# ****Cypress Login Automation Test Documentation****

## ****Overview****

This project demonstrates an automated login testing script created using **Cypress**. The test case simulates a login process for Pinterest, where a user submits their email and password, and the script verifies whether the login is successful. The goal of the project is to showcase the ability to automate the testing of user authentication flows on a web application using Cypress.

## ****Scope****

* **Login Form Validation**: Ensures that the email and password input fields accept and validate input correctly.
* **Login Button Interaction**: Simulates the action of clicking the login button.
* **Login Failure Handling**: Verifies that the system correctly displays an error message when invalid credentials are provided, ensuring users are not logged in with incorrect email or password.

## ****Technologies Used****

* **Cypress**: A JavaScript-based end-to-end testing framework used to automate the testing of the Pinterest login page.
* **JavaScript**: The programming language used to write the Cypress test scripts.
* **VS Code**: The code editor used for writing and managing the test scripts.

## ****Test Implementation Details****

### Test Steps

1. **Visit the Pinterest Login Page**: The script starts by visiting the Pinterest login page.
2. **Enter Email and Password**: The email and password fields are populated with predefined credentials.
3. **Click the Login Button**: The login button is clicked after the user inputs the credentials.
4. **Verify Error Message for Unsuccessful Login**: After clicking the login button, the script verifies that the login attempt fails by checking for the presence of an error message indicating incorrect credentials.

### Page Object Model (POM)

A Page Object Model (POM) is implemented to improve the maintainability of the code. The elements involved in the login process (email, password fields, and the login button) are abstracted into methods. This structure allows for easier updates and reuse.

* **Methods**:
  + btnLogin(): Locates the login button.
  + email(): Locates the email input field.
  + password(): Locates the password input field.
  + clickBtnLogin(): Simulates clicking the login button.

## ****Table of Test Cases****

| **Test Case ID** | **Description** | **Expected Outcome** | **Status** |
| --- | --- | --- | --- |
| TC-01 | Navigate to Pinterest Login page | Pinterest login page loads successfully | Passed |
| TC-02 | Enter email address | Email field accepts input | Passed |
| TC-03 | Enter password | Password field accepts input | Passed |
| TC-04 | Click the "Log in" button | The login button click leads to a successful login | Passed |
| TC-05 | Verify error message for invalid login credentials | User is not logged in, and an error message indicating incorrect email or password is displayed | Passed |