

# **American International University- Bangladesh**

# COMPUTER GRAPHICS Project Report

Summer 20-21 Section: N

**Project Title:** Bangladesh Army Base Camp

| Student Name                 | Student Id |
|------------------------------|------------|
| DEB KABYO                    | 19-40242-1 |
| RAHMAN,MD.AKIB UR            | 19-40279-1 |
| TANZILUR RAHMAN              | 19-40906-2 |
| SHOUPROVA,TASNUVA<br>NAUSHIN | 19-40919-2 |
| MEGHLA,SADIA AFRIN           | 19-40909-2 |

#### **Project idea:**

We have selected Bangladesh army base camp as our project because the army exists to serve the Bangladeshi people, defend the nation, protect vital national interests and fulfill national military responsibilities. In the covid-19 crisis situation, we have noticed our army serves as a front line fighter and shows very kindness to the people. In every year, Bangladesh army do their winter 'Mohora'. During this time they setup their camp in the different area of the country. Basically after seeing their camp, we have decided to make this project.

#### **Project description:**

In this project, we have designed a scenario of Bangladesh army base camp. In this scenario, there is tent, watch tower, hospital, a moving helicopter and a moving ambulance, playground, swimming pool, training and shooting field and a canteen. In the background of the army camp, there will be hills and lite blue sky. There will be some moving clouds in the sky. And there will also a sun. We also have Another feature that will be mouse keyboard interaction. By clicking in the mouse there will appear of night ,by click of a button we can move our object, such as: moving ambulance, moving helicopter, moving tank.

In this project, we have tried our best to implement all topics that we covered in our lab.

## **Project Contribution:**

| Name                       | Contribution in Project  |
|----------------------------|--------------------------|
| ID                         |                          |
| Member-1                   | 1.Helicupter             |
|                            | 2.Helicupter Landing     |
| DEB KABYO                  | 3.Tent,Flag              |
| 19-40242-1                 | 4.Canteen                |
|                            | 5.Swiming pool           |
|                            | 6.Swiming pool side Tree |
|                            | 7.Swiming pool side Road |
|                            | 8.Canteen                |
|                            | 9.Canteen side Road      |
|                            | 10.Moving Cloud, Sun     |
|                            | 11. Moving Helicopter    |
| 25 2                       | 12.Day Night View(50%)   |
| Member-2                   | 1. Watch Tower           |
| DAVISAN MED ATTENTION      | 2. Hospital              |
| RAHMAN, MD. AKIB UR        | 3. Play Ground           |
| 19-40279-1                 | 4. Goal bar              |
|                            | 5. Play Ground Side Tree |
|                            | 6.Tank                   |
|                            | 7.Tank Road              |
|                            | 8.Ambulance              |
|                            | 9,Ambulance Road         |
|                            | 10.Moving Ambulance      |
|                            | 11.Moving Tank           |
|                            | 12.Day Night View(50%)   |
| Member-3                   | 1.Traing ground          |
|                            | 2.Traning Sample         |
| TANZILUR RAHMAN            | 3.Army(training)         |
| 19-40906-2                 | 4.Traing Ground Tree     |
| March and                  | 1.61                     |
| Member-4                   | 1.Shooting Ground        |
| CHOUDDON'S TACNIUM SISTEMA | 2.Army 1(shooting)       |
| SHOUPROVA, TASNUVA NAUSHIN | 3.Army 2(shooting)       |
| 19-40919-2                 | 4.Shoting Ground Tree    |
| Member -5                  | 1.Hills (all)            |
|                            | 2.Cloud 1                |
| MEGHLA SADIA AFRIN         | 3.Cloud 2                |
| 19-40909-2                 | 4.Cloud 3                |
|                            | 5.Sun                    |
|                            |                          |

# **Project Features:**

Hills:



Cloud:



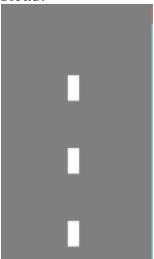
Sun:



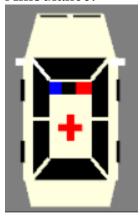
Watch Tower:



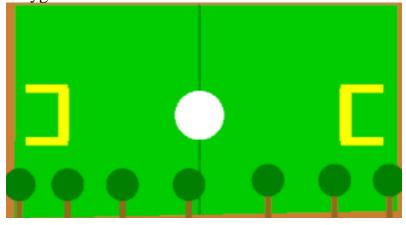
#### Road:



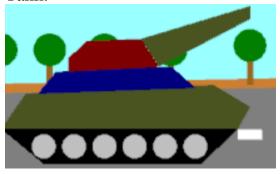
## Ambulance:



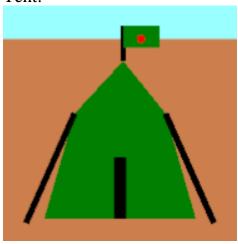
Playground:



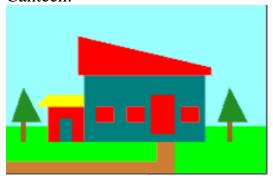
#### Tank:



#### Tent:



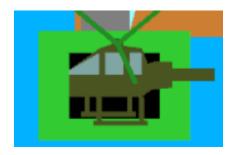
#### Canteen:



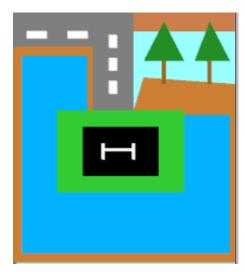
## Helipad:



## Helicopter:



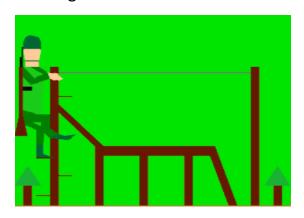
#### Swimming pool:



## Army:



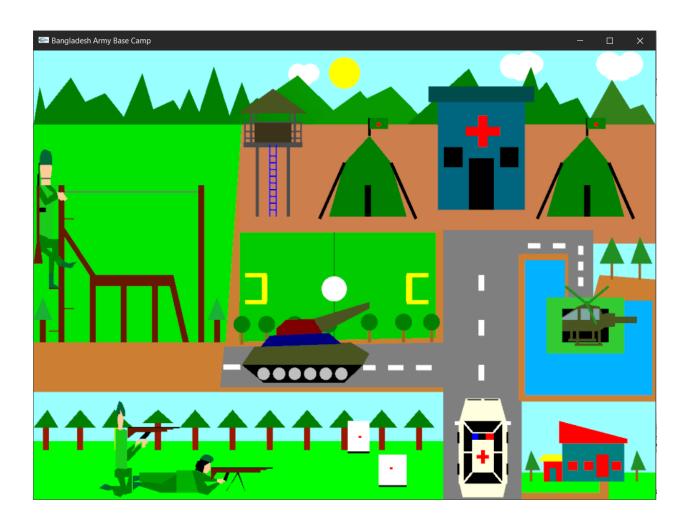
## Training Ground:



## Shooting Ground:



#### **Project Output:**



#### **Project Tools:**

In this project we have created a Army Base Camp scenario using GL\_TRIANGLES ,GL\_QUADS ,GL\_POLYGONS & GL\_POINTS with different suitable colors in Display()function. We also Use glTranslatef() function for moving object and we have used 'handleKeypress()' and 'handleMouse()' for control object. In this project we have tried to implement all functionality that we have learned in the lab.

#### **Project Impact:**

This project will be useful in the future for creating a realistic army camp with natural effects and protection. Engineers will be able to comprehend their tasks more quickly after seeing this visual effect.