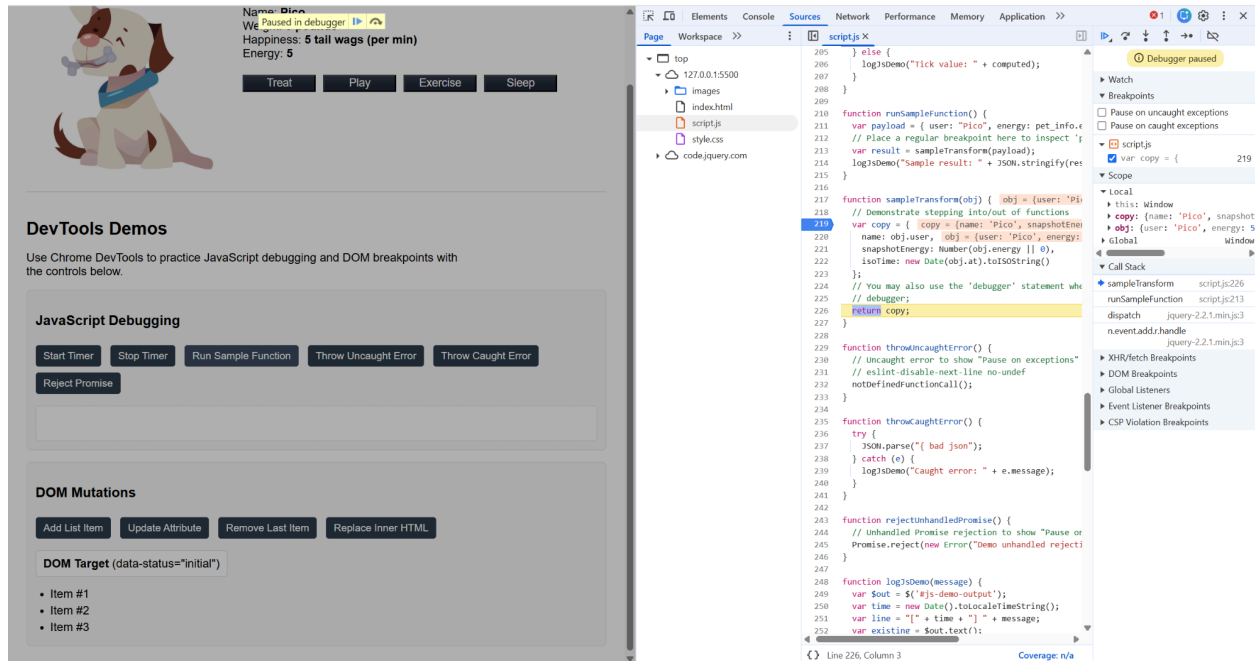


JavaScript Debugging Demos

1) Breakpoints, Step Over / Into / Out

What to do:

1. In DevTools, open the **Sources** panel and locate `script.js`.
2. Find the function `sampleTransform` and **set a breakpoint** inside the function body.
3. In the page UI, click “**Run Sample Function**”.
4. When execution pauses:
 - Use **Step Into** to follow function calls inside `sampleTransform`.
 - Use **Step Over** to run individual lines without going into inner calls.
 - Use **Step Out** to finish the current function and return to its caller.
5. Inspect:
 - The values of `payload` and `copy`.
 - Local and closure variables in the **Scope** panel.
 - The **Call Stack** to see how `sampleTransform` was reached.

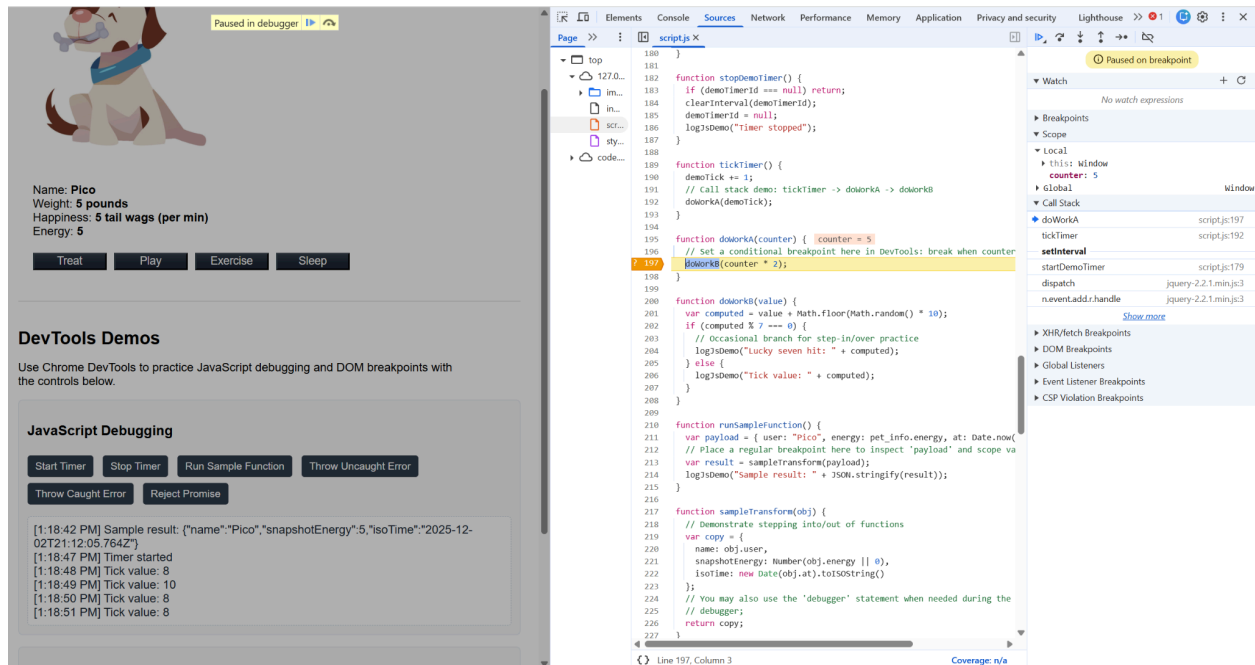


2) Conditional Breakpoint / Logpoint

What to do:

1. In `script.js`, find the function `doWorkA(counter)`.
2. In the **Sources** panel, set a breakpoint on the line inside `doWorkA`.
3. Right-click the breakpoint and choose “**Edit breakpoint...**”, then enter the condition:

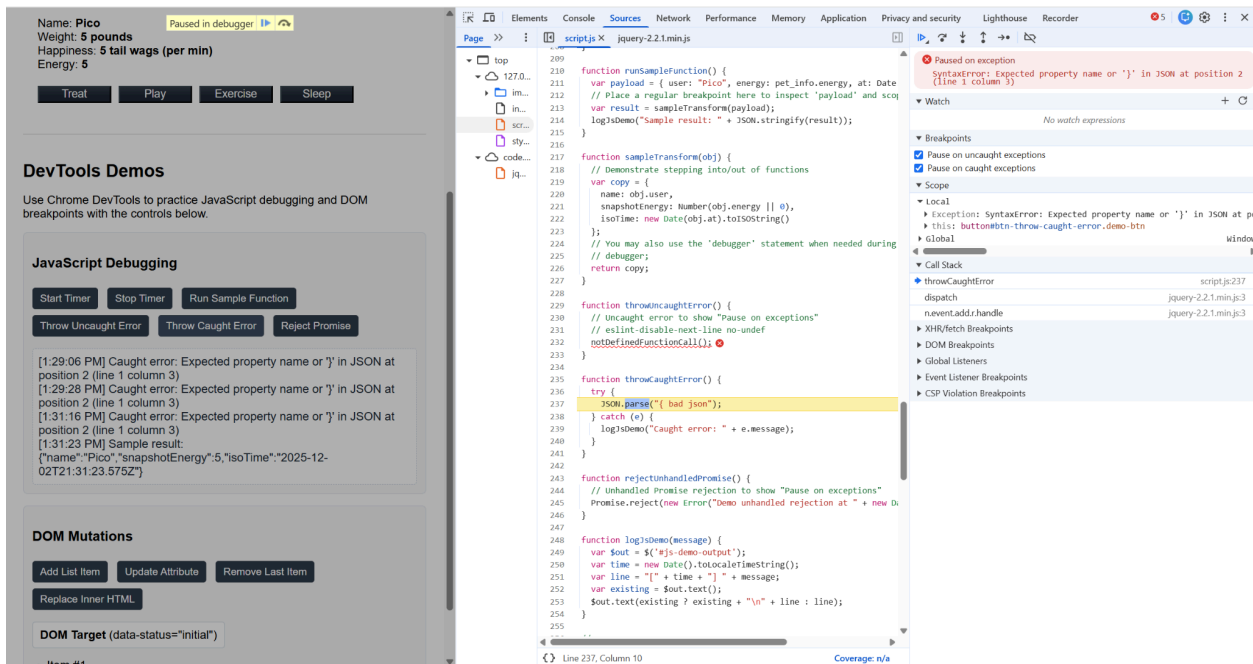
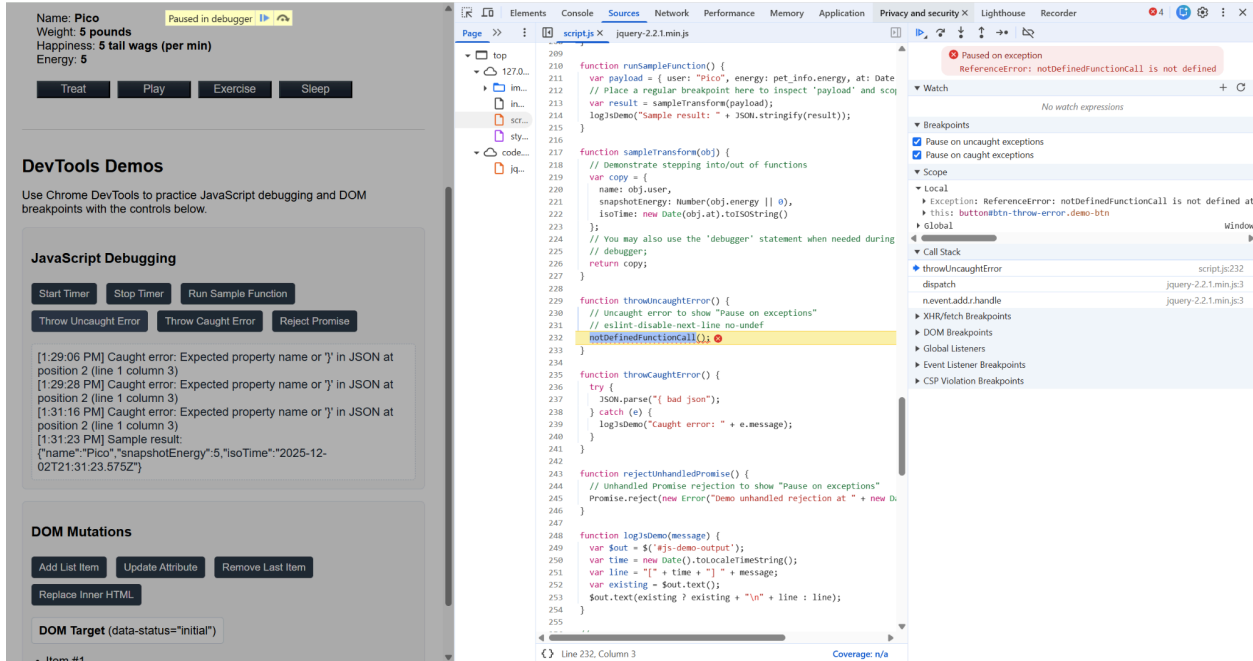

```
counter % 5 === 0
```
4. In the page, click “**Start Timer**”.
5. Observe how DevTools **only pauses** when `counter` is a multiple of 5.
6. Alternatively, convert the breakpoint to a **logpoint**:
 - Right-click the same line and choose “**Edit logpoint...**” (or similar option, depending on Chrome version).
 - Log something like: `"doWorkA counter:", counter`
7. Run the timer again and watch the messages in the **Console** without pausing execution.



3) Pause on Exceptions (Uncaught and Caught)

What to do:

1. In DevTools, go to the **Sources** panel and enable **“Pause on exceptions”** using the pause icon with a stop sign.
2. Optionally also enable **“Pause on caught exceptions”**.
3. Back in the page, click **“Throw Uncaught Error”**:
 - DevTools should pause at the line where the uncaught error is thrown.
4. Then click **“Throw Caught Error”**:
 - With only **“Pause on exceptions”** enabled, DevTools may not pause because the error is handled in a **try/catch**.
 - With **“Pause on caught exceptions”** also enabled, DevTools will pause even for the handled error, allowing you to inspect the error object and stack.

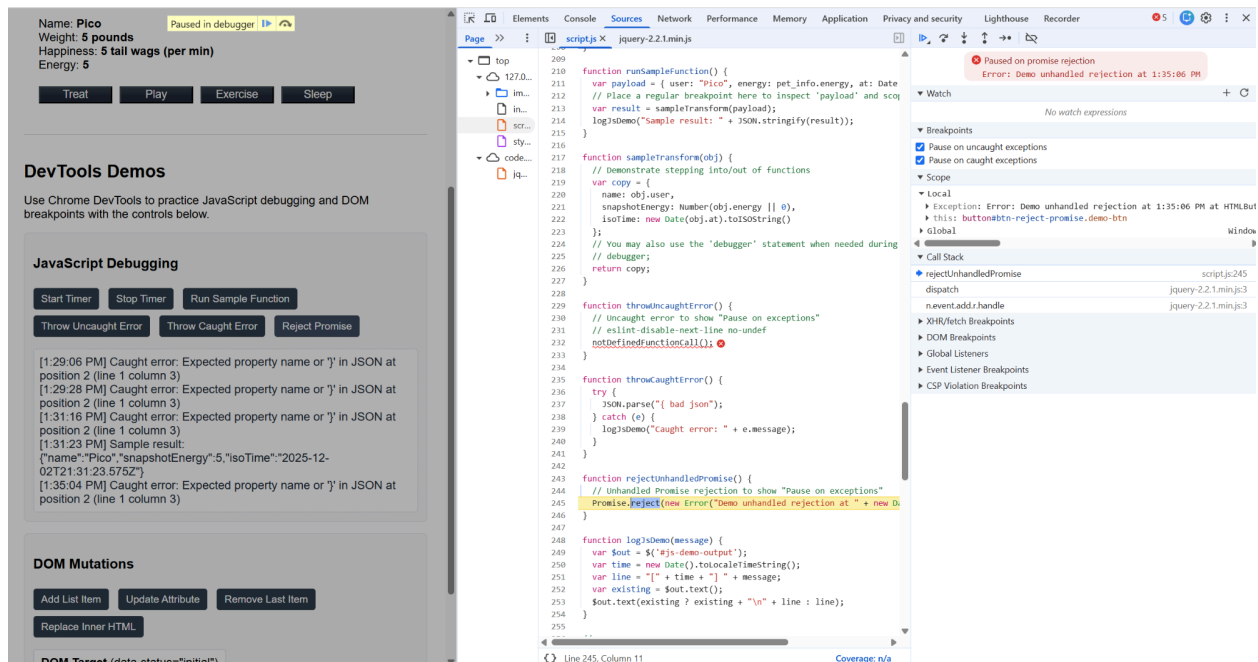


4) Unhandled Promise Rejection

What to do:

1. In the page, click “Reject Promise”.

2. This triggers an **unhandled promise rejection** in `script.js`.
3. With **Pause on exceptions** enabled, DevTools should pause where the rejection occurs.
4. Open the **Console** to see:
 - The unhandled rejection message.
 - Any associated stack trace or context.



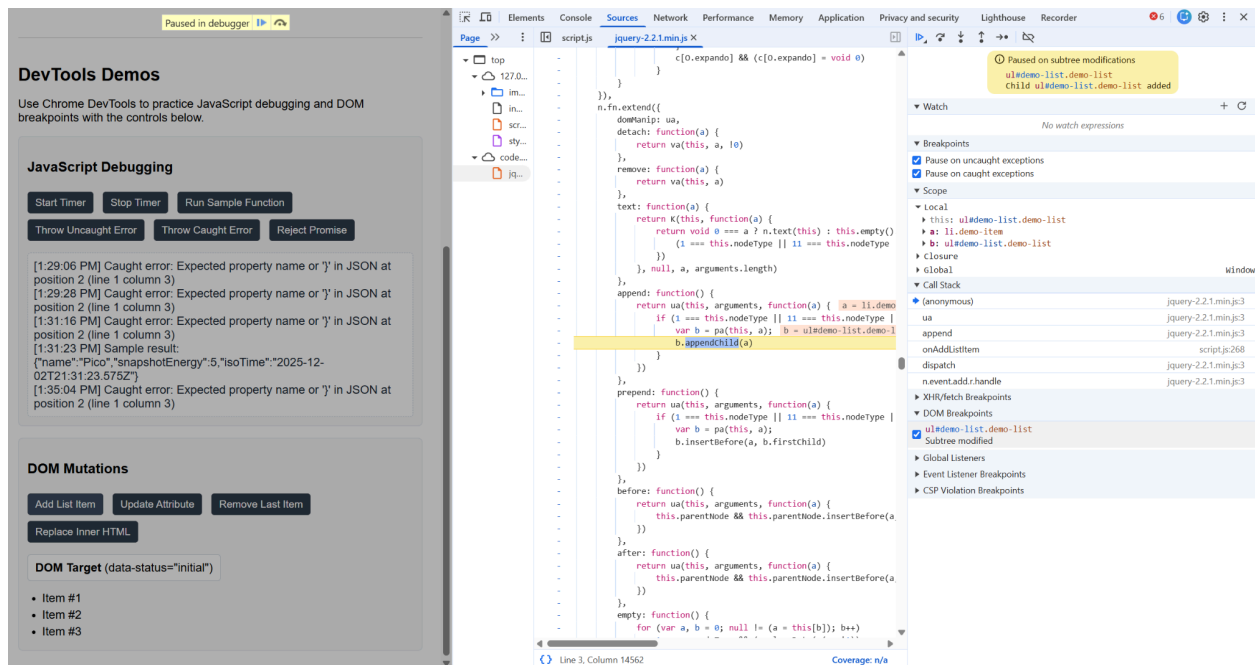
DOM Demos

5) DOM Subtree Modification

What to do:

1. In DevTools, open the **Elements** panel.
2. Locate the element with id `demo-list` (e.g., `<ul id="demo-list">`).
3. Right-click `#demo-list` and choose:
 - Break on** → **Subtree modifications**.

4. Back in the page, click **“Add List Item”**:
 - DevTools should pause at the JavaScript line that appends a new `` to `#demo-list`.
5. Click **“Replace Inner HTML”**:
 - DevTools should pause again when the inner HTML of `#demo-list` is replaced.

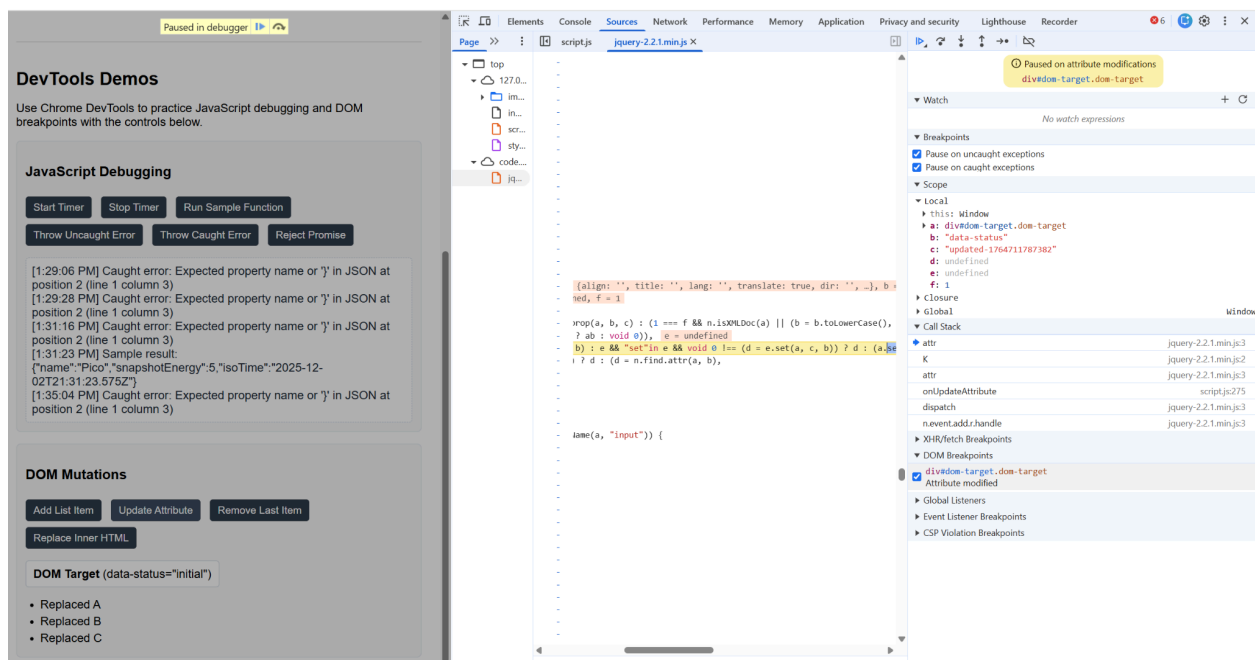


6) Attribute Modification

What to do:

1. In the **Elements** panel, find the element with id `dom-target`.
2. Right-click `#dom-target` and choose: **Break on → Attribute modifications**.
3. In the page, click **“Update Attribute”**:

- This should change the **data-status** attribute (for example, from **"idle"** to **"active"**).
4. DevTools will pause at the line in **script.js** that updates the attribute.
 5. Inspect:
 - The **Call Stack** to see how this code was reached.
 - The **Elements** panel to confirm the updated attribute.

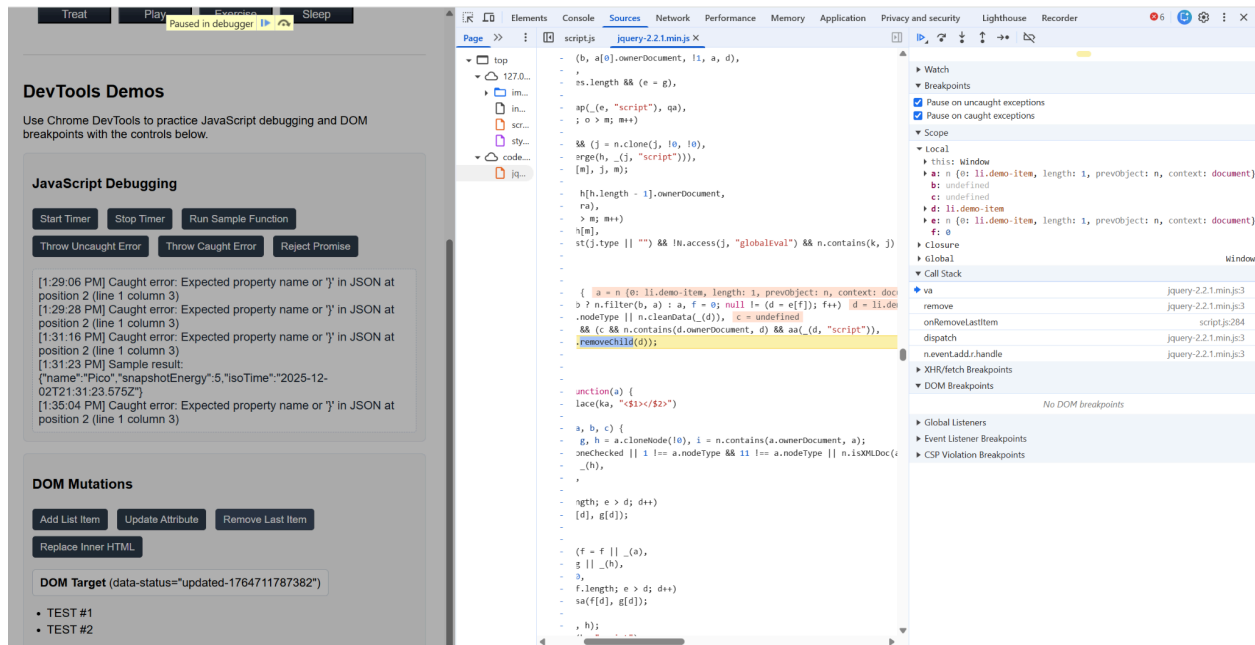


7) Node Removal

What to do:

1. In the **Elements** panel, again select **#demo-list**.
2. Right-click and choose:
Break on → Node removal.
3. In the page, click **"Remove Last Item"**:
 - The script should remove the last **** from **#demo-list**.

4. DevTools will pause at the line where the node is removed.



8) Editing in Elements Panel

What to do:

1. In the **Elements** panel, locate an element with the class **.demo-item** inside the DevTools demo section.
2. Double-click the text content of a **.demo-item** and edit it (for example, change “Original Item” to “Edited via DevTools”).
3. Press Enter and observe the change reflected immediately on the page.
4. Select **#dom-target** and modify one of its attributes (for example, add **title="Edited in DevTools"**).
5. Confirm that the new attribute value is visible in the page UI (e.g., hover to see the title tooltip).

Treat Play Exercise Sleep

DevTools Demos

Use Chrome DevTools to practice JavaScript debugging and DOM breakpoints with the controls below.

JavaScript Debugging

Start Timer Stop Timer Run Sample Function

Throw Uncaught Error Throw Caught Error

[1:29:06 PM] Caught error: Expected prop

```

position 2 (line 1 column 3)
1:29:28 PM] Caught error: Expected property name or '}' in JSON at
position 2 (line 1 column 3)
1:31:16 PM] Caught error: Expected property name or '}' in JSON at
position 2 (line 1 column 3)
1:31:23 PM] Sample result:
{"name": "Pico", "snapshotEnergy": 5, "isoTime": "2025-12-
02T21:31:23.575Z"}
1:35:04 PM] Caught error: Expected property name or '}' in JSON at
position 2 (line 1 column 3)

```

DOM Mutations

Add List Item

Update Attribute

Remove Last Item

Replace Inner HTML

DOM Target (data-status="updated-1764711787382")

- #text 94.27 × 27
- TEST #2

🔍 Elements Console Network Performance Memory Application Privacy and Security Lighthouse Recorder
⌵ Filter show .cls + - [icon] [icon]

```

<!doctype html>
<html> <meta>
  <head> => </head>
  <body>
    <header> => </header>
    <main> => </main>
    <!-- DevTools Demo Section -->
    <section class="devtools-demo" aria-labelledby="devtools-demo-title">
      h2 id="devtools-demo-title">DevTools Demos</h2>
      <p></p>
      <div class="demo-group">
        <button type="button" class="demo-btn" id="btn-update-attr">Update Attribute</button>
        <div class="demo-controls">=> </div>
        <div class="demo-output" id="js-demo-output" aria-live="polite">=> </div>
      </div>
      <div class="demo-group">
        <button type="button" class="demo-btn" id="btn-add-item">Add List Item</button>
        <button type="button" class="demo-btn" id="btn-remove-item">Remove Last Item</button>
        <button type="button" class="demo-btn" id="btn-replace-html">Replace Inner HTML</button>
      </div>
      <div class="dom-playground">
        <div class="dom-target" id="dom-target" data-status="custom" role="group" aria-label="DOM Target">=>
          <strong>DOM Target</strong>
          <span class="dom-target-value">{data-status=updated-1764711787382}</span>
        </div>
        <ul id="demo-list" class="demo-list">
          <li class="demo-item" data-id="1">
            :marker
            "TEST #1"
          </li>
          <li class="demo-item" data-id="2">
            :marker
            "TEST #2"
          </li>
        </ul>
      </div>
    </body>
  </html>

```

Styles Computed Layout Event Listeners

element.style { }

.dom-target { style.css:190
display: inline-block;
margin-bottom: 10px;
padding: 8px 10px;
border: 1px solid #cccdee;
border-radius: 4px;
background: #fff;

* { box-sizing: border-box; style.css:2
font-family: helvetica, arial, sans-serif; style.css:16
margin: 0 10px; } style.css:16

div { user-agent stylesheet
display: block;
unicode-bidi: isolate;

Inherited from body

body { font-family: helvetica, arial, sans-serif; style.css:16
margin: 0 25px; }

