

## assignment

This is a team assignment (up to 7 students). The maximum score you may get is 30. You must submit a \*.zip file of your project or provide a link to version control system(github, gitlab etc). You have to defend it during the lesson or submit it as video. During the defence you should explain each point in task and each member should explain which part they do.

Create 3 Java web application for a simple social network with following requirements:

1. Spring web application (21 points)
    - a. Users can register and authenticate
      - i. You must use token in cookie or session which
        1. is checked on each request (3 point)
        2. expires in 15 minutes (1 point)
    - b. Users can add friends: send/accept friend requests (1 point)
    - c. Users can create posts which is visible to
      - i. whole internet (1 point)
      - ii. only authorized users (1 point)
      - iii. only friends (2 point)
    - d. Users can comment posts (1 point)
    - e. Users can disable comments on their post (2 point)
    - f. There is user profile page which contains only this users' posts
      - i. Users can restrict visibility
        1. whole internet (1 point)
        2. only authorized profile (1 point)
        3. only friends - authorized users can view general information and send friend request (1 point)
    - g. Not found page (if URL is incorrect) (3 point)
    - h. Permission denied page (if user is not authenticated or page is not permitted for user) (3 point)
  2. Socket server (6 points)(You can create it as different console app or add support WebSocket to the main app: but in case if you create it as console app different from the web application it should use same database and create threads(web socket creates automatically) for each connected users )
    - a. Support clients
      - i. Asks for username and password before accepting clients (1 point)
      - ii. Proceed commands from the client
        1. Update: check for new posts and send if it appears in database (1 point)
        2. Post: create post (1 point)
    - b. check for new posts and send it to the clients in every 10 minutes (1 point)
  3. Socket client (4 points)(different console app, in case if you add websocket client it should be able to run it in separate machine or port and connect to the main app)
    - a. connect to the socket typing username and password in console (1 point)
    - b. print posts which got from the socket server (1 point)
    - c. send command to the socket server
      - i. Update (1 point)
      - ii. Post (the format is up to you) (1 point)
- You can disable commenting from the socket client