

# Login & Register Application

Create “**Login/Register**” console application that provides the possibility for registering new and login already existing/registered users.

The application initially starts with asking the user for selecting if the user wants to login or register in the system. The selection is going through entering “1” for registering and “2” for login. There is no possibility of entering another input, so validation should be implemented here as well.

There are two possible scenarios and rules in case of a valid input.

- Register
  1. User should get a message for entering the username.
  2. Username represents the user`s email address.
  3. Email address should match the following format: [username@domain.com](#) - application logic should cover the condition of checking if ‘@’ and ‘.’ are present in the email format. The email cannot start and end up with numbers or another special characters.
  4. The length of the email address should not be over 30 characters.
  5. User should get a message for entering the password.
  6. The password policy is designed according to the pattern consists of at least 10 characters length - combination of small and big letters, numbers and at least two special characters (% , # , ! , ^ , & ).
  7. After successful registration user should be able to login into the system.
- Login
  1. User should get a message for entering the username/email.
  2. Validation is displayed if the email format is not matching the system`s policy.
  3. User should get a message for entering the password.
  4. Validation is displayed if password is not matching the system`s password policy.
  5. If user enters valid inputs according to the previously defined policies, then the existence of the email & password should be checked (if the entered email and password are already registered in the system). If user enters invalid username & password three times in a row, then the application displays a message that the user is blocked and automatically terminates the execution.
  6. After successful login user gets a welcome message.

## System behavior:

- The application should have already existing administrator account:
  - Username: [admin@admin.com](mailto:admin@admin.com)
  - Password: Ad#mi8\$s@!
- If the user enters and login with these credentials, then selection menu is displayed for entering “1” or “2” depending on the required action.
  - 1 --- List of all users
  - 2 --- Delete user
- In case of entering “1” -> display list of all registered users in the system is shown.
- In case of entering “2” -> user is asked to provide another existing user`s email address and if the input is valid, then the specific user is deleted from the system. After the deletion, the updated list of existing users is displayed on the screen.  
**Note:** the administrator cannot delete himself.
- If the login is from an account that is not the administrator one, then only the option for list of all users is shown.

Both types of users can logout from the system with entering the command “logout”.

After entering the command “logout” the system should start asking for username (email) & password again.

The users can terminate the program with entering the command “exit”. In case of this command, the application should automatically close.

*\* Take in consideration all possible validation messages and protect the application from invalid user input.*

