

End-to-End System Testing, Group 30-TA

Summary of features :

1. Feature: User Registration

- Test Name: Register_Successfully
- Purpose: This test ensures that a user can successfully register with valid credentials. It:
 - Generates a random email.
 - Inputs required fields such as email, password, and repeated password.
 - Submits the form and verifies that no error message is displayed, indicating successful registration.

2. Feature: Save Lease Agreement

- Test Name: SaveLease_Successfully
- Purpose: This test validates the ability to log in and save a lease agreement. It:
 - Logs in using admin credentials.
 - Navigates to the lease agreement page.
 - Inputs lease details (address, rent, tenant name) and saves the lease.
 - Verifies the presence of a success alert stating "Lease saved successfully."

3. Feature: Retrieve Lease

- Test Name: LeaseRetrieve_NotSuccessfull
- Purpose: This test ensures error handling when a user attempts to retrieve a non-existent lease. It:
 - Logs in using admin credentials.
 - Navigates to the lease retrieval page.
 - Inputs a non-existent address and attempts to retrieve the lease.
 - Verifies the system displays an alert with the message "No matching lease found for the provided address."

Test Script Output:

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS COMMENTS
● suhaibskhan@Mac CISC 327 % cd Group-30-TA/BackendTests
● suhaibskhan@Mac BackendTests % dotnet test
Determining projects to restore...
All projects are up-to-date for restore.
rental_project -> /Users/suhaibskhan/Desktop/CISC 327/Group-30-TA/rental_project/bin/Debug/net8.0/rental_project.dll
BackendTests -> /Users/suhaibskhan/Desktop/CISC 327/Group-30-TA/BackendTests/bin/Debug/net8.0/BackendTests.dll
Test run for /Users/suhaibskhan/Desktop/CISC 327/Group-30-TA/BackendTests/bin/Debug/net8.0/BackendTests.dll (.NETCoreApp,Version=v8.0)
VSTest version 17.11.1 (arm64)

Starting test execution, please wait...
A total of 1 test files matched the specified pattern.

Passed! - Failed: 0, Passed: 6, Skipped: 0, Total: 6, Duration: 3 s - BackendTests.dll (net8.0)
○ suhaibskhan@Mac BackendTests %
```

Instructions on how to run:

Prerequisites:

docker engine and docker compose, dotnet(version 8.0 or later)

1. Pull the repo
2. Run “ docker compose up —build” in the terminal
3. Go to another terminal and cd into the BackendTests directory
4. Enter in terminal dotnet test

Task distribution

Name	Task/Responsibility
Suhaib	Authored the deliverable document, including all required sections: feature list, summaries of the end-to-end test scripts, screenshots of test execution, and instructions for running the tests. Also contributed to the testing framework by ensuring clarity in documentation and implemented the Register_Successfully test script. This test verifies the registration process by simulating a new user signing up with valid credentials and ensures that no errors are encountered during registration.
Dovydas	Set up the Selenium framework by creating the reusable SeleniumFixture class, which initializes the testing environment with appropriate browser configurations, including headless mode. Also implemented the SaveLease_Successfully test script. This test ensures the lease creation process works

	seamlessly by automating login, filling out the lease agreement form, and verifying that the lease is successfully saved with a confirmation alert.
Will	Implemented the LeaseRetrieve_NotSuccessfull test script to validate the system's error handling during lease retrieval. The test simulates a failed retrieval scenario by using an incorrect address and ensures that the appropriate error message is displayed. Contributed to refining the tests by addressing edge cases and verifying robustness in the retrieval functionality.