

American International University- Bangladesh

COMPUTER GRAPHICS

Project Report Summer 2020-2021

Project Title: COVID-19 Scenario

Section: N

Instructor: MD. SIYAMUL ISLAM

Date: 18-08-2021

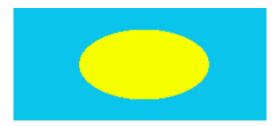
Student Name	Student Id
NUSRAT JAHAN	19-40355-1
MD EMRUL HASAN EMON	19-40357-1
EHSAN TALUKDER	19-40370-1
TOFAYET SULTAN	19-40385-1
AHMAD ZAMIL	19-40400-1

BACKGROUND:

On 31 December 2019, WHO was informed of cases of pneumonia of unknown cause in Wuhan City, China. A novel coronavirus was identified as the cause by Chinese authorities on 7 January 2020 and was temporarily named "2019-nCoV". Later it spread all over the world. In 8th march 2020 Covid-19 first identified in Bangladesh. All around 20.5 crore people affected by this virus. Around 43.3 lakh people death for this virus. In the world lockdown has been declared by the Government of every country. COVID-19 affects different people in different ways. Most infected people will develop mild to moderate illness and recover without hospitalization. Signs and symptoms include respiratory symptoms and include fever, cough and shortness of breath. In more severe cases, infection can cause pneumonia, severe acute respiratory syndrome and sometimes death. If someone feel serious kind of symptom of covid-19 they should immediately go to the hospital and have a treatment by the Doctor. In our scenario we are showing that situation happening all over the world.

Features:

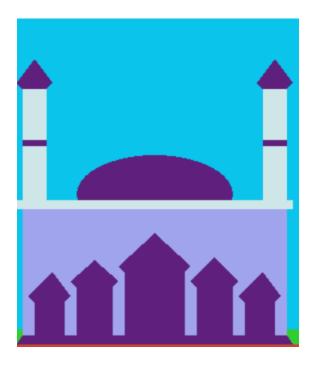
Sun: By using Bresenham's Midpoint Line Incremental Algorithm we draw the sun. And with Transformation technique we move the sun towards +1 to -1. In every pixel the sun is transforming 0.5 point at a time.



<u>Cloud:</u> By using Bresenham's Midpoint Line Incremental Algorithm we draw the cloud. And with Transformation technique we move the clouds towards -1 to +1. In every pixel the sun is transforming 0.8 & 1 point at a time.



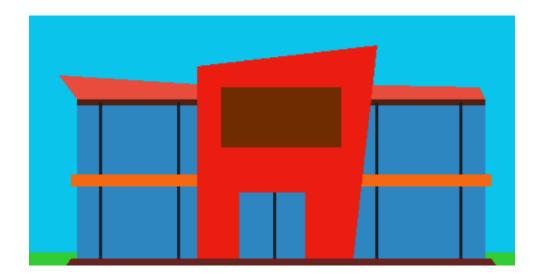
 ${\underline{\bf MOSQUE:}}$ To draw the mosque we have used quads, circle & polygon .



HOUSE: To draw the house we have used quads, triangle & Line.



SHOPPING MALL: To draw the shopping mall we have used quads, & Line.



OFFICE: To draw the Office we have used quads, & Line.



HOSPITAL: To draw the hospital we have used quads, & Line.



SCHOOL: To draw the school we have used quads, & Line.



TREE: To draw the tree we have used quads, & triangle.



LAMP: To draw the lamp we have used quads, & triangle.



CAR: To draw the car we have used quads, polygon, circle & line.



AMBULANCE: To draw the ambulance we have used quads, polygon circle & line.



POLICE CAR: To draw the police car we have used quads, polygon circle & line.



HUMAN: To draw human we have used quads, polygon circle & line.



CONTRIBUTION:

AHMAD ZAMIL (19-40400-1):

I build the mosque, cloud, Humans. By using circle & transformation technique I moved the cloud.



EHSAN TALUKDER (19-40370-1):

I build the hospital, patient & doctor. By using transformation technique I moved the patient & doctor and ambulance. Also I make a loop to break the ambulance and let the doctor and patient get up and down, then the ambulance move again.



EMRUL HASAN EMON (19-40357-1):

I build the office building, school building & lamp. By using circle & transformation technique I moved the sun.



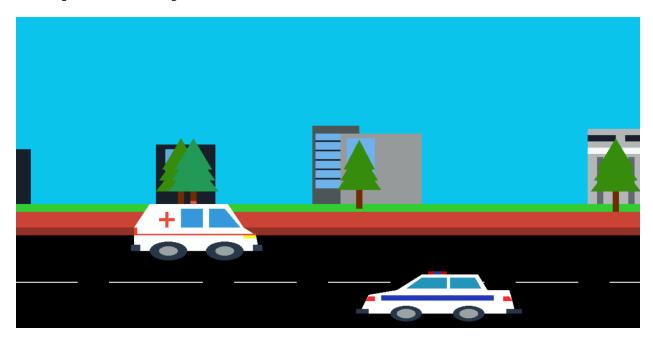
NUSRAT JAHAN (19-40355-1):

I build the house, shopping & mall. By using quads, line, circle & transformation technique I moved the car.



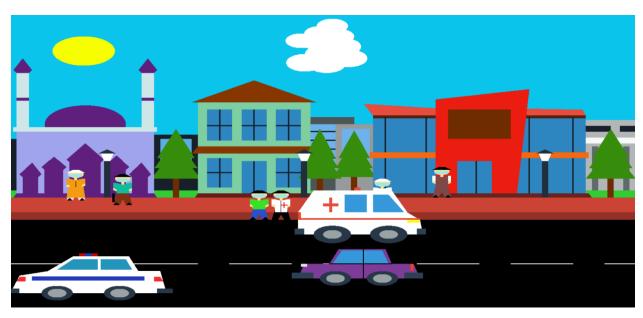
TOFAYET SULTAN (19-40385-1):

I build the background building & tree. By using quads, line, circle & transformation technique I moved the police car & ambulance.



MAIN VIEW

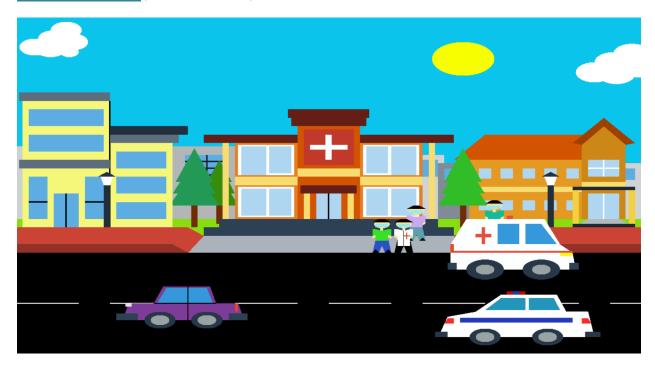
SCENARIO 1: (DAY MODE)



SCENARIO 2: (NIGHT MODE)



SCENARIO 2: (DAY MODE)



SCENARIO 2: (NIGHT MODE)



IMPACT:

By this scenario we want to show a moment of COVID- 19. To make aware people not to go out without any emergency reason. If they need to go out they must ware mask, wash hand regularly, and sanitize there hand every time.

TOOLS:

- (i) CodeBlocks
- (ii) https://htmlcolorcodes.com/
- (iii) Paint
- (iv) Graph