# Client-side Storage


**Bill Stavroulakis**

MICROSOFT MVP – GOOGLE DEVELOPER EXPERT - SOFTWARE DEVELOPER

@bstavroulakis  bstavroulakis.com/blog

# Cookies

| | |
|---|---|
| Compatibility | Everywhere! |
| Size | 4KB |
| Data-type | String |
| Pros | Simple, Configurable, Compatible |
| Cons | Less secure, Limiting, Attaches to requests, Easily deleted |

# HTML5 Web Storage

| | |
|---|---|
| Compatibility | Everywhere! |
| Size | 2.5-5MB |
| Data-type | String |
| Pros | Simple, Not transmitted, Compatible |
| Cons | Unstructured data, Slow access |

# WebSQL

| | |
|---|---|
| Compatibility | Chrome, Safari, Opera, Strong mobile support |
| Size | 2.5-5MB |
| Data-type | String |
| Pros | Asynchronous, Great search speed |
| Cons | Deprecated, Steep learning curve, Schema pre-defined |

# IndexedDB

| | |
|---|---|
| Compatibility | Modern browsers |
| Size | 10-20% of available space (browser specific) |
| Data-type | JS Object |
| Pros | Asynchronous, Large dataset |
| Cons | Steep learning curve, Complicated while implementing |

# Storage Options

- Cookies (Very Limiting)
- HTML5 Local Storage (Limited Size)
- WebSQL (Deprecated)
- IndexedDB (Limited Support)

# Storage Options

- ~~Cookies (Very Limiting)~~
- HTML5 Local Storage (Limited Size)
- ~~WebSQL (Deprecated)~~
- IndexedDB (Limited Support)

# The Offline Journey Begins

# Application Cache Status

```
var appCache = window.applicationCache;

appCache.update();

appCache.addEventListener('cached', handleCacheEvent, false);
appCache.addEventListener('checking', handleCacheEvent, false);
appCache.addEventListener('downloading', handleCacheEvent, false);
appCache.addEventListener('error', handleCacheError, false);
appCache.addEventListener('noupdate', handleCacheEvent, false);
appCache.addEventListener('obsolete', handleCacheEvent, false);
appCache.addEventListener('progress', handleCacheEvent, false);
appCache.addEventListener('updateready', handleCacheEvent, false);
```

# The cache API is a cache object where request objects act as keys to their responses

**https://davidwalsh.name/cache**