



BUILD FOR MOBILE

Progressive Web Apps

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HELLO WORLD!

My name is Christina (:

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I'm all about:

- Icecream
- Community Events
- Bleeding Edge Technology



1

VIRTUAL/AUGMENTED REALITY



2,3

BUILD FOR MOBILE



4

AUTH & DATABASE



5

MANAGE STATE



6

USER INTERFACE



7

EXPERIENCE DESIGN





BUILD FOR MOBILE

Progressive Web Apps

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Progressive Web App

WHAT is it ?

HOW can I use it ?

WHY should I care ?



Why should I care
about MOBILE ?

1992

2000

2007



First
'SmartPhone'



Smartphone
becomes
commercial

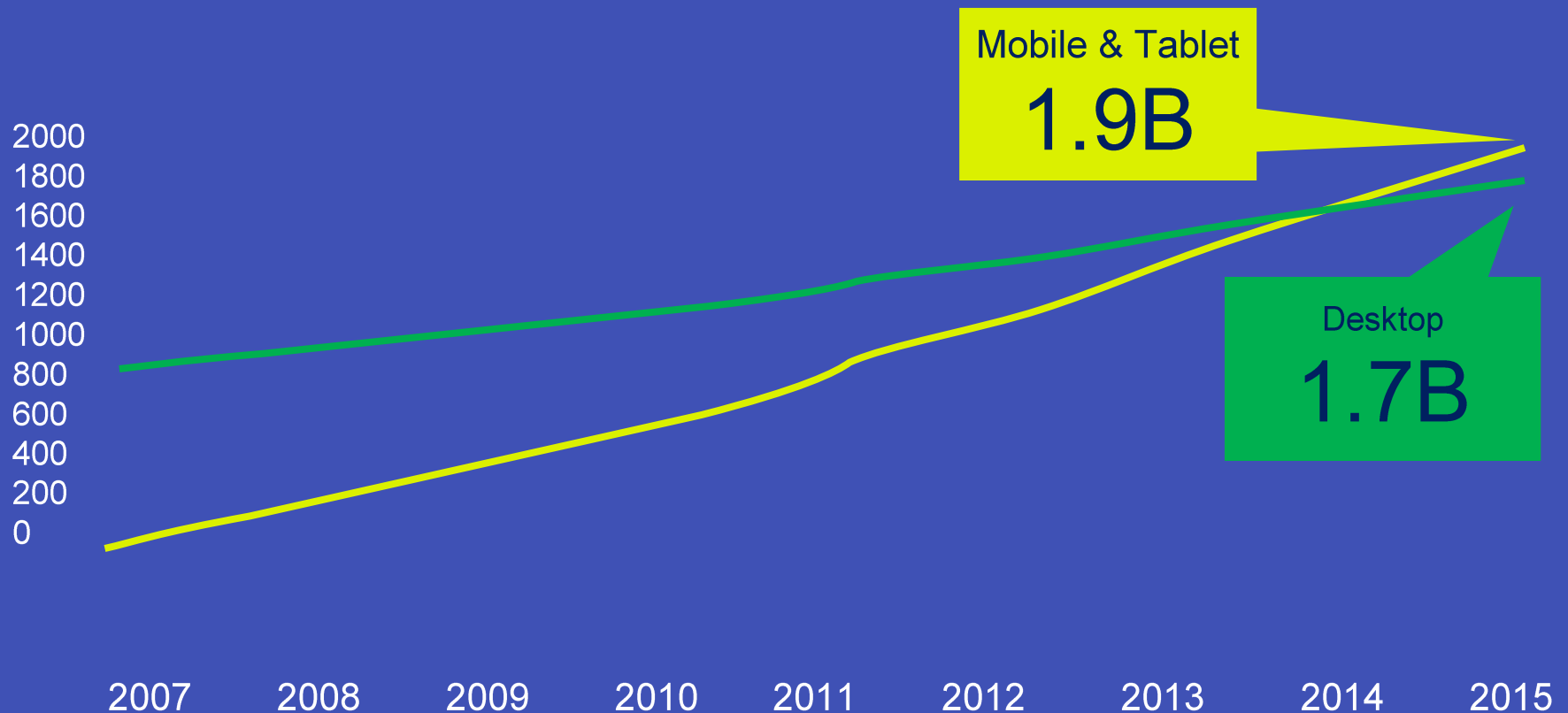


First
Touchscreen
'SmartPhone'

2014

Number of global Mobile users surpasses Desktop

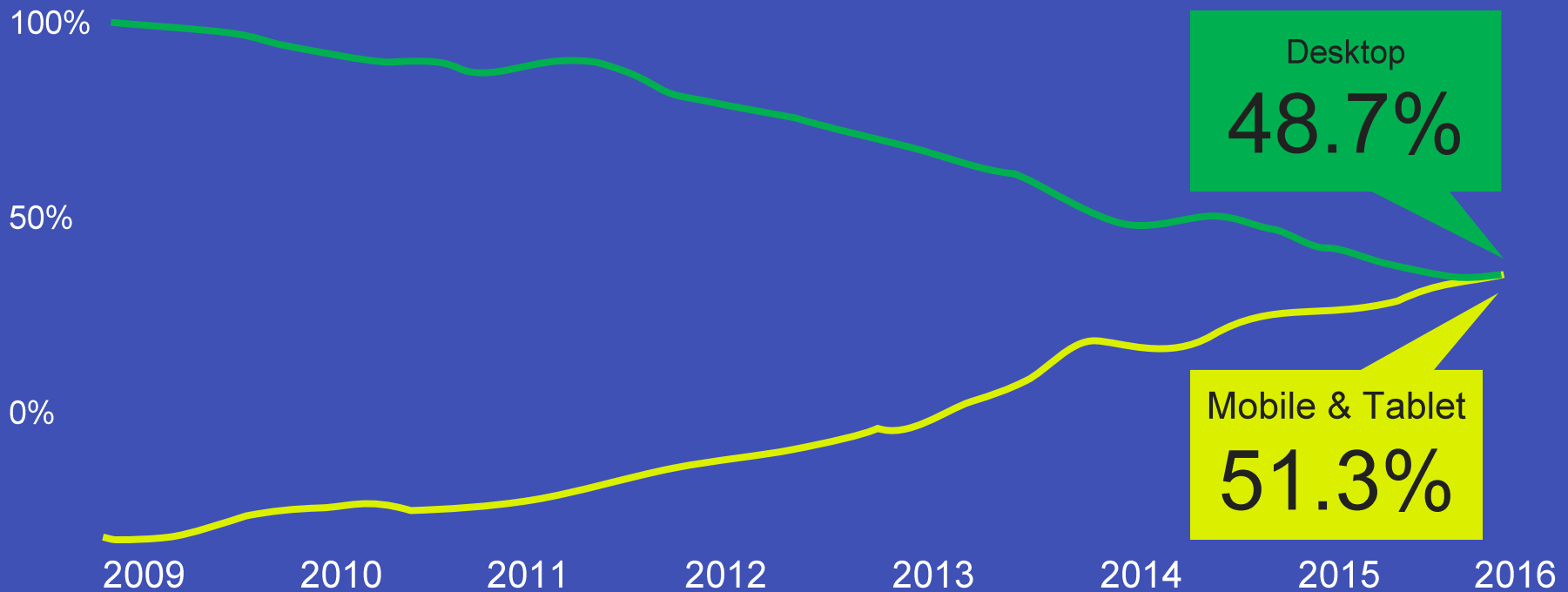
Number of global users (Millions)



2016

Internet usage on Mobile surpasses Desktop

Internet Usage world wide



2017

We check our phones 74 times a day!



2020



Mobile traffic data will increase 8 fold between 2015-2020



5.4B

MOBILE PHONE

5.3B

ELECTRICITY

3.5B

WATER



I DO care
about MOBILE !



Mobile internet usage
has already outgrown
Desktop—the mobile web
continues to become more
and more powerful!

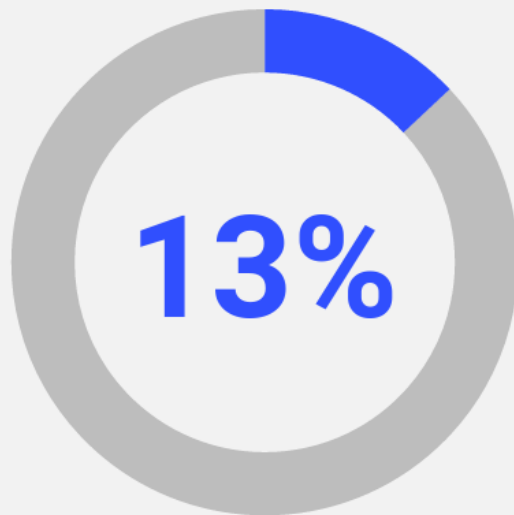


What does
PROGRESSIVE
WEB APP
mean anyway?

Progressive?

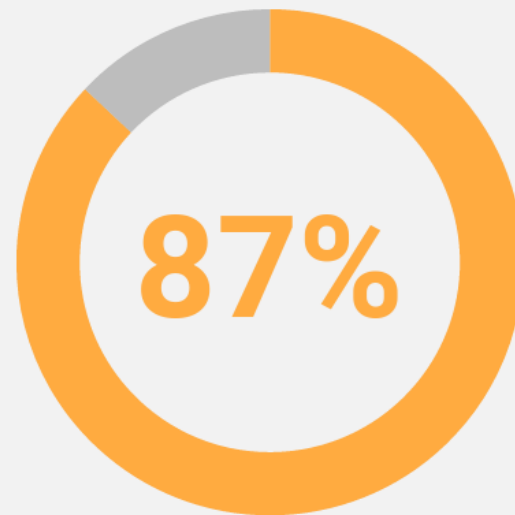
Happening or developing gradually or in stages;
proceeding step by step.

(of a group, person, or idea) favoring or
implementing social reform or new, liberal ideas.



Mobile web

VS.



Apps

Source: comScore Mobile Metrix, U.S., Age 18+, June 2015

?%

Of user's time
spent in top 3 apps

80%

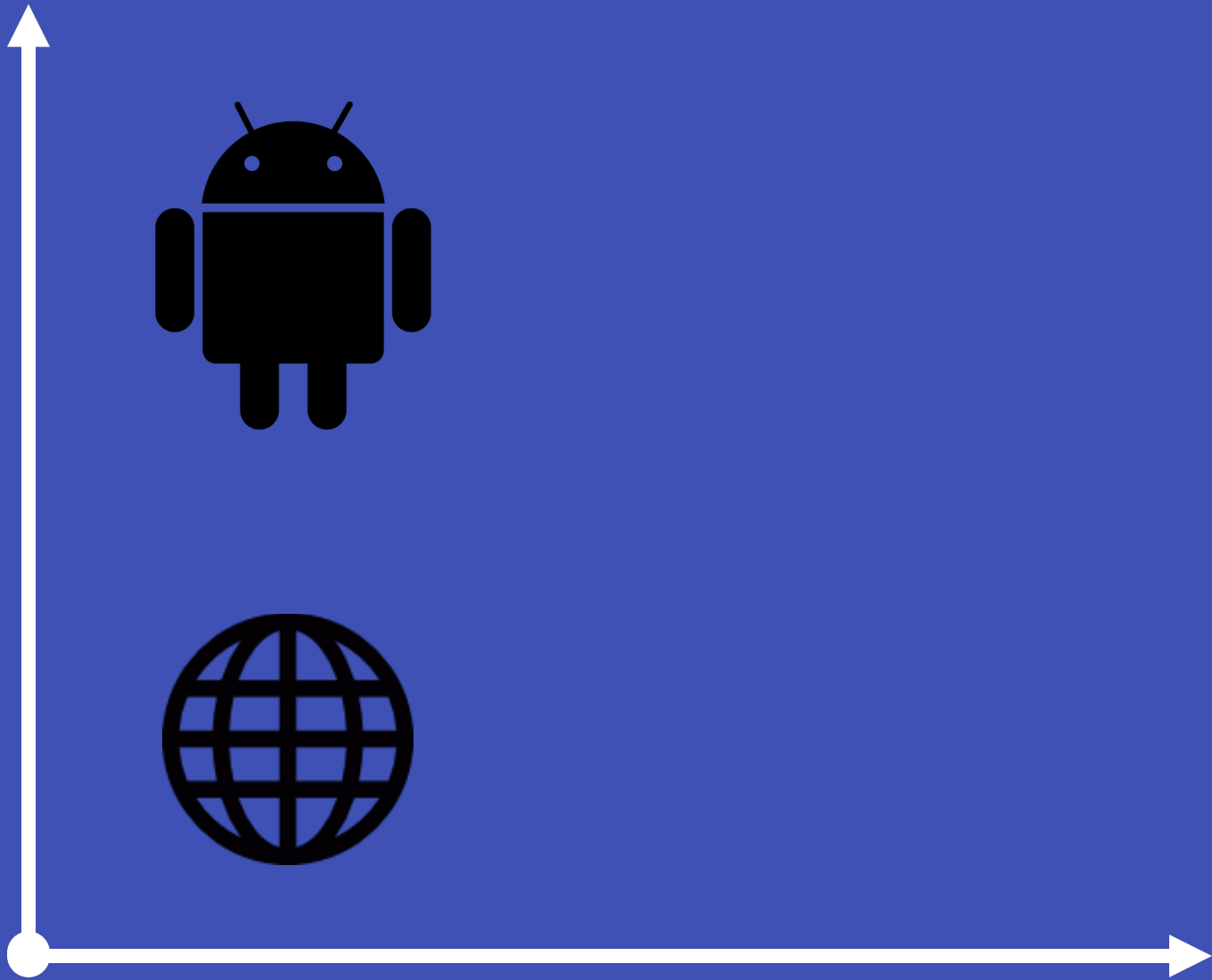
Of user's time
spent in top 3 apps



New Applications
Installed per Month

0

New Applications
Installed per Month



Reach

Progressive Web Apps

Are a whole new way of caring
about your User Experience

User experiences need to be:

Reliable

Fast

Engaging

User experiences need to be:

Reliable

Fast

Engaging



Ajax: A New Approach to Web Applications

February 18, 2005 | By Jesse James Garrett

If anything about current interaction design can be called “glamorous,” it’s creating Web applications. After all, when was the last time you heard someone rave about the interaction design of a product that wasn’t on the Web? (Okay, besides the iPod.) All the cool, innovative new projects are online.

Despite this, Web interaction designers can’t help but feel a little envious of our colleagues who create desktop software. Desktop applications have a richness and responsiveness that has seemed out of reach on the Web. The same simplicity that enabled the Web’s rapid proliferation also creates a gap between the experiences we can provide and the experiences users can get from a desktop application.

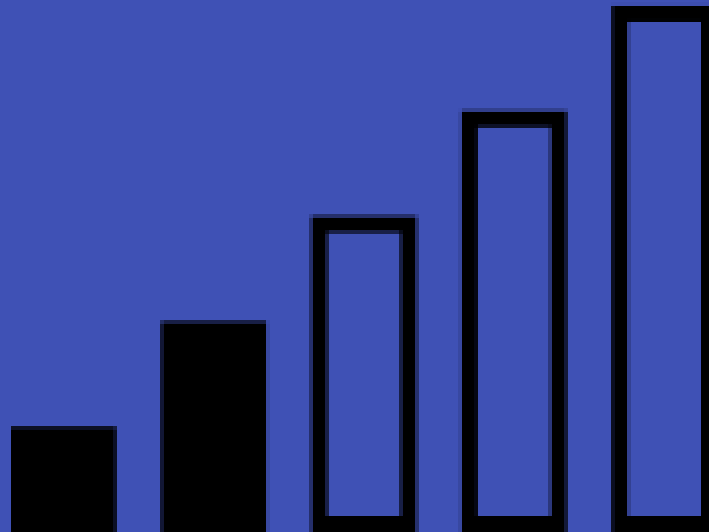
That gap is closing. Take a look at [Google Suggest](#). Watch the way the suggested terms update as you type, almost instantly. Now look at [Google Maps](#). Zoom in. Use your cursor to grab the map and scroll around a bit. Again, everything happens almost instantly, with no waiting for pages to reload.







Lie-fi



Reliability means never showing the Downasaur



User experiences need to be:

Reliable

Fast

Engaging

?%

Users abandon sites
that take more than
3 seconds to load

53%

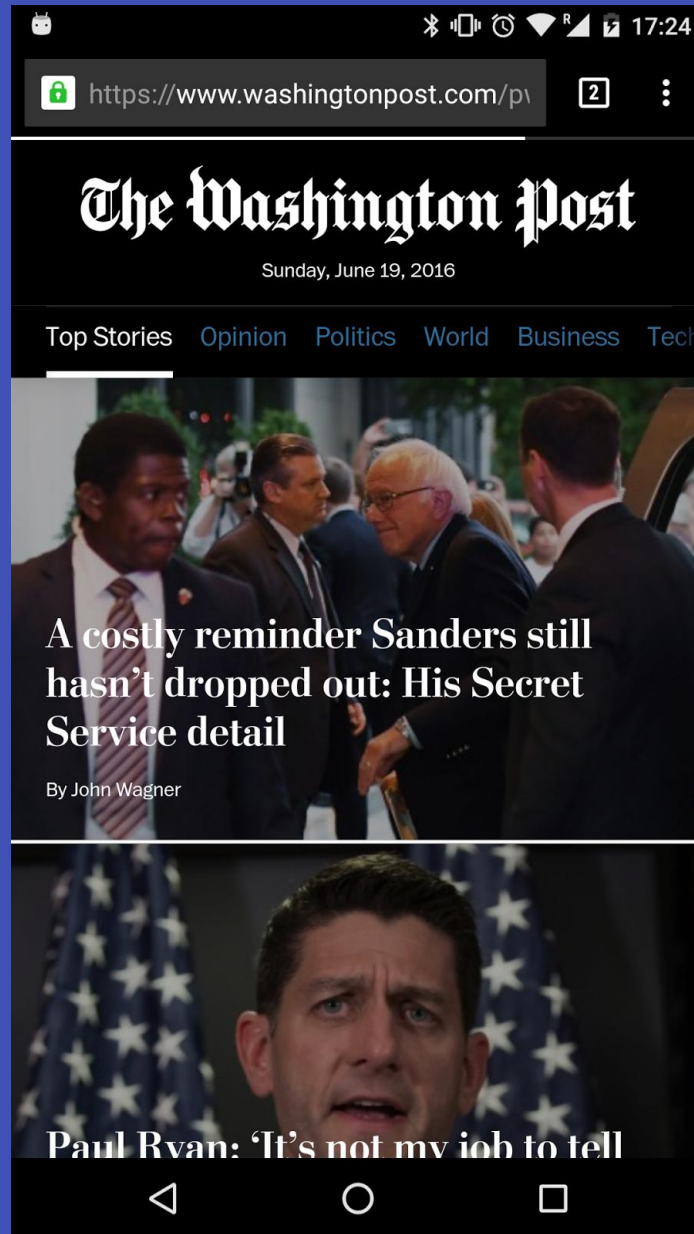
Users abandon sites
that take more than
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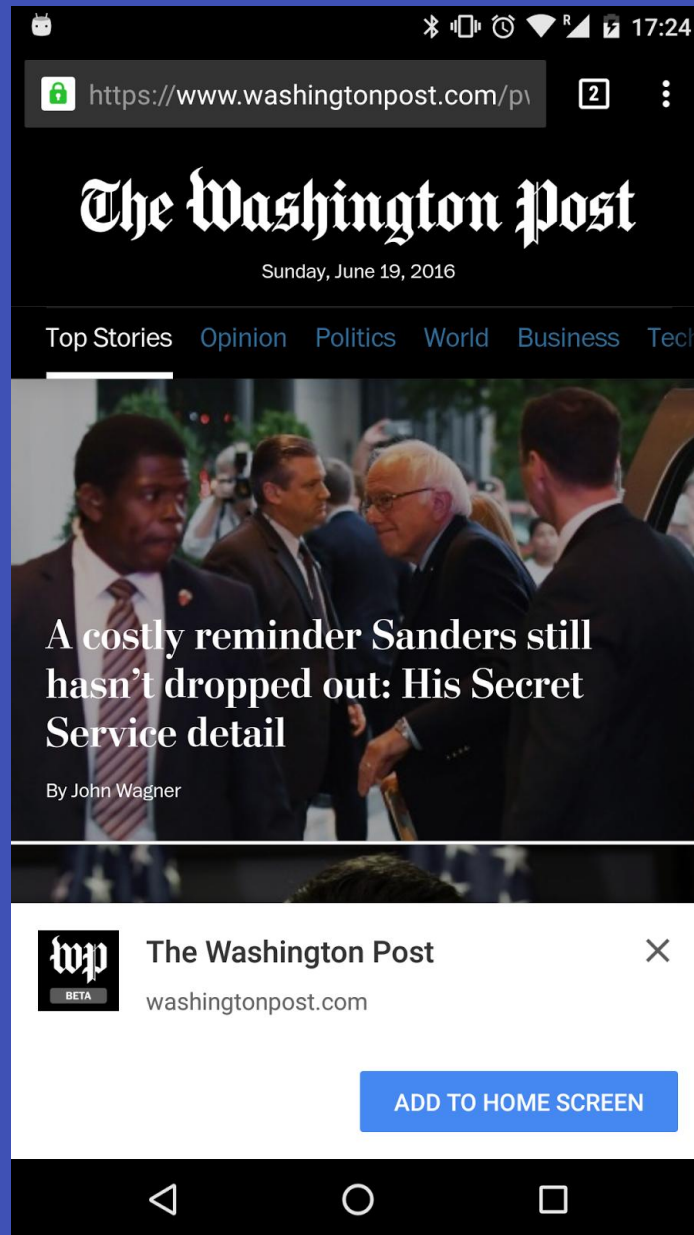
User experiences need to be:

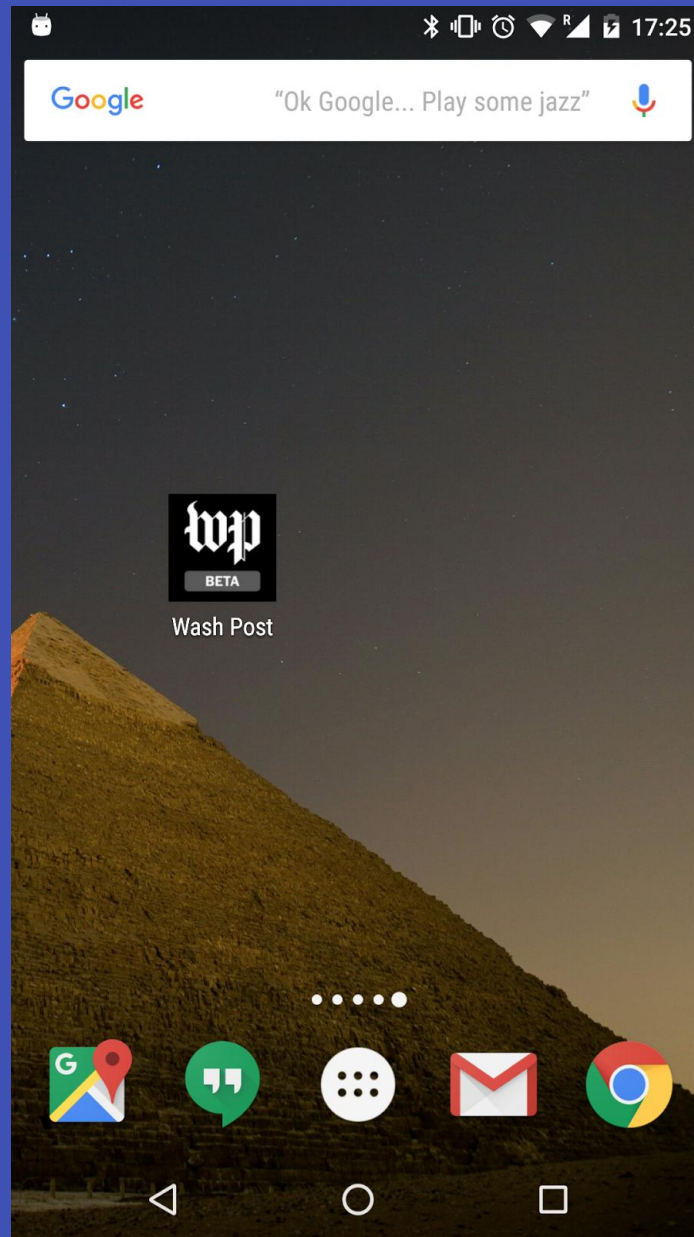
Reliable

Fast

Engaging

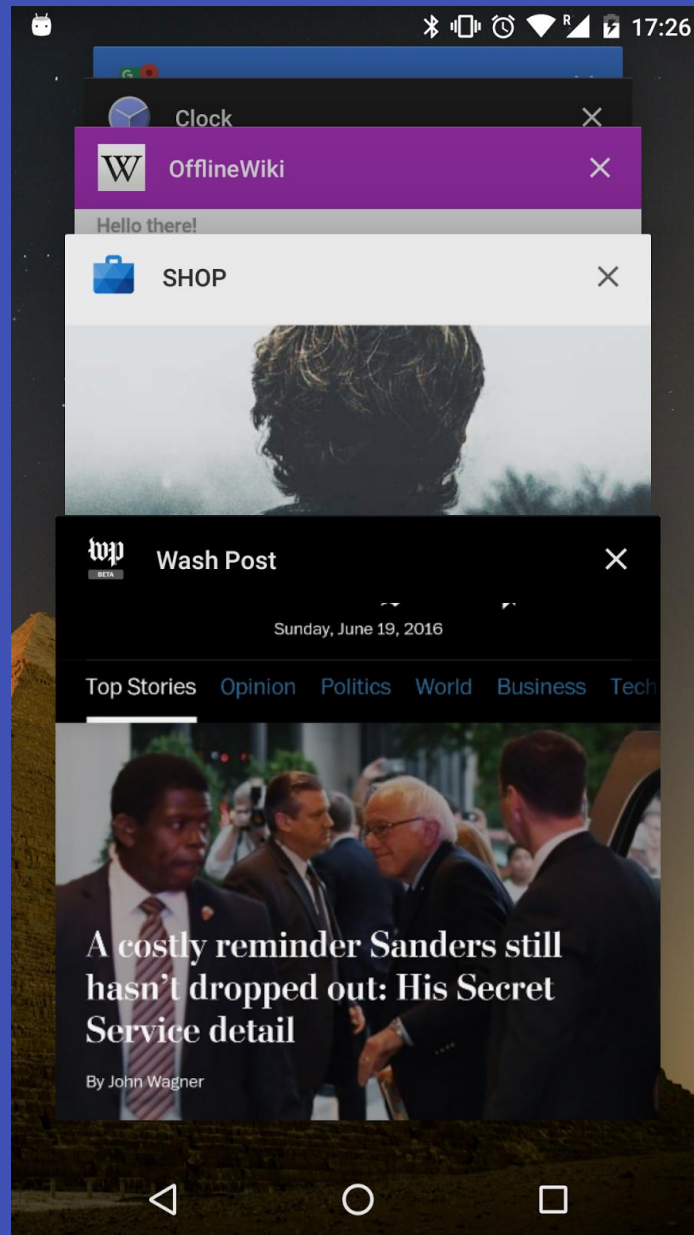










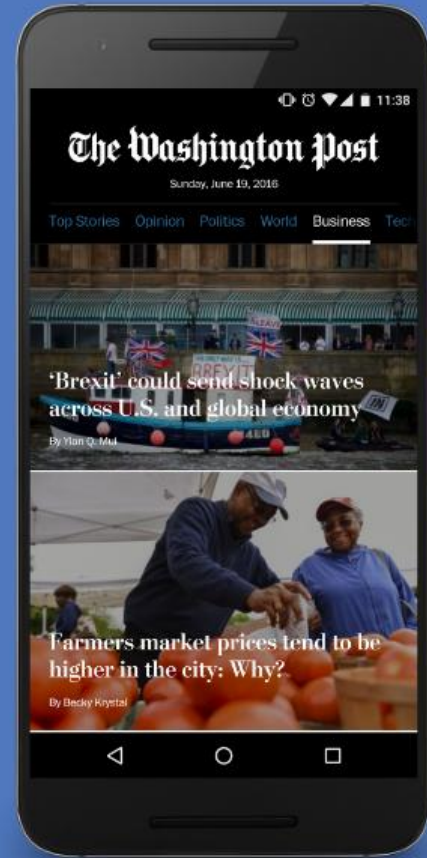


The Washington Post

80ms

article page load time in
the Progressive Web App

[Poynter article](#)



User experiences need to be:

Reliable

Fast

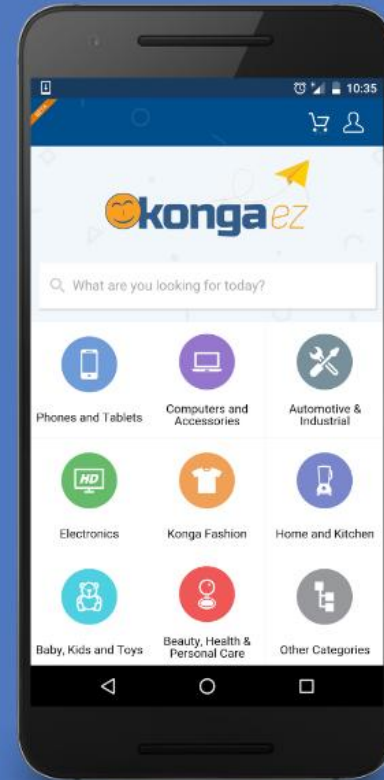
Engaging

Progressive Web Apps

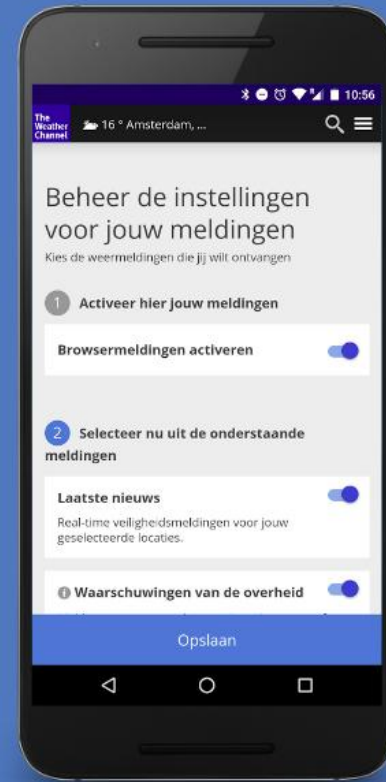
Are a whole new way of caring
about your User Experience



Both data points are compared to native app





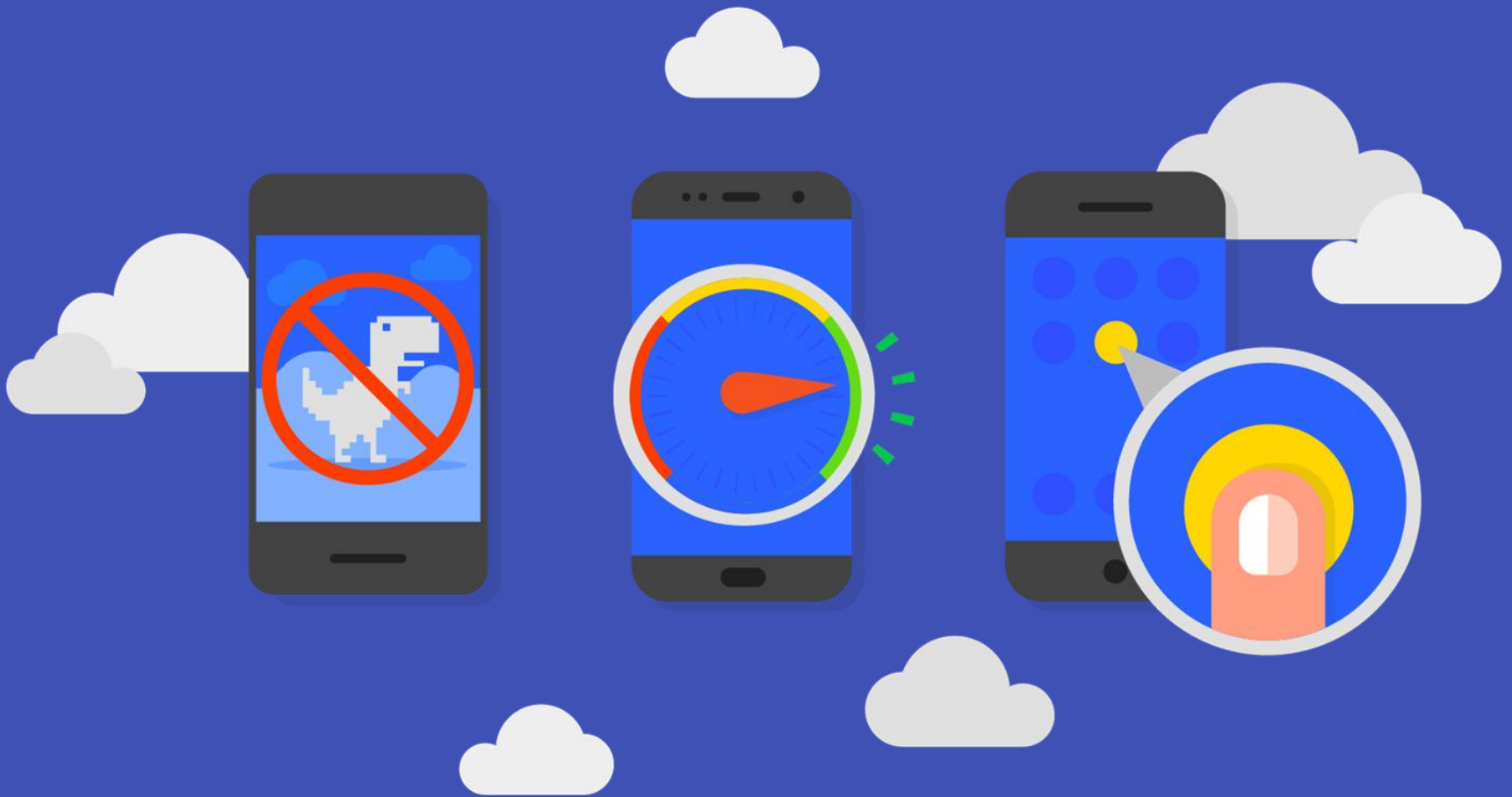




A Progressive Web App
uses modern browser
capabilities for native app-
like experiences that are
Reliable, Fast and
Engaging



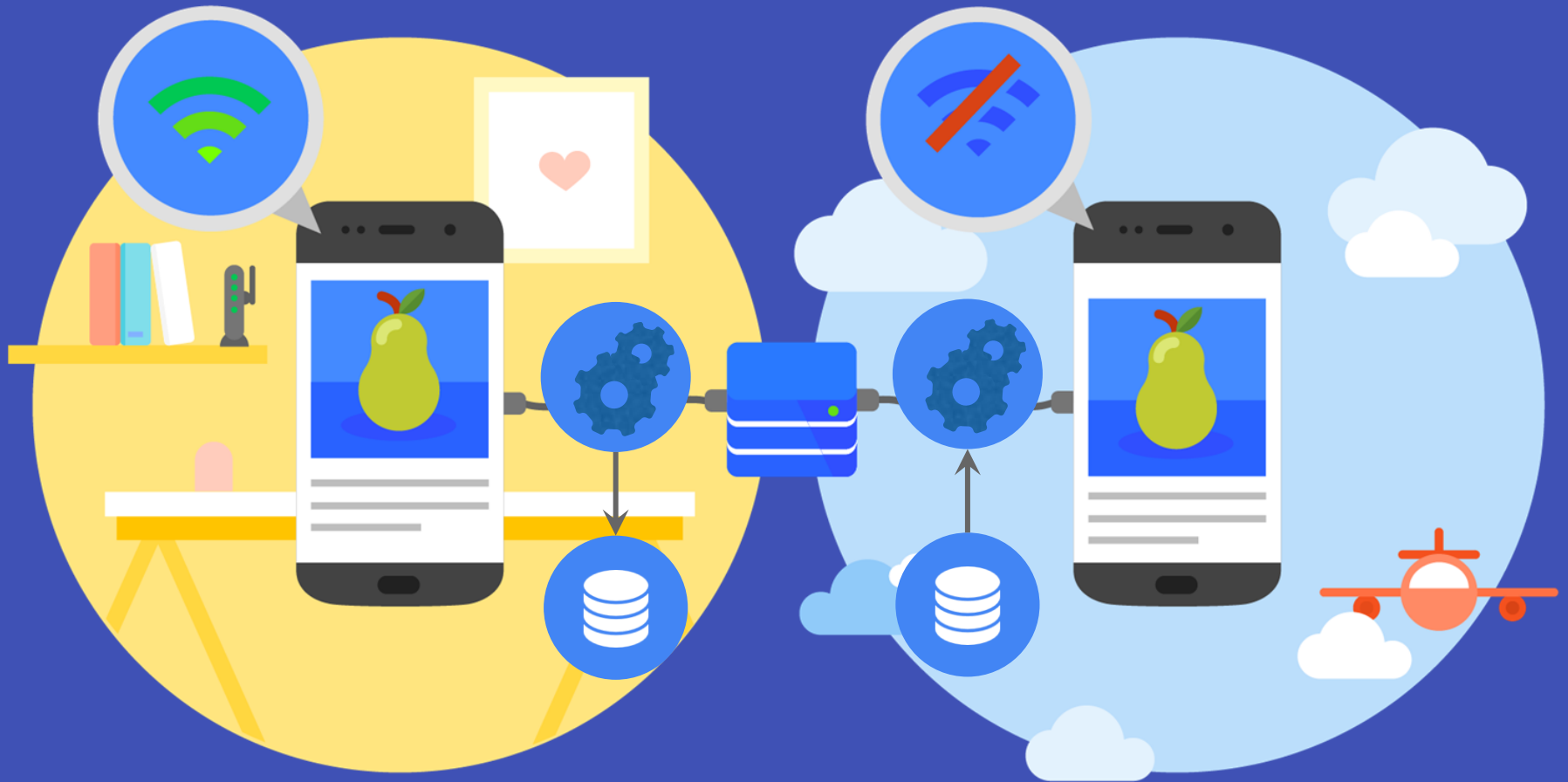
HOW do I build a Progressive Web App?



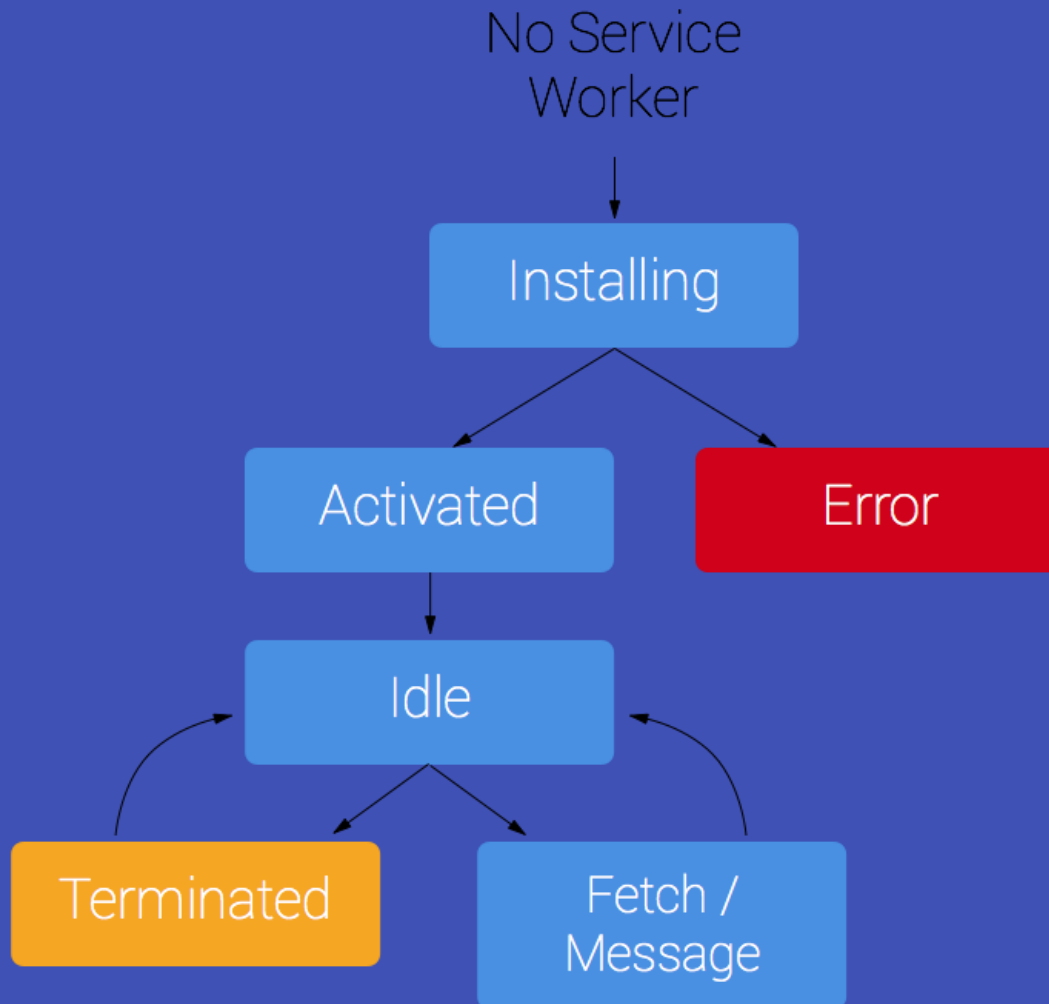
Reliable

Fast

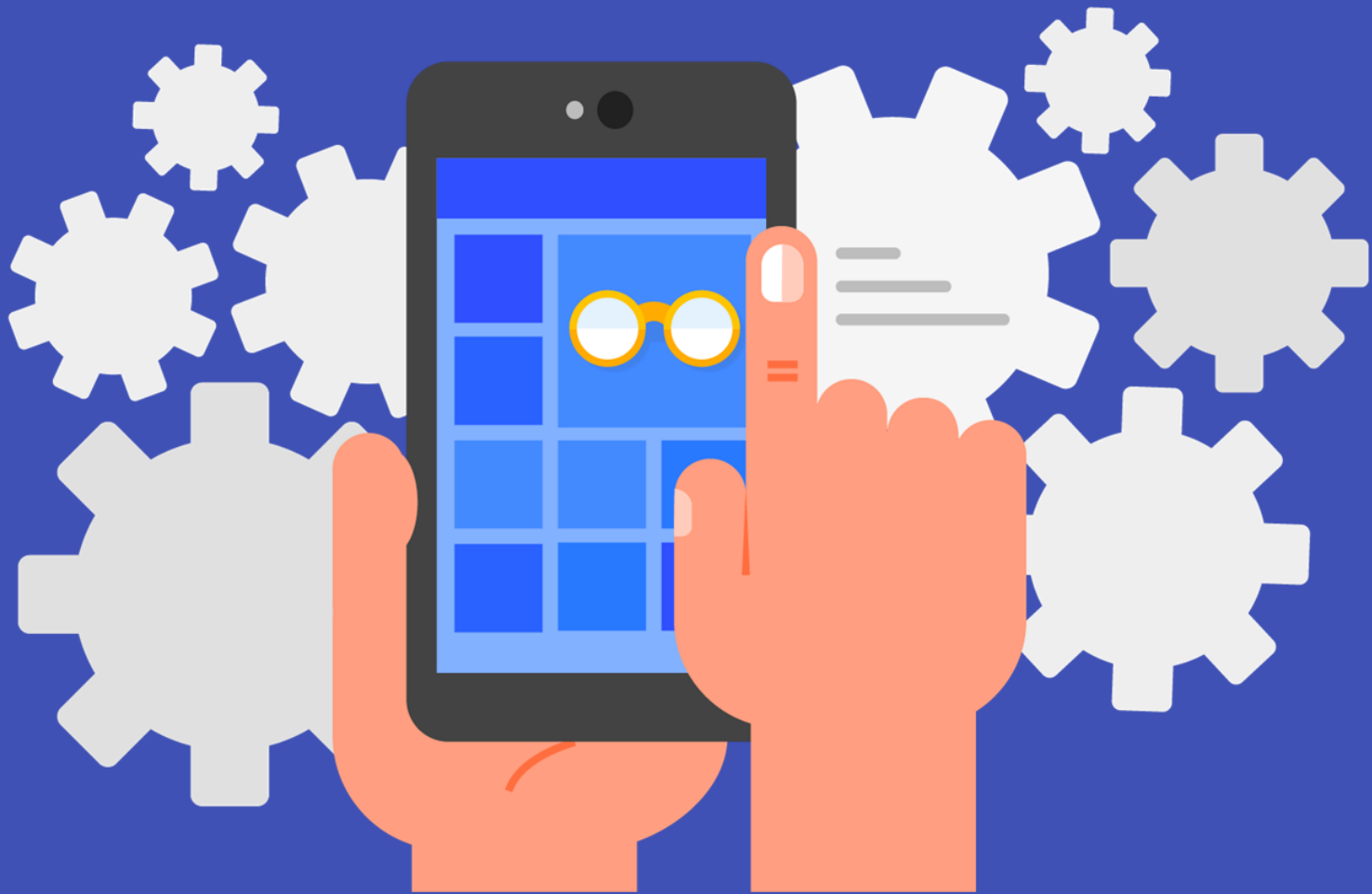
Engaging



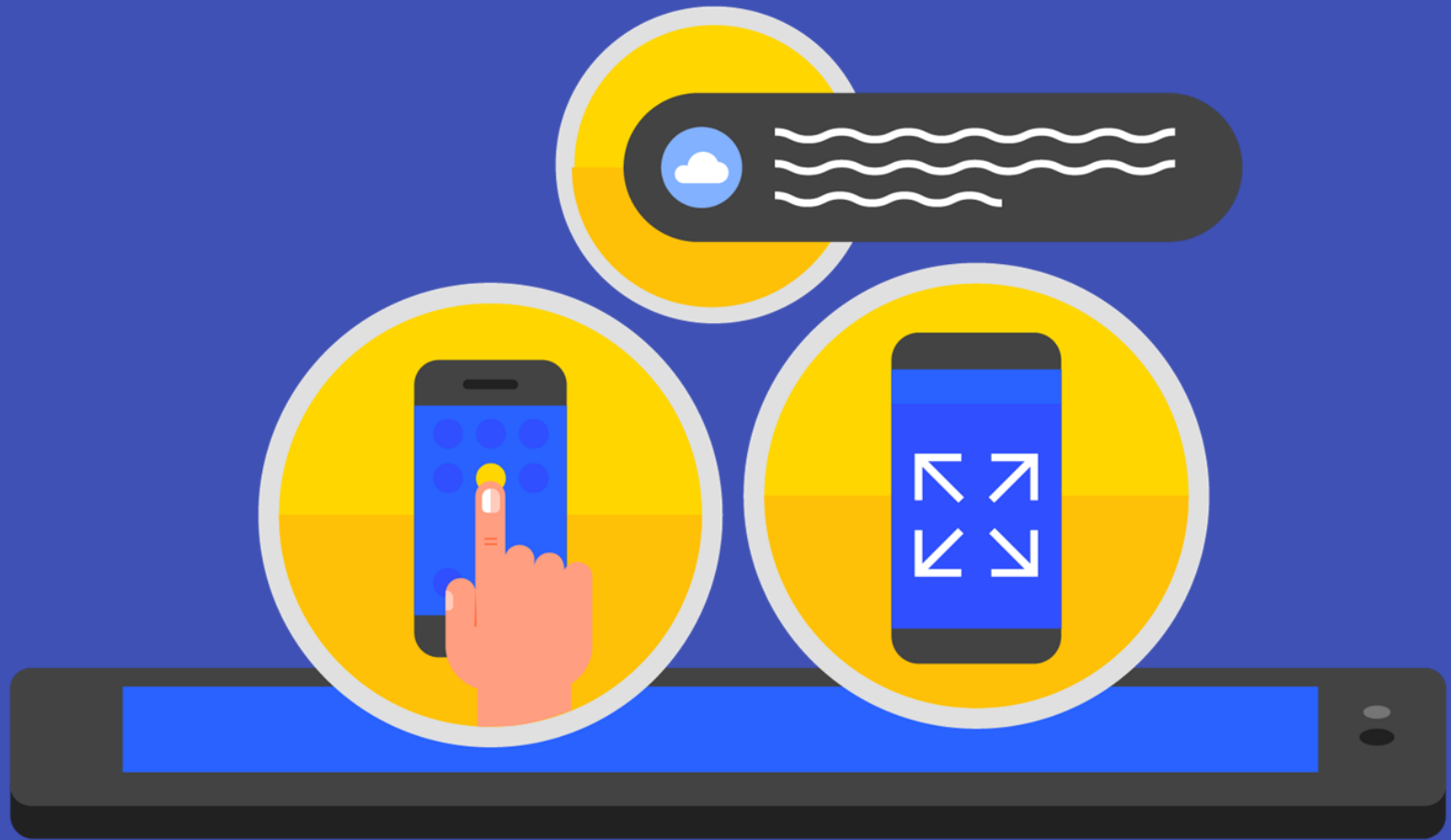
Reliable with Service Worker



Reliable with Service Worker



Fast with App Shell Cache



Engaging with Homescreen & Push



To build a PWA:

- 1) Service Worker: Go Offline
- 2) Manifest: Engage Users



For real tho?

HOW do I build a Progressive Web App?



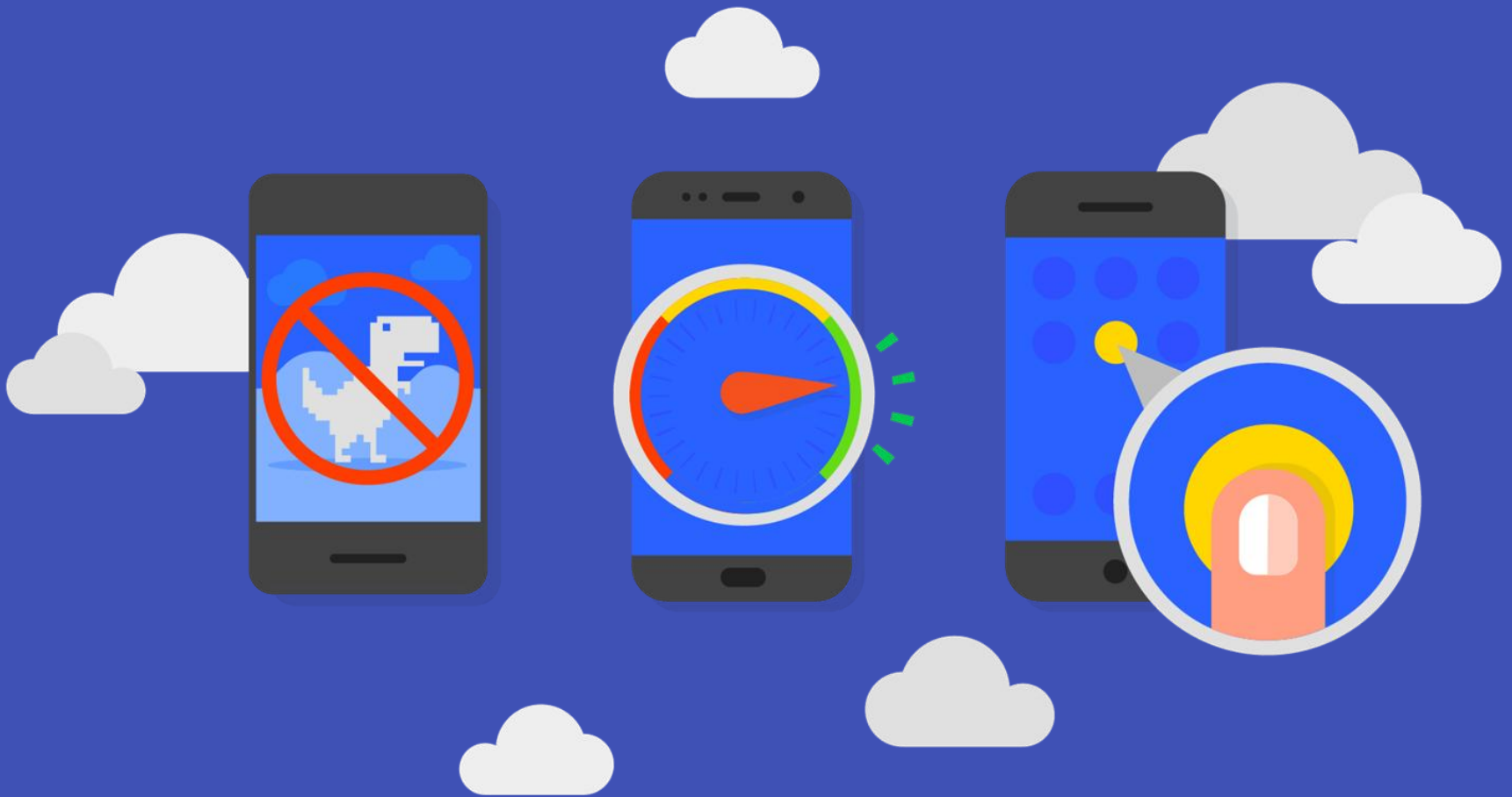
WHAT is WorkBox?



WorkBox is a JS library
that working with
ServiceWorkers easier!



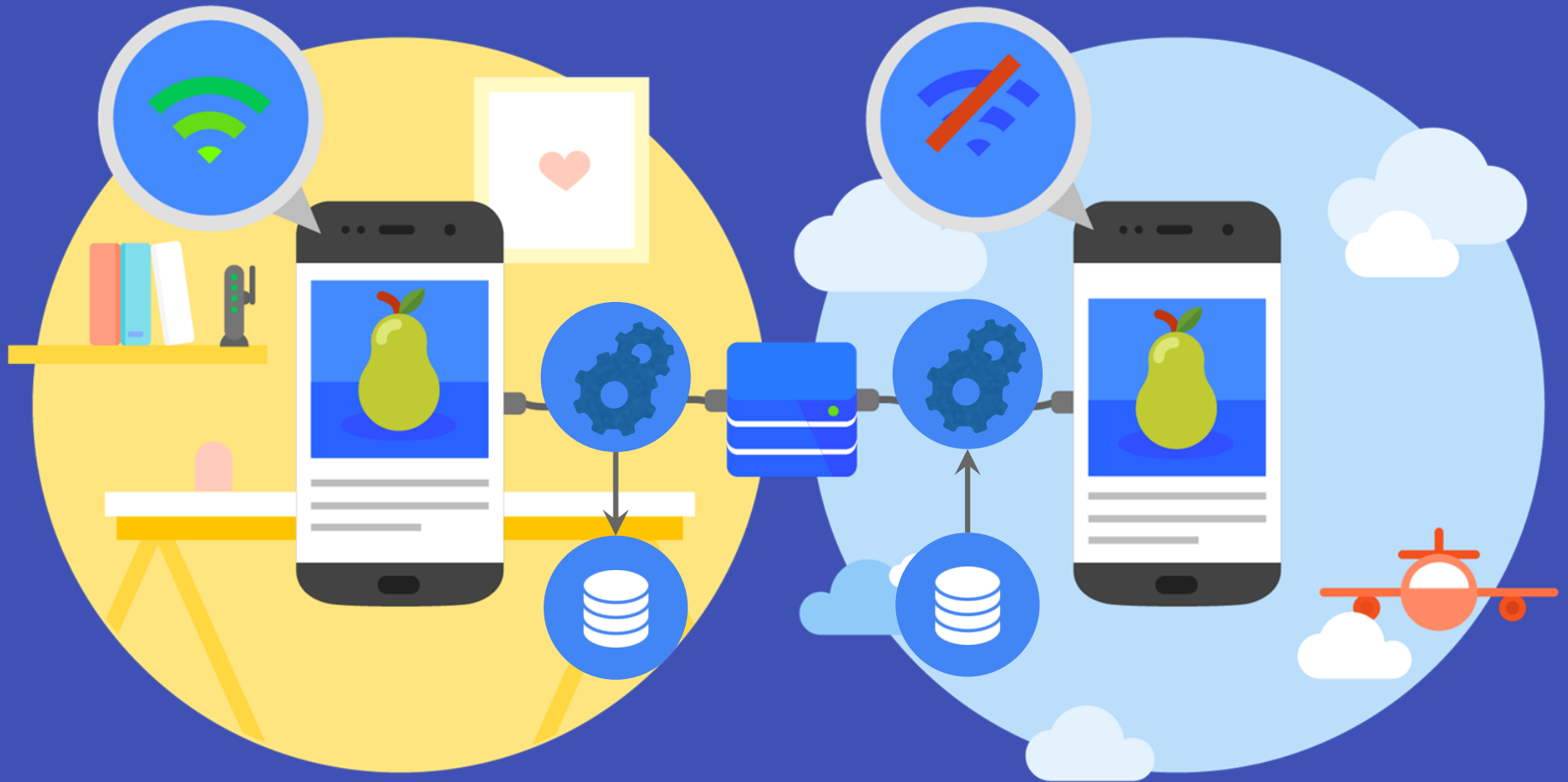
HOW do I build an Progressive Web App with WorkBox?



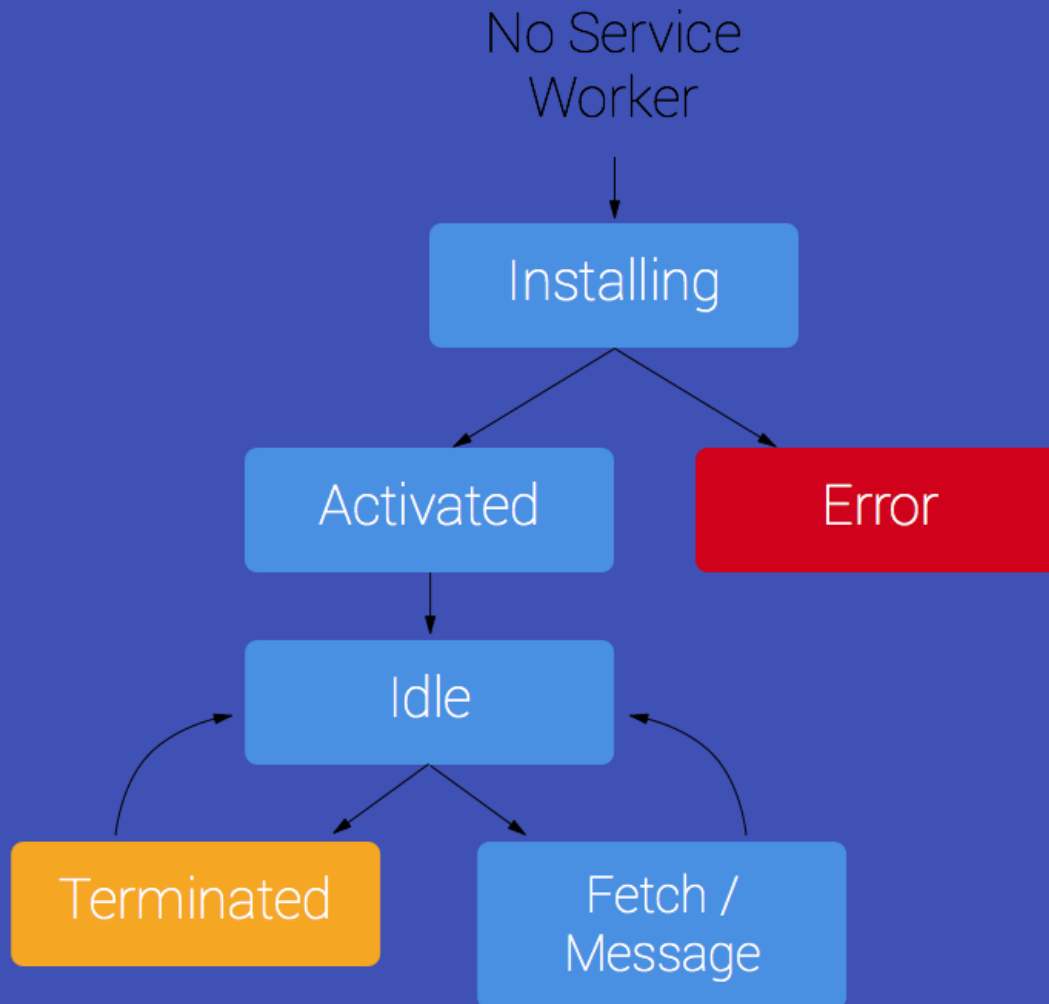
Reliable

Fast

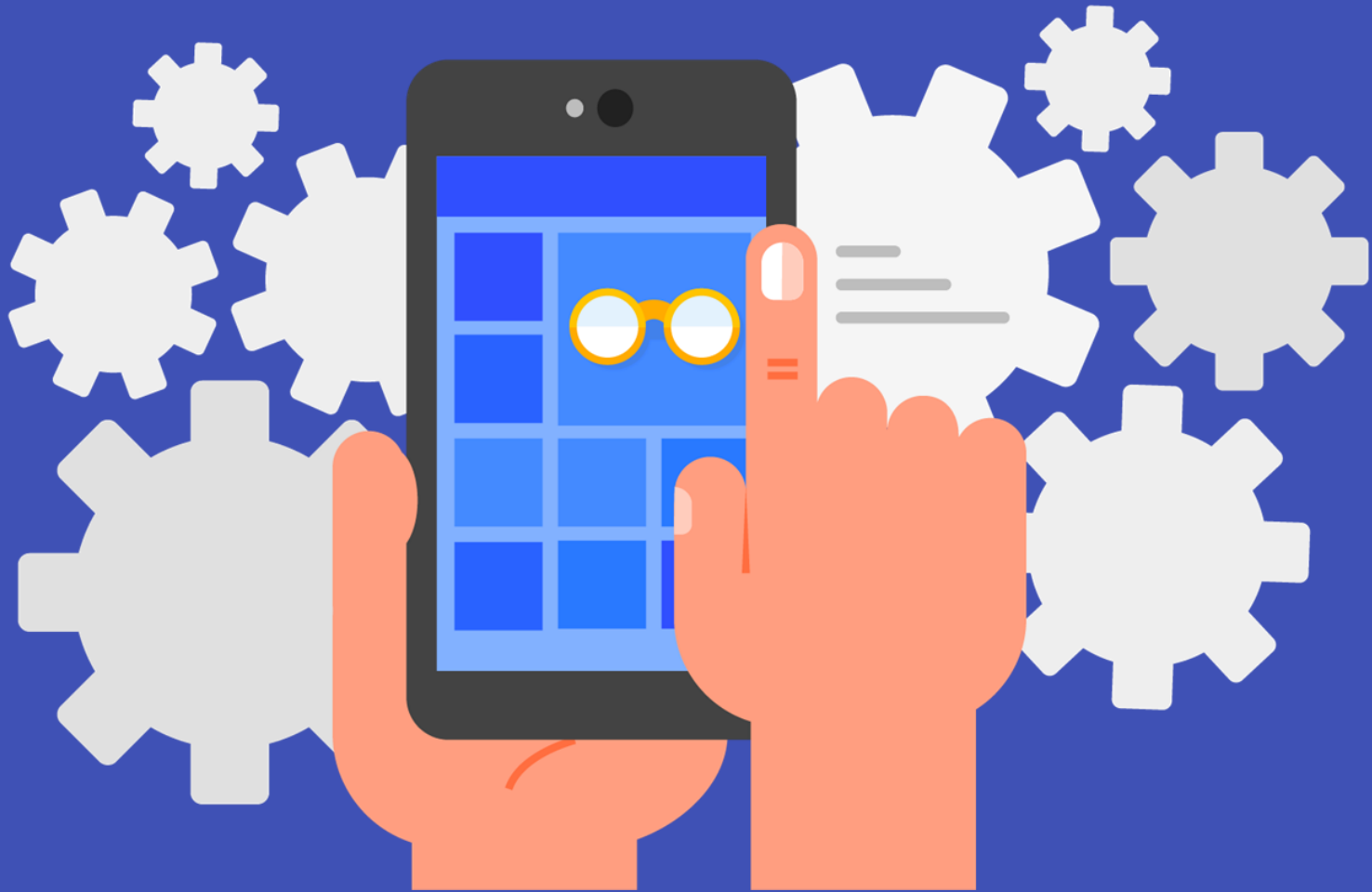
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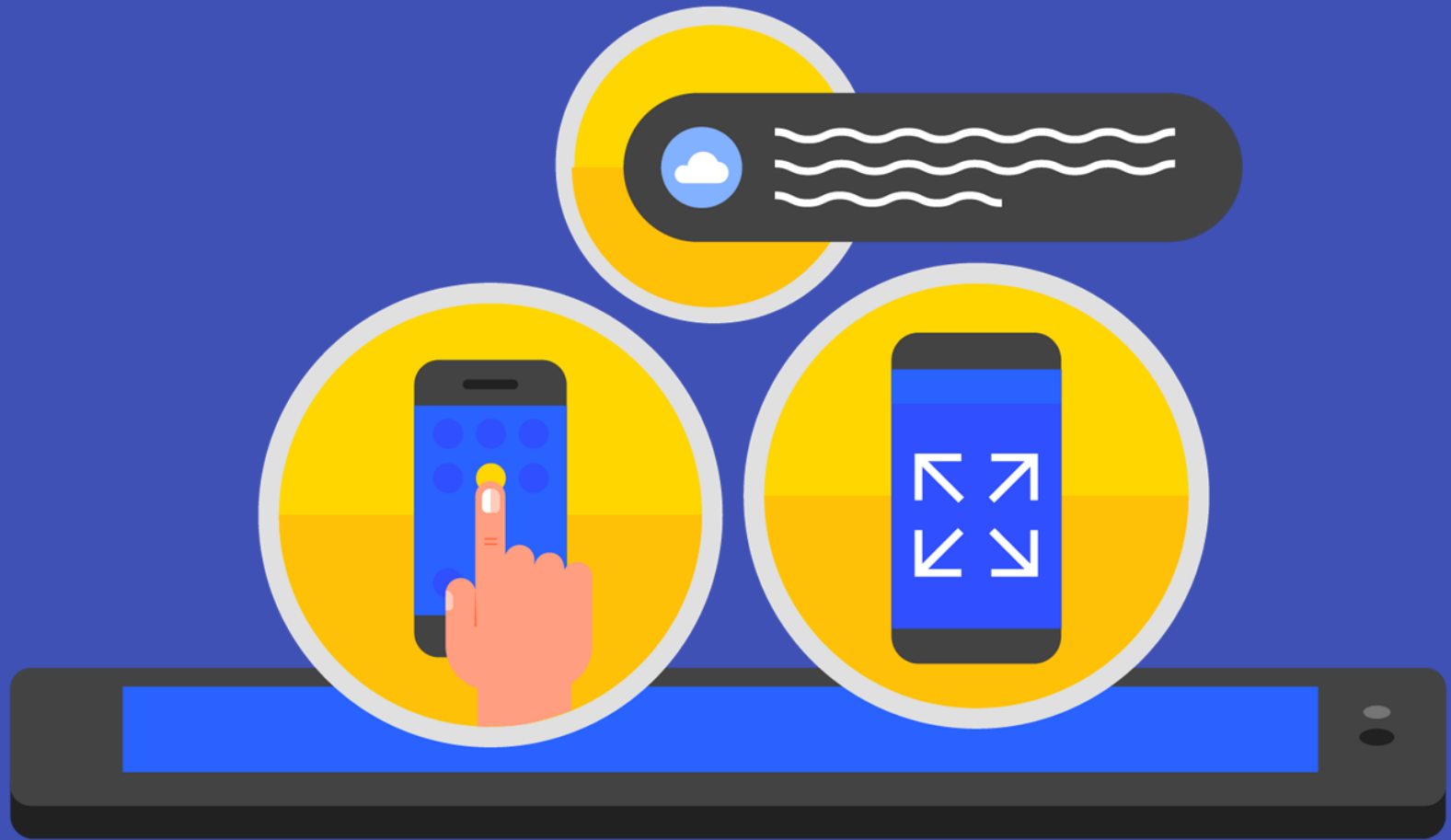
Reliable with Service Worker



Reliable with Service Worker



Fast with App Shell Cache



Engaging with Homescreen & Push



WorkBox is a helpful tool
that you can use to build
your PWA



For real tho?

HOW do I build a Progressive Web App?

*But...I already have a
redux/angular app!
Do I have to start over??*



No! There is a lot of good support for PWA with other frameworks!





WorkBox is a helpful tool
that you can use to build
your PWA



WHY should I use
PWAs?



Progressive Web Apps are awesome because:

- Build reliable, offline-ready apps
- Load up content fast
- Engage your users
- ...



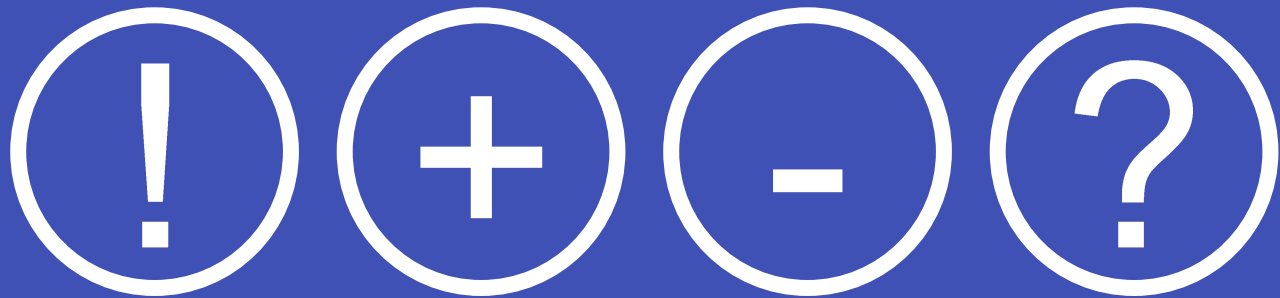
Progressive Web App

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HOW can I use it ?

WHY should I care ?

THANK YOU!





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