

In The Name Of God

FOP 98 project Documentation

- Phase 1 Functions (Client):

char * ContactWithServer(char *);

description: This function receives client request string that created in other functions , then creates a socket and connects to server and send request to server. Finally returns the server response string to base functions that call it.

void AccountMenu();

description: This function has no argument and output. It provide a menu to register , login and exit for user.

void Register();

description: This function has no argument and output. It receive username and password from user in itself and creates register request string to pass to server. Then according to the server response show a message to client.

void Login();

description: This function has no argument and output. It receive username and password from user in itself and creates login request string to pass to server. Then according to the server response show a message to client.

void UserInterface(char*);

description: This function receives a string that contains the client AuthToken that server assign to it for passing to other functions and has no output. It provide a menu to creating channels , join channels and logging out from account for user and according to user selection calls another function.

void CreateChannel(char*);

description: This function receives a string that contains the client AuthToken that server assign to it and has no output. It receive channel name for creating from user in itself and creates a request string to pass to server. Then according to the server response show a message to client.

void JoinChannel(char*);

description: This function receives a string that contains the client AuthToken that server assign to it and has no output. It receive channel name for join from user in itself and creates join request string to pass to server. Then according to the server response show a message to client.

void Logout(char*);

description: This function receives a string that contains the client AuthToken that server assign to it and has no output. It creates logout request string to pass to server. Then according to the server response show a message to client.

void ChatMenu(char*);

description: This function receives a string that contains the client AuthToken that server assign to it for passing to other functions and has no output. It provide a menu to sending messages , refreshing messages , showing channel members ,

finding a specific user in current channel , finding a specific word among messages and leaving from current channel for user and according to user selection calls another function.

void SendMeesage(char*);

description: This function receives a string that contains the client AuthToken that server assign to it and has no output. It receives a message from user for sending in itself and creates a request string to pass to server. Then according to the server response show a message to client.

void Refresh(char*);

description: This function receives a string that contains the client AuthToken that server assign to it and has no output. It creates a request string for refresh messages to pass to server. Then according to the server response show an error message or unread messages list to client.

void ChannelMembers(char*);

description: This function receives a string that contains the client AuthToken that server assign to it and has no output. It creates a request string for showing channel members to pass to server. Then according to the server response show an error message or members list to client.

void LeaveChannel(char*);

description: This function receives a string that contains the client AuthToken that server assign to it and has no output. It creates a request string for leave channel to pass to server. Then according to the server response show a message to client.

void SearchMember(char*);

description: This function receives a string that contains the client AuthToken that server assign to it and has no output. It receives a username from user for searching in itself and creates a request string for searching members to pass to server. Then according to the server response show result to client.

void SearchMessage(char*);

description: This function receives a string that contains the client AuthToken that server assign to it and has no output. It receives a word from user for searching among messages in itself and creates a request string for searching message to pass to server. Then according to the server response show result to client.

- Phase 2 Functions (Server):

cJSON* Register(char command[1000]);

description: It receives the full client request and after checking filters for registering , register user and creates a file for user in database or return an error , both in Json format. (return a pointer to cJSON struct)

cJSON* Login(char command[1000]);

description: It receives the full client request and after checking filters for login(Checking with database) , permits user to login and add user to online clients or return an error , both in Json format. (return a pointer to cJSON struct)

cJSON* CreateChannel(char command[1000]);

description: It receives the full client request and after checking filters for creating a channel , creates channel and creates a file for channel in database or return an error , both in Json format. (return a pointer to cJSON struct)

cJSON* JoinChannel(char command[1000]);

description: It receives the full client request and after checking filters for join in a channel with database , permits user to join a channel and add user to channel members or return an error , both in Json format.(return a pointer to cJSON struct)

cJSON* Logout(char command[1000]);

description: It receives the full client request and after checking filters for logout , permits user to logout from account and remove user from online members or return an error , both in Json format.(return a pointer to cJSON struct)

cJSON* SendMes(char command[1000]);

description: It receives the full client request and after checking filters for sending message , permits user to send a message in current channel and add message to saved messages in channel or return an error , both in Json format.(return a pointer to cJSON struct)

cJSON* LeaveChannel(char command[1000]);

description: It receives the full client request and after checking filters for leave channel , permits user to leave a channel and remove user from channel members or return an error , both in Json format.(return a pointer to cJSON struct)

cJSON* Refresh(char command[1000]);

description: It receives the full client request and after checking filters for refreshing messages , send a list of unread messages or return an error , both in Json format.(return a pointer to cJSON struct)

cJSON* ChannelMembers(char command[1000]);

description: It receives the full client request and after checking filters for showing channel members , send a list of channel members or return an error , both in Json format.(return a pointer to cJSON struct)

cJSON* SearchUser(char command[1000]);

description: It receives the full client request and after checking searching among channel members , send a username (if user found) or return an error , both in Json format.(return a pointer to cJSON struct)

cJSON* SearchMessage(char command[1000]);

description: It receives the full client request and after checking searching among channel messages in database , send a list of messages that contains an specific word (if

the word found) or return an error , both in Json
format.(return a pointer to cJSON struct)
