
Future of Application Development with PWAs

Snigdha Kashyap

Software Development Engineer-II @ **expedia group™**
Activities, Supply & Connectivity



YOU KNOW I GOT ME
AN AGENDA

Includes and limited to:

*kidding

- **Reviewing native apps**
- **Arrival of PWAs: the game changer**
- **Bridging the native gaps**
- **Why to learn about PWAs?**
- **Other side of the coin**



The Era of “Native” Applications



- Apps built for **specific platforms**
- Accessible through **app stores** like
 - Google Play or  Available on the  App Store
- Fully integrated with device features (camera, sensors etc)



- Platform-Specific Development
- Storage Hungry
- Frequent Updates
- High Barriers to Entry

CHALLENGES

of being “Native”

Don't run away from
challenges,
Run over them.





The native applications you have **seen...**



*Instagram
Lite*



+ More >>>

The Game Changer



Built using web
technologies



Native-like, but
run in browsers



Alternative to
traditional websites



Installable
without visiting
app stores

Bridging the native gaps



Offline support



Seamless



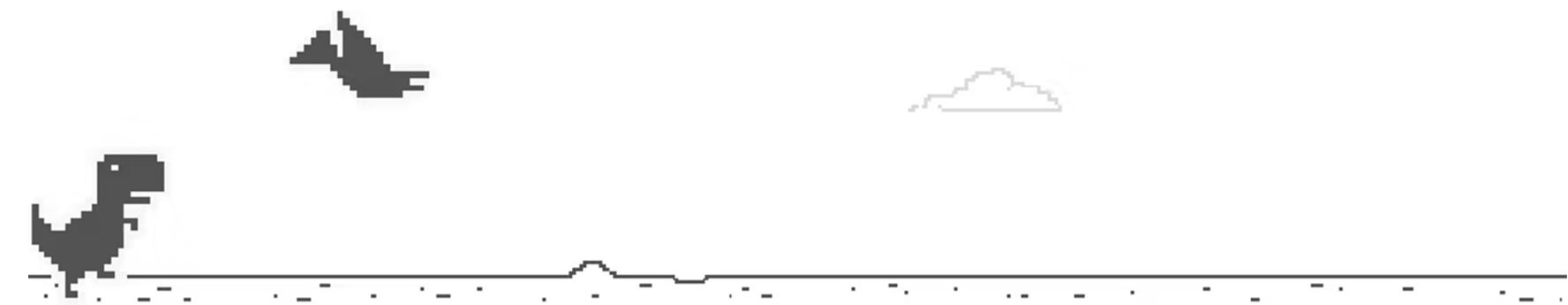
Cost efficient

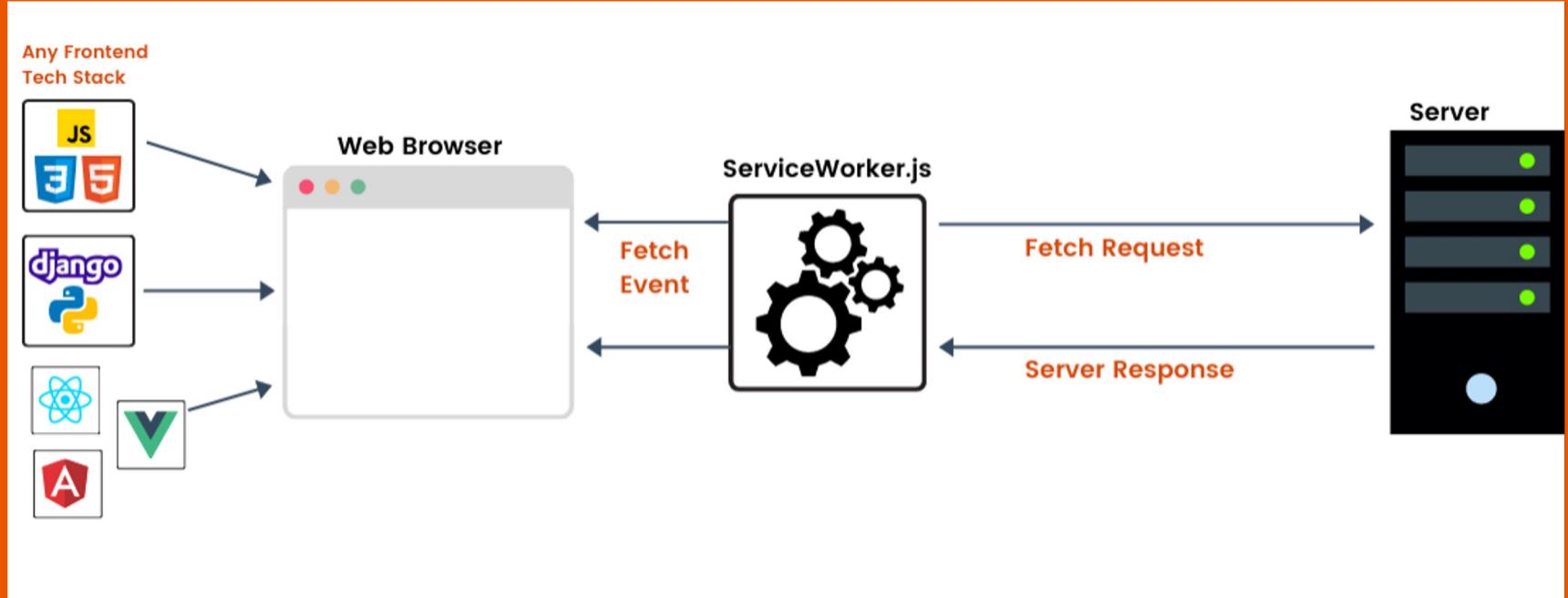


Platform-independent development



Faster

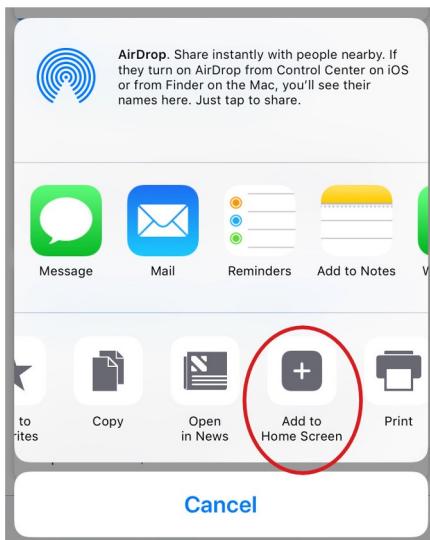




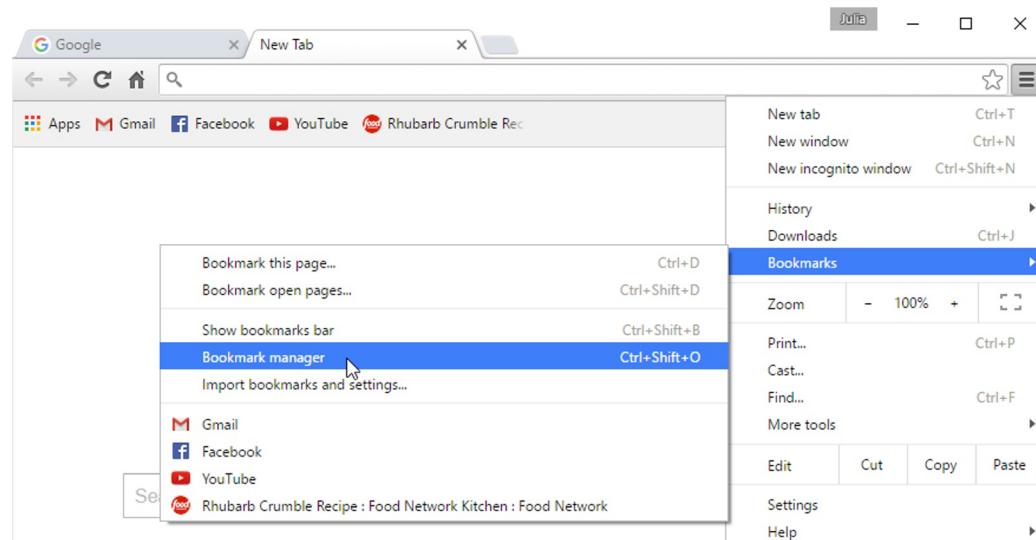
Provisioning fetch events in PWAs

Source: www.geeksforgeeks.org/progressive-web-app-offline-support-detection-logic-for-chrome-browser/

Installing & using PWAs



Add to home screen



Bookmark the application page

**“Progressive Web Apps are just
websites that took all the right
vitamins.”**

Google web.dev

3 Pillars of PWAs



Reliable

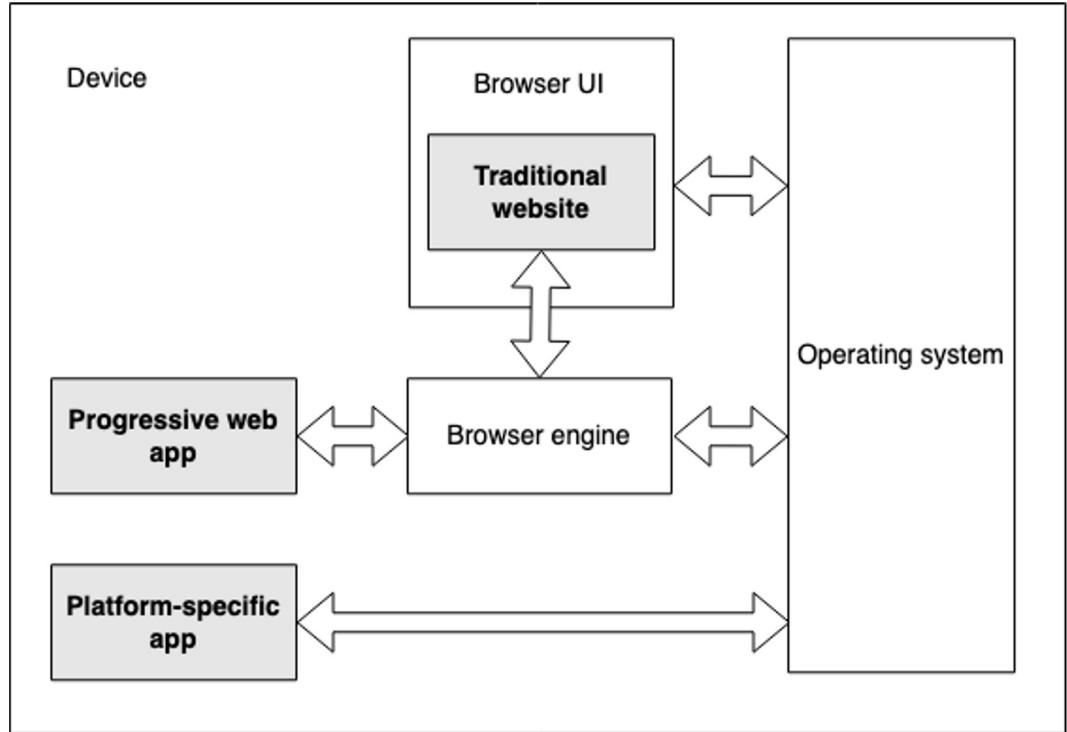
Capable



Installable



A simple comparison



Above diagram is extracted from: https://developer.mozilla.org/en-US/docs/Web/Progressive_web_apps/Guides/What_is_a_progressive_web_app#progressive_web_apps

Giving a **good start!**

- Emphasis on a **specific** feature
- **Offline-first** approach
- “**Scratch**” your application





Native OR PWA?

Let's hear from the gathering!



PWA VS. RESPONSIVE WEBSITE



Progressive Web App

Cost-effective

Yes

Rich

Discoverable

Easily accessible

Yes

Yes

Yes

Yes

Yes

Yes (they require HTTPS)



Responsive website

Cheaper but inferior to PWA

No

Limited

Discoverable

Less convenient to access

Yes

No

Yes

No

No

Not always

Modelled PWAs for existing native apps

- one.spotify.com for  Spotify
- Instagram Web for 
- Twitter lite for  
- Zoom.us for 

+ And many more to think of!

Does PWA win **every** time?



May lack support with legacy devices



Dependent on browser engine



Lack support for every browser yet



Less utilisation of device capabilities



Security concerns (XSS)

Diving into the future

Progressive Apps

Traditional Website



Resources!

- MDN Docs
- Web.dev by 



Lets connect professionally

@  /snigdha-kashyap-6825211b9



@snigdha_kashyap_

