FINAL YEAR THESIS

"MULTIMEDIA CONTENT VISUALISATION"

BY

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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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DAFFODIL INTERNATIONAL UNIVERSITY

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APPROVAL

This Project titled "**MULTIMEDIA CONTENT VISUALISATION**", submitted by Md. Kamrul Hasan Khan 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 18 October, 2020.

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DECLARATION

I hereby declare that, this project has been done by me under the supervision **Arif Ahmed, Adjunt Associate Professor & Head, Department of Multimedia and Creative Technology,**Daffodil International University. I 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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ABSTRACT

Multimedia is media that uses multiple forms of information content and information processing (e.g. text, audio, graphics, animation, video, interaction) to inform or entertain the (user) audience. Human being has always been looking for having an intellectual connection with other people; and, for this goal, with regard to his need at every time period, he has chosen an appropriate method for communication; once by means of the paintings on cave walls, and once by means of computer. On this path, the magic of multimedia content visualization has always been attractive for human and helped him have a better communication with his environment. Nowadays, the art of motion graphics and video editing is considered as a powerful and effective factor in the process of communication; and this art finds a new aspect every day. I used After Effect, Premiere Pro, Adobe Photoshop and Adobe Illustrator for complete my content development. .Motion graphics, Video Content, Poster Design, Social media content which is important to define your intended target audience(s) in order to develop and communicate messages and graphics that appeal to my audience and prompt them to take action. The main work process was done by creating motion and animation. I use graphical contents and plugins for making everything realistic For my still image content visualization I use adobe illustrator, adobe photoshop, stock image etc. Regarding the growing development of media in today's world, the necessity of familiarity with multimedia content visualization is becoming obvious for more effective communication. Social Media Content visualization, Video Content,CGI works using motion graphics, illustration is the main objective of this report paper .

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CHAPTER 01

Introduction

Relevance of different definitions of multimedia; e several uses for multimedia in education industry, and entertainment; Describe the various talents and tools needed to produce a multimedia product; Compare and contrast stand-alone versus internet-based multimedia, in terms of Capabilities, development and limitations; Describe the different types of software that may be needed to produce a multimedia product and typical features one should expect from each software type; general process of multimedia development; and basic familiarity with a variety of authoring software A multimedia content creator is someone who is responsible for the contribution of information to any media and most especially to digital media.. A multimedia content creator can contribute any of the following: blog, news, image, video, audio, email, social updates and other related content. [1] Multimedia content visualization is combination of text, graphic, sound, animation, and video that is delivered interactively to the user by electronic or digitally manipulated means. Various marketing channels crowded with competing messaging means marketers are constantly under pressure to create compelling content. Online platforms used to highlight messaging and promote branded content require a steady infusion of fresh content to keep audiences engaged. Developing a continuous stream of fresh content that generates audience interest can be challenging for any brand. [2] For this reason they need multimedia content visualizer .This kind of multimedia visualization I specially use different kind of editing and compositing software of Adobe . By using after effect we create motion .We add motion, composite the whole work, edit and render in After Effect. And for other works such as 2D graphics works we use Illustrator. We work on video content by Adobe Premiere Pro for other graphical content we use Photoshop. I worked there for three month. I learned a lot in this period of time and developed my skills. We basically work for local clients such as companies, agencies etc. In the mean time we work for NowThis news, Vdeex, Cricfrenzy, Rickth Film, Ruchi, and some other local clients. Some of the works were so basic and some of them were tough and took a lot of time to done. We work as group like we planned the whole project in a meeting then divided those works to all creative artists. We use preset, motion, templates and plugins in our work process. Bangladesh is still behind in the Multimedia Content Visualization Sector. There are a few number of studio who produce good quality advert or content visualization . Even this department is not available in every university. A low number of animator and designers are available for such great and productive works. So this is challenging for this country to improve in Multimedia Content Visualization Sector in a short time.

CHAPTER 02

Literature Review

This chapter will be discussing the thesis on the different companies and agencies about Multimedia content visualization.

In our country there are a lot of companies and agencies such as Grey Advertising Bangladesh, Asiatic Experiential Marketing Limited, Mindtree Advertising, Pixelaa Studios, A2i etc.[3] All the companies and agencies do motion animation. They use the multimedia contents to achieve the market goals. They do animated TV commercial, animated online video commercial, animated short film. [4]

2.1 Grey Advertising Bangladesh

They divided there services in four section and those are intelligence, content & stories, experiences and delivery. They create ideas and expressed through communication in there works. They have a lot of clients in local market. They work for Coca-Cola, gsk, uber, MasterCard, ACI, Apex, gain, GrameenPhone, Pran, UCB and etc. They work for abroad companies too such as Indian Oil, New Zealand Dairy, PERFETTI and etc. Design,illustration,3D environment, product advertise, 2d animation for products are their main works. [6]

Figure 2.1.1 work of Grey

2.2 Asiatic Experiential Marketing Limited

They started from productions, video editing, color grading, CG productions, down to post production solutions focusing on animation work and many more, we have teams specializing in production and post-production services, working with various world-class brands like NTV, Nagorik TV, BTV, UNICEF and USAID. Forging strong relationships between brands and consumers, they have deep partnerships with social platforms with clients, like Reckitt Benckiser Bangladesh, Thyrocare Bangladesh, EnergyPac Electronics, HP, BMW, Peugeot, Obhai (MGH) and New Zealand Dairy Bangladesh, a leading edge. Building on that knowledge, they use insights from social data to develop social strategies, run campaigns and deliver contagious content.[7] Bringing together some of the best people in the business with hands-on training and finding solutions that are global when needed, or as singular as a simple human emotion, they provide any kind of communication your brand needs. Their specialty caters to the unique objective and need of the brands to help increase sale, and Top-of-mind Awareness. They build pioneering brands with purpose. Advertisement Communication is not only limited to products and services but also it has its impact on social awareness and humanitarian causes. Their team dedicated to Social Communication deals with social welfare needs of people and provides specialized services. Working with humanitarian giants like UNICEF, WHO, ASA, BRAC. They are working with brands like Unilever, HSBC, Facebook, PepsiCo and Loreal. [8]

2.3 Mindtree Advertising

The media industry is in the midst of enormous reinvention at the hands of digital. Technology is erasing the lines between content creators and consumers. Powerful online communities are pushing news and events into real time viral storms. New distribution channels and partnerships are creating unprecedented business opportunities. Mindtree uses its expertise to enable broadcasters, publishers, gamers, out-of-home services, advertising agencies and sport. Mostly they work for digital marketing and IT consulting. [10]

Figure 2.3.1 work of Mindtree

2.4 Pixelaa Studios

They have a lot of clients in local market. They work for BIRTAN, Nescafe, Pran, SIBL, Vivacom Solution Limited. They are so popular among all the agencies and companies for their works and creativity. They did a lot of nice CG works and those are amazing. They have 75+ successful animated productions.[5] Pixelaa is only one years old but it create a high value in market and now pixelaa is trusted by a lot of remarkable companies and agencies such as Mobil tm, Robi, ACI, Unigas, incepta, Jantrik, United Group, Social Islami Bank Limited, Nescafe, Pran, Square, radio furtu 88.0 FM, easytrax, Doctorola, PetroMax LPG, SHANTA asset management, City Bank, ASIATIC etc.[10]

Figure 2.4.1 Work of Pixelaa

Pixelaa is trying to do something new and different than others. They are trying to make 2d animation using digital art. They are trying to have the market attention so that they can do better job in this market place.

Figure 2.4.2 work of Pixelaa

They are making graphical contents using digital art. By doing this they are working better and faster than others. And also they are having a lot of projects from well-known companies and agencies.

Figure 2.4.3 work of Pixelaa

2.5 A2i

A2i is Government project. Their major areas are e- governance, innovation lab, and informative projects. They have a lot of partners such as UNDP, GAIN, Telenor, Mozilla, LIFE ACADEMY, COPENHAGEN CONSENSUS CENTER, Griffith University, JICA, NICT (Maldives), Urban Launchpad, Google, ColudCamp USA, eGL Singapore, Behavioral Insights Team and British Council. [11]

Figure 2.5.1 work of A2i

CHAPTER 03

Project Workflow

This chapter will be discussing the uses of different software and workflow of how to create a CG product. In this part, I will describe some CG works that I did in my intern period. I will do this in a step by step process and use After Effect cc 2019, Adobe Photoshop and Adobe Illustrator.

3.1 21st February CG Short Documentary For Vdeex

I work in the CG of Walton AC. I learned a lot from this project. This one was challenging for me because I learn lot of different tools while I was working on this project. I learn about photo holder and smooth transection for this work. I also do a short research about 21st February for this project.

1. I use png linear image for background
2. Take a HD solid.
3. I use animation composer for text animation.
4. I change the position to linear and direction to uniform for makes image animation.
5. I use masking in this CG
6. I use template

Make a particle path with pen tool and animate the path with these particles moving.
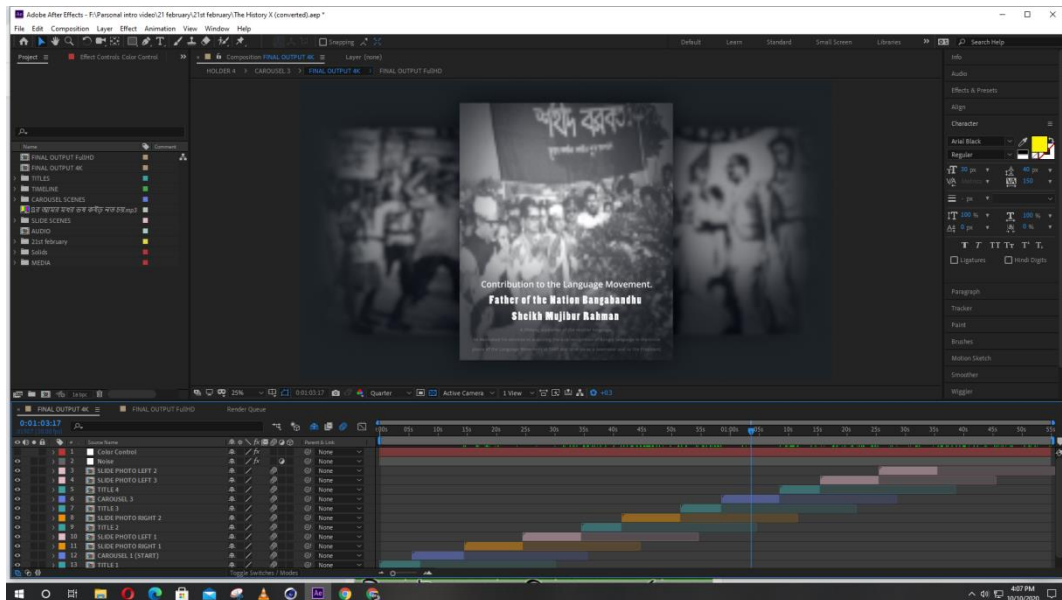
Figure 3.1.1 work of Vdeex 21st February CG Short Documentary

Image set on the photo holder than start to animation. I use position tool set key frame and animate the image horizontally . I change the key frame time very carefully as there is rhythm on it.
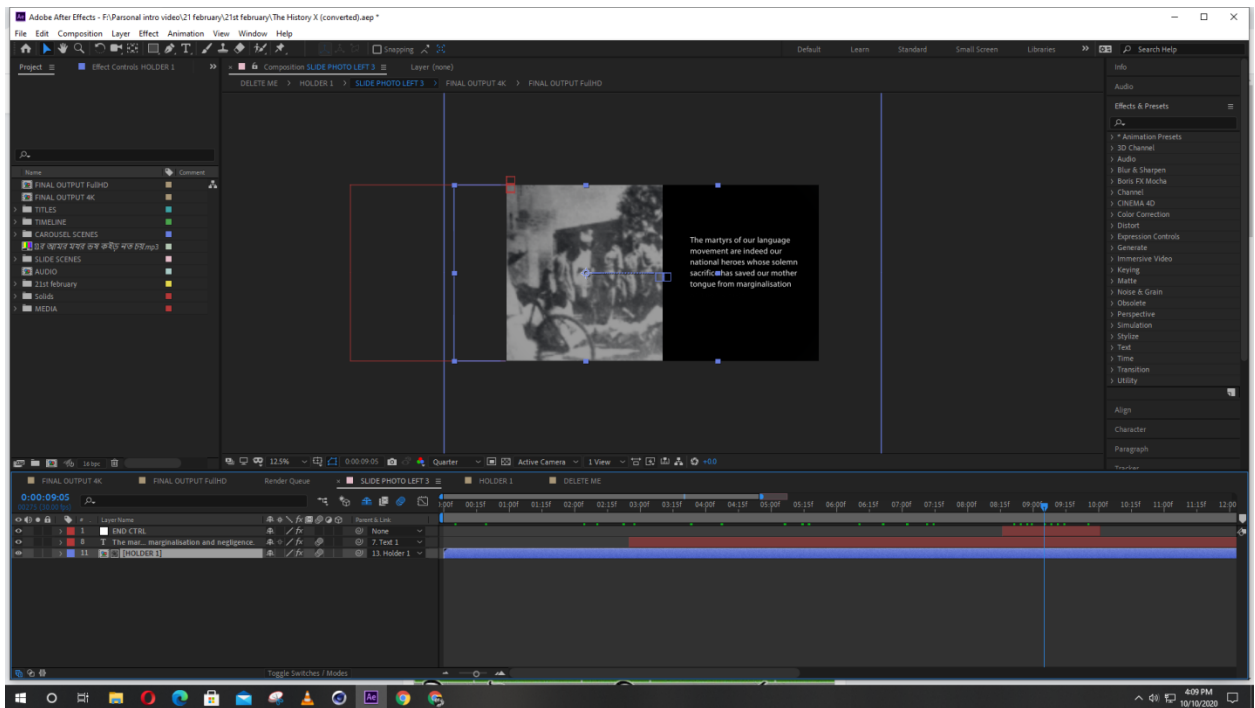

Figure 3.1.2 work of Vdeex 21st February CG Short Documentary

Composite all elements and animate them properly. Animate the layers in section and complete this animation part. I use some basic animation for complete this project using scale tool, position tool, opacity.
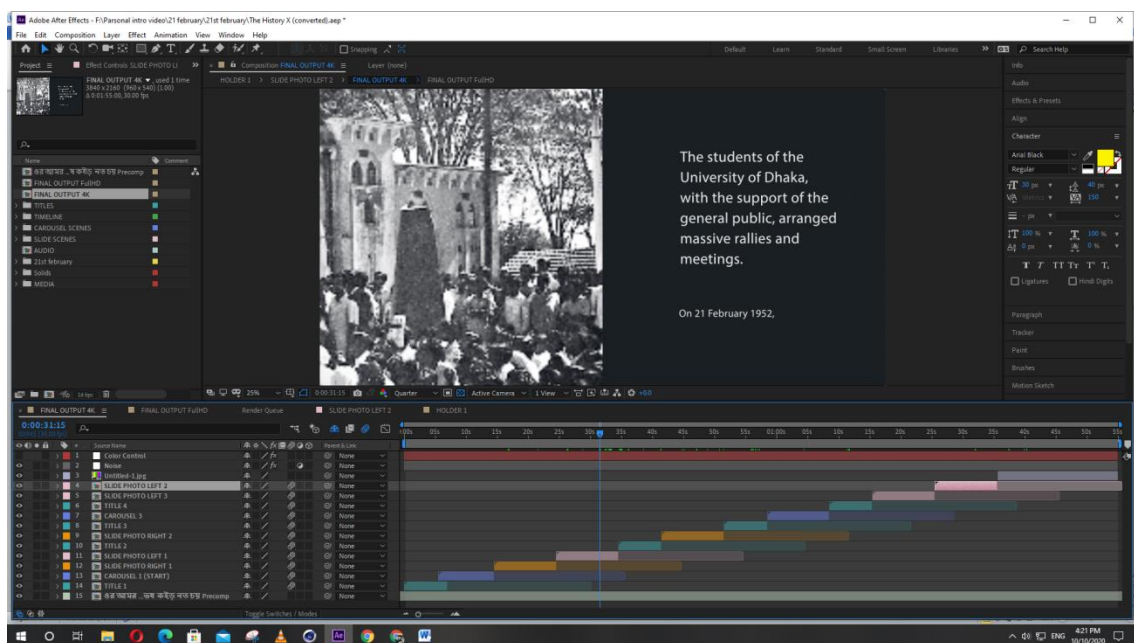

Figure 3.1.3 work of Vdeex 21st February CG Short Documentary

I divided this project to different composition to make this easier. I am going to composite text part in the end of the project. Cause all the valuable information a give my audience through it.When image come in the frame and set then text animation become and do it with animation composer text preset and opacity.
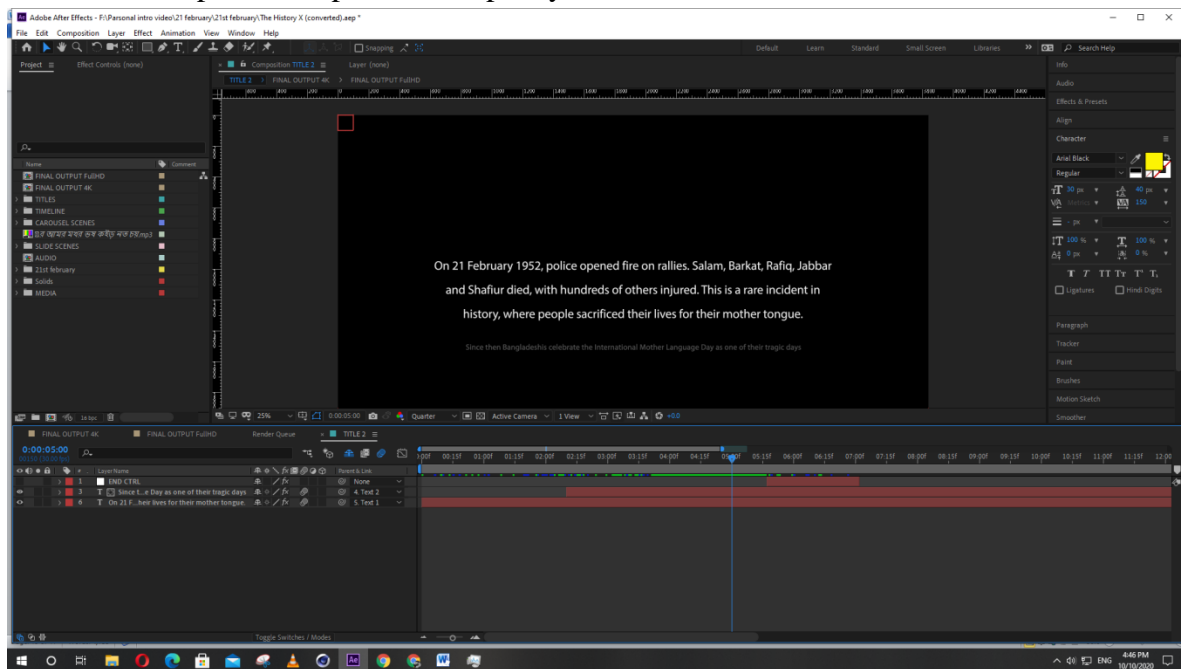
Figure 3.1.4 work of Vdeex 21ˢᵗ February CG Short Documentary

Used masking and giving effect in the end part make it better and complete. Fixed the color tone and background color to match with the video and logo.
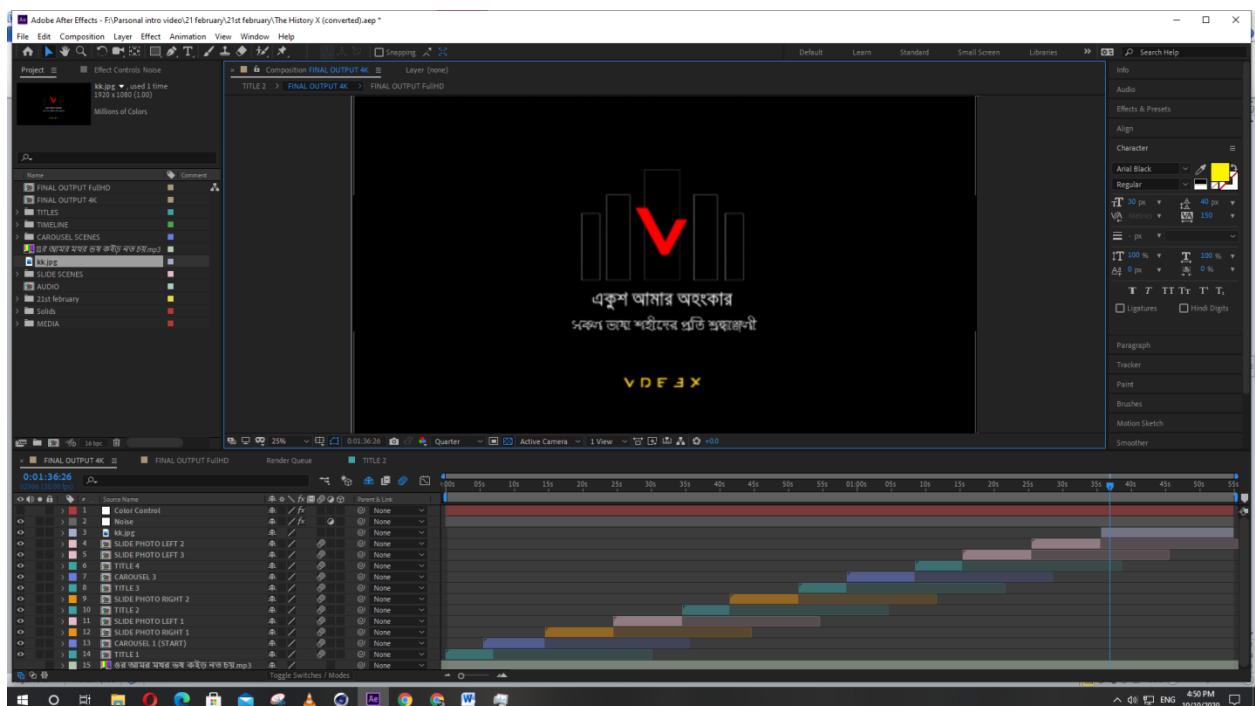
Figure 3.1.5 work of Vdeex 21ˢᵗ February CG Short Documentary

3.2 Social Media Content For Vdeex

1. Used puppet tool for character animation

2. Used some illustrator file

3. Position animation

4. Animation composer preset for Transition.

5. Use trim path for circle animation

Used puppet tool for animate the character, fixed there anchor point. Made the background, and Character in Adobe Illustrator. Animate those illustrator files in after effect using basic tool of after effect.
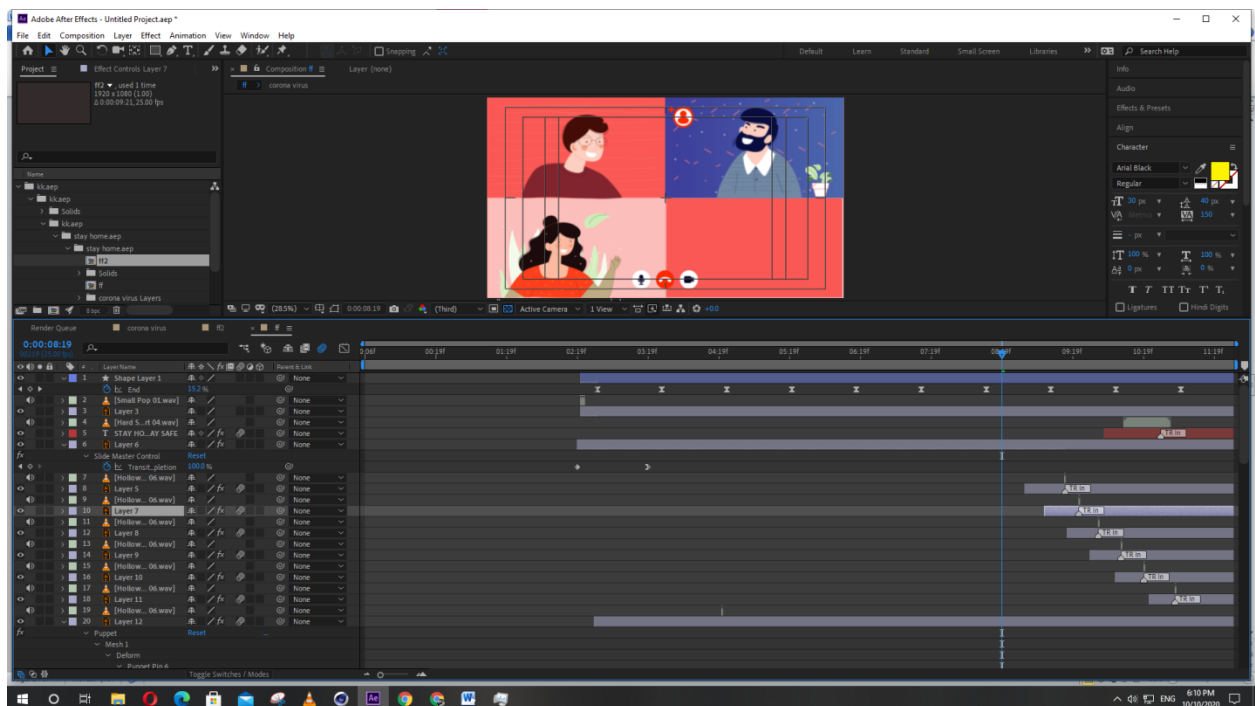

Figure 3.2.1 Social Media Content for Vdeex

I used some motion graphics in this section of the animation. Animate the main character using puppet tool and basic tool of after effect such as position and scale. Used a simple solid for background .
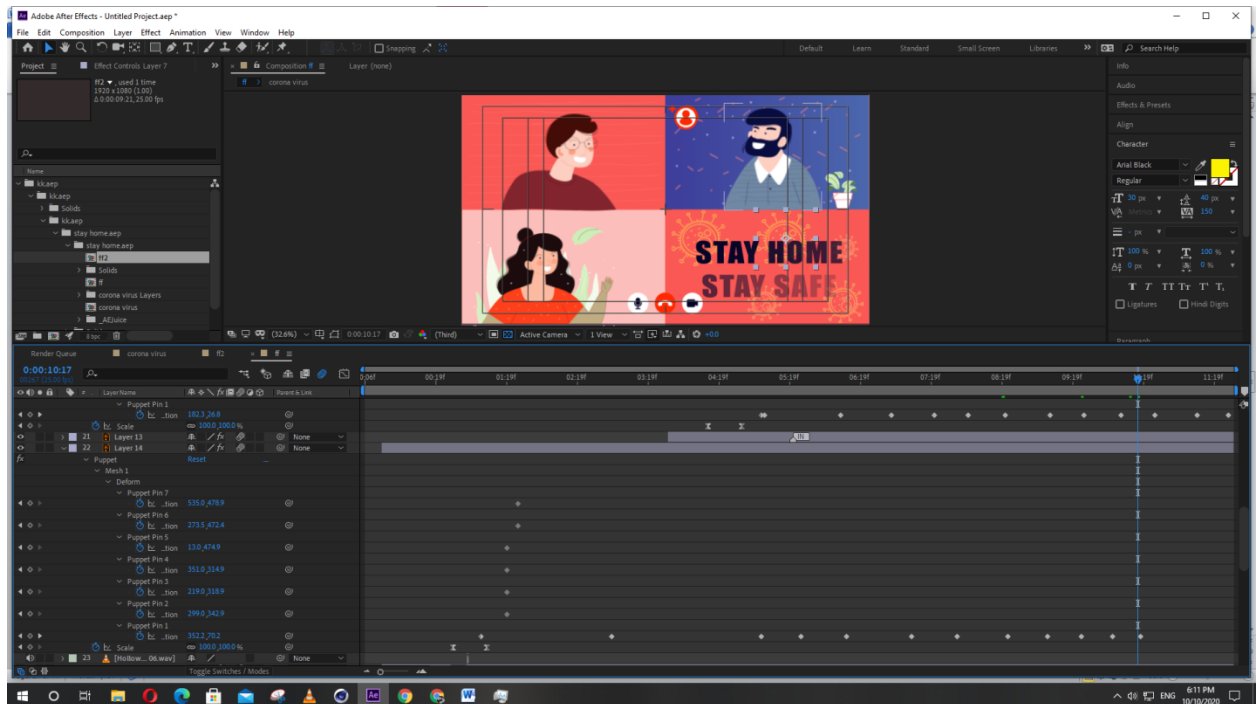
Figure 3.2.2 Social Media Content for Vdeex

I used position tool and Animation composer text preset for make this text animation. Here I used different type of preset. Like fade in, Fade out, Scale preset etc.
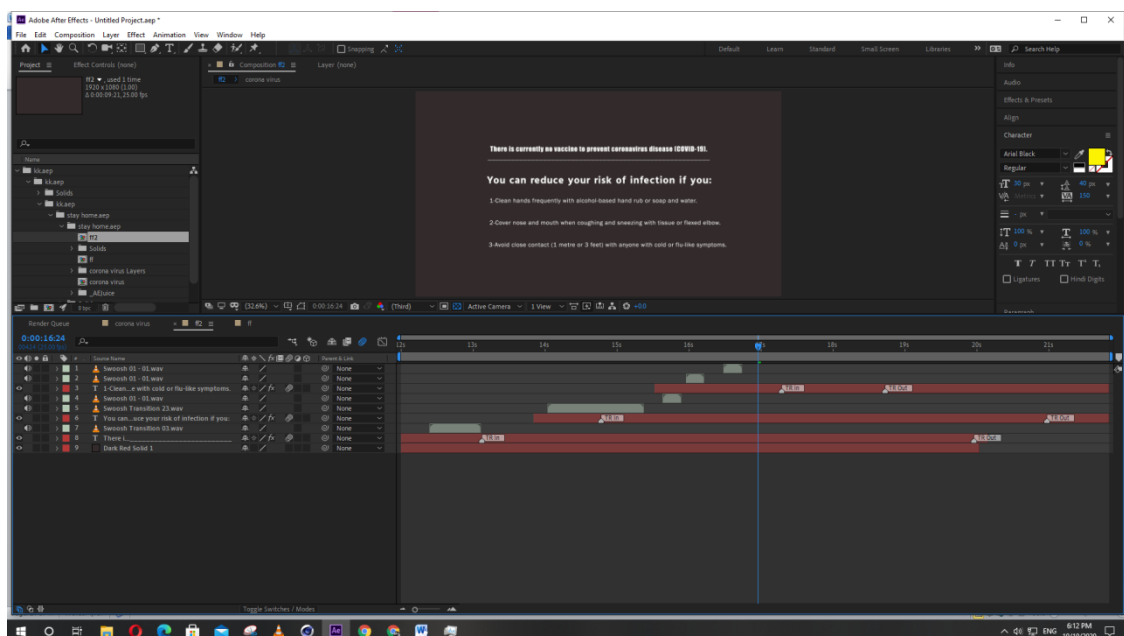

Figure 3.2.3 Social Media Content for Vdeex

3.3 Ruchi Mnemonic Design

1. At first I draw the concept and approve from Clint.

2. In adobe illustrator I illustrate it with circle, pen tool and others.

3. For text I use font then create outline and made this of Mnemonic.
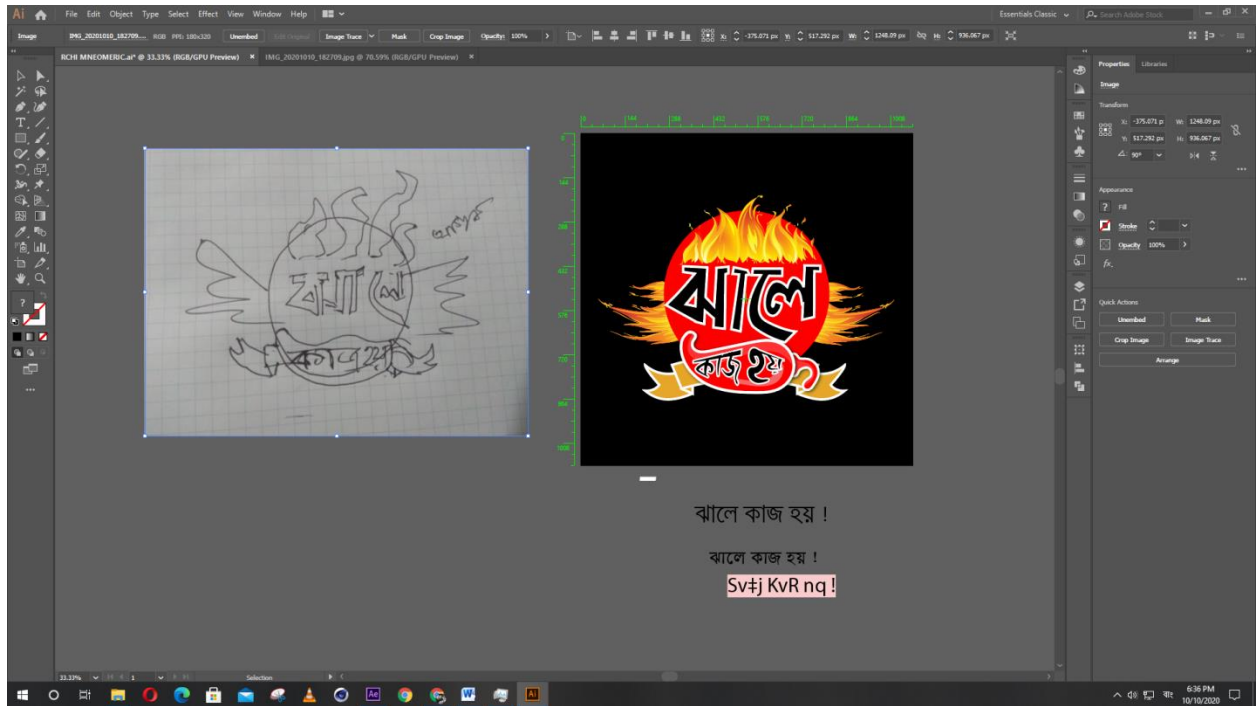
5. I collect fire from freepik.com.

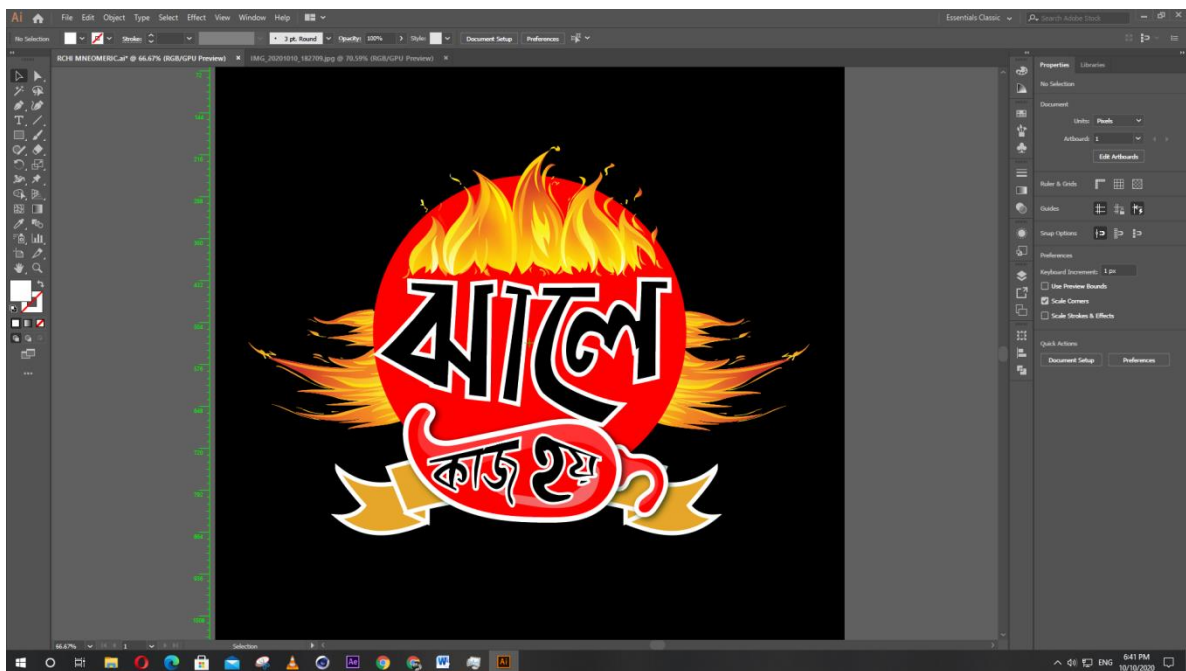Figure 3.3.1 Ruchi Mnemonic Design

Figure 3.3.2 Ruchi Mnemonic Design

3.4 Rickth Logo

1. When I start a logo design I do raff sketch of those logo.Here I do same thing.

2. Then I get it into my adobe illustrator .I use circle, rectangle, square shape for create this logo.

3.I use font and create outline for give the logo name and slogan.
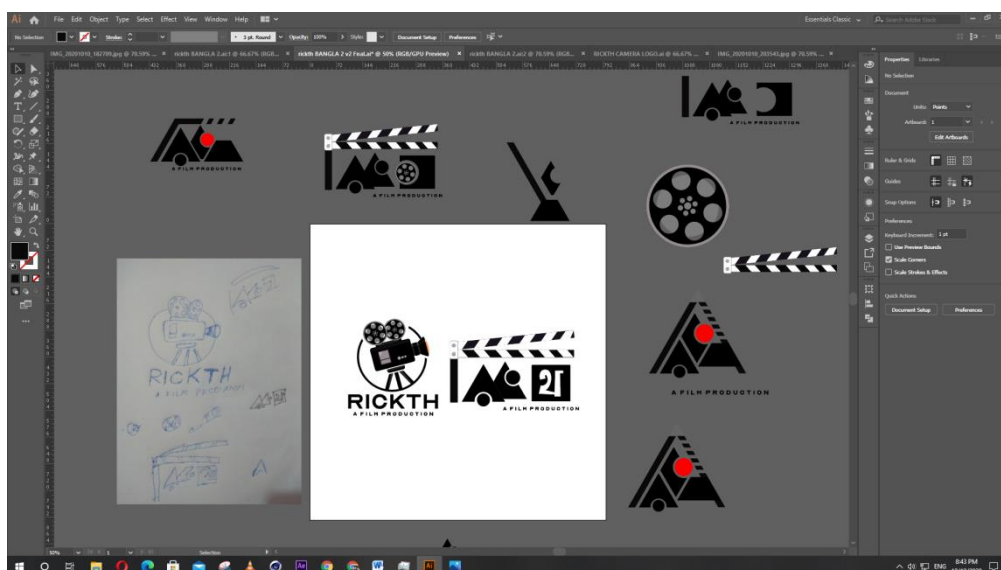

Figure 3.4.1 work of Rickth Logo

Figure 3.4.2 work of Rickth Logo

3.5 Studio Tik Tok Corona Virus Awareness

1. I made illustration of the background using illustrator

2. Composite them in different layer in Illustrator

3. Use puppet tool for character animation

4. Trim path for line animation

5. Animate all the different layers from illustrator

6. I use Motion bro for Transition

Illustrate the heron in Illustrator, composite them in different layers and animate them with puppet tool.
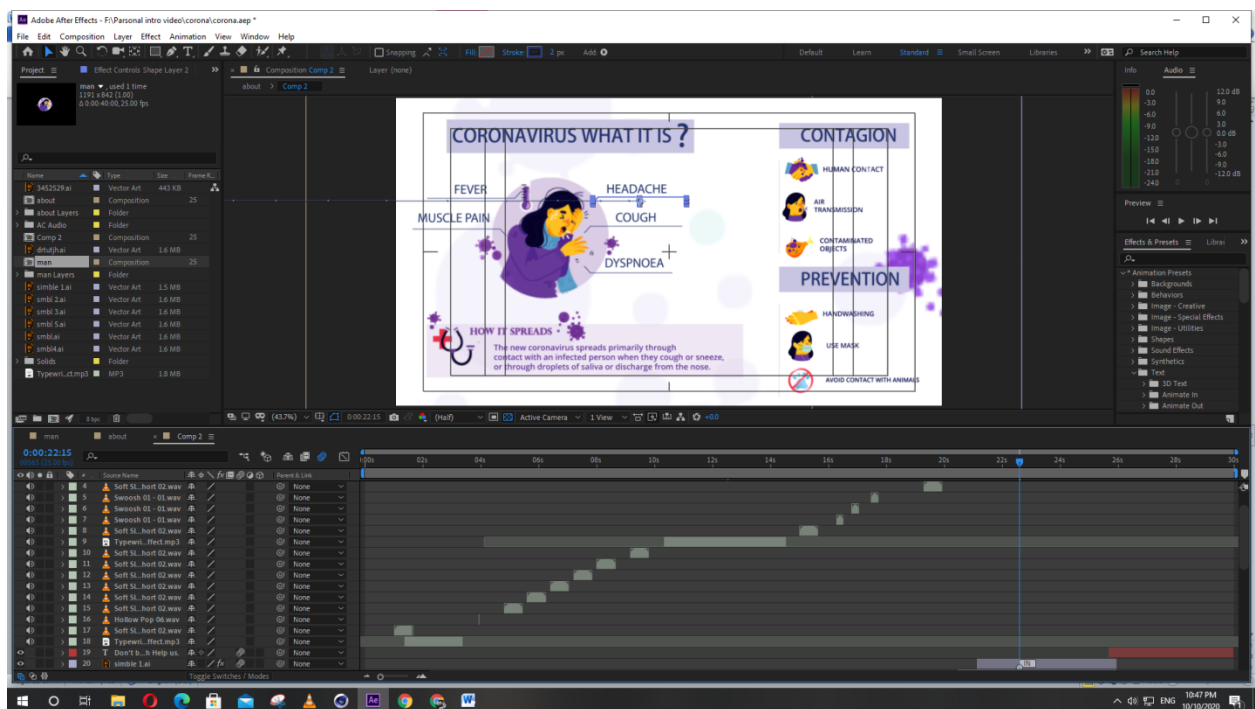

Figure 3.5.1 work of Studio Tik Tok Corona Virus Awareness

Animate text using text preset, scale, rotation, position, for make the basic animation. I used trim path for indicator line animation. I used motion blur after giving position key frame With make this animation more attractive.
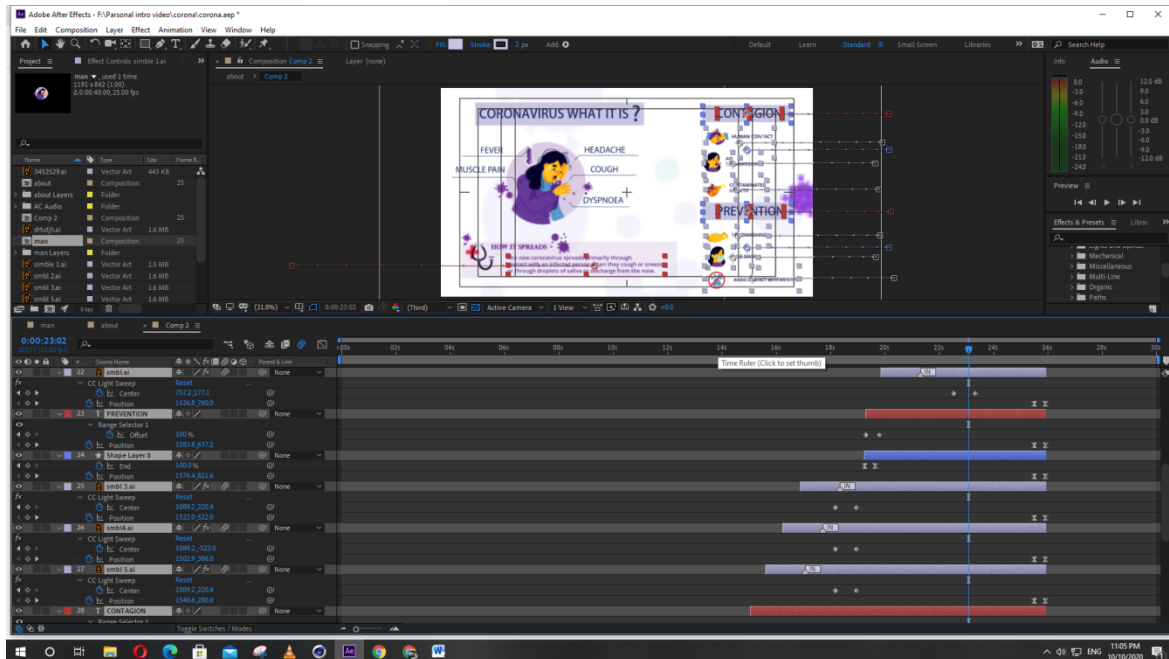

Figure 3.5.2 work of Studio Tik Tok Corona Virus Awareness

At first I take a solid background and take some illustrator png image of corona virus .Then reduce it's opacity .After that I animate every png of background with scale,position for make the background animation.
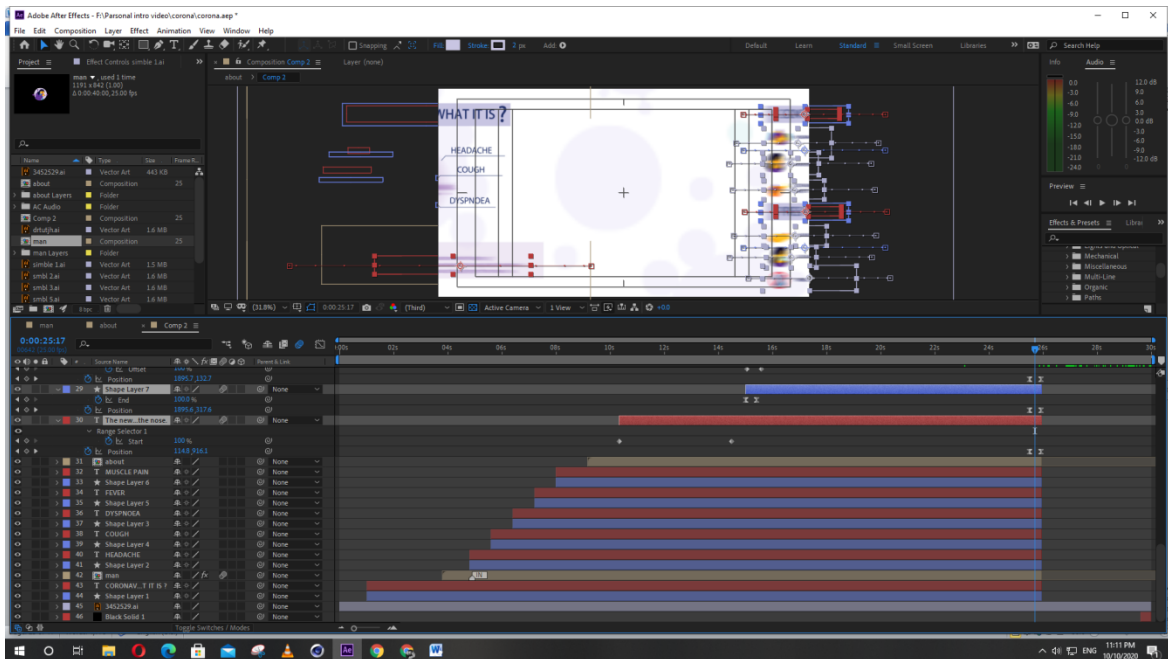

Figure 3.5.3 work of Studio Tik Tok Corona Virus Awareness

Animate the square part which used for text background I used trim path .Animate the circle of the character with effect preset cc lighting wipe .And take the pivot point corner put key frame in one corner to another corner.
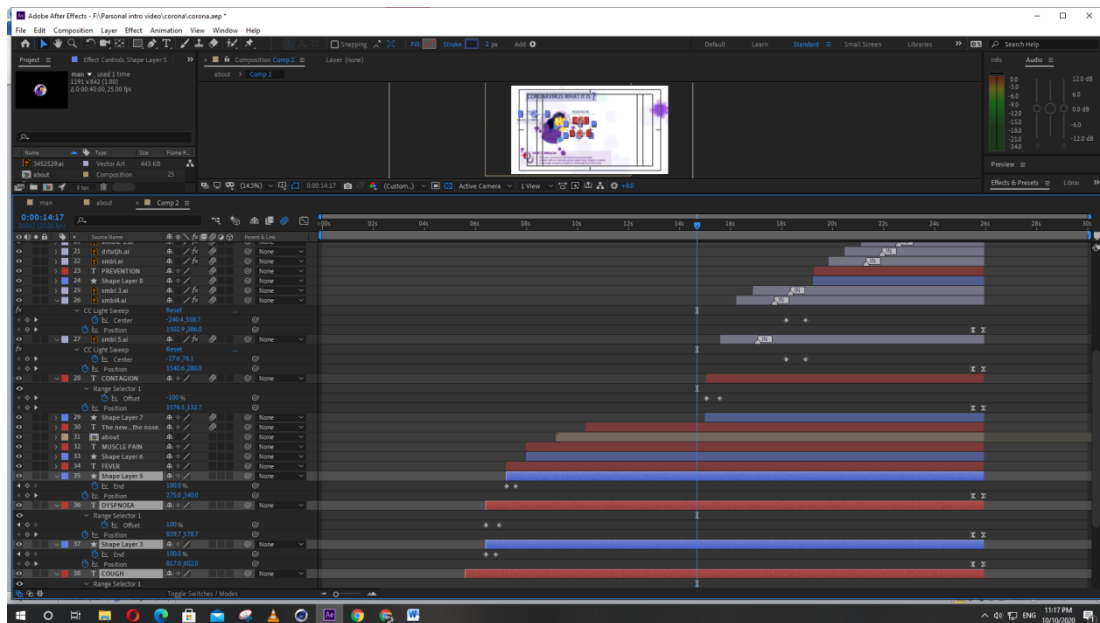

Figure 3.5.4 work of Studio Tik Tok Corona Virus Awareness

I used animation composer text preset for this last part text animation.It is just fade in and fade out.
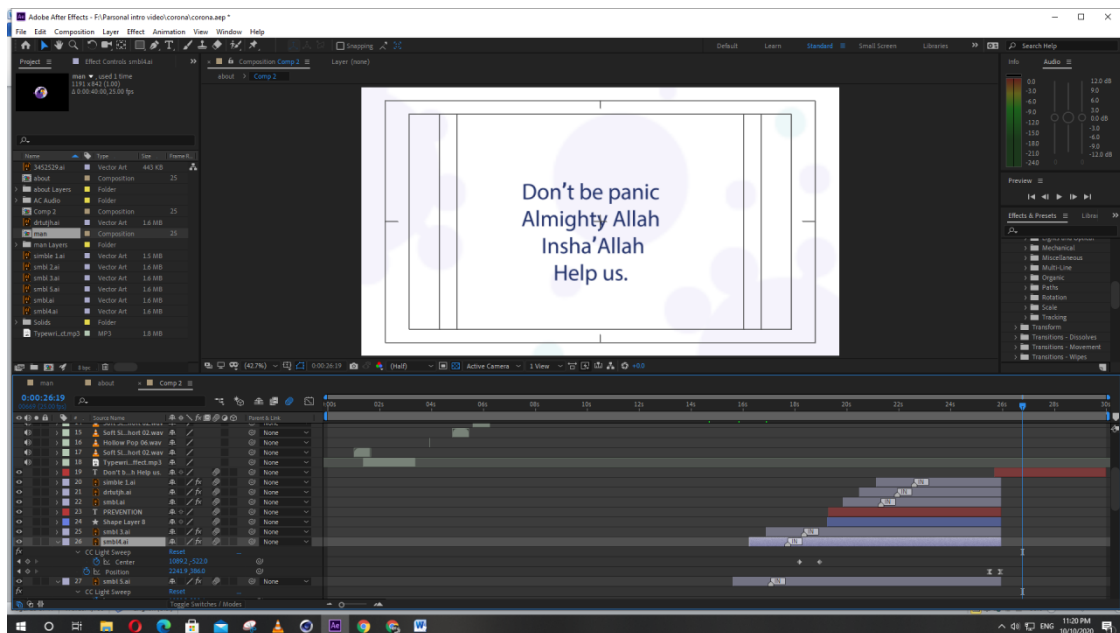

Figure 3.5.5 work of Studio Tik Tok Corona Virus Awareness

3.6 Nowthis News

1. I used many stock video for this project.

2. Cut and color correction of video in Adobe premiere pro.

3. Used transition,text animation ,compose video in after effect.

Download related videos from stock video.Then drag all video file in adobe premiere pro and cut file by cutting tool. And edit simple color with color correction. After do these thing video render in mp4 file.
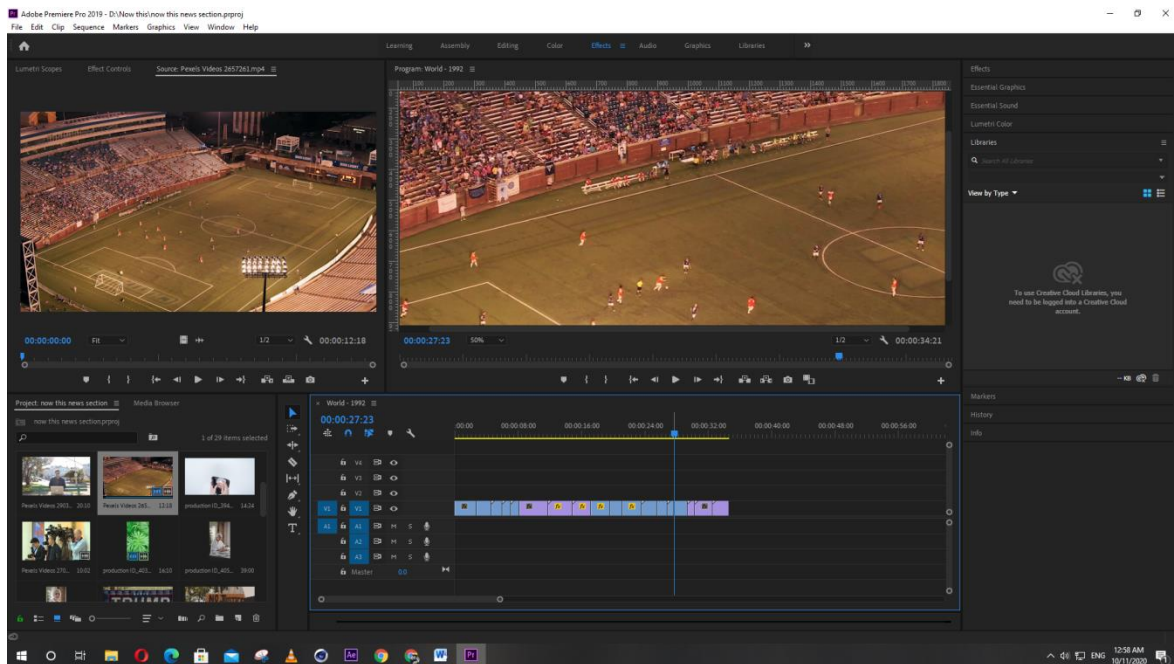

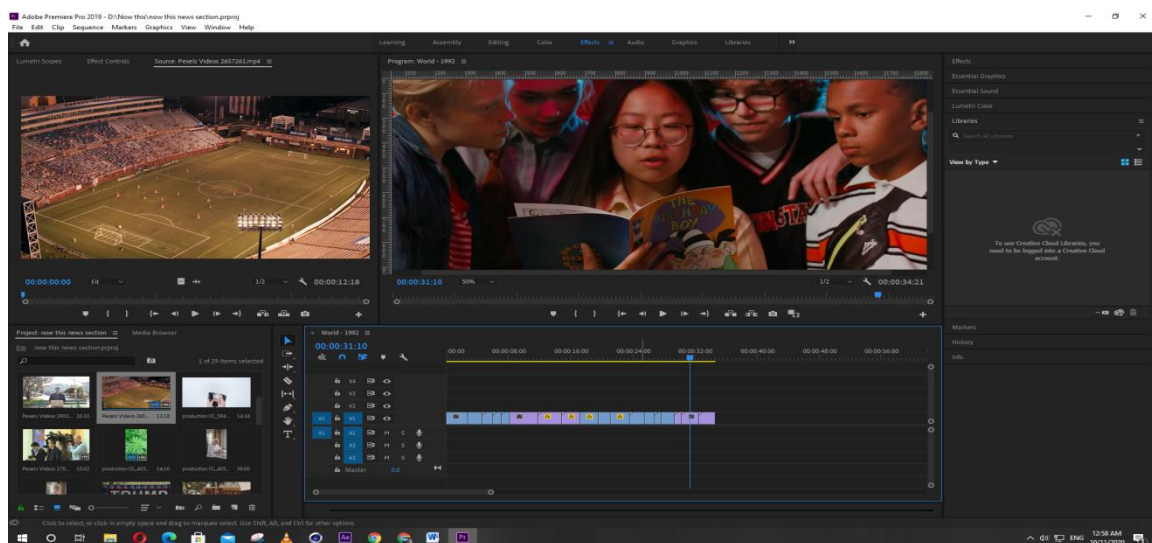Figure 3.6.1 work of Nowthis News

Figure 3.6.2 work of Nowthis News

I used after effects for compositing whole video .After render in premier pro all file input in after effects .Then take a square and keep just stock after that on title/action safe and trim path the stock for animation.
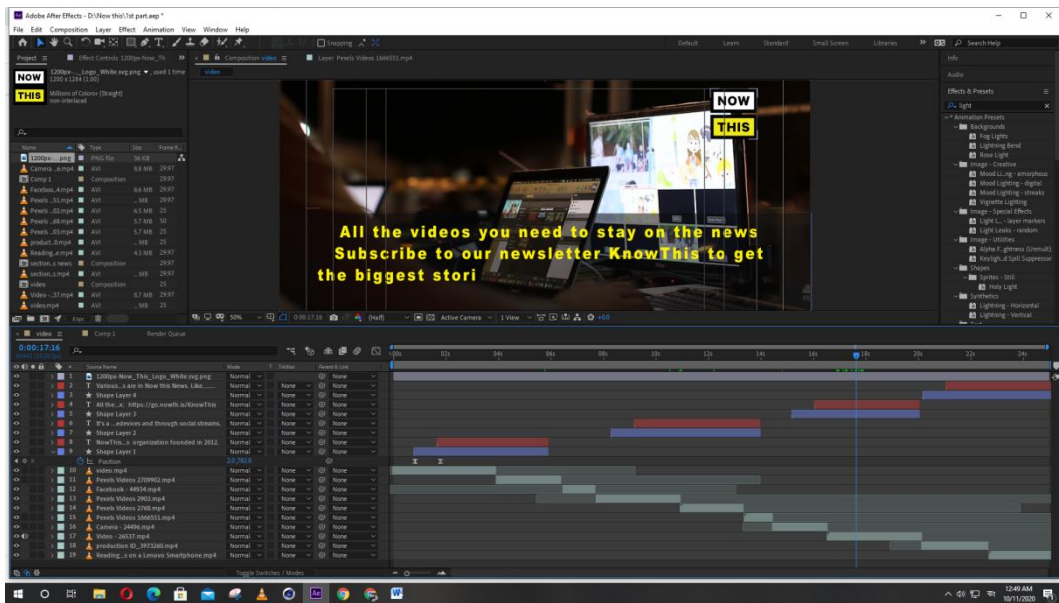

Figure 3.6.3 work of Nowthis News

For every text animation I used type writer effect. And box animation do by position simple animation .Used logo in title/action safe.
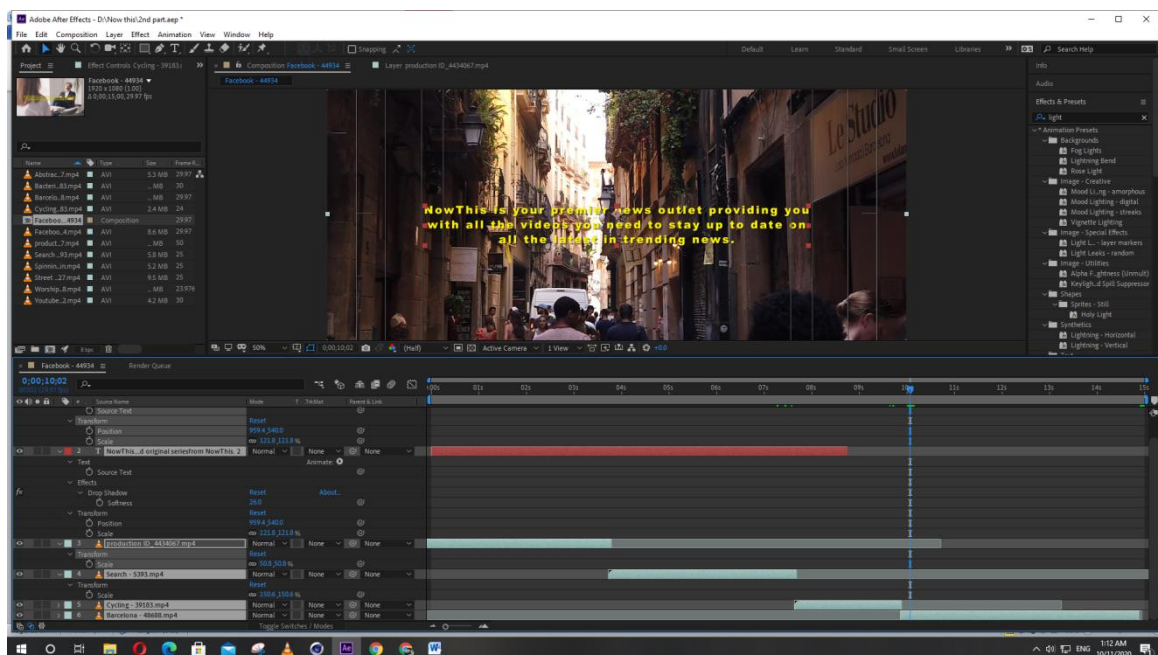

Figure 3.6.4 work of Nowthis News

3.7 Crickfrenzy Logo Animation

Cricfrenzy took birth as the new face of cricket news in Bangladesh as a means to connect the masses with the sport that they love unconditionally in a new and exciting way. . I work for their Logo animation.They want to just a simple logo animation in a off white background.

1. Firstly I take a solid and color it off white

2. I used position tool for logo animation and mask the logo change it into alpha for attractive the transition.

3. Trim path the line.

4. I use a dot shape above the line and do scale animation and take position for it's animation.

5. I create text animation by text preset and set key frame as I need .

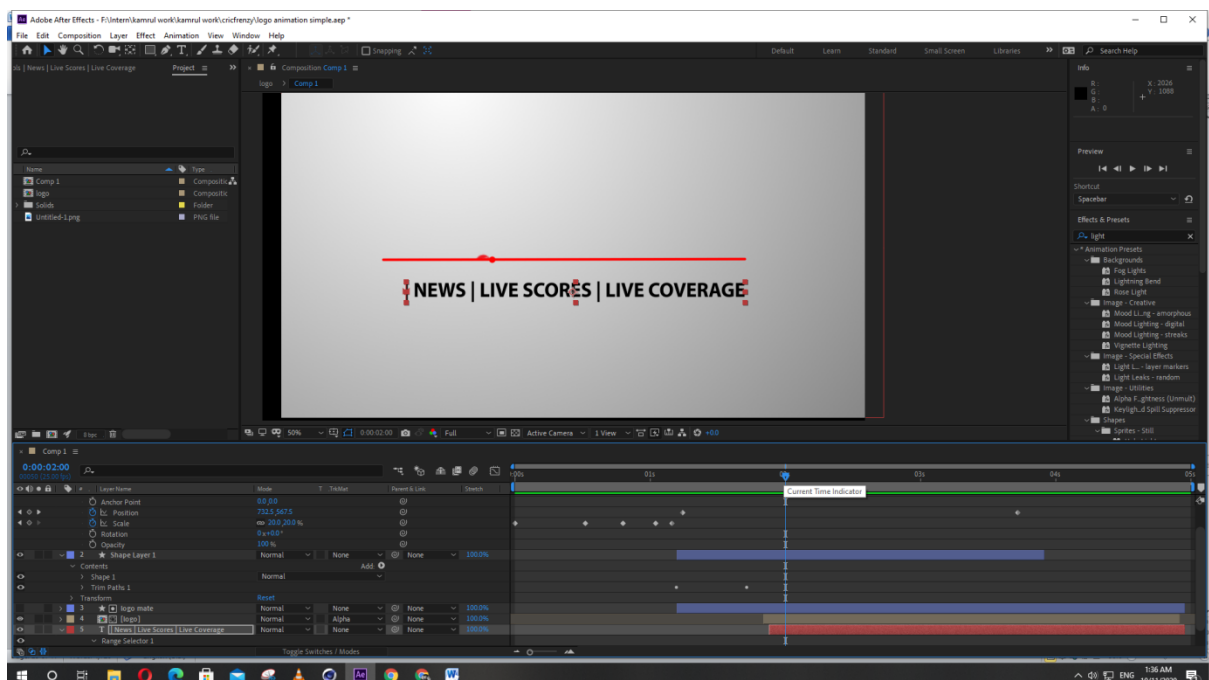6. Composite all the elements and make the logo animation.

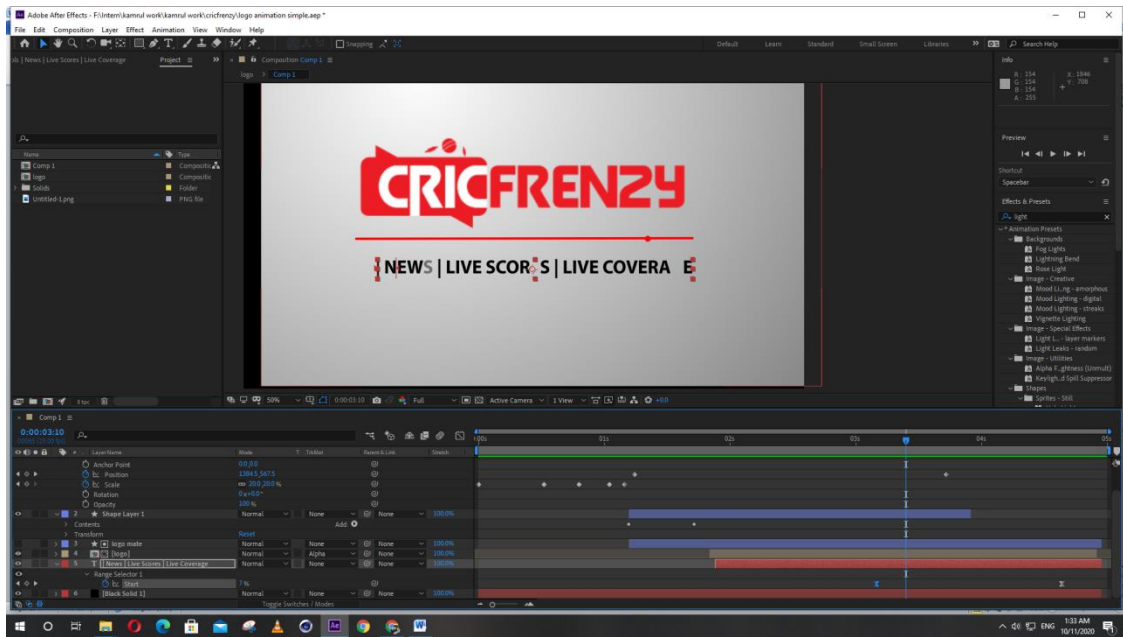Figure 3.7.1 work of Crickfrenzy Logo Animation

Figure 3.7.2 work of Crickfrenzy Logo Animation

After whole animation I used fade out .For fade out It back from frame very smoothly and look more beautiful.
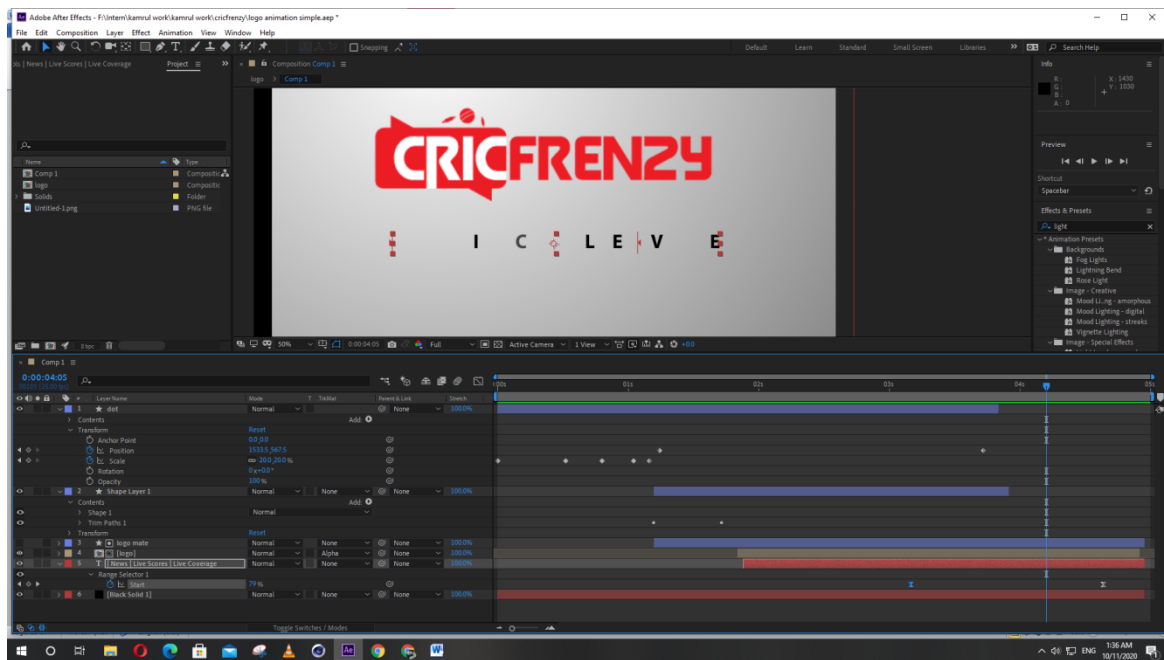

Figure 3.7.3 work of Crickfrenzy Logo Animation

3.8 Vdeex Logo Animation

1. Used a temple for this project

2. I put my logo into the logo template where they pre compose for logo replace logo.

3. Used scale for scale it that's way it can fit the template.

4. Then animate some layers using position, scale and rotation for giving extra variation.

I can create this logo animation just using template but I animate some layer on my own way and give some variation and add sound from web I was a copyright robotic free sound.
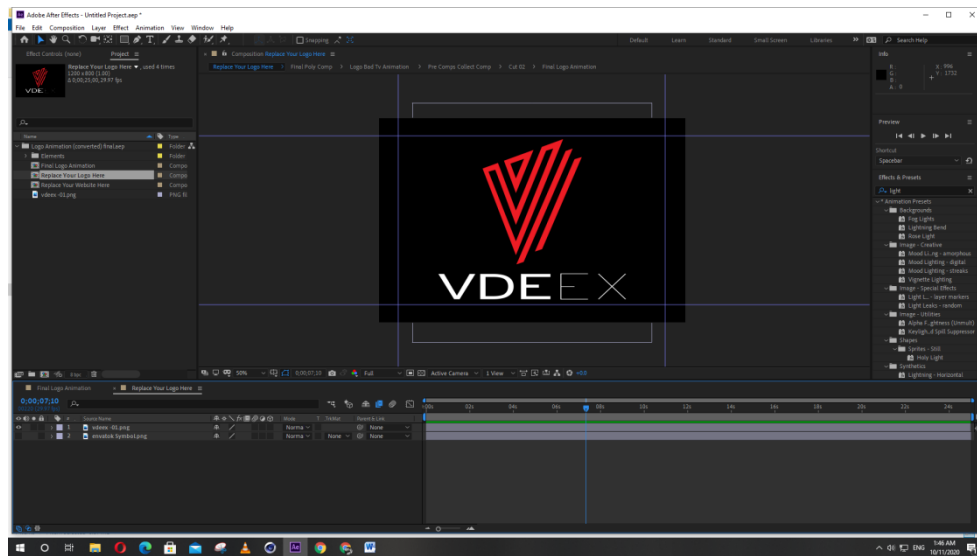

Figure 3.8.1 work of Vdeex Logo Animation
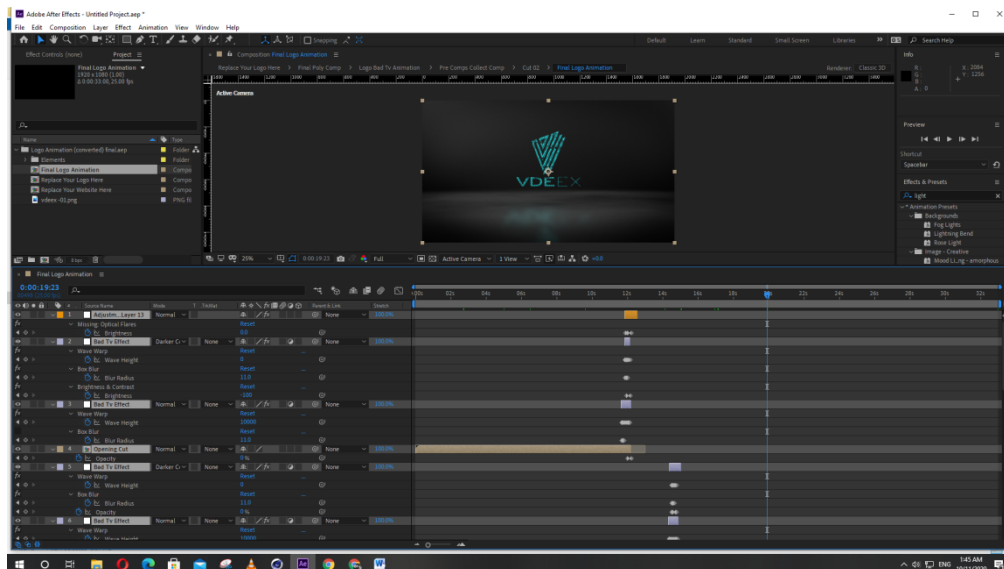
Figure 3.8.2 work of Vdeex Logo Animation

CHAPTER 04

Project Final Output

4.1 Works of Vdeex 21st February CG Short Documentary

Used animation composer for making this text effect and animation.I used position tool and motion blur for image transition.

Figure 4.1.1 work of Vdeex 21st February CG Short Documentary

I used scale for image zoom in zoom out. When used motion blur I also used fade in fade out transition for double image. That's way it look more attractive and beautiful. Whole information and image of documentary collect from internet.

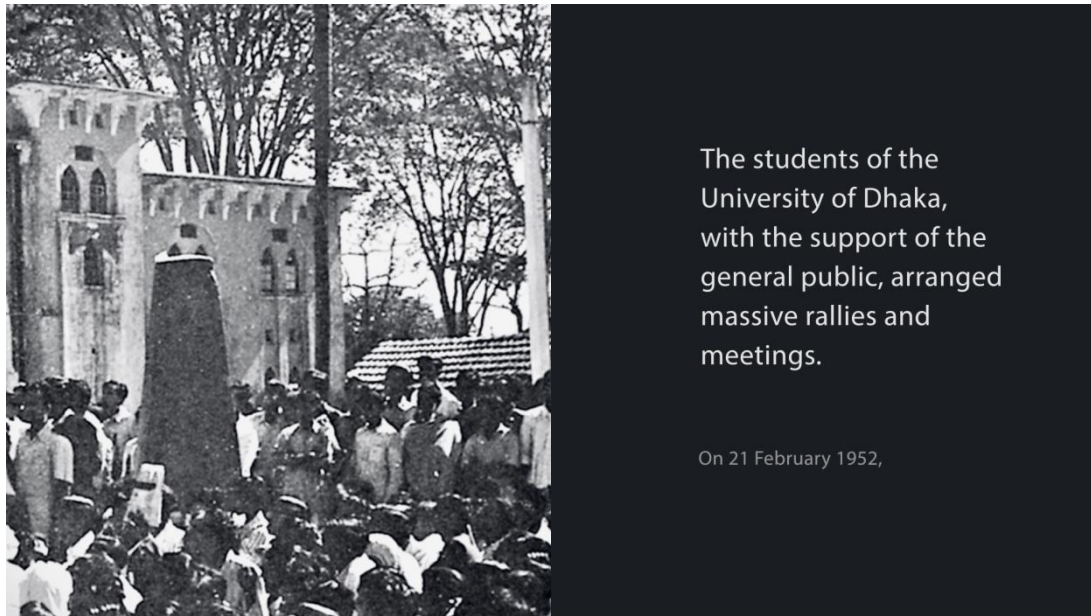Figure 4.1.2 work of Vdeex 21st February CG Short Documentary

4.2 Works of Vdeex Social Media Content

Animate elements using opacity, position and scale tool in after effect. I used some vector files and illustrator file for this animation video. I used puppet tool for some movement of the elements.

Figure 4.2.1 work of Vdeex Social Media Content

I used four different color illustrator file for this project background and animate them with basic tool of after effects.
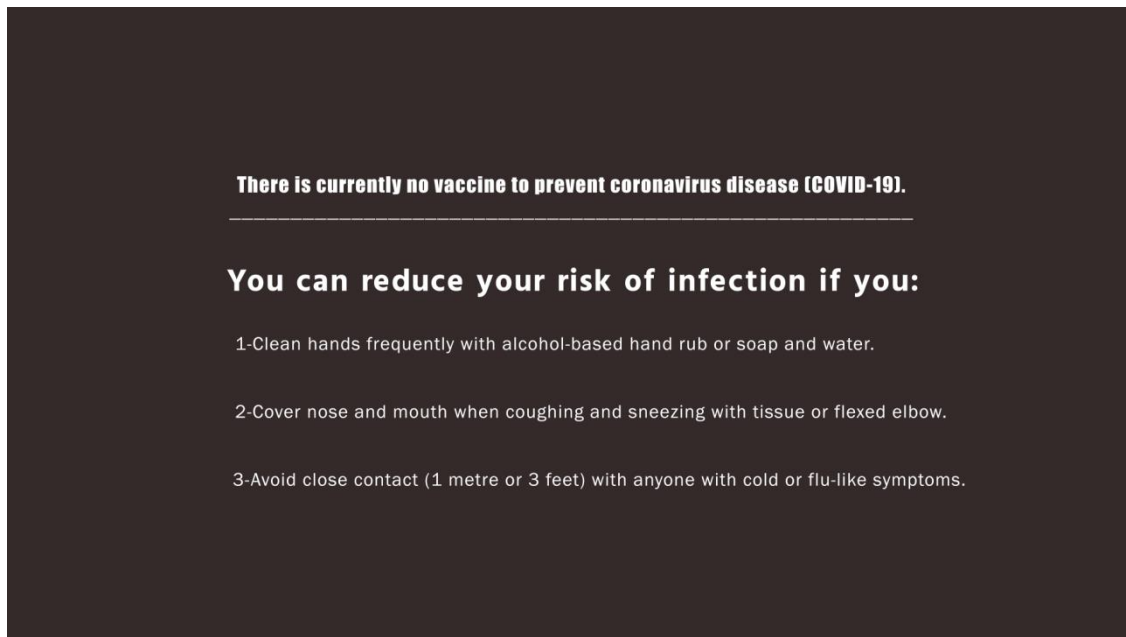

Figure 4.2.2 work of Vdeex Social Media Content

4.3 Works of Ruchi Mnemonic Design

Ruchi is a renowned brand of Pran group. They make an advertise and their slogan was "jhale kaj hoy". This slogan was used in the end part of advertise. For their slogan they decided to make a Mnemonic.
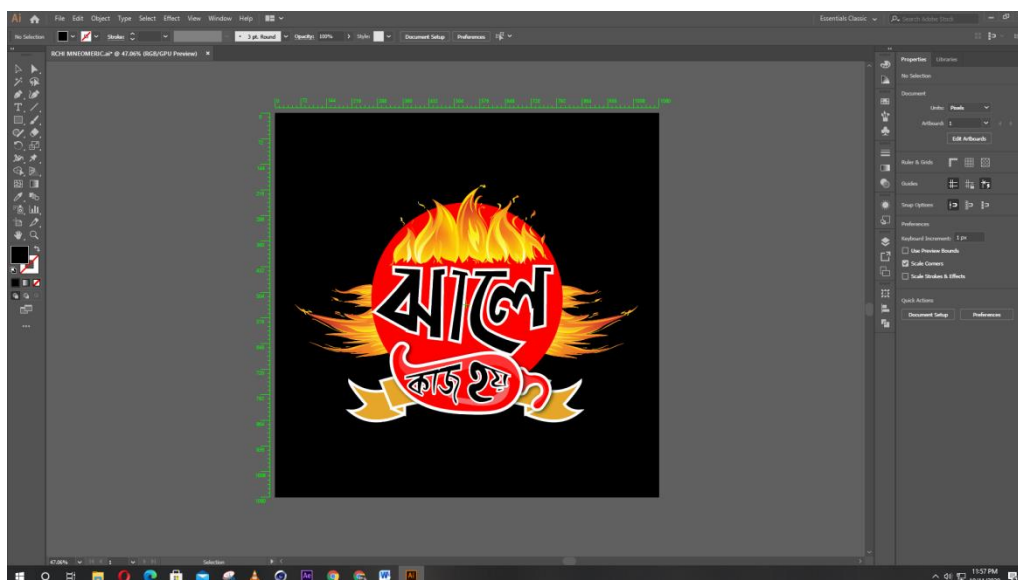
Figure 4.3.1 work of Ruchi Mnemonic Design

At first I draw concept of mnemonic. Then illustrate it in to the illustrator .I used pen tool, circle shape for design this mnemonic.

Figure 4.3.2 work of Ruchi Mnemonic Design

4.4 Works of Rickth Logo

I make two logo for Rickth. They select this one .I use triangle, circle, square shape for create this logo. For Logo name and slogan I use font.

Figure 4.4.1 work of Rickth Logo

4.5 Works of Studio Tik Tok Corona Virus Awareness

In this project all the element is illustrate file in different layer .I animate them with trim path, animation composer and transition preset.I aslo used basic tool of after effects.
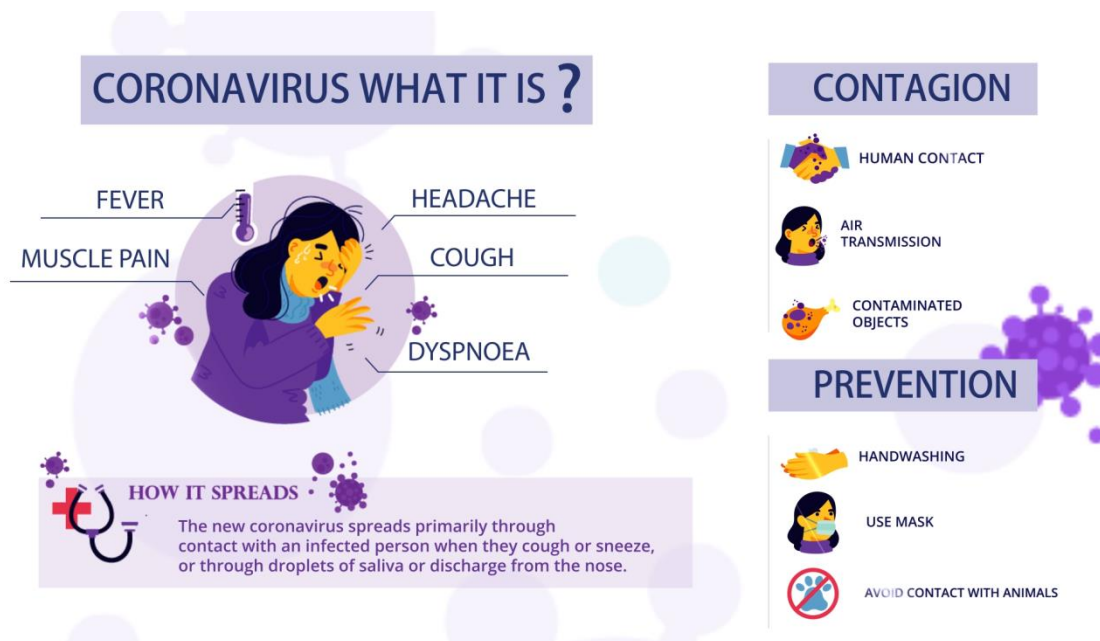
Figure 4.5.1 work of Studio Tik Tok Corona Virus Awareness

I used text animation for the last part of this CGI Content. I used some basic animation for this composition. Just using position tool I animated the background.

Figure 4.5.2 work of Studio Tik Tok Corona Virus Awareness

4.6 Works of NowThis News

Download related videos from stock video.Then drag all video file in adobe premiere pro and cut file by cutting tool. And edit simple color with color correction. After do these thing video render in mp4 file..

Figure 4.6.1 work of NowThis News

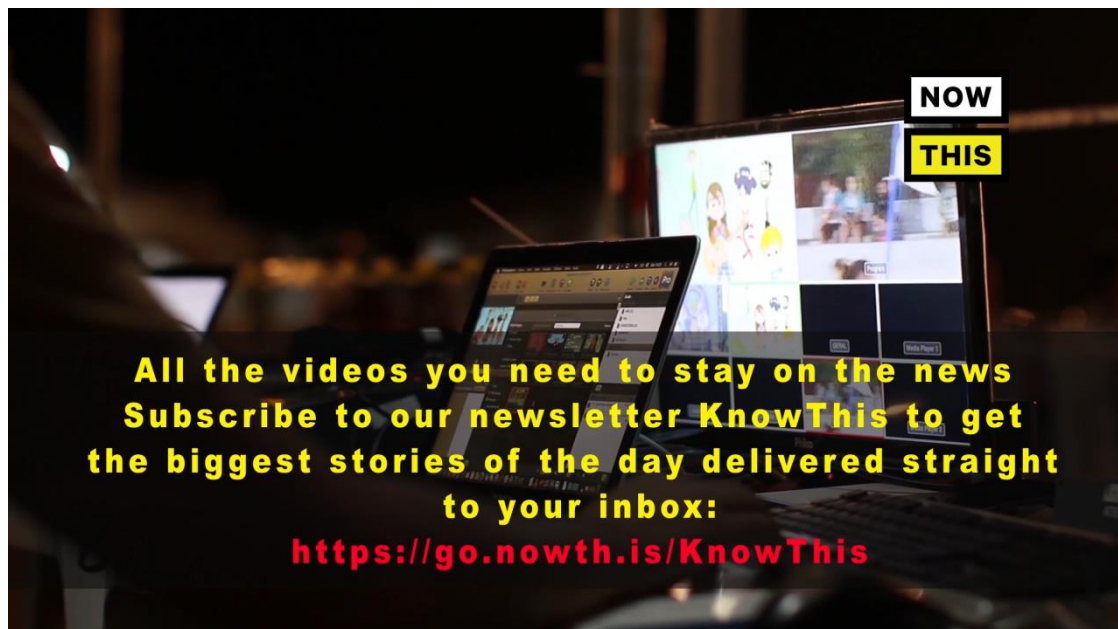I used after effects for compositing whole video .After render in premier pro all file input in after effects .Then take a square and keep just stock after that on title/action safe and trim path the stock for animation.

Figure 4.6.2 work of NowThis News

I used copyright free music after render it .It make my whole composition more prominent.

Figure 4.6.3 work of NowThis News

4.7 Works of Vdeex Logo Animation

I can create this logo animation just using template but I animate some layer on my own way and give some variation and add sound from web I was a copyright robotic free sound.

Figure 4.7.1 work of Vdeex Logo Animation

This template was so complex . I was to work divided it into three part .Last part was much complex then other two parts. But in the end the project was joss.
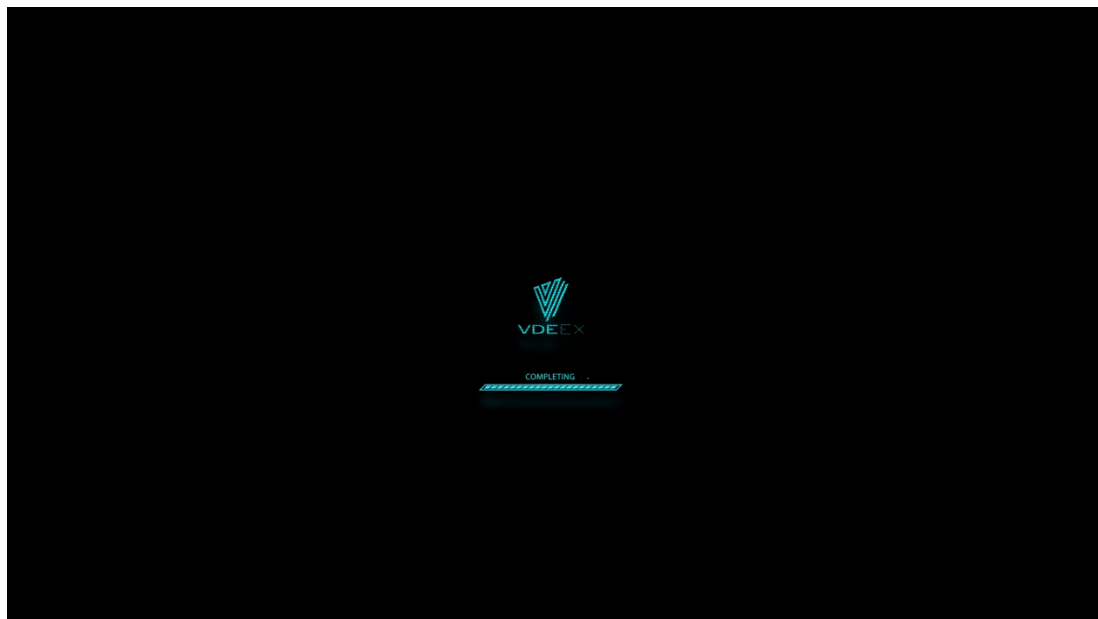

Figure 4.7.2 work of Vdeex Logo Animation

CHAPTER 05

Problems during Working

I face a lot of problem while I was working. A lot of works was difficult and challenging for me. But whenever I faced problem, I learned a lot from mistakes. I learn new ways and new tools new teams. Most of the time plug-in doesn't work properly, template bugs and crashes of software was common. Matching key frames, fix positions, rotations were difficult sometimes. Working with template was tough but I enjoyed a lot. Making of backgrounds was also a little problem. But the experience I gathered is the most important thing in this Intern period.

CHAPTER 06

Conclusion

At this report I discuss about my intern period, work process and workflow in Studio TikTok. For last 3 month I was doing a lot of work for Studio Tiktok on motion graphics, CGI, 2d animation and some graphics works. At this intern period I learned a lot while I was working. I enjoyed a lot and try to work hard. In future I wants to work with this company and work in this area. Sometimes it gets challenging for me to continue working like as usual because of time. I have faced various issues during doing these projects. Done some research and development online and solved most of the issues. But, also failed to solve few of them. Learned some very useful shortcuts that made the production process much comfortable and less tedious. Through this Report I represented the complete and proper pipeline and workflow my work process.

References

[1] Multimedia Applications for Educational Purposes
https://www.ukessays.com/essays/media/multimedia-applications-educational-4151.php last accessed on

27/09/2020 at 9.19 pm

[2] Why Graphic Content and Data Visualization Are Good for Business

https://www.clickz.com/why-graphic-content-and-data-visualization-are-good-for-business/27591/ last accessed
on 27/09/2020 at 9.19 pm

 [3] Top Advertising Agencies in Bangladesh

 https://clutch.co/bd/agencies last accessed on 27/09/2020 at 9.45 pm

[4] Best Advertising Agencies in Bangladesh

https://www.sortlist.com/advertising/bangladesh-bd   last accessed on 01/10/2020 at 8.45 pm

[5] We Make Animated Videos to Achieve Your Marketing Goals

 http://pixelaastudios.com/   last accessed on 05/10/2020 at 6.30 pm

[6]Gray Bangladesh

https://www.grey.com/bangladesh   last accessed on   06/10/2020 at 9.35 pm

[7]We Touch Life With Passionate Ideas

 http://www.asiaticexp.com/   last accessed on 07/10/2020 at 10.22 pm

[8] Asiatic360 service

https://www.asiatic360.com/services/#production   last accessed on 07/10/2020 at 10.48 pm

[9] Campus Careers

https://www.mindtree.com/careers/campus-careers last accessed on 07/10/2020 at 11.50 pm

[10] Our Little Corner, Where Our Imaginations Run Wild

 http://pixelaastudios.com/#about-us   last accessed on 08/10/2020 at 8.00 pm

[11] Development, Resource Mobilization, Research and Policy Reform

https://a2i.gov.bd/partners/ last accessed on 14/10/2020 at 9.00 pm

[12]The Role of Motion Graphics In Visual Communication

https://www.ijsr.in/upload/1126697859Mr%20%20Fattahi%202%20Rev.pdf
Last accessed on 14/10/2020 at 11.25 pm