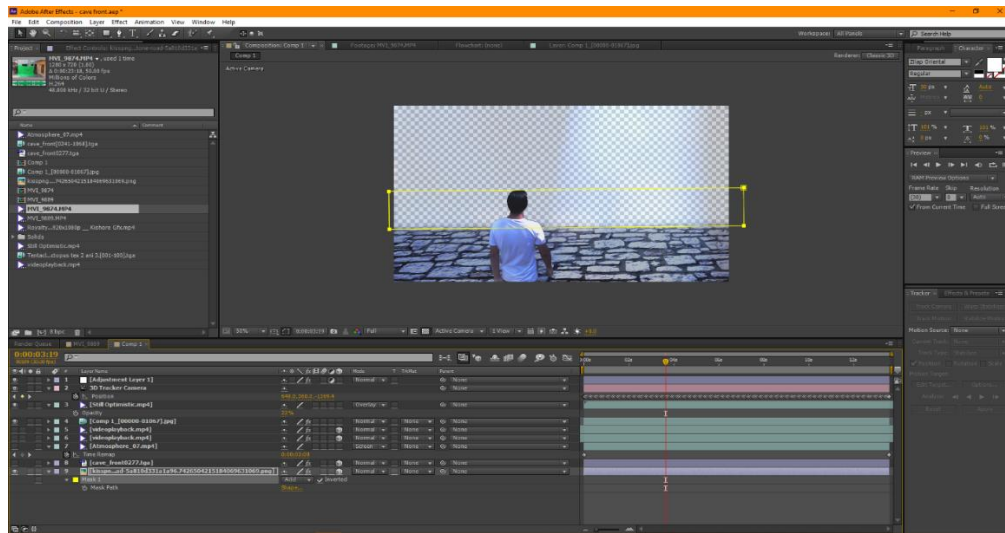
Figure 7.5.26: Matt Painting

7.5.7 Tracking:

For tracking here, we use Boujou 5.0. First of all, we render our specific video clip for tracking purpose as JPEG or PNG sequence. After that we import that JPEG/PNG sequence to boujou for tracking.

One thing we should remember all the time that the frame rate of our main clip and our imported clip must be same or the tracking will not be better.
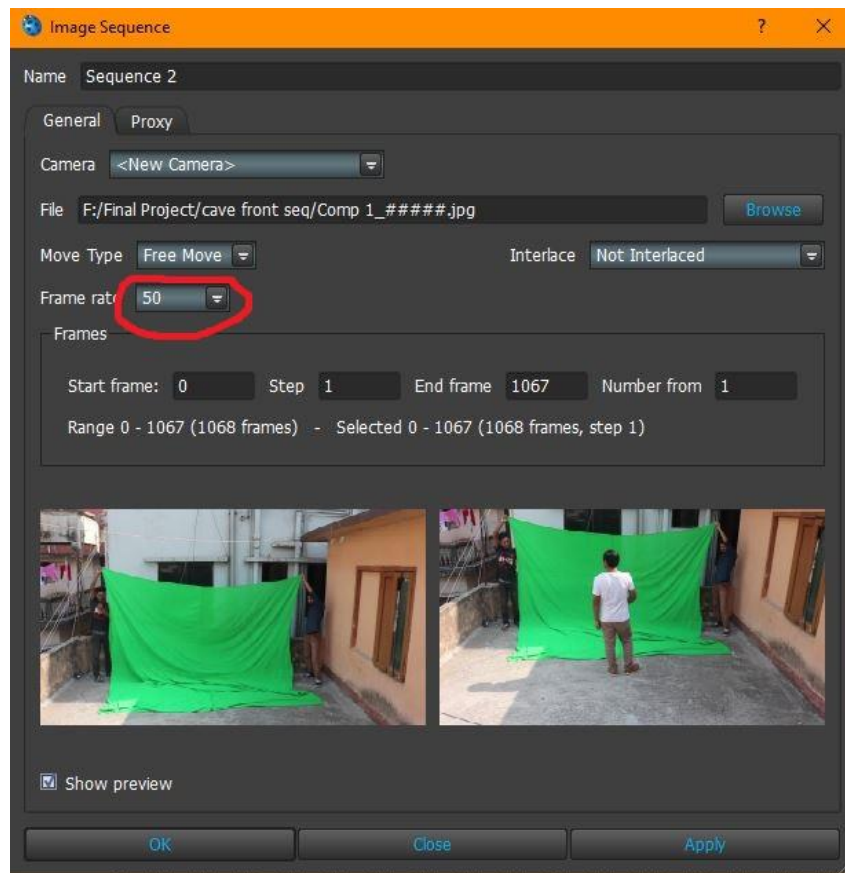

Figure 7.5.27: Boujou Image Sequence

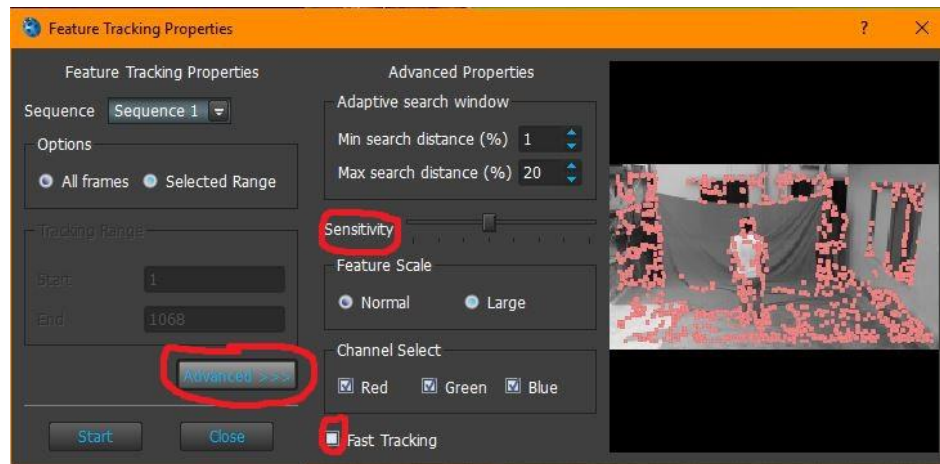Then after import go to Track Features and maintain those setting for better tracking –

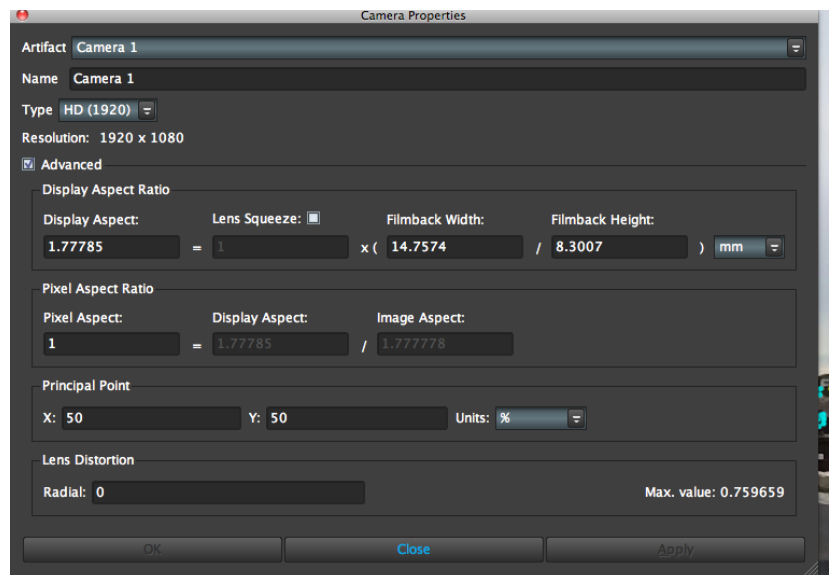

Figure 7.5.28: Feature Tracking Properties

Figure 7.5.29: Boujou Camera Properties

Go to Advance – Change sensitivity **(NOTE: Higher the Sensitivity, better for capturing tracking more & accurate points).** Then select Fast Tracking Option for track a little bit faster. After that go to Camera Solve - Option (All Frames) – Optimize camera path smoothness – Start.
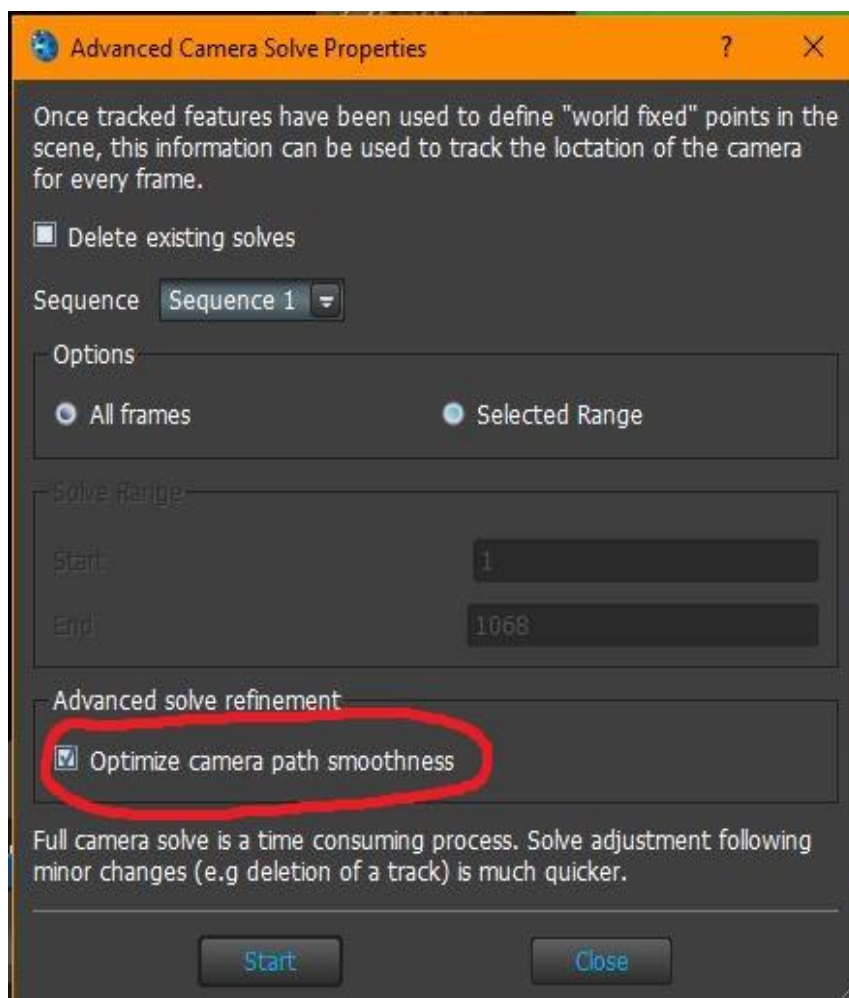

Figure 7.5.30: Advance Camera Solves Properties

After camera solve, for edit the tracking the points go to –

3D vision – Select all the tracking points - Click to Reset coordinate system transformation for align all the track point in right position.
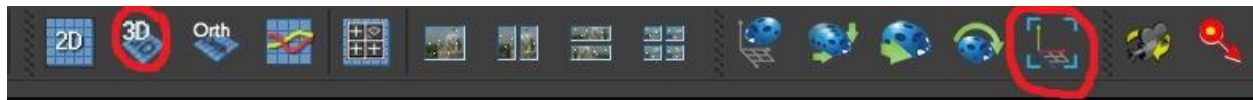

Figure 7.5.31: Boujou Interface

After tracking we should go for export. For exporting cameras, we maintain those steps –
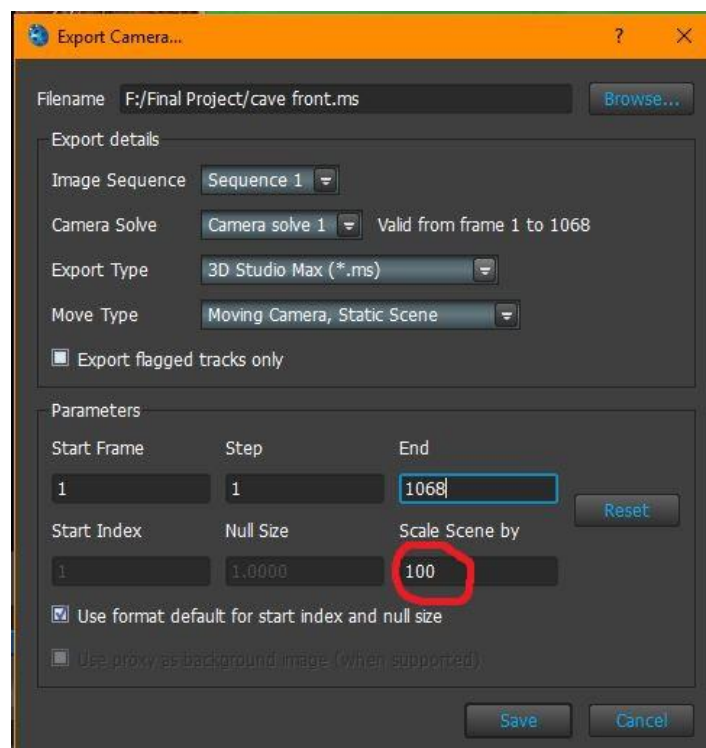

Figure 7.5.32: Boujou Exporting

In exporting time, we should keep in mind that Scale of scene must be 100 or above or after exporting it can't be seen in any area of 3D's Max or MAYA. Then open 3D's MAX or maya and after that goto Script - Run Script – Select the exported camera file.
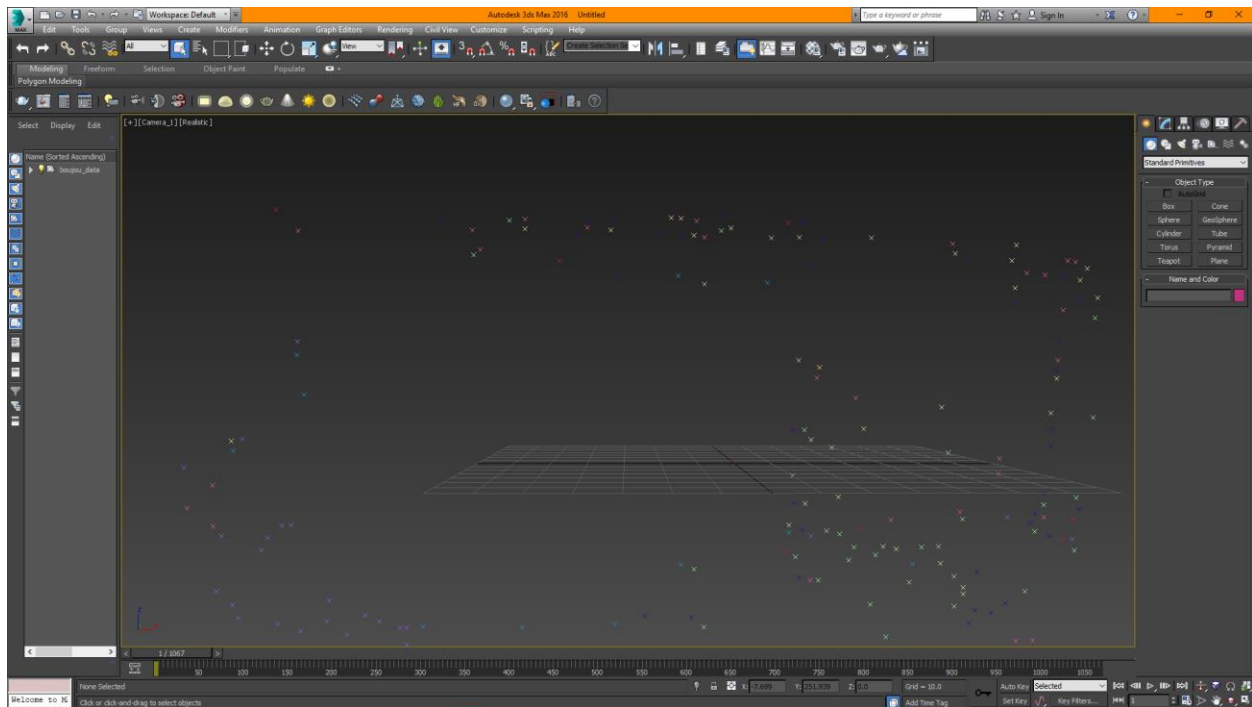

Figure 7.5.33: Tracking Points

7.5.8 Sound Editing:

In this project sound editing was the toughest part for us because we didn't have any professional boom or condenser microphone for dubbing. But in any case, we didn't give up. We try to capture audio from camera mic for listening after then we record our voice by phone recorder.

Figure 7.5.34 : Voice Recording Equipment

Figure 7.5.35 : Condenser Mic for Voice Recording

After take recording by phone, we go Adobe Audition CC and then we edit the recording. Firstly, we remove the noise and then add some effect. In some times we boost our voice in need.

We also use some of Royalty free sound effects and background music to enhance visually and listening part of our short film and getting more interesting.
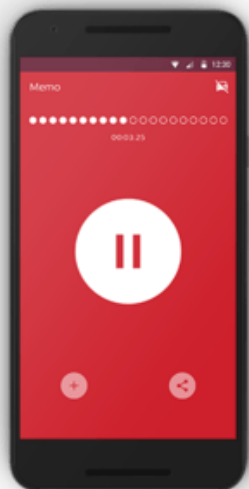

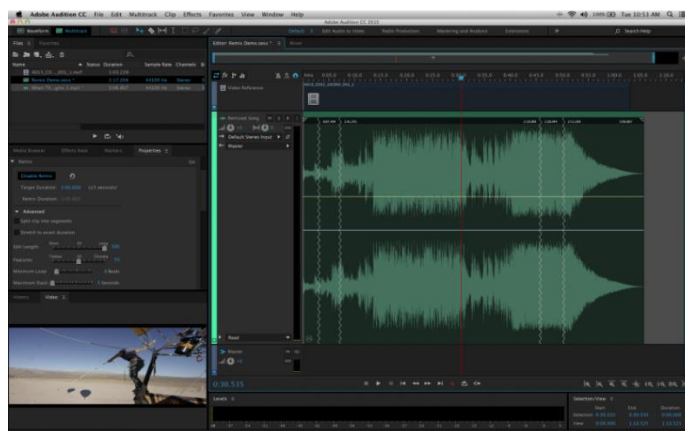
Figure 7.5.36 : Recording Apps

Figure 7.5.37: Adobe Audition CC

CHAPTER EIGHT

ABOUT POST PRODUCTION

8.1 What is post production?

In production post production roles a very important part in the whole production pipeline. In post-production all the editing part of a movie or short film has happen. The main attraction and besties of a movie or short film are being increased in post-production.

8.2 What I do in post-production of our short film?

In post-production of our short film I divided it some parts. Those specific parts of post-production are given below –

1.Modeling: In this part I divided all the modeling part of our short film such as characters, objects, virtual environment etc.

2.Texturing: In the texturing part I textured all the 3D models of our short film.

3.Matt Painting: In this section, I do all the matt work such as chroma screen removing, putting some overlays of smokes, grunges, virtual cracks, virtual ground etc.

4.Tracking: Tracking is the most important part in our whole post-production process. I generally Tracks footages in Boujou and sometimes in After Effects Mocha.

5.Sound designing: In this part of our post-production I edit & design all audios of our short film.

6.Compositing: After all done all of this parts I compose all the part into a single video footage and render it on After Effects CS6 & Adobe Premier Pro.

CHAPTER NINE

CONCLUSION & REFERENCES

9.1 Conclusion:

Finally, we thanks to Allah and our respected supervisor Md Arif Ahmed sir and our head of the dept. Md Sheikh Mohammad Allayer sir for give us unequaled resources and love to finish the whole project in time. We are very grateful to them. In this project we tried to show our skills and experiences during our varsity life. In this department we have learned and realize about VFX, motion graphics, simulations, 3D Modeling etc. We also thinking that we will make a sequel of this short film in future. We also believe that our short film has a good morality and meaning which can make increase the awareness among the people. We also think to create a VFX based production house where we can make more this type of short film and entertain the whole world.

9.2 References:

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