

URLs in JavaScript

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What is a URL

The location API

Let's code a redirection browser extension

What is a URL

Examples of URLs

`http://www.example.com/index.html`

`https://github.com/`

`ftp://internet.address.edu/file/path/file.txt`

`whatsapp://send?text=Hello%2C%20World!`

`mailto:contact@myname.com`

<https://en.film.com:443/main/func/search.php?text=manhattan&genre=comedy#cast>

The Anatomy of a URL

Example

`https:// en.film.com :443 /main/func/search.php ?text=manhattan&genre=comedy #cast`

Explanation

- `Protocol/scheme*` Examples: `http`, `https`, `ftp`, `mailto`, `tel`, `chrome`.

*: Mandatory.

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Example

`https:// en.film.com :443 /main/func/search.php ?text=manhattan&genre=comedy #cast`

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- **Protocol/scheme*** Examples: `http`, `https`, `ftp`, `mailto`, `tel`, `chrome`.
- **Domain name*** An IP address can be used instead.

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`https:// en.film.com :443 /main/func/search.php ?text=manhattan&genre=comedy #cast`

Explanation

- **Protocol/scheme*** Examples: `http`, `https`, `ftp`, `mailto`, `tel`, `chrome`.
- **Domain name*** An IP address can be used instead.
- **Port** Default `:80` for `http`. default `:443` for `https`.

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The Anatomy of a URL

Example

https:// en.film.com :443 /main/func/search.php ?text=manhattan&genre=comedy #cast

Explanation

- Protocol/scheme* Examples: http, https, ftp, mailto, tel, chrome.
- Domain name* An IP address can be used instead.
- Port Default :80 for http. default :443 for https.
- Path Traditionally physical; now, mostly an abstraction by web servers.

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The Anatomy of a URL

Example

`https:// en.film.com :443 /main/func/search.php ?text=manhattan&genre=comedy #cast`

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- **Protocol/scheme*** Examples: `http`, `https`, `ftp`, `mailto`, `tel`, `chrome`.
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- **Parameters/query/search** `&`-separated key/value pairs.

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The Anatomy of a URL

Example

`https:// en.film.com :443 /main/func/search.php ?text=manhattan&genre=comedy #cast`

Explanation

- **Protocol/scheme*** Examples: `http`, `https`, `ftp`, `mailto`, `tel`, `chrome`.
- **Domain name*** An IP address can be used instead.
- **Port** Default `:80` for `http`. default `:443` for `https`.
- **Path** Traditionally physical; now, mostly an abstraction by web servers.
- **Parameters/query/search** `&`-separated key/value pairs.
- **Fragment/hash** Client side; does not get sent with the request; Browsers scroll to position.

*: Mandatory.

Encoding table

space	!	#	\$	%	&	'	()	*
%20	%21	%23	%24	%25	%26	%27	%28	%29	%2A
+	,	/	:	;	=	?	@	[]
%2B	%2C	%2F	%3A	%3B	%3D	%3F	%40	%5B	%5D

Use

`encodeURIComponent()`.

Example:

`https://wa.me/1555555555?text=I%27d%20like%20to%20chat%20with%20you`

The location API

window.location Properties

Example

http:// en.film.com :80 /1979 ?text=manhattan&genre=comedy #cast

Properties

- location.protocol: "https:".

window.location Properties

Example

http:// en.film.com :80 /1979 ?text=manhattan&genre=comedy #cast

Properties

- location.protocol: "https:".
- location.hostname: "en.film.com".

window.location Properties

Example

http:// en.film.com :80 /1979 ?text=manhattan&genre=comedy #cast

Properties

- location.protocol: "https:".
- location.hostname: "en.film.com".
- location.port: "80".

window.location Properties

Example

http:// en.film.com :80 /1979 ?text=manhattan&genre=comedy #cast

Properties

- location.protocol: "https:".
- location.hostname: "en.film.com".
- location.port: "80".
- location.path*: "/1979".

window.location Properties

Example

http:// en.film.com :80 /1979 ?text=manhattan&genre=comedy #cast

Properties

- `location.protocol`: "https:".
- `location.hostname`: "en.film.com".
- `location.port`: "80".
- `location.path*`: "/1979".
- `location.search`: "?text=manhattan&genre=comedy". Can be used in conjunction with `URLSearchParams`.

window.location Properties

Example

http:// en.film.com :80 /1979 ?text=manhattan&genre=comedy #cast

Properties

- `location.protocol`: "https:".
- `location.hostname`: "en.film.com".
- `location.port`: "80".
- `location.path*`: "/1979".
- `location.search`: "?text=manhattan&genre=comedy". Can be used in conjunction with `URLSearchParams`.
- `location.hash`: "#cast".

*: not reactive.

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- `location.reload(Boolean)`: reload from server or cache based on boolean passed.
- `location.replace()`: similar to `.assign` but without history.

Let's code a redirection browser
extension

- Tampermonkey extension: chromium, firefox.
- JavaScript.

Script code

```
// ==UserScript==
// @name          Wikipedia mobile
// @description    Redirect to mobile version of wikipedia
// @match          https://en.wikipedia.org/*
// @run-at         document-start
// ==/UserScript==

(function() {
    'use strict';
    if (location.hostname === 'en.wikipedia.org') {
        location.hostname = 'en.m.wikipedia.org';
    }
})();
```

Do you wish to add anything?

you can find the slides at: <https://github.com/aliveupstairs/talks>

Thank You