**Playwright setup for a fresh device:**

1) Install VS code editor as an IDE/code editor.

2) Download and install npm from node.js official website

3) Install playwright extension from vs code with following commands

npm init playwright@latest

first check your status with the command Get-ExecutionPolicy to check whether it's restricted or others, if it is Restricted we will face an error. So need to run following command in the vs code terminal

i) run Set-ExecutionPolicy -Scope CurrentUser

ii) type RemoteSigned

4) Run the install command and select the following to get started:

i) type Install Playwright in terminal

ii)Choose between TypeScript or JavaScript (default is TypeScript) [I selected javascript]

iii)Name of your Tests folder (default is tests or e2e if you already have a tests folder in your project) [ I provided tests]

iv)Add a GitHub Actions workflow to easily run tests on CI [false]

v)Install Playwright browsers (default is true) [true]

5) Create Folder to club all the dependencies of playwright and node modules(the folder can be created in which the dependencies will be downloaded when we install the npm, if not we can do this step).

6) Open folder from VS code where you can choose the created folder which have dependencies.

7) You can write your first code and run using the following the commands in terminal

i) npx playwright test to run all the test cases against all available browsers

ii) --headed to see execution on browser (by default it is headless)

iii) --debug to debug the steps

iv) --project use to open particular browser

v) npx playwright show-report use to see the passed test cases report (the report will be opened by default if the execution is failed)

**Project explanation and assumptions:**

i)Here I have taken Amazon India website for the assessment

ii) I have done the setup to choose the India location in the project for the smooth execution of test cases (locators and page looks vary based on geographical location)

iii)I have included both unit testing , integration testing and e2e testing test cases

iv) Config file has the setup to locate India amazon website, to capture screenshot for failed test case.

v) This project handles new tab navigation(if opens) and same tab(if not) as well

vi) I did not use the login feature as it involves security

**Test Cases:**

1) Verify amazon.in string in the home page

2) Verify search bar is empty and clickable

3) Verify cart should be empty on the first launch

4) Select books from search category and verify it is selected

5) Search books from search bar with search category books

6) Search books and print the total results for the search keyword

7) Sort results based on selection and verify it is selected

8) Click first product after sorting for the search the keyword

9) For the product: click on add to cart, verify success message and proceed to buy button are present and cart count is 1

10) Click buy now and verify it redirects to login page

11) Add more than one products on to cart and verify cart count based on added products

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S.No | TestCaseName | Preconditions if needed | Steps | Page | Expected Result | Test Data |
| 1 | Verify amazon.in string in the home page | Launch Amazon website | 1.Launch amazon.in url in the browser  2.Verify amazon logo/name in the home page | Home page | 1.Website should be launched successfully  2. Amazon (logo) name should be displayed as page is loaded successfully | Amazon url  https://www.amazon.in |
| 2 | Verify search bar is empty and clickable | Launch Amazon website | 1.Launch amazon.in url in the browser  2. Verify search bar is empty and clickable | Home page | 1.Website should be launched successfully  2. Search bar should be empty and clickable | Amazon url  https://www.amazon.in |
| 3 | Verify cart should be empty on the first launch | Launch Amazon website | 1.Launch amazon.in url in the browser  2. Verify cart is empty on the first launch | Home page | 1.Website should be launched successfully  2. Cart should be empty and clickable on launch until we add shopping items | Amazon url  https://www.amazon.in |
| 4 | Select books from search category and verify it is selected | Launch Amazon website | 1.Launch amazon.in url in the browser  2.Select any category from the category dropdown | Home page | 1.Website should be launched successfully  2. Should be able to select any value for the category from dropdown  3.It should be selected | Amazon url  [https://www.amazon.in](https://www.amazon.com/)  “Books” for the category |
| 5 | Search books from search bar with search category books | Launch Amazon website | 1.Launch amazon.in url in the browser  2.Select any category from the category dropdown  3. Search keyword related to the category selection | Home page | 1.Website should be launched successfully  2. Should be able to select any value for the category from dropdown  3.Should be able to search keyword related to the category selection | Amazon url  [https://www.amazon.in](https://www.amazon.com/)  “Books” for the category “Harry Potter” for the search keyword |
| 6 | Search books and print the total results for the search keyword | Launch Amazon website | 1.Launch amazon.in url in the browser  2.Select any category from the category dropdown  3. Search keyword related to the category selection  4. Print the total no of results shown for the search keyword | Home page | 1.Website should be launched successfully  2. Should be able to select any value for the category from dropdown  3.Should be able to search keyword related to the category selection  4. Should capture and print the no of results | Amazon url  [https://www.amazon.in](https://www.amazon.com/)  “Books” for the category “Harry Potter” for the search keyword |
| 7 | Sort results based on selection and verify it is selected | Launch Amazon website | 1.Launch amazon.in url in the browser  2.Select any category from the category dropdown  3. Search keyword related to the category selection  4. Sort results based on any feature | Home page | 1.Website should be launched successfully  2. Should be able to select any value for the category from dropdown  3.Should be able to search keyword related to the category selection  4. Sort should be applied based on the feature that is selected | Amazon url  [https://www.amazon.in](https://www.amazon.com/)  “Books” for the category “Harry Potter” for the search keyword  “High To Low” for the sort feature |
| 8 | Click first product after sorting for the search the keyword | Launch Amazon website | 1.Launch amazon.in url in the browser  2.Select any category from the category dropdown  3. Search keyword related to the category selection  4. Sort results based on any feature  5.Click the first product after sorting and it opens a new tab | Home page | 1.Website should be launched successfully  2. Should be able to select any value for the category from dropdown  3.Should be able to search keyword related to the category selection  4. Sort should be applied based on the feature that is selected  5. Should be able to click on the first product after sorting and it should open in new tab | Amazon url  [https://www.amazon.in](https://www.amazon.com/)  “Books” for the category “Harry Potter” for the search keyword  “High To Low” for the sort feature |
| 9 | For the product : click on add to cart, verify success msg and proceed to buy button are present and cart count is 1 | Launch Amazon website | 1.Launch amazon.in url in the browser  2.Select any category from the category dropdown  3. Search keyword related to the category selection  4. Sort results based on any feature  5.Click the first product after sorting and it opens a new tab  6.Click on add cart for the first product  7. Verify added to cart successfully msg after adding product to the cart  8.Verify cart count is increased with 1 and proceed to buy button is present | Home page | 1.Website should be launched successfully  2. Should be able to select any value for the category from dropdown  3.Should be able to search keyword related to the category selection  4. Sort should be applied based on the feature that is selected  5. Should be able to click on the first product after sorting and it should open in new tab  6.Should be able to add product to the cart and msg should be displayed  7.Cart should be increased with count 1 and proceed to buy button should be enabled | Amazon url  [https://www.amazon.in](https://www.amazon.com/)  “Books” for the category “Harry Potter” for the search keyword  “High To Low” for the sort feature |
| 10 | Click buy now and verify it redirects to login page | Launch Amazon website | 1.Launch amazon.in url in the browser  2.Select any category from the category dropdown  3. Search keyword related to the category selection  4. Sort results based on any feature  5.Click the first product after sorting and it opens a new tab  6.Click on add cart for the first product  7. Click Buy now button | Home page | 1.Website should be launched successfully  2. Should be able to select any value for the category from dropdown  3.Should be able to search keyword related to the category selection  4. Sort should be applied based on the feature that is selected  5. Should be able to click on the first product after sorting and it should open in new tab  6.Should be able to add product  7.Buy now button should appear and click  8. It should redirect to login page as we did not do login at first | Amazon url  [https://www.amazon.in](https://www.amazon.com/)  “Books” for the category “Harry Potter” for the search keyword  “High To Low” for the sort feature |
| 11 | Add more than one products on to cart and verify cart count based on added products | Launch Amazon website | 1.Launch amazon.in url in the browser  2.Select any category from the category dropdown  3. Search keyword related to the category selection  4. Sort results based on any feature  5.Click the first product after sorting and it opens a new tab  6.Click on add cart for the first product  7. Click on add to cart  8.Verify cart count is 1  9. Repeat steps from 5 to 8 for the next 2 products and verify cart count based on products added | Home page | 1.Website should be launched successfully  2. Should be able to select any value for the category from dropdown  3.Should be able to search keyword related to the category selection  4. Sort should be applied based on the feature that is selected  5. Should be able to click on the first product after sorting and it should open in new tab  6.Should be able to add product  7.Cart count should be 1 now  8. Steps 5 & 6 should be repeated for next 2 products | Amazon url  [https://www.amazon.in](https://www.amazon.com/)  “Books” for the category “mahabharata” for the search keyword  “featured” for the sort feature |