

## AI-Powered Test Coverage

Using Selenium IDE integrated with AI plugins enhances automated testing far beyond manual efforts. While traditional scripting covers known paths, AI expands test coverage by dynamically learning the UI, identifying edge cases, and auto-generating meaningful test suggestions based on user behavior or anomalies. In the login test case, the AI plugin can detect field changes, suggest additional negative test inputs, and adapt to DOM changes that would normally break manual scripts. Moreover, it flags UI inconsistencies or response-time issues that humans might overlook. As a result, AI doesn't just reduce manual effort—it improves reliability by learning and evolving with the application. This leads to higher success and failure detection rates, better regression testing, and faster debugging cycles. In short, AI-powered automation ensures tests are smarter, more resilient, and more comprehensive than traditional methods.

Example when using correct credentials

Project: plp\_test

Executing ▾

✓ Untitled\*

https://academy.powerlearnprojectafrica.org

	Command	Target	Value
1	✓ open	/login	
2	✓ set window size	669x728	
3	✓ click	id=email	
4	✓ type	id=email	mwangiwambugu@gmail.com
5	✓ click	id=password	
6	✓ type	id=password	Mwangi@29542069

Command: open # [icon]

Target: /login [icon] [icon]

Value: [input type="text"]

Description: [input type="text"]

Runs: 1 Failures: 0

Log Reference

- 2. set window size on browser OK 21:29:30
- 3. click on id=email OK 21:29:38
- 4. type on id=email with value mwangiwambugu@gmail.com OK 21:30:19
- 5. click on id=password OK 21:30:19
- 6. type on id=password with value Mwangi@29542069 OK 21:30:19
- 7. click on css=inline-flex OK 21:30:19

'Untitled' completed successfully 21:30:19

Example using wrong credentials

Project: plp\_test\*

Executing ▾

plp\_test\*

▶▶▶▶▶

https://academy.powerlearnprojectafrica.org

	Command	Target	Value
1	✓ open	/login	
2	✓ set window size	1137x728	
3	✓ click	id=email	
4	✓ type	id=email	mwangiwambugu@gmail.com
5	✓ click	id=password	
6	✓ type	id=password	Mwangi123

Command

open

#

Target

/login

Value

Description

Runs: 1

Failures: 0

Log

Reference

4. type on id=email with value mwangiwambugu@gmail.com OK

5. click on id=password OK

6. type on id=password with value Mwangi123 OK

7. click on css=.inline-flex OK

8. mouseOver on css=.inline-flex OK

9. mouseOut on css=.inline-flex OK

'plp\_test' completed successfully

10:49:52

10:49:52

10:49:53

10:49:53

10:49:53

10:49:54

10:49:54