Project: A Secure Teller Terminal System

System Class and System Integration

1. System Class

• How to create a system class?

A sample design of the system class is given below:

```
system
startMenu: Menu
adminManager: AdminCoordinator
clientManager: ClientCoordinator
accountManager: AcctCoordinator
getOption()
init()
login(): Role
run(role: Role)
shutdown()
```

2. The main() function

• How to implement the main() function()?

```
int main() {
   system sys; //this is a system object
   int option;
    Role role; //you must define this data structure first
    bool quit = false;
   system.init(); //all the menus are created; all the data sets are loaded from files
   while (!quit) {
           option = system.getOption(); //displayMenu is implemented inside this function
           if (option == 1) { //login is chosen
                   role = sys.login();
                   sys.run(role);
           }
           Else quit = true;
   sys.shutdown(); //save all the data sets to the files
   return 0;
}
```

```
System::Run(role) {
    If (role == admin)
        adminManager.get_admin_menu_driver();
    else client_acct_Manager.clientacct_menu_driver();
}
```

3. The adminCoordinator class – Integrates the admin_menu with staff_DB

```
adminCoordinator:
       data:
              admin menu: menu
              staff DB: staff table
       functions:
              admin menu driver //Integrates the admin_menu with staff_DB
              add staff()
              staff <- get_staff(staff_name)</pre>
adminManger::admin_menu_driver() {
       exit = false;
       while (not exit) {
              admin menu.display();
              option = admin_menu.getOption()
              switch (option)
                      case '2': add_staff()
       }
}
adminManager::addstaff() {
       enter user staff_name;
       enter password;
       staff <- create an new staff object(staff_name, password);</pre>
       exist <- staff_DB.check(staff_name);</pre>
       if (exist == false) {
              staff_DB.push_back(staff);
               print "staff is successfully added" message;
       else "do not add an existing staff"
}
```