# **Department of Computing**

**CS110: Fundamentals of Computer Programming** 

Class: BSCS – 5C

**Assignment 3** 

**Submission Due: Dec 19th, 2015, 11:55 pm** 

Instructor: M. Muddassir Malik

## **Assignment 3**

#### Introduction

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

Functions

## **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]

Write a software that provides the functionality of an ATM machine. Information (like Pin code, account number, name and balance) of five users is hard coded into the software. Any of the users can use the system and withdraw the amount or enter more funds into his/her account. When one user is finished using the ATM, it should not terminate the program but it displays a welcome screen for the next user as it happens in the real ATM.

## Task 2 [5]

Write a medical prescription system. The software displays a list of symptoms that the system can handle and then takes in a variable number of symptoms from the user. Based on the symptoms entered by the patient, the system shortlists the illnesses that he/she might have. After shortlisting, if the there are more than one illness that is possible, system asks some additional questions to pinpoint an illness. Software suggests a medicine for the patient based on the data provided.

You need to research some common illnesses for this task.

#### **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%