# [WebTraining11: Angular2 final exercise:](https://confluence.app.iaf/pages/viewpage.action?pageId=33916101)

In this exercise you will use all that you have learned in this course, you will need to build both the server and client side of a full-fledged website.

# Team chat:

In this exercise you need to create a full chat system suitable for working teams of people.

## **Functionalities:**

1. Sign in and log in, working with sessions.
   1. If you are not logged in you cannot access the site at all.
   2. You can only see and post in rooms that you have permission to use.
2. Chat rooms: a team can have multiple chat rooms where they discuss different things. For example a web development team can have a room for ui, logic, data base, server side, offtopic and so on.
   1. Rooms will be marked as read or unread.
   2. You may have permission to view a room but not to post in it.
3. Chat:
   1. Each user will have an Icon when he posts a new message his icon, name, date and hour of the post will appear next to the message.
   2. A user can edit or delete his post.  
      If a user edits his post that edit will happen across all open browsers without a need to reload.
   3. In the chat you will be able to use the `@` sign to mention someone. For example: `@David why did you give me 0 on the code review?`
4. Notifications:  
   When a user is being mentioned he will get a notification on his browsers, showing up in a small window with who mentioned him and what did they say.

## **Bonus:**

Finished ahead of time? Nice, here are a couple of things you can do:

1. Admin panel: add an admin panel, allowing the admin to create, edit and delete chat rooms, give or take permissions from users and adding or removing a user from a group.
2. Groups: You can add a user to a group like `UI` that room could have permissions to view and post in certain rooms.
   1. In chat you could mention a group `@UI where are you guys ?`  
      All users in that group will be notified.
   2. Each group can be assigned a color and the users name in chat will be in that color.
3. Emoticons, add them to the chat, create a submenu to pick and post from a list of emoticons (Like in whatsapp).