



**National University of Sciences and Technology (NUST)**  
**School of Electrical Engineering and Computer Science**

**Department of Computing**

**CS250: Data Structure and Algorithms**

**Class: BSCS 5AB**

**Lab 3: Linked List & OpenGL**

**Date: 4<sup>th</sup> October, 2016**

**Time: 9am- 12pm / 2pm – 5pm**

**Instructor: Shamyl Bin Mansoor / Akhtar Munir**



### **Lab 3: Linked List & OpenGL**

#### **Introduction**

The Lab consists of Dynamic Singly linked list in an openGL (glut) application

#### **Objectives**

In this lab you will learn the basic operations of linked lists by using an openGL based example.

#### **Tools/Software Requirement**

Visual Studio c++ , given code on LMS

#### **Description**

The basic operation consist of creating the list, initialize pointers to NULL, inserting nodes, insert at beginning, insert at last and deleting nodes from front.

#### **Lab Tasks**

You are required to upload the lab tasks on LMS and the name of that tasks must be in this format YourFullName\_reg#.cpp

Remember to comment your code properly.

#### **Task 1**

Understand the given openGL code and the circle linked list.

#### **Task 2**

In the given code

- add a function to insert a circle at a specific location in the linked list
- add a function to delete a specific numbered circle from the linked list

Write your own simple code.

#### **Deliverable**

Students are required to upload the lab task on LMS before the deadline.