Instructions:

How to Run:

1. Ensure the application is running locally or accessible at **`http://localhost:3000`**.
2. Install all necessary dependencies by running: `pip install -r requirements.txt`
3. Navigate to: app/assignment-6 for Test Script Files: Can be found in **`e2e_tests.py`**
4. Execute the test scripts:

```
python test_register.py
```

```
python test_login.py
```

```
python test_flights.py
```

5. Review the output in the console for test results and validation messages.

Debugging Notes:

All tests use the Chrome WebDriver. Ensure you have Google Chrome installed on your system.

- If ChromeDriver is not automatically installed or fails, ensure that the `webdriver_manager` package is properly configured.
- If `http://localhost:3000` is not the correct URL, replace it with the appropriate URL for your application in each script.

Prerequisites to Run Test Scripts:

1. Python Installed
2. Node.js Installed
3. Selenium Installed
4. Selenium Webdriver-Manager Installed

Features Considered for Testing

1. User Registration: To verify that users can successfully register on the platform.
This test automates the user registration process, ensuring that the application accepts valid data, detects duplicate registrations, and displays appropriate alerts.

2. User Login: To validate the login functionality of the application.
This test ensures that users can log in using valid credentials and that their user data is correctly displayed on the home page post-login.

3. Flight Validation To confirm that the flight-related features function as expected.
This test covers validation of discounted flights, navigation to the "Explore All Flights" page, and the ability to filter flights based on a minimum price.

Test Scripts Description

The User Registration test suite automates the following steps:

1. Navigates to the registration page.
2. Fills in the required form fields (first name, last name, phone number, email, and password).
3. Accepts the terms and conditions by selecting the required checkbox.
4. Submits the registration form.
5. Handles the success or error alert appropriately (e.g., duplicate registration detection).

Test Command:

```
python test_register.py
```

Expected Output:

```
Opened application homepage.
Navigated to the 'Register' page.
Filled in the registration form.
Submitted the registration form.
Registration alert: Registration successful!
```

The User Login test suite automates the following steps:

1. Navigates to the login page.
2. Fills in the login form with valid credentials (email and password).
3. Submits the login form.
4. Validates that the user's first name is displayed on the home page after a successful login.

Test Command:

```
python test_login.py
```

Expected Output:

```
Opened application homepage.
Filled in the login form.
Submitted the login form.
User data validated successfully. LOGIN SUCCESSFUL.
```

Flight Validation Test

1. The Flight Validation test suite automates the following steps:
2. Verifies the presence of discounted flight deals on the homepage.
3. Navigates to the "Explore All Flights" page.
4. Filters the flights by entering a minimum price.
5. Validates that the filtered results display correctly.

Test Command:

```
python test_flights.py
```

Expected Output:

```
Opened application homepage.
Discounted flights are available.
Navigated to 'Explore All Flights' page.
Entered minimum price for filtering.
Filtered flight location: New York
Filtered flight location: Los Angeles
Filtered flight location: Chicago
```