PROTECTION OF INFORMATION BASED ON SENSITIVITY AND PRIVILEGE LEVELS

CONTINUOUS ASSESSMENT FOR WEEK 6 – CS 3058

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***Introduction***

There are two **user types** in the system. Users are identified using those two user types. Staff user type have 4 sub staff types: **doctor, nurse, lab, receptionist and pharmacy**. When a user is registered username, password, user type and privilege level fields are saved in the config.ini file. Format of the username is created by considering the user type. If staff user type is selected staff user needs to enter a unique verification code provided to them by the administration. Sub staff types will be assigned according to that verification code by the system. Verification details are saved in the config.ini file under [staff verification]. This will avoid patients from creating staff type accounts and staff members from creating other staff type accounts.

Only the receptionist can create a new patient data records. Receptionist only have the permission to enter personal details of the patient, when creating a new data record. Patients can view his/her medical history but cannot edit them.

***Viewing Sensitivity of data***

* Patient can view only his/her personal medical history.
* Any staff member can view the personal details on patients.
* Doctors, nurses and pharmacy staff types can view sickness details of any patient.
* Doctors, nurses and pharmacy staff types can view drug prescriptions of any patient.
* Doctors, nurses and lab staff types can view lab test prescription of any patient.

***Editing Sensitivity of data***

* Only the receptionist can edit personal details of patients.
* Only doctors and nurses can edit sickness details of patients.
* Only doctors and nurses staff types can edit drug prescriptions of patients.
* Doctor, nurse and lab staff types can edit lab test prescriptions of patients.
* Users can keep or erase previous data after editing each fields they have access to.

***Format of the usernames in config file***

* + For patient: **[username] patient**
  + For staff: **[username] staff**
  + No two staff members can have the same username.
  + No two staff patients can have the same username.

***User privilege levels***

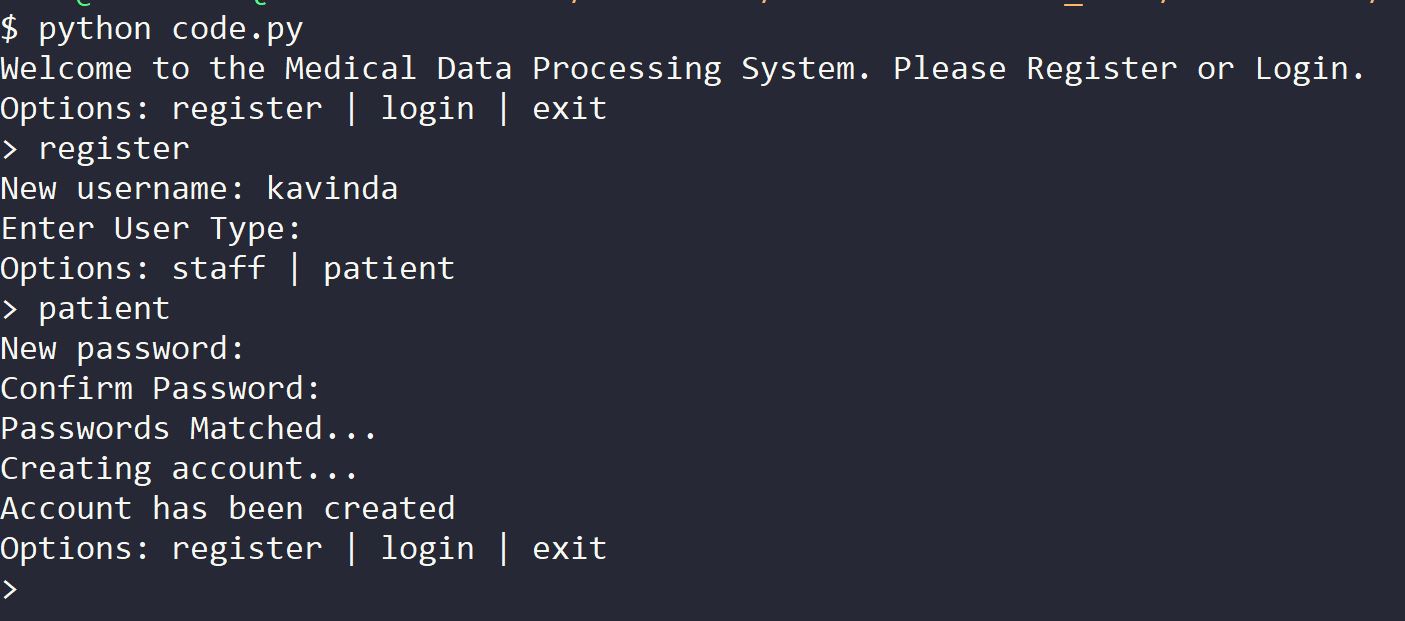
* Patient: admin\_0
* Doctor: admin\_1
* Nurse: admin\_2
* Lab: admin\_3
* Receptionist: admin\_4
* Pharmacy: admin\_5

**Current User Accounts**

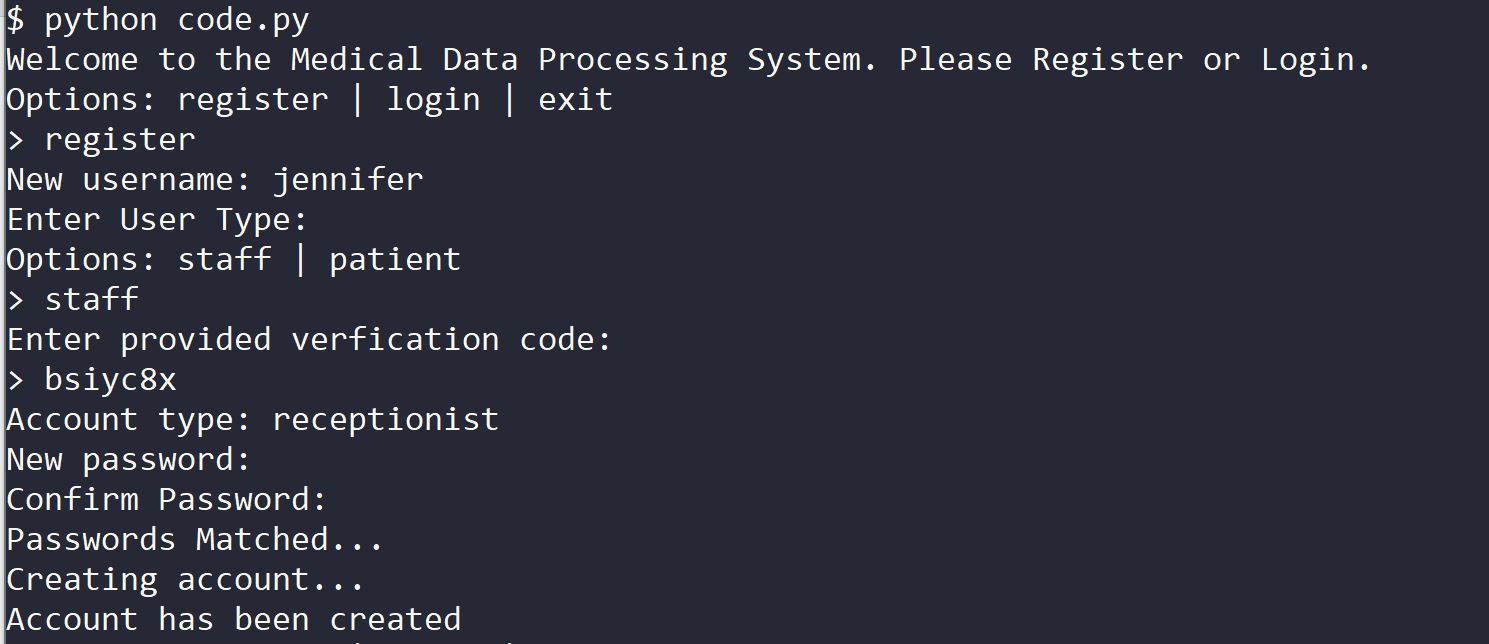
1. ***Patient\_1***
   * *Username: kavinda*
   * *Password: kavinda*
2. ***Patient\_2***
   * *Username: bruce*
   * *Password: kavinda*
3. ***Doctor***
   * *Username: kavinda*
   * *Password: kavinda*
4. ***Nurse***
   * *Username: diana*
   * *Password: kavinda*
5. ***Lab***
   * *Username: fernando*
   * *Password: fernando*
6. ***Receptionist***
   * *Username: jennifer*
   * *Password: kavinda*
7. ***Pharmacy***
   * *Username: desilva*
   * *Password: desilva*

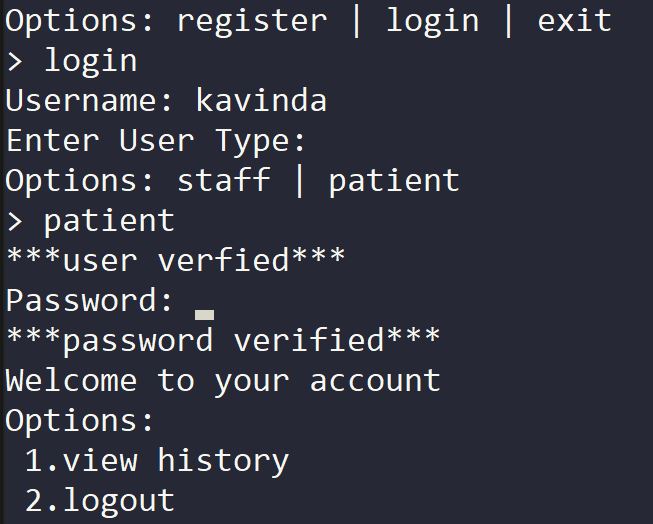
NOTE: Run the code in command line, so the passwords will not be echoed.

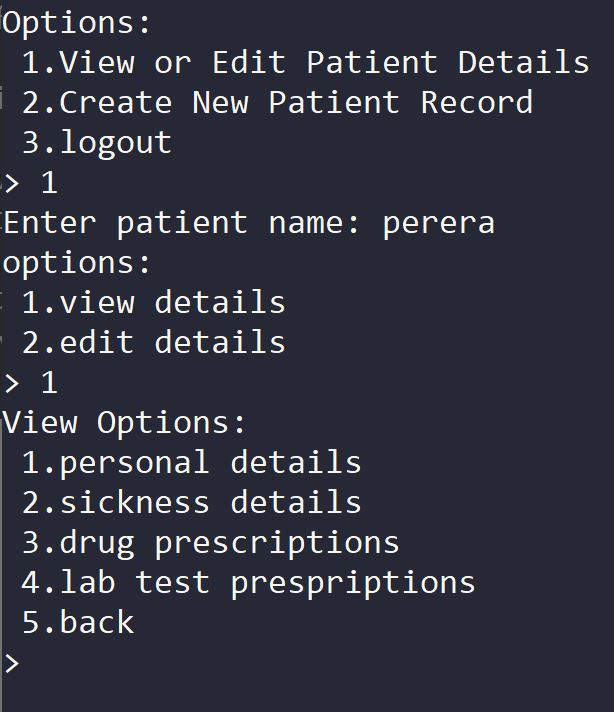
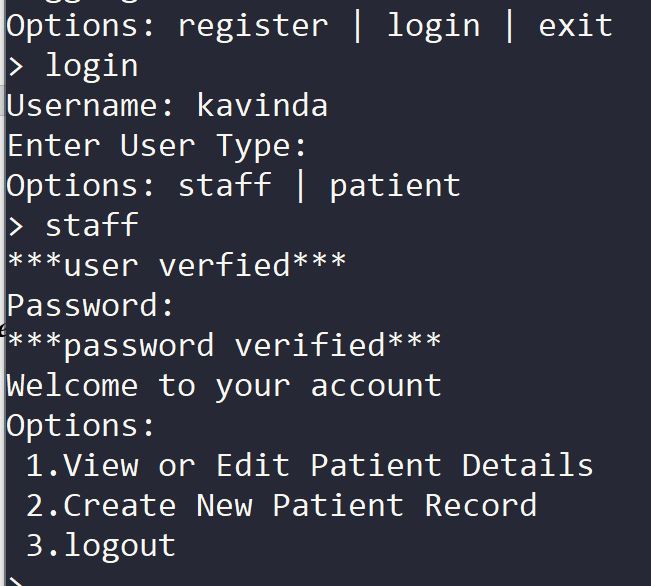
***Registering a new patient***

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***Registration of new staff member***

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***Patient login and menu***

***Staff login and menu***