

Assignment 2

No	Task	Outcome of the task
1 (100)	<ul style="list-style-type: none"> Assume that there is a company named ABC. ABC needs a chat server for their employee's internal usage. There should be a GUI based chat client <u>-not a web based-</u>. When an employee run the chat client for the first time, chat client have to register itself to the chat server by using her/his mail address -as a user name-, setting a password for logon. But the chat server have to validate the user is correct. You may use the Database -Employee info- containing Employees name, surname, mail address, citizenship information etc. that is already exist in the company -assume this and prepares a db-. So, for the employee registration, you can use these information. Via the Chat Client, employees can do the below operations <ol style="list-style-type: none"> See who is active on the Chatserver Send a private message to a specific person Send a general message to all active person The system must record the activities below. <ol style="list-style-type: none"> All messages in 1-1 and 1-many chats Activities time for a user's A user called "superuser" can access/see the logs via a backdoor which is not a normal user can access. For the chat server, you should develop a custom server and for the accessing to Employee information, logging the activities etc, you must do these actions via a Web Service -not via a direct Database query-. Encryption between client and server or the servers has to be supported. It can be activated by a command and/or switch. Create a One-Page documentation file as "document.pdf" containing summary of your project details, design, components etc. Upload only your project file(s) as "project.zip" 	Developing a chat server
2	<ul style="list-style-type: none"> Start a video/audio capturing tool on a host/client (your voice telling what you are testing during the demo) <ol style="list-style-type: none"> Start your server(s), client(s), web services -if exist- or others Run "netstat" and shows your server is listening of your server port 777. Start Client app on at least 2 users(s) Start Wireshark network captures Show the 1-1 chars, 1-many chats, who is active etc commands. Stop Wireshark network capture and show the traffics/messages between client, server, web service etc. Save the recording file as "recording-demo.xxx" as in a playable video format in a default apps in any OS. Recoding should be max 7 mins. 	Showing your projects in Demo

Notes:

- You can work as a team as min 4 person and max 12 person.
 - Select a name for your group and write your group name in the file <https://1drv.ms/x/s!AskI0Ni85uLtj7grRiv-H6EZlmwhqA?e=k4tWVm> for yourself. You may also use this file to reach to the others who has not a group yet.
 - During submission, only one of the team members should upload the assignment.
- Late uploads -1 min or 1 day- will not be graded.
- Upload your **3 project files** by one by one. Do not compress all files into one file.
- If there is any question in your mind that are not fully clarified in this document, you may do some assumption and prepare your solution based on it. Creativity and Innovations in the project is limited with your dream.