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| **LAB211 Assignment** | **Type:** | **Short Assignment** |
| **Code:** | **J1.S.P0072** |
| **LOC:** | **150** |
| **Slot(s):** | **2** |

**Title**

Write a login function uses MD5 encryption for passwords (separate from FPT Webmail software Project).

**Background**

NA

**Program Specifications**

Write a login function uses MD5 encryption for passwords.

User include the following information:

* Username(String), Password(String), Name(String), Phone(String), Email(String), Address(String), Date Of Birth(Date)
* Phone number must be 10 or 11 number
* Email is in correct format.
* Check date of birth (DOB) properly formatted date format according to dd/MM/yyyy

Write a login function use this information, to sign in then displays greeting “Hello + Username”,

***Function details:***

**Function 1:** Display a menu and ask users to select an option.

* Users run the program. The program prompts users to select an option.
* Users select an option, perform **Function** **2**.

**Function 2:** Perform function based on the selected option..

* Option 1: Add account
  + Add Account information (Username, Password, Name, Phone, Email Address, Date Of Birth) .
  + Check data is valid with the following conditions:
    - Username cannot null, empty or already exist in DB.
    - Password cannot null, empty.
    - Phone number must be 10 or 11 number.
    - Email is valid format.
    - Date of birth is valid format dd/MM/yyyy.
  + Password use the MD5 encryption function.
  + Add account in to program.
  + Return the menu.
* Option 2: Login
  + Prompt users to input a username and password.
  + Access to DB search account.
  + If information correct, display the greeting.
  + If information is incorrect reported login fail.
  + Return to the main screen.
* Option 3: Exit the program.

***Expectation of User interface:***

------------- Login ----------------  
Account: NghiaNV

Password: nghia

------------ Wellcome -----------

Hi SkyLine, do you want change password now? Y/N:

1

---------- Add User --------

Account:NghiaNV

Password:nghia

Name:SkyLine

Phone:0988666888

Email:nghianv@t.com

Address:Ha Noi

DOB:26/06/2016

============ Login Program =========

1. Add User

2. Login

3) Exit

Please choice one option:

Old password:

new password:

renew password:

5

2

3

4

**Guidelines**

**Student must implement methods**

* addAccount
* login

**in startup code.**

**Function 1: addAccount**

* implement function:public int addAccount(String username, String password, String name, String phone, String email, String address, String dob) throws Exception
  + Input:
* account: account information.
  + Return value:
    - id account.
    - List Exception

**Function 2:** Login

* implement function: public Boolean login(String username, String password)
  + Input:
* account: account information.
  + Return value: login status.