

PROJET CSHARP - Social Network.

Context :

In this project, you will create a console application that aims to provide the back-end programming for a social network project.

A social network consists of the following concepts :

- **Authentication.**
- **Newsfeed.**
- **Posts.**
- **Profiles.**
- **Pages.**
- **Groups.**
- **Events.**
- **Reactions.**
- **Comments.**

Functionalities :

In order to create a social network back-end, we need to have the following functionalities implemented :

1. The user must be able to register and login to the console application.
2. Once the user is authenticated, a menu should appear providing a list of operations that can be made :
 - 2.1. Browse news feed.
 - 2.2. Create, edit, delete a page.
 - 2.3. Create, edit, delete a post on his profile.
 - 2.4. Create, edit, delete a post on a page that he owns.
 - 2.5. Search and load profiles to visit.
 - 2.6. Search and load pages to visit.
 - 2.7. Create, edit, delete a group and add / remove users to / from it.

- 2.8. Create, edit, delete a post in a group.
- 2.9. Search and load groups to visit.
- 2.10. Create, edit, delete an event and add / remove users to / from it.
- 2.11. Create, edit, delete a post in a particular event.
- 2.12. Search and load events.
- 2.13. React to posts (any).
- 2.14. Add / remove a comment to a post (any).
- 2.15. Change his name.
- 2.16. Change his password.
- 2.17. Change his email.
- 2.18. Send a friend request.
- 2.19. Send a message to a user.
- 2.20. Log out.

Technologies:

You're allowed to use C# programming language in order to create this back-end code presented via a console application with the .NET framework.

A social network application should be able to store and retrieve data, so you may want to use a database for this particular scenario, noting the Entity Framework code first database, MySQL database or SQL server. However a database is not required, you may also work with memory only, which means you're going to implement a workflow for the presentation in which you demonstrate all the functionalities were created by simply initiating the process.

Guides :

You can submit your project as a zip file via mail to the mentors.

The mentors are highly recommending to browse and read the official microsoft documentation since it covers in depth the details of C# programming :

<https://docs.microsoft.com/>