Web Install API

https://github.com/PEConn/web-install-explainer peconn@chromium.org

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Who am I?

Me

- Peter Conn
- Software Engineer at Google.
- Work on Chrome on Android.
- Part of the Mobile Web Install team.



What's the purpose of this session?

- To see what other browsers think of a Web Install API.
 - o Is there a need for it?
 - O How would we make it?
 - What are your concerns?
- We have an <u>incredibly rough draft</u>, to help discussion.



What is this API about?

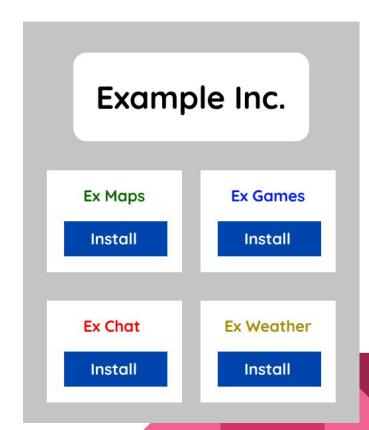
An API that allows a website to request the installation of another website.

Our thoughts so far

(a summary of our draft explainer)

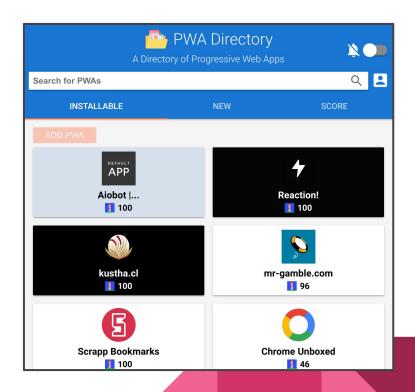
Use cases

- A web app directory, such as <u>PWA</u>
 <u>Directory</u>, <u>findPWA</u> or <u>Appscope</u>.
- A unified installation page for a vendor of multiple installable web apps.



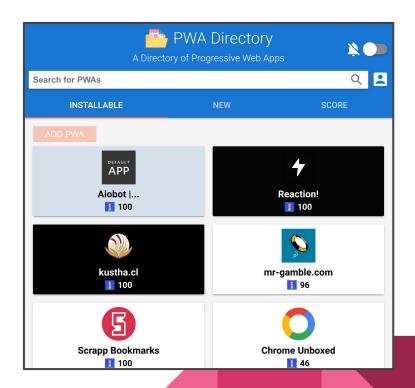
Why app directories?

- Better discoverability strengthens web apps.
- Provide ratings and reviews for users.
- Leads to better monetization for developers.



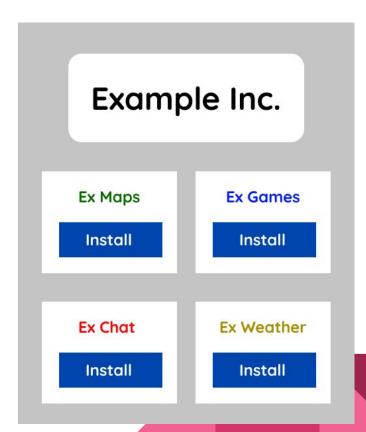
Why app directories?

- Will allow users to choose where to get their installed apps from - democratising installation.
- Users are trained to get their apps from stores - without this the web could lose out.



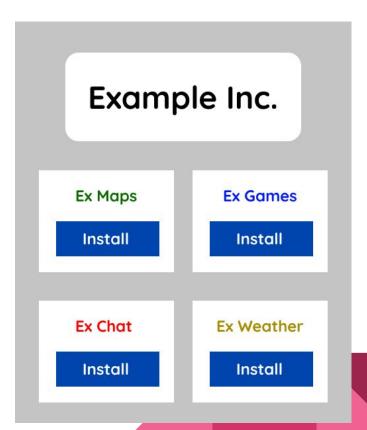
Why unified install pages?

- A place for a single publisher to list a suite of installable apps.
- Easier for users to get the whole suite.
- A place for users to check their entitlements and subscriptions.



Why unified install pages?

- Encourages splitting functionality into separate apps.
- Stronger origin isolation.
- More granular permissions.



We should protect:

- The user from the catalogue.
- The user from the target website.
- The target website from the catalogue?

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What do we lock this capability behind?

- Website permission?
- Browser prompt?
- User gesture?
- Website trust?

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- The **user** from the **catalogue**.
- The user from the target website.
- The target website from the catalogue?

We want to apply our normal installability criteria.

We should protect:

- The **user** from the **catalogue**.
- The user from the target website.
- The target website from the catalogue?

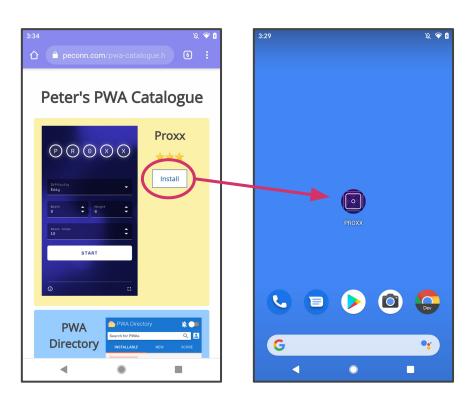
Proxx was copied and sold within hours of being uploaded.

Should a web app have control over who can list/install it?

UX examples

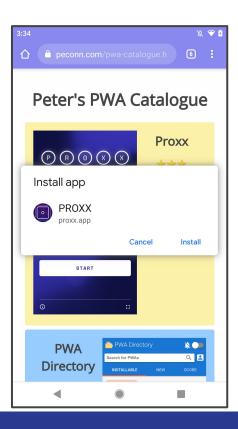
A few ideas for how users could install an app.

Seamless installation



- Easiest to abuse.
- The user doesn't even see the URL of the installed app.

Browser Prompt



- Similar to beforeInstallPrompt.
- Gated behind a user gesture?

Try Before You Buy



- Launch a link in a specialized browser UI.
- Install is featured prominently.
- User can return to the catalogue easily.

Open Questions

Install source attribution

- Should the website know where the installer came from?
- It would help app catalogue monetization.
- Could just use the referrer?

Informing the directory of the outcome

- Should the directory know if the user went through with the installation?
- Could be used as a signal for web app quality.
- Could be used to customize directory UI.

Checking for existing installs

- Should the directory know if a web app is already installed?
- Allowing a website to see a list of the user's installed apps would allow fingerprinting.
- Maybe just apps that the directory itself installed?
- Could be used to customize directory UI.

And now for your thoughts?

Discuss!

- Should we do this?
- Have we missed any concerns?
- Can you think of any alternative user flows?
- What about the open questions?

Thanks for listening and engaging!

<u>Link to explainer draft</u>.