Project Fugu

What we have enabled

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Ben Morss & Thomas Steiner (Google)

Slides: goo.gle/project-fugu-tpac2022
What is Project Fugu?

“The Capabilities Project (code name Project Fugu) is a cross-company effort with the objective of making it possible for web apps to do anything platform-specific apps can.”
How does Project Fugu operate?

Fixed process requiring explainer, spec, TAG review, security review,…

Try new ideas in origin trials first to avoid burn-in.

User agent optionality, e.g., for permission handling.

**Spec ≠ standard**, but standardization is the ultimate goal.

All spec work starts in the WICG.
How does Project Fugu operate?

Standardization is happening:

- **Web Share API**: W3C Candidate Recommendation Draft
- **WebTransport**: W3C Working Draft
- **File System**: Living Standard
- **WebCodecs**: W3C Working Draft
- **Clipboard API and events**: W3C Working Draft
- **Multi-Screen Window Placement**: W3C First Public Working Draft
How does Project Fugu operate?

Sometimes we also agree to disagree:
A walk down the Chromium release memory lane…
A walk down the Chromium release memory lane…
A walk down the Chromium release memory lane…

Vous êtes ici!
### APIs introduced in...

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<th>Feature freeze</th>
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👉 **Idle Detection**
APIs introduced in…

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👉 Idle Detection

Pause mobile notifications while you're using this device
To pause Chat mobile notifications while you're active on this device, allow your browser to detect if you're active or away. Click Continue and then Allow when prompted by your browser.

https://mail.google.com/chat/
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👉 EyeDropper
APIs introduced in...

95 Feature freeze branch beta cut stable 1% > 100%

EyeDropper

https://boxy-svg.com/app
APIs introduced in…

- App Icon Shortcut menu for PWAs on macOS and Linux
- URL Protocol Handler Registration for PWAs
APIs introduced in…

👉 App Shortcut menu for PWAs on macOS and Linux

https://twitter.com/
APIs introduced in…

👉 URL Protocol Handler Registration for PWAs

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https://www.irccloud.com/
APIs introduced in...

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👉 WebTransport
APIs introduced in...

WebTransport

https://zoom.us/
APIs introduced in…

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👉 PWA should be able to be uninstalled the same way a "real app" can
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<td>HIDDevice forget()</td>
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APIs introduced in...

👉 Multi-Screen Window Placement

100 Feature freeze branch beta cut stable 1% > 100%

👍 Multi-Screen Window Placement Demo (GitHub, ChromeStatus)

https://michaelwasserman.github.io/window-placement-demo/
APIs introduced in…

👉 USBDevice forget()

👉 Web USB sameObject behavior
APIs introduced in…

- Window Controls Overlay for Installed Desktop Web Apps
- File Handling
- chrome.management API can no longer interact with PWA apps
### APIs introduced in...

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#### Window Controls Overlay for Installed Desktop Web Apps

- **SQLite Viewer Web App**
  - A free, web-based SQLite browser designed for SQLite and Android.
  - Use the web-based SQLite tool to quickly and easily inspect SQLite files.
  - Your data stays private: Everything is stored client-side and never leaves your browser.

https://sqliteviewer.app/
APIs introduced in...

File Handling

Welcome to Adobe Acrobat

Stay productive anywhere with PDF tools online

https://documents.adobe.com/
APIs introduced in...

👉 SerialPort forget()

👉 Local Font Access
APIs introduced in…

👉 Local Font Access

🔗 https://paint.js.org/
APIs introduced in…

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👉 Origin Private File System extension: AccessHandle
APIs introduced in...

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Origin Private File System extension: AccessHandle

https://photoshop.adobe.com/
The File System Access API with Origin Private File System

Feb 16, 2022 by Zhi Liu

It is very common for an application to interact with local files. For example, a general workflow is opening a file, making some changes, and saving the file. For web apps, this might be hard to implement. It is possible to simulate the file operations using IndexedDB API, an HTML `a` element with the `files` type, an HTML `a` element with the `download` attribute, etc., but that would require a good understanding of these standards and careful design for a good user experience. Also, the performance may not be satisfactory for frequent operations and large files.
For more examples, check out the Project Fugu API Showcase
What are we building?

Talking to developers

Oo, that looks shiny
What to build?

What's happening on the web now?
Help that happen. Make it better.
New web use cases

- Video and audio creation apps
- Game streaming
- Things being aware of nearby things
- Educational toys like LEGO™
- Code editors
- Peripheral configuration
- Medical applications
- Call control
- Creative applications
- Retail…?
New capabilities

- Multiple screens
- Screen refresh rate
- BLE scanning, Serial over Bluetooth
- Better advanced storage
- File system access
- Low-latency audio
Safety first
Project Fugu

Thank you!

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