# Department of Computing

# CS361: Computer Graphics

# Class: BSCS-5ABC

# Lab09: Parallel Projection

**CLO2: Develop program to implement 3D Scenes**

# Date: 5th November, 2018

# Time: 9:00am- 12:00pm

# Instructor: Dr. Muhammad Muddassir Malik

# Lab9: Parallel Projection

# Introduction

Computer graphics methods are now commonly used to produce animations for a variety of application including entertainment (motion pictures and cartoons), advertising scientific and engineering, studies and training and education.

**Objectives**

After performing this lab students should be able to create basic:

Animations

**Tools/Software Requirement**

For testing HTML 5, CSS, JS

**Description**

**https://webglfundamentals.org/webgl/lessons/webgl-3d-perspective.html**

**Lab Task**

**Task 1**

Create two wireframe cubes side by side but with different distances to default camera position. The cubes are constantly rotating. Implement parallel projection. Implement sliders to manipulate different parameters of parallel projection.

**Task 2**

Implement perspective projection for the scene in task 1. Write code to manipulate its parameters.

**Bonus:** Implement a button to switch between a wireframe cube and a wireframe model (complicated than a cube).

**Deliverable**

Upload your code with snap shots of the output.