# Assignment 3

Deadline: Feb 24 (**hard**).                    Goal: Train Web Services

Your task is to develop a chat tool that should consist of a server and a client component. The implemented web service should be REST.

The server should allow clients to

• create chatrooms

 • list all existing rooms

• join existing chatrooms

• send messages to chatrooms

• leave a chatroom Once created, chatrooms store all data (messages sent to the room) for as long as they exist.

 The client should provide an interface that enables a user to

 • create a room,

• list the existing rooms,

• join one or more existing chatrooms

 • send messages to chatrooms

 • leave one or more rooms If the user connects to a chatroom, all previously sent messages of that room should be displayed.

New messages sent by the user or other connected users should be shown to the user. Since this assignment focuses on the use of middleware, you should not use sockets.

❖ You can use any Programming language for the backend. If you implement the assignment with two languages, you get a 15% bonus.
❖ You do not need to implement the GUI (Graphical user interface). The client and server can talk through command line or terminal
❖ The assignment is easier to be marked during the tutorial hours, but if you want to upload the assignment, you must upload the documented source code, an accurate instruction for running your code as well as screenshots of the output of each required task.

Marking:

Client can create a chatroom 20%
Client can see the list of existing room 20%
Client can join one of the existing chat rooms 20%
Client can send a message 20%
Client see the history of previous messages in a chatroom 20%