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

Department of Computing

CS110: Fundamentals of Computer Programming

Class: BSCS – 5C

Assignment 4

Submission Due: Dec 27th, 2015, 11:55 pm

Instructor: M. Muddassir Malik

Assignment 4

Introduction

In this assignment you have to understand and implement the following concepts

- Pointers

Objectives

- To develop skills for using functions.

- To understand how to program conditional calculations.

Tools/Software Requirement

- Microsoft Visual Studio 2010 or later

Task 1 [5]

Create a library management system. Store the books with their metadata in 2D arrays. Store the registered users of the library along with their information in another 2D array.

Implement

1. Book borrowing and returning system.

2. Ability to view report that lists all the books that are currently borrowed.
3. Ability to search any particular book and show its details and status (in library or borrowed).
4. Print a report, showing the details of the users and the books they have borrowed.
5. Add a book into the library
6. Add more functionality for extra credit

Your code must contain arrays, functions, passing by reference and pointers.

General Instructions

Any assumptions that you take must be properly stated.

You must do this work individually but you can ask for help from the Lab Engineer. You cannot share your code with anyone or copy code. Plagiarism will result in zero marks.

Deliverables

Submit only 1 zip file (please do not submit a .rar as it does not decrypt through script) on the given LMS link, which contains both the programs. You must include the source code files (the .c or .cpp files), not an exe or any other kind of file. Anyone who submits a word document or anything other than source files will be awarded a zero. Your file should be named as asg1[YOUR FIRST AND LAST NAME].zip

Always submit 1 day before the deadline to avoid any last minute delays.

Marks break down:

1. Working of the program: 60%

2. Code readability: 20%

3. Output structure and aesthetics: 20%