

AMERICAN INTERNATIONAL UNIVERSITY BANGLADESH

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DEPARTMENT OF COMPUTER SCIENCE AND TECHNOLOGY



Designing A City View

Submitted to

MD. MASUM BILLAH

by

Group: 1

Name	Id	Section
MD. SADMANUR ISLAM SHIHSIR	20-42871-1	B
MD. ABDUR RAHMAN FOYSAL	20-42742-1	B
SALAH-UD-DIN ELIAS KHAN	20-44139-2	B
SOMEL AHMED	20-42800-1	B

Vision of Department

Our vision is to be the preeminent Department of Computer Science through creating recognized professionals who will provide innovative solutions by leveraging contemporary research methods and development techniques of computing that is in line with the national and global context.

Mission of Department

The mission of the Department of Computer Science of AIUB is to educate students in a student-centric dynamic learning environment; to provide advanced facilities for conducting innovative research and development to meet the challenges of the modern era of computing, and to motivate them towards a life-long learning process.

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List of Objects

1. Building
2. Field
3. Lamp Post
4. Road
5. Car
6. Cloud
7. Sun
8. Moon
9. Rain
10. Snow
11. Tree
12. Bench

Chapter 1

Introduction

Only vector images are used in computer graphics. Raster graphics are best used for non-line art images; specifically digitized photographs, scanned artwork or detailed graphics. Unlike raster images, vector graphics are based on mathematical formulas that define geometric primitives such as polygons, lines, curves, circles and rectangles. The advantages of Vector Image are, there is no upper or lower limit for sizing vector images. That's why, we used vector images to create our project. Since we are not printing the output on a paper but rather showing the output on a monitor. The output is being shown to us as a collection of pixels (as a raster image).

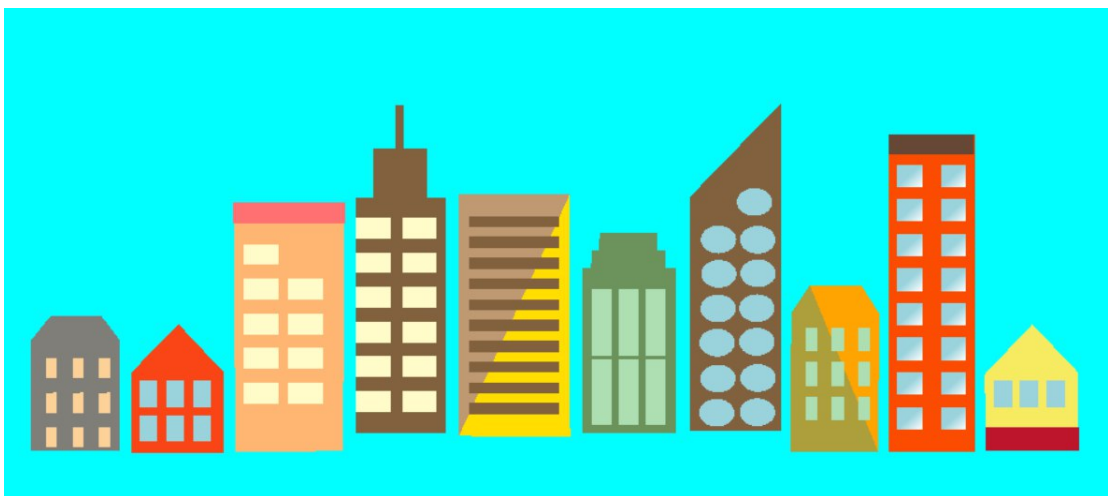
Chapter 2

Project Proposal:

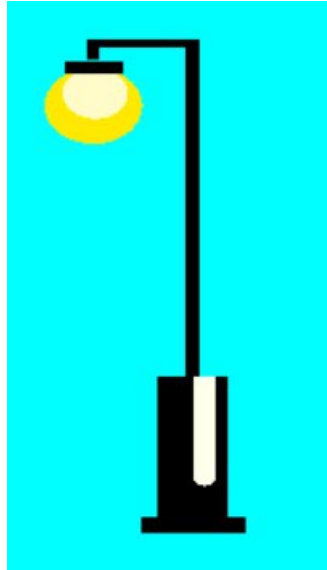
In this project, we design a scenario of a City View. In this scenario, we have buildings in the back side, a moving car along with the road, trees and lamp posts. We also added other features which are weather and rain. With a click of a button the time clock will activate and the scenario will change from day to night and also we can control rain(when the rain will start and stop).When we click R, then rain will start and if we press S then rain will stop. The car will move automatically but we have also set a time clock for this task.

2.1 SCHEMATIC DIAGRAM:

2.1.1 Building:



2.1.2 Lamp Post:



2.1.3 Car:



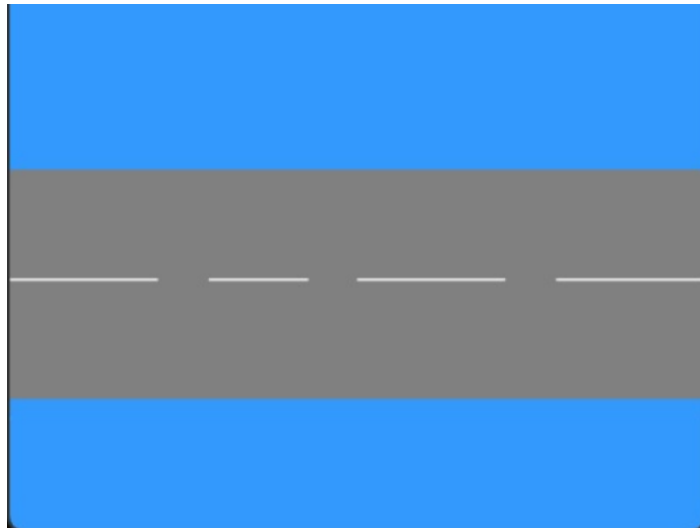
2.1.4 Tree:



2.1.5 Bench:



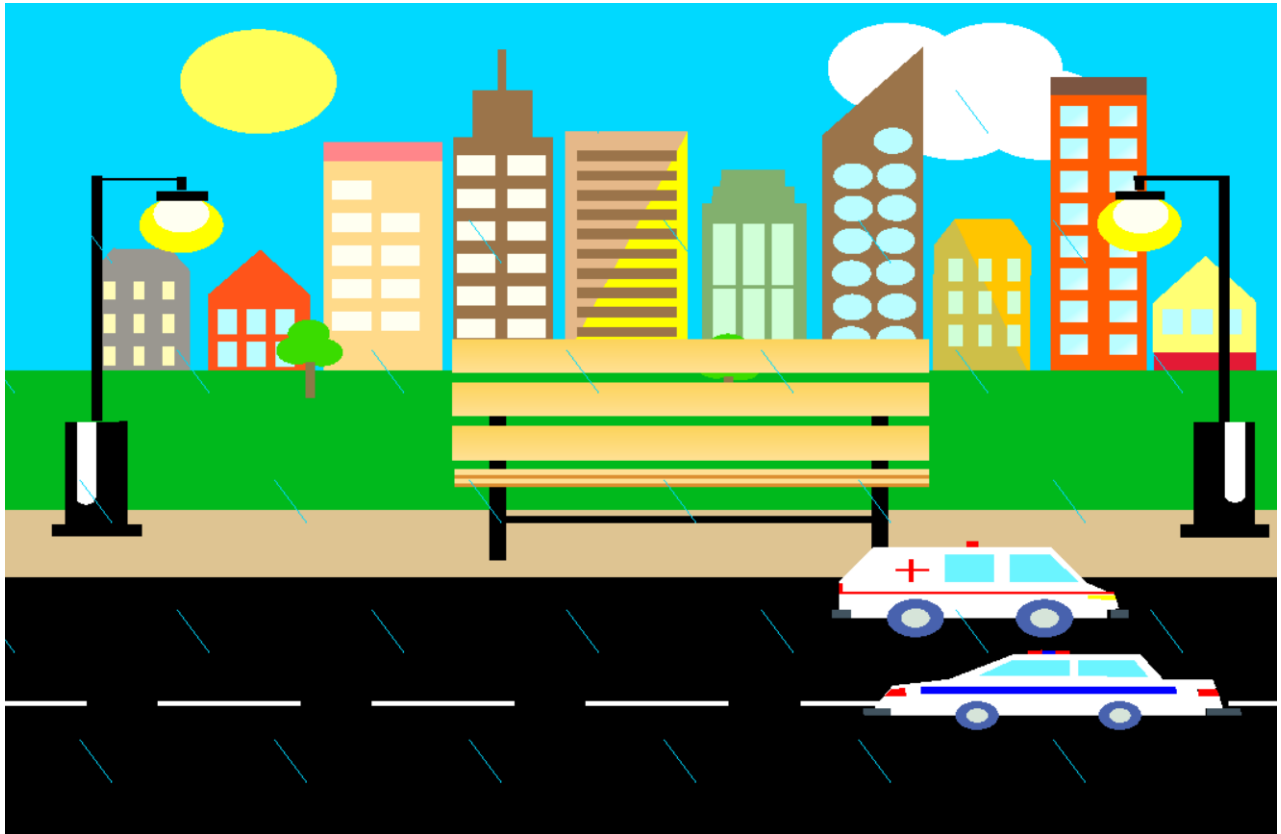
2.1.6 Road:



2.1.7 Cloud:



2.1.8 Final View:



Chapter 3

FUNCTIONS TO REPRESENT THE OBJECTS

3.1 Functions of Object:

Serial No.	Object	Function
1.	Building	building()
2.	Field	GreenField()
3.	Tree	Tree()
4.	Bench	Bench()
5.	Lamp Post	Lamp()
6.	Car	car()
7.	Weather	weather()
8.	Circle	Circle()
9.	Moon	moon()
10.	Sun	sun()
11.	Cloud	cloud()
12.	Road	road()

3.2 Task Assignment:

Member-1	Member-2	Member-3	Member-4	Total
25%	25%	25%	25%	100%

3.3 CONCLUSION:

We are making our project using an extension of code blocks named OpenGL. By using different functionalities of OpenGL, we have created a city view with various facilities. We create this kind of demo project for a city, we can rebuild it in our real world.

3.4 Reference:

1. Taking points from "<https://www.geogebra.org>"
2. Taking colour code from "<https://colorcodes.io/>"