

Overview

This project automates a test case for Posit Cloud using Python and Selenium. The test performs the following actions on Posit Cloud:

1. Logs into the platform
2. Creates a new Space
3. Creates an RStudio Project within the Space
4. Verifies successful loading of the RStudio IDE

The test runs in Docker for isolation but can also be executed locally.

Prerequisites

- Docker: Required for running the tests in an isolated environment.
- Python 3.9+: Only needed if you plan to run the script locally.
- Selenium: Needed to automate browser interactions (included in the Docker image, but required locally if not using Docker).

Steps to Run the Test in Docker:

1. Clone this repository:

```
git clone <repository_url>
```

```
cd <repository_folder>
```

2. Update login email and login password in docker-compose.yml

```
sed -i.bak 's/python3 automated_test_posit_cloud.py  
my_login@email my_login_password/python3  
automated_test_posit_cloud.py your_email your_password/' docker-  
compose.yml
```

Make sure to replace `your_email` and `your_password` with the actual email and password.

3. Build the Docker image:

```
docker-compose build
```

4. Run the Docker container with your Posit Cloud credentials:

```
docker-compose up
```

Code Structure:

- `login(driver, username, password)`: Logs into Posit Cloud using the provided credentials.
- `create_space(driver)`: Automates the creation of a new space.
- `create_project(driver)`: Automates the creation of a new RStudio project in the space created above.
- `verify_rstudio_ide(driver)`: Confirms that the RStudio IDE loads successfully.

Other Automations (requires more time):

1. **Create Account**: Automate account creation to ensure smooth registration.
2. **Delete Space**: Automate space deletion to validate correct deletion and confirmation messages.
3. **Create/Delete Projects from Templates**: Automate creating different types of projects from provided templates.
4. **Update Profile**: Automate the process of updating and validating profile settings across devices.

Potential Improvements:

- **Cross-browser testing** could be added using Selenium Grid.
- **Error handling** could be improved for unexpected behavior.
- **Parameterization** of project and space names to make the script more flexible.