

Final Term Project Report

Computer Graphics [D]

21 April 2022

| | |
|--------------|------------------|
| Project Name | Modern City View |
|--------------|------------------|

Table 1: Project



| | |
|-----------------|--------------|
| 1. | 2. |
| Tutor Name | Group Number |
| Md Masum Billah | 05 |

Table 2: Faculty, Group number

| Name. | ID. |
|-----------------|------------|
| Ashraful Islam | 20-42010-1 |
| Arefin Hamim | 20-42117-1 |
| Tahamidul Haque | 20-42139-1 |
| Sudipto Saha | 20-42143-1 |

Table 3: Group members

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1 Introduction

Only vector images are used in computer graphics. Keep in mind that raster images are only pasteurized and then projected on the projector. Only raster images are shown on the projector. Raster images are made up of a series of pixels. Vector images, on the other hand, are created using mathematical formulas rather than pixels. There are some basic definitions about Computer Graphics. GL (Graphics Library): Library of 2-D, 3-D drawing primitives and operations API for 3-D hardware acceleration. GLU (GL Utilities): Miscellaneous functions dealing with camera set-up and higher-level shape descriptions GLUT (GL Utility Toolkit): Window-system independent toolkit with numerous utility functions, mostly dealing with user interface.

2 Proposal

In this project, we design a scenario of modern city view. In this scenario, we have a building, a plane, moving cars along the road trees boat, river, sun, moon, cloud. To complement the whole scenario we have light blue skies. Then it will be converted into night, evening and afternoon color. The boat is moving and also clouds are moving, plane is moving. After pressing upper button the car will be started to move if we clicked on J button the boat will move.

3 List of object

- Cars
- Plane
- Clouds
- Phone both
- Blue house
- Red house
- Twin tower
- Boat
- Moon
- Sun
- Road
- River
- Trees
- sky

4 Hardware Requirements

Therefore we used some hardware necessities those are

- Pentium or Higher
- 2 GB Ram or more
- A standers keyboard
- Compatible mouse
- VGA monitor

5 Software Requirements

Therefore we used some software necessities those are

- WINDOWS XP and higher version
- Open GL
- CodeBlocks C++
- WINDOWS 10

6 Project images

Here are the features of our project.

6.1 Trees



6.2 Cloud



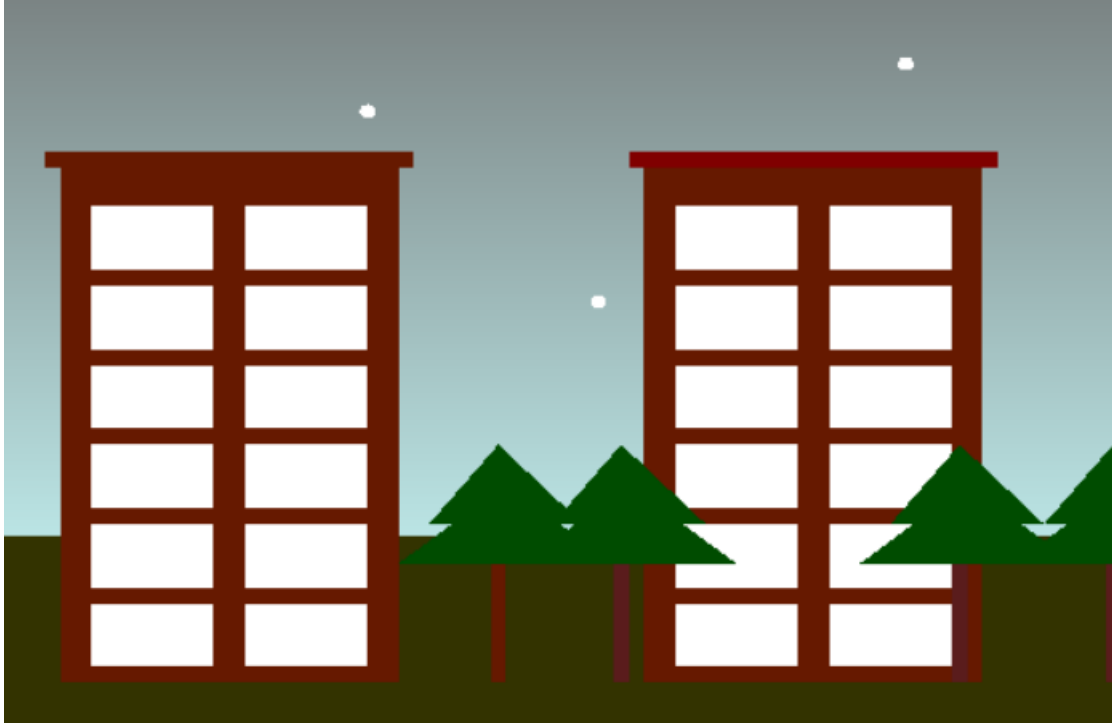
6.3 Blue house



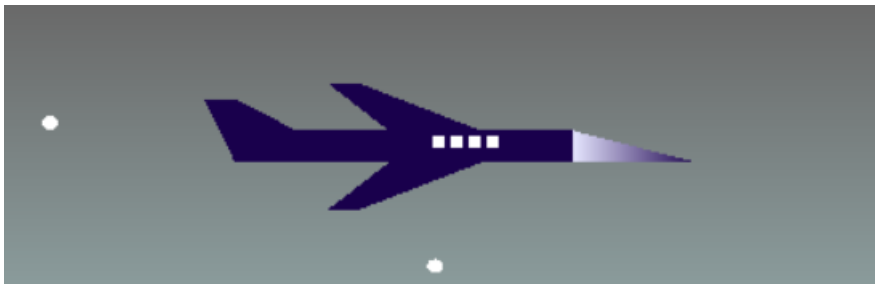
6.4 Boat and river



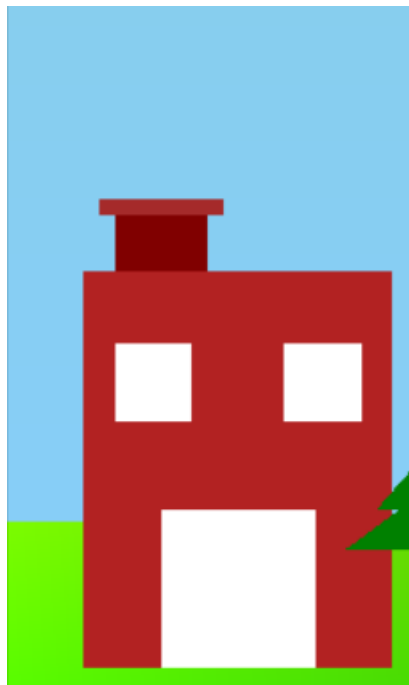
6.5 Twin Tower



6.6 Plane



6.7 Red house



6.8 Cars



7 Function Representation

| Object Name. | Function. |
|--------------|-----------|
| cars | |
| plane | |
| clouds | |
| blue house | |
| red house | |
| twin tower | |
| phone both | |
| river | |
| boat | |
| trees | |
| road | |
| sun | |
| moon | |
| sky | |

Table 4: Functions

8 Contribution

| Member 1. | Member 2. | Member 3. | Member 4. | Total. |
|----------------|------------------------|-----------------|--------------|--------|
| Ashraful Islam | Sultanul Arifeen Hamim | Tahamidul Haque | Sudipto Saha | |
| 30 | 30 | 30 | 10 | 100 |

Table 5: Contribution percentage

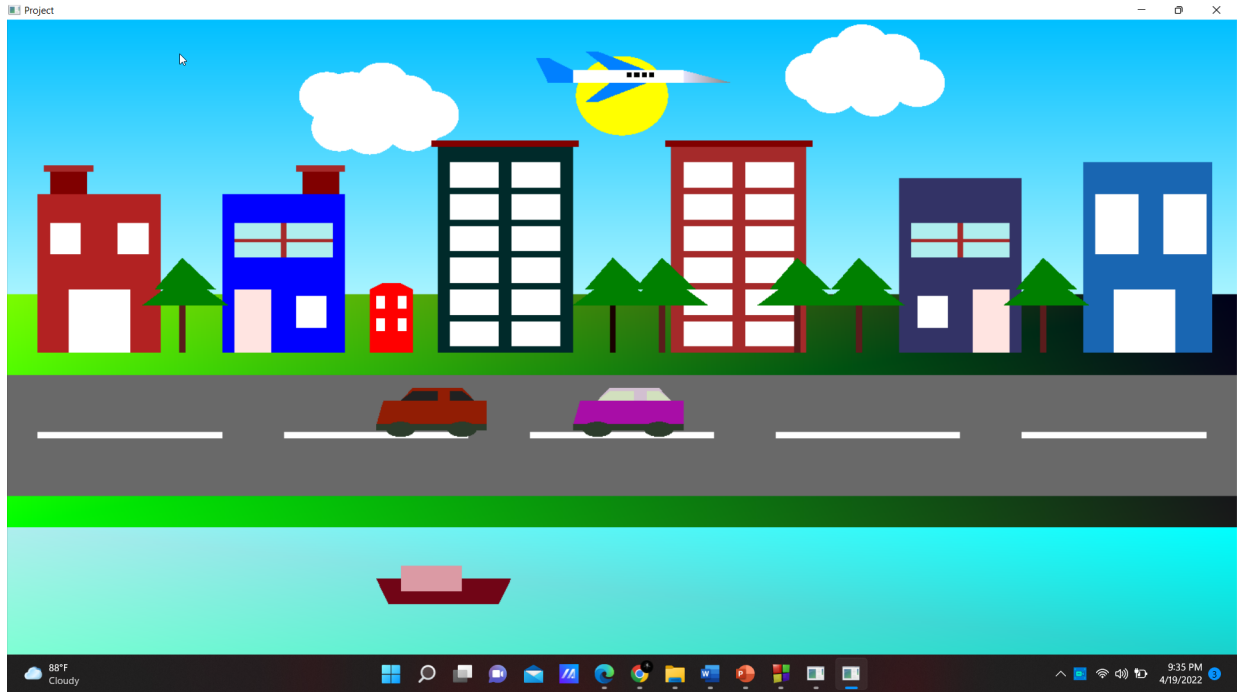
| Name. | Contribution part |
|------------------------|---|
| Ashraful Islam | Cloud, stars , plane and report |
| Sultanul Arifeen Hamim | blue house, red house, field, river, boat, twin tower, road strips, sun |
| Tahamidul Haque | trees, cars |
| Sudipto Saha | sky |

Table 6: Contribution in project

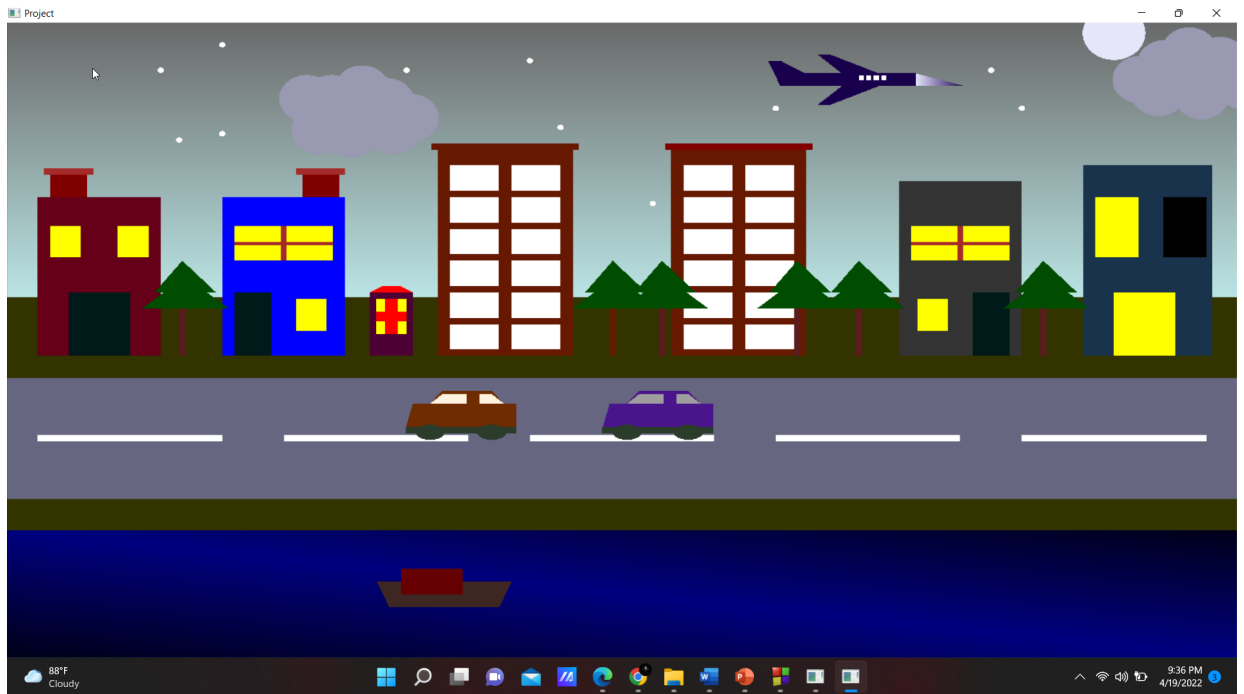
9 Final view of project

After the coding this is the final output of our project.

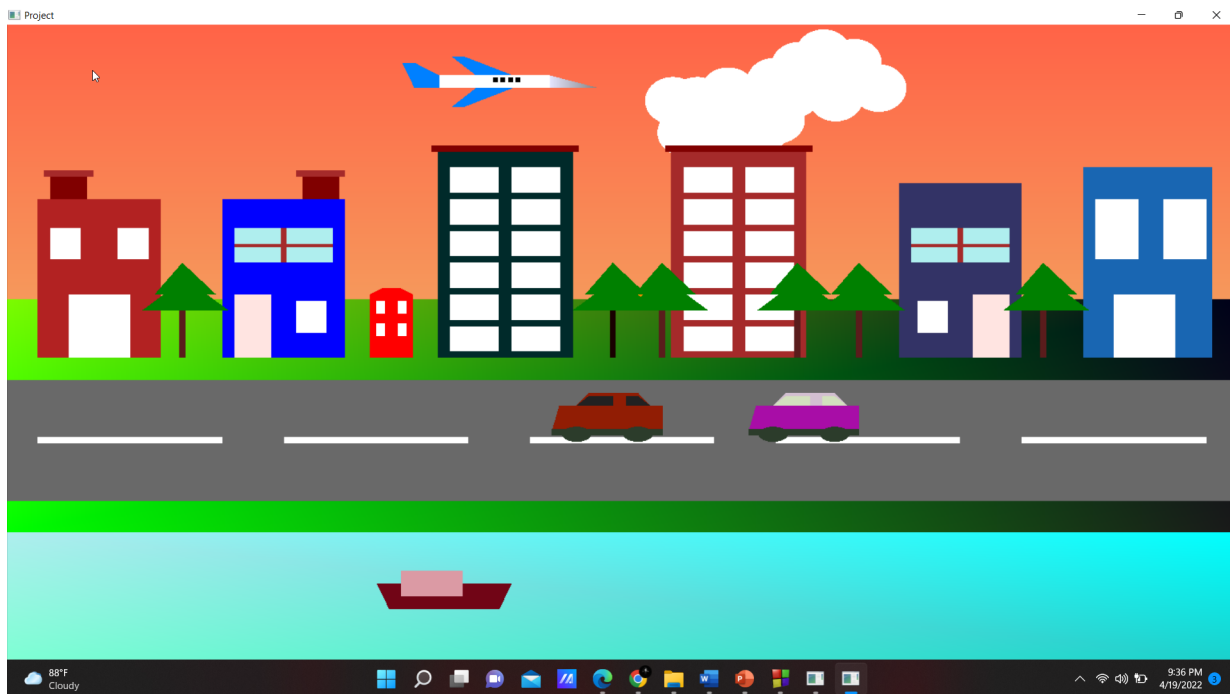
9.1 Day view of our project



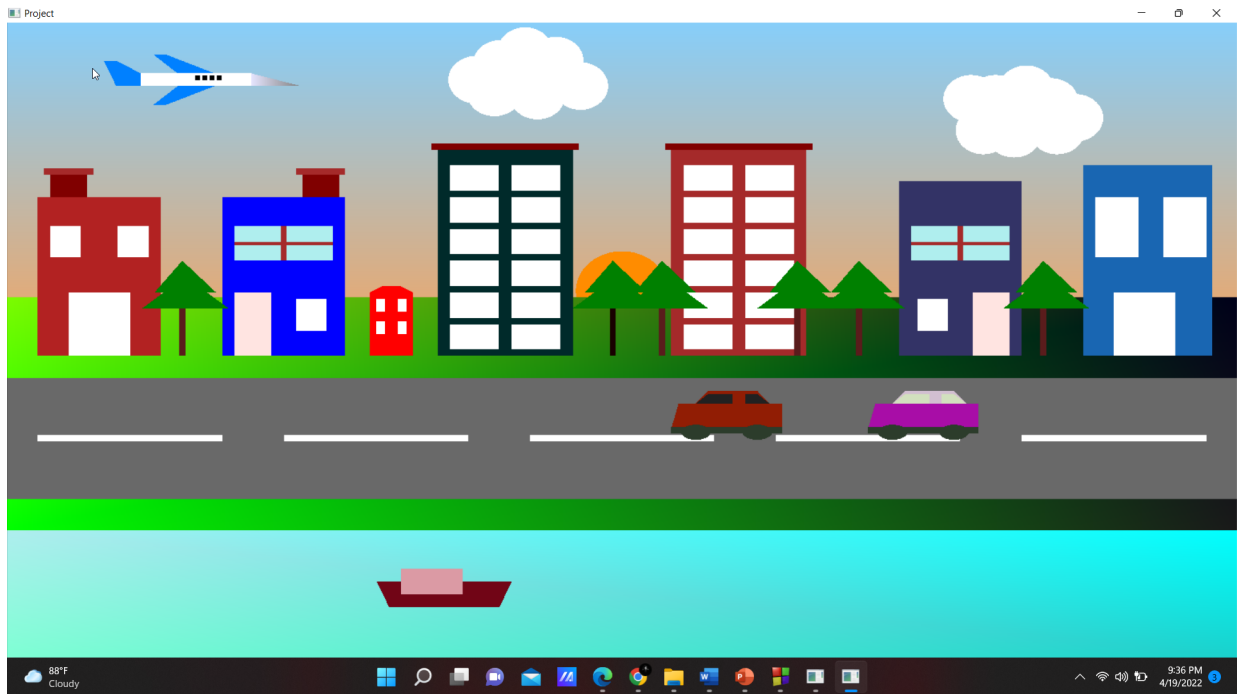
9.2 Night view of our project



9.3 Morning view of our project



9.4 Afternoon view of our project



10 Conclusion

We have seen a modern city view on the frontier side in this project's conclusion. We've shown that using code blocks and different functionalists, we can build a modern city view. To construct a plausible situation, the items should travel in various directions. This project will be useful in the future for creating a realistic city with natural effects and protection. Engineers will be able to comprehend their tasks more quickly after seeing this visual effect.