#### Frame class

At every point of time, page exposes its current frame tree via the page.mainFrame and frame.childFrames methods.

#### Signature:

```
export declare class Frame
```

### **Remarks**

Frame object lifecycles are controlled by three events that are all dispatched on the page object:

- <u>PageEmittedEvents.FrameAttached</u>
- PageEmittedEvents.FrameNavigated
- PageEmittedEvents.FrameDetached

The constructor for this class is marked as internal. Third-party code should not call the constructor directly or create subclasses that extend the Frame class.

# **Example 1**

An example of dumping frame tree:

```
const puppeteer = require('puppeteer');

(async () => {
   const browser = await puppeteer.launch();
   const page = await browser.newPage();
   await page.goto('https://www.google.com/chrome/browser/canary.html');
   dumpFrameTree(page.mainFrame(), '');
   await browser.close();

function dumpFrameTree(frame, indent) {
   console.log(indent + frame.url());
   for (const child of frame.childFrames()) {
    dumpFrameTree(child, indent + ' ');
   }
  }
})();
```

## **Example 2**

An example of getting text from an iframe element:

```
const frame = page.frames().find(frame => frame.name() === 'myframe');
const text = await frame.$eval('.selector', element => element.textContent);
```

# Methods

Method	Modifiers	Description
<u>\$(selector)</u>		This method queries the frame for the given selector.
<u>\$\$(selector)</u>		This runs document.querySelectorAll in the frame and returns the result.
\$\$eval(selector, pageFunction, args)		
\$eval(selector, pageFunction, args)		
\$x(expression)		This method evaluates the given XPath expression and returns the results.
addScriptTag(options)		Adds a <script> tag into the page with the desired url or content.</td></tr><tr><td>add Style Tag (options)</td><td></td><td>Adds a <pre><li>rel="stylesheet"> tag into the page with the desired url or a <style type="text/css"> tag with the content.</pre></td></tr><tr><td><u>childFrames()</u></td><td></td><td></td></tr><tr><td><u>click(selector, options)</u></td><td></td><td>This method clicks the first element found that matches selector.</td></tr><tr><td>content()</td><td></td><td></td></tr><tr><td>evaluate(pageFunction, args)</td><td></td><td></td></tr><tr><td>evaluateHandle(pageFunction, args)</td><td></td><td></td></tr><tr><td>executionContext()</td><td></td><td></td></tr><tr><td><u>focus(selector)</u></td><td></td><td>This method fetches an element with selector and focuses it.</td></tr><tr><td>goto(url, options)</td><td></td><td></td></tr><tr><td>hover(selector)</td><td></td><td>This method fetches an element with selector, scrolls it into view if needed, and then uses <a href="Page:mouse">Page:mouse</a> to hover over the center of the element.</td></tr><tr><td>isDetached()</td><td></td><td></td></tr><tr><td>name()</td><td></td><td></td></tr><tr><td><u>parentFrame()</u></td><td></td><td></td></tr><tr><td>select(selector, values)</td><td></td><td>Triggers a change and input event once all the provided options have been selected.</td></tr><tr><td>setContent(html, options)</td><td></td><td>Set the content of the frame.</td></tr></tbody></table></script>

tap(selector)	This method fetches an element with selector, scrolls it into view if needed, and then uses <a href="Page-touchscreen">Page-touchscreen</a> to tap in the center of the element.
title()	
type(selector, text, options)	Sends a keydown, keypress/input, and keyup event for each character in the text.
url()	
waitFor(selectorOrFunctionOrTimeout, options, args)	
waitForFunction(pageFunction, options, args)	
waitForNavigation(options)	
waitForSelector(selector, options)	
waitForTimeout(milliseconds)	Causes your script to wait for the given number of milliseconds.
waitForXPath(xpath, options)	