



Faculty of Computers & Artificial Intelligence

2<sup>st</sup> Term (2019-2020) Final Exam تخلفات

class: First year

Course Code: CSW 150

Course name: Fundamentals of Structure Programming

Research submission: From 31 May to 7 June 2020



Benha University

Final Date: 7 / 6 /2020

Total Marks: Pass / Fail

Examiner(s): Prof. Mazen Selim

---

a) Write a research project in ONE of the following topics:

### Topic No. 1

#### Bank Management System

#### Using C++

#### Project Objective

The main objective of this banking system, is to provide a flexible solution for banking industry. With this system both types of users such as bank customers and working personnel of the particular bank will find it so easy to use and able to perform all their operations using this system. This system enables its users to manage their bank accounts. Customers will be able to withdraw and deposit amount to their particular account. It will also able to generate transactions on money for particular customer account.

#### Proposed System

The system has the potential to perform all the activities, which are required to make a successful bank. This interactive system will be able to provide customers all the information just by a single click. **The system at least must contain:-** 2 structures, a login structure that involve username and password to achieve the authentication and Account structure that involve name , balance , phone , Account number and type of account (saving – checking – money market ) account , and a show menu which contains 5 functions for creating new account , deposit and withdraw amounts to their particular account, a search function to get information about a customer, display function to show all users in the bank , and any other function the student can suggest

Notes:-

- Create array [100] of structures.
- The system starts running with the data for 5 constant users (index from 0 ----4).
- To create a new account it must be add from index 5 and so on, the program keep tracks of the last index ..
- All the previous operations in the proposed section has to be done using functions
- The student can suggest any other functions that support the system

**The previous project was just an example in the field of banking,  
The same methodology can be used, but in different fields according to the nature of  
the field such as:**

- Topic 2      Hospital Management System**
- Topic 3      Library Management System**
- Topic 4      Bookshop Management System**

**GOOD LUCK,**

**Examiner(s)  
Prof. Mazen Selim  
Dr. Mohamed. Taha**