Task 2: Automated Testing with AI

Test Script

{

  "id": "be04a5ff-315d-4c0e-aa6c-95372e520b34",

  "version": "2.0",

  "name": "Automated Testing with AI",

  "url": "https://preview--watuworks.lovable.app",

  "tests": [{

   "id": "e4164e23-3e63-4e96-a42e-233b2ccc2c64",

   "name": "test",

   "commands": [{

    "id": "4b99b8c8-12ab-424b-bb7a-92a0b2930e98",

    "comment": "",

    "command": "open",

    "target": "/auth",

    "targets": [],

    "value": ""

   }, {

    "id": "f5041825-82cd-4316-a0aa-d9f695d0f7c0",

    "comment": "",

    "command": "setWindowSize",

    "target": "808x833",

    "targets": [],

    "value": ""

   }, {

    "id": "67102ed9-9ad2-48b6-a7da-a6d9801570f7",

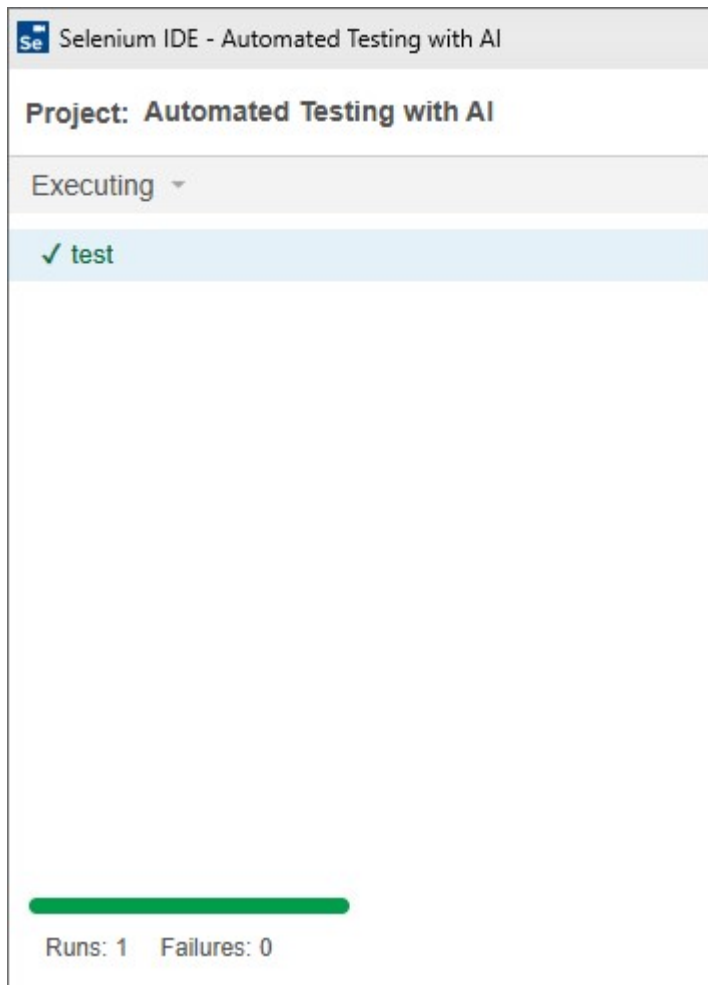   "comment": "",

    "command": "type",

```json
    "target": "id=signin-email",
    "targets": [
      ["id=signin-email", "id"],
      ["css=#signin-email", "css:finder"],
      ["xpath=//input[@id='signin-email']", "xpath:attributes"],
      ["xpath=//div[@id='radix-:r0:-content-signin']/form/div/input", "xpath:idRelative"],
      ["xpath=//input", "xpath:position"]
    ],
    "value": "geokullo@gmail.com"
  }, {
    "id": "ea5b3a9b-ebff-4936-a54b-c9839131e8ac",
    "comment": "",
    "command": "type",
    "target": "id=signin-password",
    "targets": [
      ["id=signin-password", "id"],
      ["css=#signin-password", "css:finder"],
      ["xpath=//input[@id='signin-password']", "xpath:attributes"],
      ["xpath=//div[@id='radix-:r0:-content-signin']/form/div[2]/div/input", "xpath:idRelative"],
      ["xpath=//div[2]/div/input", "xpath:position"]
    ],
    "value": "Pass@1234#1"
  }, {
    "id": "8643989e-ca30-4aa6-927f-d2e2015569de",
    "comment": "",
    "command": "click",
    "target": "id=signin-email",
    "targets": [
      ["id=signin-email", "id"],
```

```
      ["css=#signin-email", "css:finder"],

      ["xpath=//input[@id='signin-email']", "xpath:attributes"],

      ["xpath=//div[@id='radix-:r0:-content-signin']/form/div/input", "xpath:idRelative"],

      ["xpath=//input", "xpath:position"]

    ],

    "value": ""

  }, {

    "id": "b34a5c33-c644-4ef3-90a5-9667af633974",

    "comment": "",

    "command": "click",

    "target": "id=signin-password",

    "targets": [

      ["id=signin-password", "id"],

      ["css=#signin-password", "css:finder"],

      ["xpath=//input[@id='signin-password']", "xpath:attributes"],

      ["xpath=//div[@id='radix-:r0:-content-signin']/form/div[2]/div/input", "xpath:idRelative"],

      ["xpath=//div[2]/div/input", "xpath:position"]

    ],

    "value": ""

  }, {

    "id": "64d79b07-5312-42d9-ace2-e1f746045fb7",

    "comment": "",

    "command": "click",

    "target": "css=.bg-primary",

    "targets": [

      ["css=.bg-primary", "css:finder"],

      ["xpath=//button[@type='submit']", "xpath:attributes"],

      ["xpath=//div[@id='radix-:r0:-content-signin']/form/button", "xpath:idRelative"],

      ["xpath=//form/button", "xpath:position"]
```

      ],

      "value": ""

    }]

  }],

  "suites": [{

    "id": "ad294be7-d862-4fe8-977b-1adcd3d682a9",

    "name": "Default Suite",

    "persistSession": false,

    "parallel": false,

    "timeout": 300,

    "tests": ["e4164e23-3e63-4e96-a42e-233b2ccc2c64"]

  }],

  "urls": ["https://preview--watuworks.lovable.app/"],

  "plugins": []

}

Selenium IDE - Automated Testing with AI

Project: Automated Testing with AI

Executing ▾

✓ test

Runs: 1   Failures: 0

Summary

AI-enhanced testing tools like Testim.io and Selenium with AI plugins improve test coverage by dynamically adapting selectors when UI elements change, reducing brittle test failures. These tools learn from previous runs and adjust locators based on visual or contextual cues rather than fixed IDs or XPath.

This adaptability reduces maintenance overhead and increases test reliability. Compared to manual testing, AI-driven automation allows for faster execution of large test suites, early bug detection, and broader coverage across multiple browser-device combinations. Additionally, AI can auto-generate test cases from user flows, accelerating test creation significantly.