Testing Client Server File Management System

The testing for this application is done by performing unit testing. The testing.py file consists of 12 test cases which are used to test the functionality of client server file management system. The information about those test cases and the reason for choosing them to check functionality is described below.

1. **Test for login:**
   The test is performed to check whether the system logs the user in. It is supposed to log in user and write username in logfile.txt and set login_status to True.

2. **Test for login using wrong password:**
   The test is performed to check whether the system shows "Incorrect password" message when incorrect password is entered.

3. **Test for login using unregistered credentials:**
   The test is performed to check the system result when invalid credentials were entered. It is supposed to show a message "User doesn't exist. Please login to continue".

4. **Test for registration:**
   The test is performed to check whether the system registers user when new user credentials were entered.

5. **Test for registration with existing credentials:**
   The test is performed to check whether the system tells the user that the credentials entered were already registered when entered already existing user credentials.

6. **Test for write_file:**
   The test is performed to check whether the system creates file and writes given data into it when content to write is given.

7. **Test for write_file with no content:**
   The test is performed to check whether the system creates an empty file when no content is given with write_file command.

8. **Test for write_file with existing file name and no content:**
   The test is performed to check whether the system clears the file when no content and existing file name is given with write_file command.

9. **Test for create_folder:**
   The test is performed to check whether the system creates a folder with given name when folder doesn't exist.

10. **Test for create_folder with existing folder name:**
    The test is performed to check whether the system shows that folder already exists when given folder name already exists.

11. **Test for change_folder:**

The test is performed to check whether the system moves the current working directory to given folder when exists folder with given folder name.

12. **Test for quit:**

The test is performed to check whether the system logs out the user and closes the connection. It is supposed to clear the username in logfile.txt and close the connection.

13. **Test for using commands without login:**

The test is performed to check whether the system denies the user request of creating or reading a file and changing folder when user was not logged in.

These test cases were used to check whether the system functions correctly or not. These test cases were designed by keeping in mind about the requirements that are to be satisfied for the file management system. The test for command "commands" was not included in these test cases as it returns same every time. So it was tested manually.