



# Gerry White

Freelance Technical Marketing Consultant



*Past, the present and the future*

- History of the mobile web
- Where we are today
- 5 key technologies
- & The future
- Questions ?

A person is walking away from the camera on a narrow path through a dense, foggy forest. The person is wearing a dark jacket and pants. The fog is thick and white, obscuring the background. Bare trees are visible on the left side of the path, and darker evergreen trees are on the right. The overall atmosphere is misty and somewhat somber.

*2010 - 53 % of us are Nomophobic*



*1999 Nokia 7110 first WAP phone*



*2003 Nokia went weird*

NOKIA

1  
☎

2  
abc

3  
def

4  
ghi

5  
jkl

\*

6  
mno

7  
pqrs

8  
tuvw

9  
wxyz

☎  
L







Nokia N Series 2005





Exit Torgny Segerstedts Vei

SANDER

SANDERBERG



1.9  
km

17.0 km  
0:32 hrs

Battery icon  
15:26

K12373 Greveveien

NOKIA  
N95

VOL

AF  
REROUT

TA  
GUIDANC

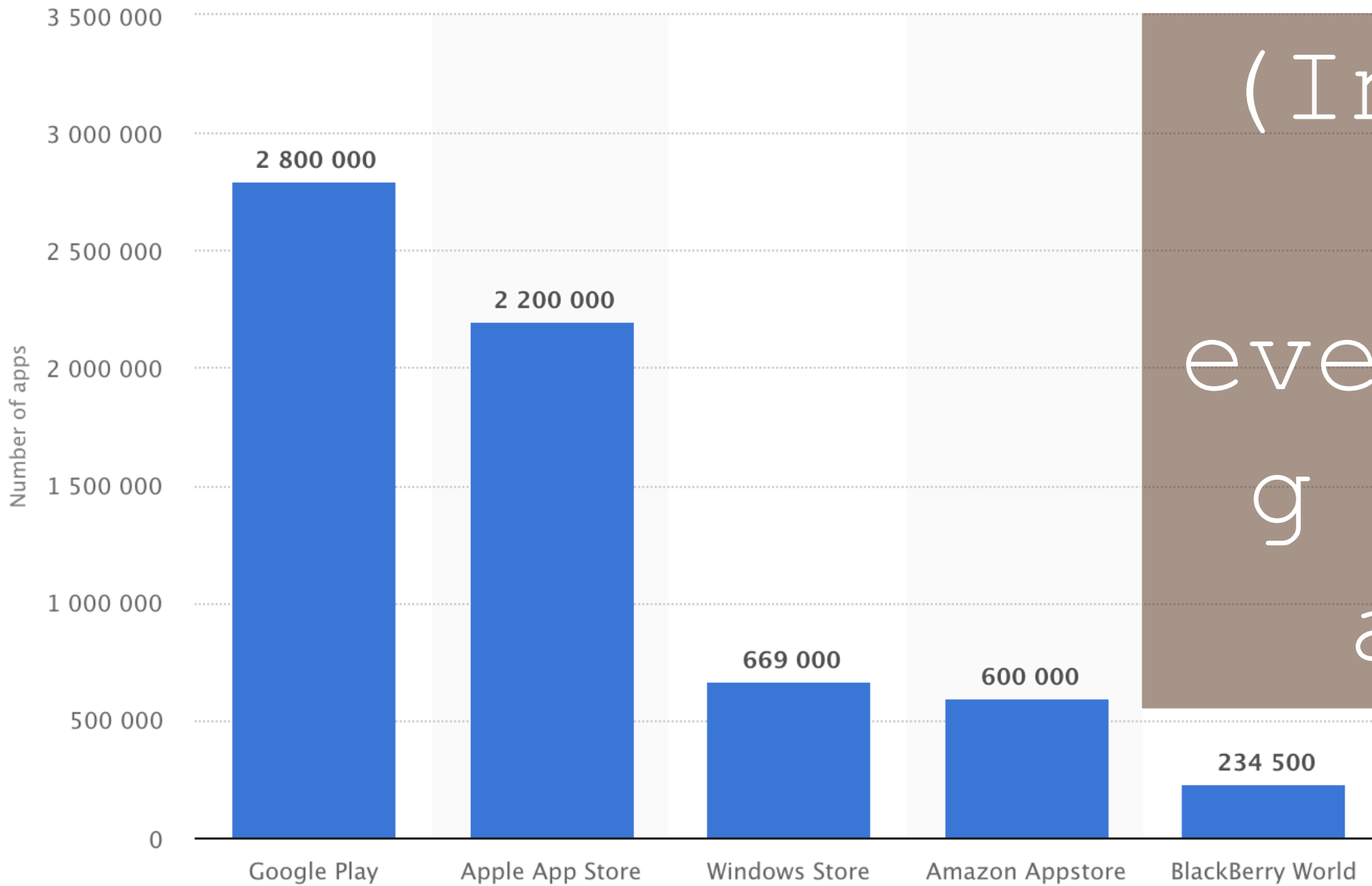
COMPACT  
disc  
DIGITAL AUDIO

DIS

8gb microSD  
5mp Camera  
Wifi  
TV Out  
GPS  
Video  
Cut and Paste!



In 2008 – there is an app for  
that




(In 2018  
—  
everything  
is an  
app)


1.  **Baseball Boy!**  
Games  
[Buy Now on iTunes >](#)

2.  **Knife Hit**  
Games  
[Buy Now on iTunes >](#)


3.  **WhatsApp**  
Social Networking  
[Buy Now on iTunes >](#)

4.  **Bitmoji**  
Utilities  
[Buy Now on iTunes >](#)

5.  **1LINE one-stroke**  
Games  
[Buy Now on iTunes >](#)

26.  **Gmail - Email by**  
Productivity  
[Buy Now on iTunes >](#)

27.  **Wordscapes**  
Games  
[Buy Now on iTunes >](#)

28.  **Pinterest**  
Social Networking  
[Buy Now on iTunes >](#)

29.  **Stop - Categories**  
Games  
[Buy Now on iTunes >](#)

6.  **Instagram**  
Photo & Video  
[Buy Now on iTunes >](#)

7.  **Messenger**  
Social Networking  
[Buy Now on iTunes >](#)

8.  **Snapchat**  
Photo & Video  
[Buy Now on iTunes >](#)

9.  **YouTube: Watch,**  
Photo & Video  
[Buy Now on iTunes >](#)

10.  **Facebook**  
Social Networking  
[Buy Now on iTunes >](#)

31.  **amazon**  
Shopping  
[Buy Now on iTunes >](#)

32.  **Perfect Tower**  
Games  
[Buy Now on iTunes >](#)

33.  **sh**  
Shpock Boot Sale &  
Shopping  
[Buy Now on iTunes >](#)

34.  **Twitter**  
News  
[Buy Now on iTunes >](#)

12.  **60%** of apps have never been installed?

13.  **Mad Skills BMX 2**  
Games  
[Buy Now on iTunes >](#)

14.  **Spotify Music**  
Music  
[Buy Now on iTunes >](#)

15.  **Plashy**  
Productivity  
[Buy Now on iTunes >](#)

36.  **Brain Proxy**  
Productivity  
[Buy Now on iTunes >](#)

37.  **Snake VS Block**  
Games  
[Buy Now on iTunes >](#)

38.  **Microsoft Outlook**  
Productivity  
[Buy Now on iTunes >](#)

11.  **Granny**  
Games  
[Buy Now on iTunes >](#)

39.  **musical.ly**  
Photo & Video  
[Buy Now on iTunes >](#)

16.  **HSBC UK Mobile**  
Finance  
[Buy Now on iTunes >](#)

17.  **Netflix**  
Entertainment  
[Buy Now on iTunes >](#)

18.  **Google Maps - GPS**  
Navigation  
[Buy Now on iTunes >](#)

19.  **COOKING MAMA**  
Games  
[Buy Now on iTunes >](#)

20.  **Wish - Shopping**  
Shopping  
[Buy Now on iTunes >](#)

41.  **Word Crossy - Word**  
Games  
[Buy Now on iTunes >](#)

42.  **UNICORN: Colour by**  
Entertainment  
[Buy Now on iTunes >](#)

43.  **Sniper 3D: Shoot to**  
Games  
[Buy Now on iTunes >](#)

44.  **Super Mario Run**  
Games  
[Buy Now on iTunes >](#)

21.  **Unlabeled**

22.  **Unlabeled**

23.  **Unlabeled**

24.  **Unlabeled**

25.  **Unlabeled**

46.  **Unlabeled**

47.  **Unlabeled**

48.  **Unlabeled**

49.  **Unlabeled**

Mr. Tubb sent you a message on ClassDojo



Inbox



ClassDojo

to me

3 days ago [View details](#)



ClassDojo

Mr. Tubb sent you a message!

You have a new message from Mr. Tubb

[View Message](#)



Sent with love from ClassDojo HQ

735 Tehama Street, San Francisco CA 94103

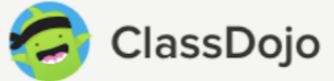


Mr. Tubb sent you a message on ClassDojo

Inbox



ClassDojo  
to me  
3 days ago [View details](#)



Mr. Tubb sent you a message!

You have a new message from Mr. Tubb

[View Message](#)



Sent with love from ClassDojo HQ

735 Tehama Street San Francisco CA 94103



**ClassDojo**  
ClassDojo  
3 PEGI 3

[INSTALL](#)

In-app purchases

#7 **Top Apps Education**

10  
MILLION

Downloads

4.4  
★★★★★

145,812



Family Friendly



Education



Similar

Better learning behaviors, smoother lessons, and hassle-free data!

[READ MORE](#)



Mr. Tubb sent

Inbox



ClassDojo  
to me  
3 days ago



**ClassDojo**  
ClassDojo  
3 PEGI 3

You ha

#7 Top Apps

10  
MILLION

Downloads

4.4  
★★★★☆

145,812



Family Friend

Better learning behaviors, smooth  
hassle-free data!

READ MO



# ClassDojo

## Don't miss out on our amazing app!



Use the app!

Continue without app



Inbox



0 to 3



Cl  
Cla  
3

10  
MILLION

Downloads

Better learni  
hassle-free c

Don't miss



# ClassDojo

ClassDojo works best if you switch to our Android app!

It's the best way to connect with your child's teacher

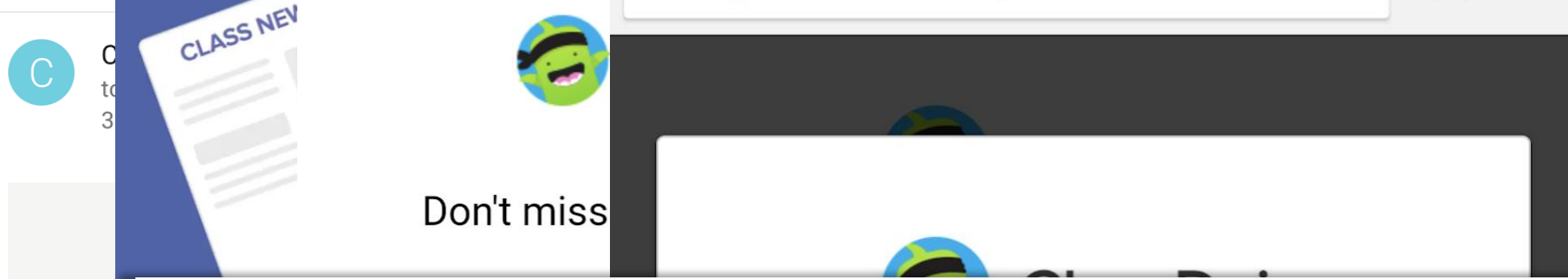
[Download the ClassDojo App](#)

[No thanks, I'll download it later](#)

[Forgot your password?](#)

[Don't have an account?](#)





Reminder - A science fair will be held after school on Monday 26th March to celebrate Science Week. We hope to see you there!

Download the ClassDojo App

No thanks, I'll download it later

Forgot your password?

Don't have an account?

10  
MILLION

Downloads

Better learning  
hassle-free c





In 2015 — PWAs

Progressive Web Apps



**NOTE** - If you want to look at PWA examples, these two have the side effect that you'll end up sleeping on the sofa ....



# Progressive Web Apps

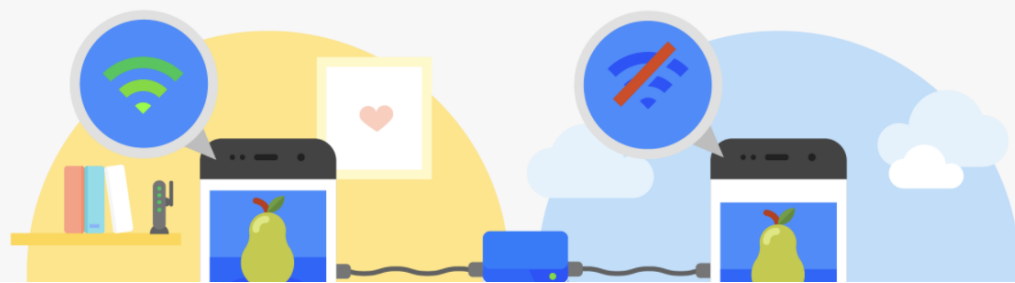
[PWA CHECKLIST](#)

A new way to deliver amazing user experiences on the web.

Progressive Web Apps are user experiences that have the reach of the web, and are:

- **Reliable** - Load instantly and never show the downasaur, even in uncertain network conditions.
- **Fast** - Respond quickly to user interactions with silky smooth animations and no janky scrolling.
- **Engaging** - Feel like a natural app on the device, with an immersive user experience.

This new level of quality allows Progressive Web Apps to earn a place on the user's home screen.



## Reliable

When launched from the user's home screen, service workers enable a Progressive Web App to load instantly, regardless of the network state.

A service worker, written in JavaScript, is like a client-side proxy and puts you in control of the cache and how to respond to resource requests. By pre-caching key



PWA CHECKLIST



stantly, regardless of the network state.

aScript, is like a client-side proxy and puts you in  
respond to resource requests. By pre-caching key

- Site is served over HTTPS
- Pages are responsive on tablets & mobile devices
- All app URLs load while offline
- Metadata provided for Add to Home screen
- First load fast even on 3G
- Site works cross-browser
- Page transitions don't feel like they block on the network
- Each page has a URL
- Site's content is indexed by Google
- Schema.org metadata is provided where appropriate
- Social metadata is provided where appropriate
- Canonical URLs are provided when necessary
- Pages use the History API
- Content doesn't jump as the page loads
- When tapped, inputs aren't obscured by the on screen keyboard
- Content is easily shareable from standalone or full screen mode
- Site is responsive across phone, tablet and desktop screen sizes
- Any app install prompts are not used excessively
- The Add to Home Screen prompt is intercepted
- First load very fast even on 3G
- Site uses cache-first networking
- Site appropriately informs the user when they're offline
- Provide context to the user about how notifications will be used
- Site dims the screen when permission request is showing
- Push notifications must be timely, precise and relevant
- Provides controls to enable and disable notifications
- User is logged in across devices via Credential Management API
- User can pay easily via native UI from Payment Request API.



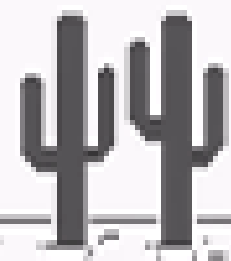
Manifest  
JSON LD

A Venn diagram consisting of two overlapping circles. The left circle is light blue and contains the text 'Manifest JSON LD'. The right circle is a darker blue and contains the text 'Service Worker'. The overlapping area in the center is a medium blue color.

Service  
Worker

HI 00720 00090

# Service Worker



# Lighthouse

Version: 2.9.3

Performance	97
Progressive Web App	100
Accessibility	81
Best Practices	94
SEO	100

Results for: <https://airhorner.com/?homescreen=1>  
May 13, 2018, 4:19 AM GMT+1 • ▶ Runtime settings



These checks validate the aspects of a Progressive Web App, as specified by the baseline [PWA Checklist](#).

100

## 0 Failed Audits

### 11 Passed Audits

- ▼ Registers a service worker ✓  
The service worker is the technology that enables your app to use many Progressive Web App features, such as offline, add to homescreen, and push notifications. [Learn more.](#)
- ▼ Responds with a 200 when offline ✓  
If you're building a Progressive Web App, consider using a service worker so that your app can work offline. [Learn more.](#)
- ▶ Contains some content when JavaScript is not available ✓
- ▶ Uses HTTPS ✓

00090






# Manifest JSON LD

```
{
  "name": "The Air Horner",
  "short_name": "Airhorner",
  "icons": [
    {
      "src": "/images/touch/android-launchericon-48-48.png",
      "type": "image/png",
      "sizes": "48x48"
    },
    {
      "src": "/images/touch/android-launchericon-72-72.png",
      "type": "image/png",
      "sizes": "72x72"
    },
    {
      "src": "/images/touch/android-launchericon-96-96.png",
      "type": "image/png",
      "sizes": "96x96"
    },
    {
      "src": "/images/touch/android-launchericon-144-144.png",
      "type": "image/png",
      "sizes": "144x144"
    },
    {
      "src": "/images/touch/android-launchericon-192-192.png",
      "type": "image/png",
      "sizes": "191x192"
    },
    {
      "src": "/images/touch/android-launchericon-512-512.png",
      "type": "image/png",
      "sizes": "512x512"
    }
  ],
  "start_url": "/?homescreen=1",
  "scope": "/",
  "display": "standalone",
  "background_color": "#2196F3",
  "theme_color": "#2196F3"
}
```

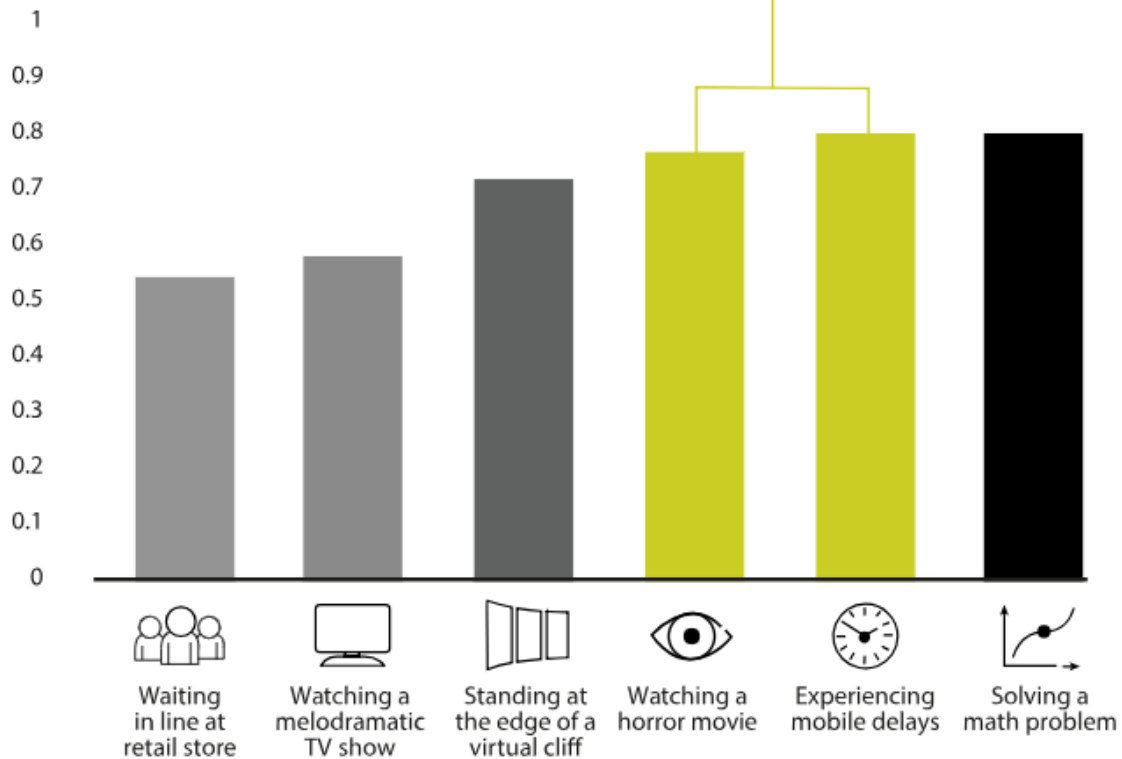


A person is walking away from the camera on a path through a dense, foggy landscape. The person is silhouetted against the light fog. To the left, there is a bare, leafless tree. The overall atmosphere is eerie and desolate. The text is overlaid on the right side of the image.

*The level of stress caused  
by mobile phone delays is  
greater than a horror  
movie*







The level of stress caused by mobile delays was comparable to watching a horror movie









*The level of stress caused by mobile phone delays is greater than a horror movie*






## Camera & Microphone

-  AUDIO & VIDEO CAPTURE ✓
-  ADVANCED CAMERA CONTROLS ✓
-  RECORDING MEDIA ✓
-  REAL-TIME COMMUNICATION ✓






## Operating System

-  OFFLINE STORAGE ✓
-  FILE ACCESS ✓
-  CONTACTS ✗
-  SMS ✗
-  STORAGE QUOTAS ✓
-  TASK SCHEDULING ✗






## Native Behaviors

-  LOCAL NOTIFICATIONS ✓
-  PUSH MESSAGES ✓
-  HOME SCREEN INSTALLATION ✓
-  FOREGROUND DETECTION ✓
-  PERMISSIONS ✓






## Location & Position

-  GEOLOCATION ✓
-  GEOFENCING ✗
-  DEVICE POSITION ✓
-  DEVICE MOTION ✓
-  PROXIMITY SENSORS ✗

## Seamless Experience

-  OFFLINE MODE ✓
-  BACKGROUND SYNC ✓
-  INTER-APP COMMUNICATION ✗
-  PAYMENTS ✓
-  CREDENTIALS ✓

## Device Features

-  NETWORK TYPE & SPEED ✓
-  ONLINE STATE ✓
-  VIBRATION ✓
-  BATTERY STATUS ✓
-  DEVICE MEMORY ✓





WEBASSEMBLY

Overview

Demo

Getting Started

Docs

Spec

Community

Roadmap

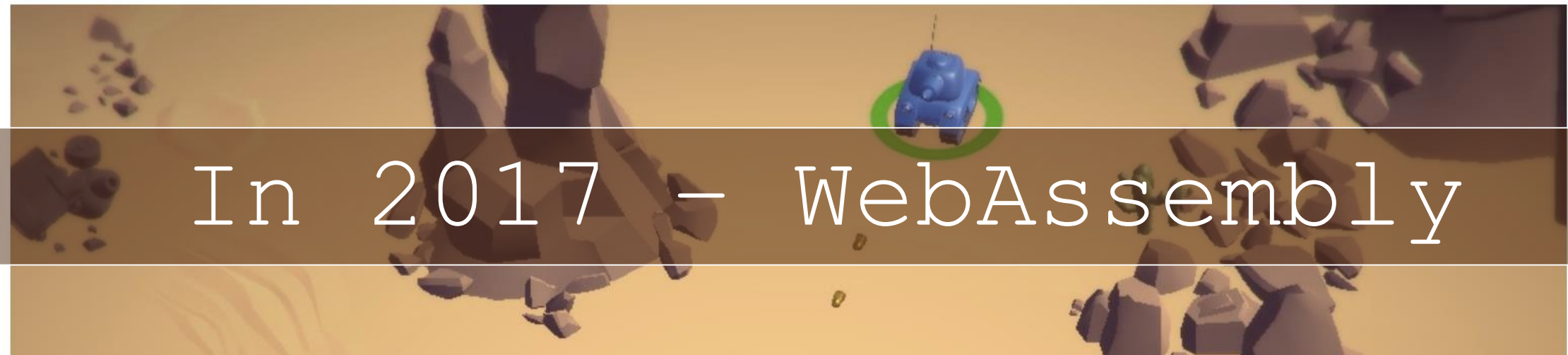
FAQ

WebAssembly 1.0 has shipped in 4 major browser engines.



[Learn more](#)

## Tanks! Demo




In 2017 – WebAssembly

## Was 2011 the 'Year of the Mobile'? - Periscopix

<https://www.periscopix.co.uk/blog/was-2011-the-year-of-the-mobile/> ▼

By Oliver Walker 2nd February 2012. At the start of **2011**, there was a lot of industry talk that the coming **year** would be the '**year of the mobile**'. Well, for a good 380ish days since those bold claims were made, my colleague Vim and I have excitedly waited for the time that we could analyse all the data. That time is now.

A hand is holding an iPhone 2G, showing the iOS home screen with various app icons. The background is a blurred outdoor scene with green plants. A semi-transparent dark brown banner is at the bottom of the image.

In 2011 – meet Siri

## Is 2014 Finally The Year Of Mobile? - Forbes

<https://www.forbes.com/sites/.../2014/02/06/is-2014-finally-the-y>

6 Feb 2014 - Attention: Announcing **2014**, the third annual “year of hearing this line since 2012, but it seems that **2014** is poised to finally become a mainstream marketing solution. Consumer adoption of smartphones is no longer ubiquitous. Take for example ...

have been  
t **mobile**  
tablets is no

In 2014 – meet Alexa





Hi, how can I help?



Hi, how can I help?

find me a hotel in London



Here to help



Here to help



Travelodge London  
Farringdon

★★★★☆ 39.3 mi

3-star hotel



Travelodge London  
Central Covent...

★★★★☆ 38.6 mi

2-star hotel



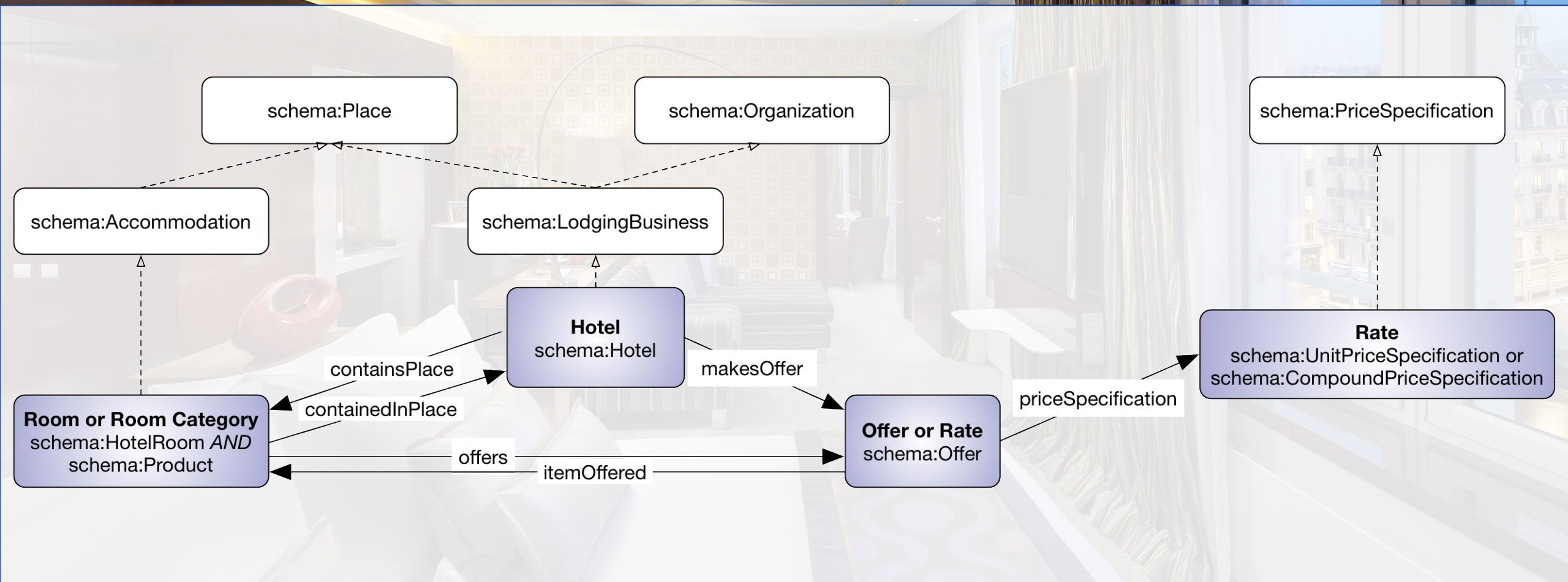
Travelodge Lon  
Central Southw

★★★★☆ 37.7

3-star hotel







## Geo Position

```
<div itemscope itemtype="http://schema.org/Hotel">
  <h1><span itemprop="name">ACME Hotel Innsbruck</span></h1>
  <span itemprop="description">A beautifully located business hotel right in the
heart of the alps. Watch the sun rise over the scenic Inn valley while
enjoying your morning coffee.</span>
  <div itemprop="address" itemscope itemtype="http://schema.org/PostalAddress">
    <span itemprop="streetAddress">Technikerstrasse 21</span>
    <span itemprop="postalCode">6020</span>
    <span itemprop="addressLocality">Innsbruck</span>
    <span itemprop="addressRegion">Tyrol</span>,
    <span itemprop="addressCountry">Austria</span>
  </div>
  <div itemprop="geo" itemscope itemtype="http://schema.org/GeoCoordinates">
    <meta itemprop="latitude" content="47.2649990" />
    <meta itemprop="longitude" content="11.3428720" />
  </div>
</div>
```

```
<div itemscope itemtype="http://schema.org/Hotel">
<h1><span itemprop="name">ACME Hotel Innsbruck</span></h1>
<span itemprop="description">A beautifully located business hotel right in the
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<meta itemprop="longitude" content="11.3428720" />
</div>
</div>
```



## Photos and Logo

```
<div itemscope itemtype="http://schema.org/Hotel">
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  <span itemprop="description">A beautifully located business hotel right in the
heart of the alps. Watch the sun rise over the scenic Inn valley while
enjoying your morning coffee.</span>
  
</div>
```



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<meta itemprop="longitude" content="11.3428720" />
</div>
</div>
```

```
<div itemscope itemtype="http://schema.org/Hotel">
<h1><span itemprop="name">ACME Hotel Innsbruck</span></h1>

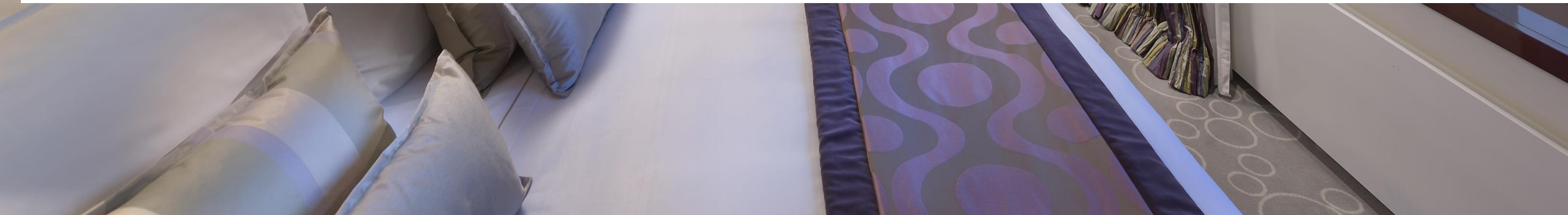
<span itemprop="description">A beautifully located business hotel right in the
heart of the alps. Watch the sun rise over the scenic Inn valley while
enjoying your morning coffee.</span>

</div>
```

## Opening Hours (Reception)

You can use the [openingHours](#) or [openingHoursSpecification](#) properties to indicate the opening hours of the reception of the hotel.

```
<div itemscope itemtype="http://schema.org/Hotel">
<h1><span itemprop="name">ACME Hotel Innsbruck</span></h1>
<span itemprop="description">A beautifully located business hotel right in the
heart of the alps. Watch the sun rise over the scenic Inn valley while
enjoying your morning coffee.</span>
Reception opening hours:
<meta itemprop="openingHours" content="Mo-Fr 07:00-23:00">Mon-Fri 07.00-23.00
<meta itemprop="openingHours" content="Sa 08:00-23:00">Saturdays 08.00-23.00
<meta itemprop="openingHours" content="Sun 08:00-12:00">Sundays 08.00-12.00
</div>
```



```

<div itemscope itemtype="http://schema.org/Hotel">
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  </div>
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    <meta itemprop="latitude" content="47.2649990" />
    <meta itemprop="longitude" content="11.3428720" />
  </div>
</div>

```

```

<div itemscope itemtype="http://schema.org/Hotel">
  <h1><span itemprop="name">ACME Hotel Innsbruck</span></h1>
  <img itemprop="logo" alt="ACME Hotel Innsbruck logo" data-bbox="378 75 475 115" />
  <span itemprop="description">A beautifully located business hotel right in the
heart of the alps. Watch the sun rise over the scenic Inn valley while
enjoying your morning coffee.</span>
  <img itemprop="photos" alt="Hotel photos" data-bbox="378 165 475 195" />
</div>

```

#### Opening Hours (Reception)

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```

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  <meta itemprop="openingHours" content="Sun 08:00-12:00">Sundays 08.00-12.00
</div>

```

## Hotel Features and Services

### Sauna and Gym

```

<div itemscope itemtype="http://schema.org/Hotel">
  <h1><span itemprop="name">ACME Hotel Innsbruck</span></h1>
  <span itemprop="description">A beautifully located business hotel right in the
heart of the alps. Watch the sun rise over the scenic Inn valley while
enjoying your morning coffee.</span>
  Hotel Features:
  <ul>
    <li itemprop="amenityFeature" itemscope itemtype="http://schema.org/LocationFeatureSpecification">
      <span itemprop="name">Sauna</span>
      <meta itemprop="value" content="True">
    </li>
    <li itemprop="amenityFeature" itemscope itemtype="http://schema.org/LocationFeatureSpecification">
      <span itemprop="name">Gym</span>
      <meta itemprop="value" content="True">
    </li>
  </ul>

```

```

<div itemscope itemtype="http://schema.org/Hotel">
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    <span itemprop="postalCode">6020</span>
    <span itemprop="addressLocality">Innsbruck</span>
  </div>

```

```

<div itemscope itemtype="http://schema.org/Hotel">
  <h1><span itempr
  <img itemprop="l
  <span itemprop="

```

#### Opening Hours (Reception)

You can use the [openingHours](#) or [openingHoursSpecification](#) properties to indicate the opening hours of the reception of the hotel.

#### Hotel Features and Services

Sauna and Gym

```

<div itemscope itemtype="http://schema.org/Hotel">
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      <meta itemprop="value" content="True">
    </li>

```

```

itemscope itemtype="http://schema.org/Hotel">
<span itemprop="name">ACME Hotel Innsbruck</span></h1>
  <span itemprop="description">A beautifully located business hotel right in the
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enjoying your morning coffee.</span>
  <span itemprop="openingHoursSpecification">
    <span itemprop="openingHours" content="Mo-Fr 07:00-23:00">Mon-Fri 07.00-23.00
    <span itemprop="openingHours" content="Sa 08:00-23:00">Saturdays 08.00-23.00
    <span itemprop="openingHours" content="Sun 08:00-12:00">Sundays 08.00-12.00
  </span>

```



## Information about Rooms

Some hotels just indicate basic information about the number and type of available room categories. In the simplest form, one can use the [numberOfRooms](#) property with the type of room in the [unitText](#) property of a [QuantitativeValue](#), like so:

```

<div itemscope itemtype="http://schema.org/Hotel">
  <h1><span itemprop="name">ACME Hotel Innsbruck</span></h1>
  
  <span itemprop="description">A beautifully located business hotel right in the
heart of the alps. Watch the sun rise over the scenic Inn valley while
enjoying your morning coffee.</span>
  <span itemprop="numberOfRooms" itemscope itemtype="http://schema.org/QuantitativeValue">
    <span itemprop="value">45</span>
    <span itemprop="unitText">double rooms</span>
  </span>
  <span itemprop="numberOfRooms" itemscope itemtype="http://schema.org/QuantitativeValue">
    <span itemprop="value">15</span>
    <span itemprop="unitText">single rooms</span>
  </span>

```

```

<div itemscope itemtype="http://schema.org/Hotel">
  <h1><span itemprop="name">ACME Hotel Innsbruck</span></h1>
  <span itemprop="description">A beautifully located business hotel right in the
heart of the alps. Watch the sun rise over the scenic Inn valley while
enjoying your morning coffee.</span>
  <div itemprop="address" itemscope itemtype="http://schema.org/PostalAddress">
    <span itemprop="streetAddress">Technikerstrasse 21</span>
    <span itemprop="postalCode">6020</span>
    <span itemprop="addressLocality">Innsbruck</span>
  </div>

```

```

<div itemscope itemtype="http://schema.org/Hotel">
  <h1><span itempr
  <img itemprop="l
  <span itemprop="

```

#### Opening Hours (Reception)

You can use the `openingHours` or `openingHoursSpecification` properties to indicate the opening hours of the reception of the hotel.

#### Hotel Features and Services

Sauna and Gym

```

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```
<div itemscope itemtype="http://schema.org/Hotel">
```

Hotel Features:

```

<ul>
<li i
  <sp
  <me
</li>
<li i
  <sp
  <me
</li>
</ul>
</div>

```

```
<div itemscope itemtype="http://schema.org/Product">
```

```

```

```
<span itemprop="name">Dell UltraSharp 30" LCD Monitor</span>
```

```
<div itemprop="aggregateRating"
```

```
  itemscope itemtype="http://schema.org/AggregateRating">
```

```
  <span itemprop="ratingValue">87</span>
```

```
  out of <span itemprop="bestRating">100</span>
```

```
  based on <span itemprop="ratingCount">24</span> user ratings
```

```
</div>
```

```
<div itemprop="offers" itemscope itemtype="http://schema.org/AggregateOffer">
```

```
  <span itemprop="lowPrice">$1250</span>
```

```
  to <span itemprop="highPrice">$1495</span>
```

```
  from <span itemprop="offerCount">8</span> sellers
```

Sellers:

```
  <div itemprop="offers" itemscope itemtype="http://schema.org/Offer">
```

```
    <a itemprop="url" href="save-a-lot-monitors.com/dell-30.html">
```

```
    Save A Lot Monitors - $1250</a>
```

```
  </div>
```

```
  <div itemprop="offers" itemscope itemtype="http://schema.org/Offer">
```

```
    <a itemprop="url" href="jondoe-gadgets.com/dell-30.html">
```

```
    Jon Doe's Gadgets - $1350</a>
```

```
  </div>
```

```
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```



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```

```

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```
  </div>
```

```
</div>
```





DoubleTree by Hilton Hotel Leeds City Centre from £60.  
Leeds Hotels - KAYAK  
<https://www.kayak.co.uk> > ... > Leeds

Find the best deal for the DoubleTree by Hilton Hotel Leeds City Centre in Leeds (England) on KAYAK. View 5573 reviews, 35 photos and compare deals for this hotel.

Rating Price  
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DoubleTree by Hilton Hotel Leeds City Centre (Leeds) - 2018 Hotel Prices | Expedia  
<https://www.expedia.co.uk> > West-Yorks...

DoubleTree by Hilton Hotel Leeds City Centre - read reviews, look at the photos and get great deals. Book the DoubleTree by Hilton Hotel Leeds City Centre with Expedia now and save!

Rating  
4.5 ★★★★★ (1,380)

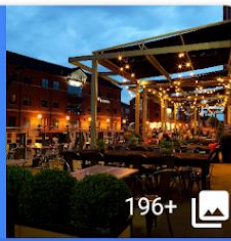
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Rating Price  
4.5 ★★★★★ (699) from £65

DoubleTree by Hilton Hotel Leeds City Centre Review, Yorkshire | Travel - The Telegraph  
<https://www.telegraph.co.uk> > ... > Hotels

DoubleTree by Hilton Hotel Leeds City Centre  
4.3 ★★★★★ (1,178)  
4-star hotel



196+ photos

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Modern rooms and suites with stylish rooftop bar and a restaurant

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Check availability

Check in  
Sun 20 May

Expedia.co.uk  
Read Real Guest Review  
Get Instant Confirmation

Booking.com

Hilton.com Official website

More rates

4.3 ★★★★★ Very good  
1,178 reviews on Google

Rooms 4.2 Location 4.6 Service 4.3

What guests are saying

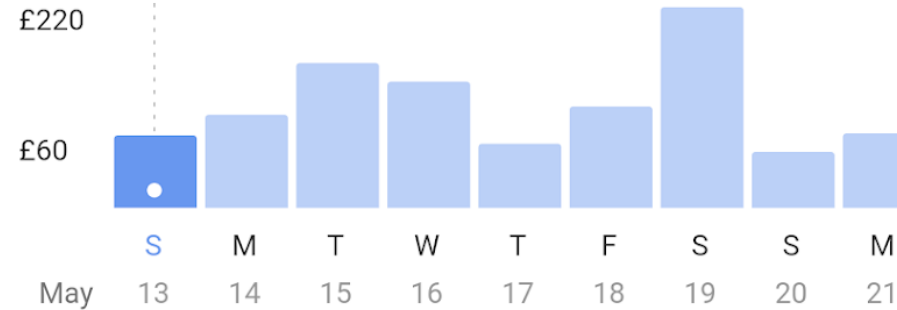
"Great service, lovely food and fab cocktails bar."

... was great also (in the up...

... es, great location, friendly...

Price trends: weekly

Sun 13 May (1 night) £78/night



Best prices for a 1-night stay

Booking.com

9/10 · 4,220 reviews

Kirstie, a week ago

+ Cost of parking very expensive  
- Cost of parking

View more on Booking.com

Amenities

Free Wi-Fi

Parking



[DoubleTree by Hilton Hotel Leeds City Centre from £60. Leeds Hotels - KAYAK](https://www.kayak.co.uk)

<https://www.kayak.co.uk> > ... > Leeds

Find the best deal for the DoubleTree by Hilton Hotel Leeds City Centre in Leeds (England) on KAYAK. View 5573 reviews, 35 photos and compare deals for this hotel.

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[DoubleTree by Hilton Hotel Leeds City Centre, Leeds: Info, Photos, Reviews | Book at Hotels.com](https://uk.hotels.com)

<https://uk.hotels.com> > ... > Leeds Hotels

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[DoubleTree by Hilton Hotel Leeds City Centre Review, Yorkshire | Travel - The Telegraph](https://www.telegraph.co.uk)

<https://www.telegraph.co.uk> > ... > Hotels



# Deep Dive into **Entity-First Indexing**

**Mobile-First Crawling,  
Entity-First Indexing**

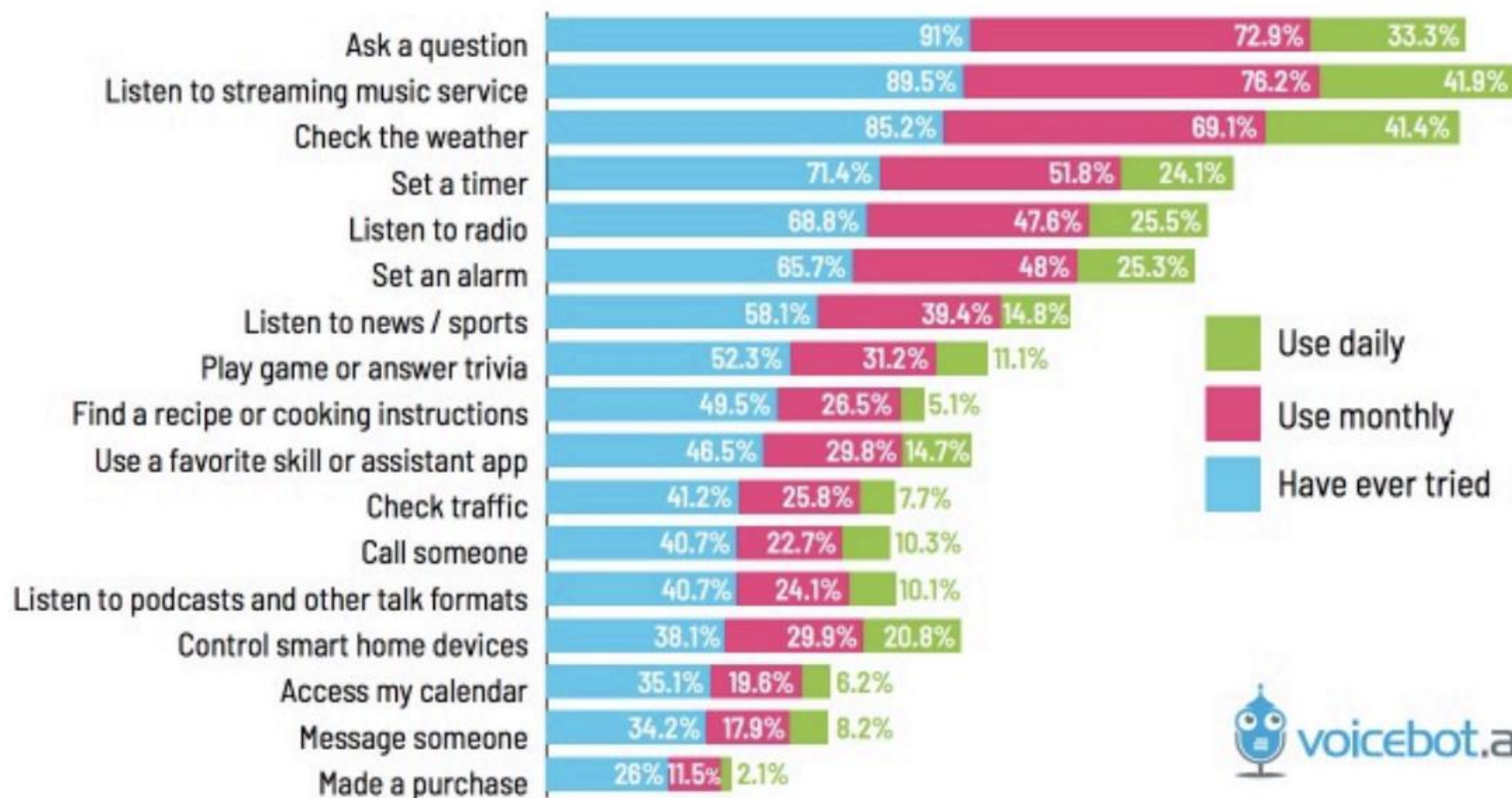
Post  
**1/5**



[mobilemoxie.com/blog/entity-first-indexing-mobile-first-crawling-1-of-5/](https://mobilemoxie.com/blog/entity-first-indexing-mobile-first-crawling-1-of-5/)



## Smart Speaker Use Case Frequency January 2018



- Use daily
- Use monthly
- Have ever tried



# Amazon Echo orders doll houses after 'hearing' TV presenter talking

Viewers say a presenter's comments about an erroneous purchase were picked up by their gadgets, triggering even more orders.

14:31, UK,  
Monday 09 January 2017



Amazon released the Echo in the UK in September 2016



## Top Stories



**British men  
kidnapped in DR  
Congo released**

# Burger King's Google Home Whopper stunt just won a big advertising award



Tanya Dua [✉](#) [🐦](#)

🕒 Jun. 20, 2017, 10:11 PM 🔥 1,049



After sneaking into people's homes, Burger King has managed to sneak out with an award at the Cannes Lions, advertising's biggest annual gathering.

Back in April, the fast food chain created a sneaky TV spot that served as a hack for Google Home. The ad featured the phrase "OK, Google, what is the Whopper burger," which triggered any Google Home device within earshot to start reading aloud from the Whopper Wikipedia page.



YouTube/Burger King

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[YouTube/Burger King](#)



Amazon's Choice for "iphone case"



## TORRAS iPhone 7 Case, iPhone 8 Case, Ultra-Thin Case with [Tempered Glass Screen Protector], Simple Stylish Fully Protective Matt Cover for Apple iPhone 7 (2016)/iPhone 8 (2017) - Space Black

by TORRAS

**£9.99** ~~£18.00~~  prime

Get it by **Tomorrow, May 26**

 1,514

Promotion Available and [5 more promotions](#) ▾

### Product Features

... Designed with *iPhone 7/8* in mind, TORRAS *case* follows its every line ...

Amazon's Choice for "iphone case"



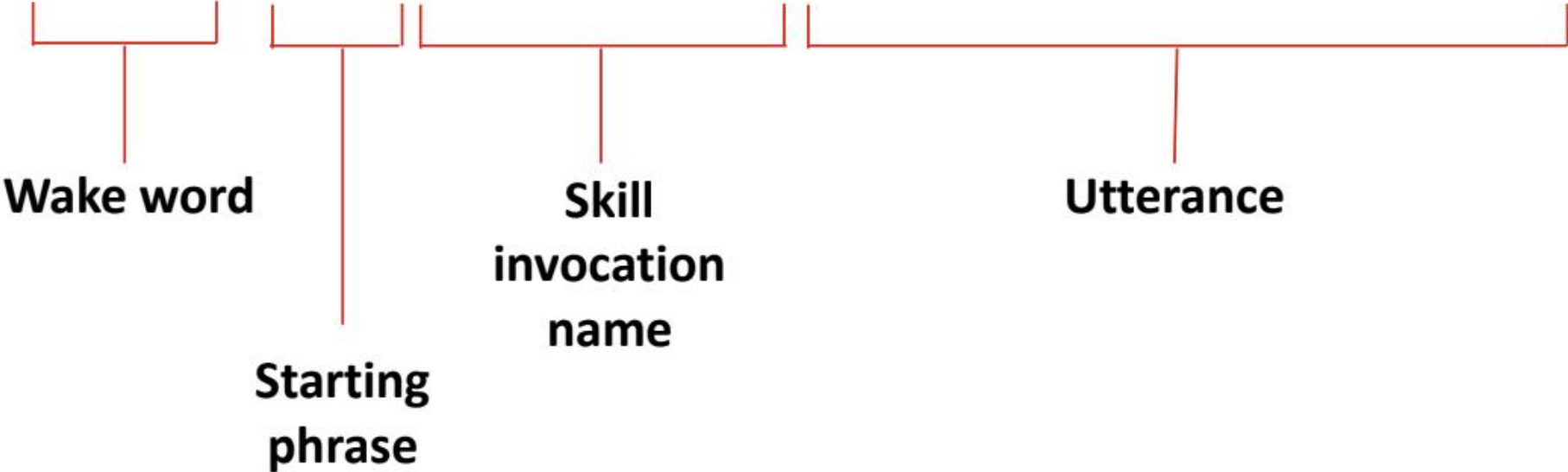
## TORRAS iPhone 7 Protective Matt Co by TORRAS

**£9.99** ~~£18.00~~ ✓prime

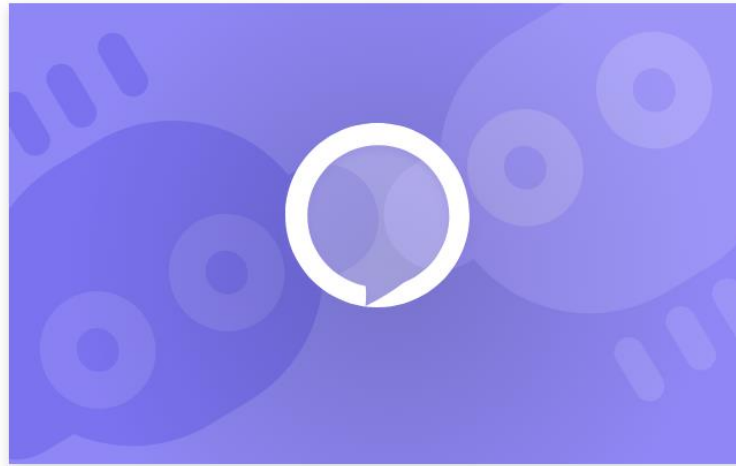
Get it by Tomorrow, May



# Alexa, ask Vodafone how much is my bill?



# Getting Started



## Introduction to Alexa

Continue your learning by starting with Introduction to Alexa

**START**

Overview

**Syllabus**

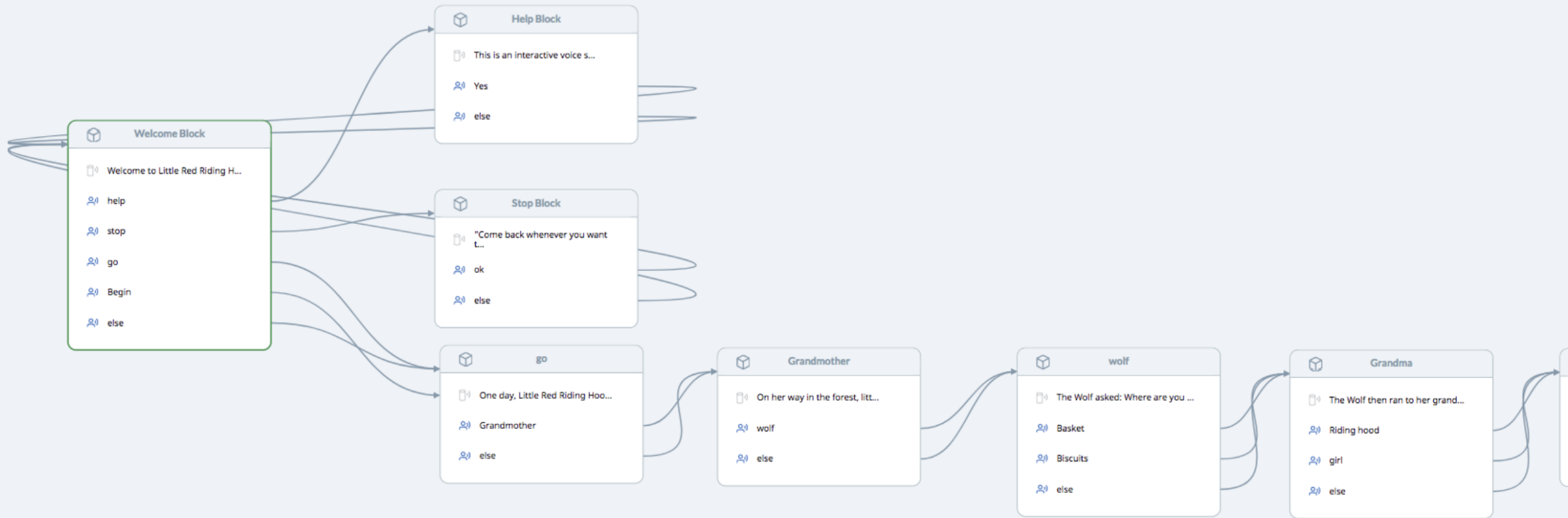
### 1 Build Your First Alexa Skill

>  Build Your First Alexa Skill Interactive Lesson

 Create a New Intent Freeform Project

 Build Your First Alexa Skill Multiple Choice Quiz

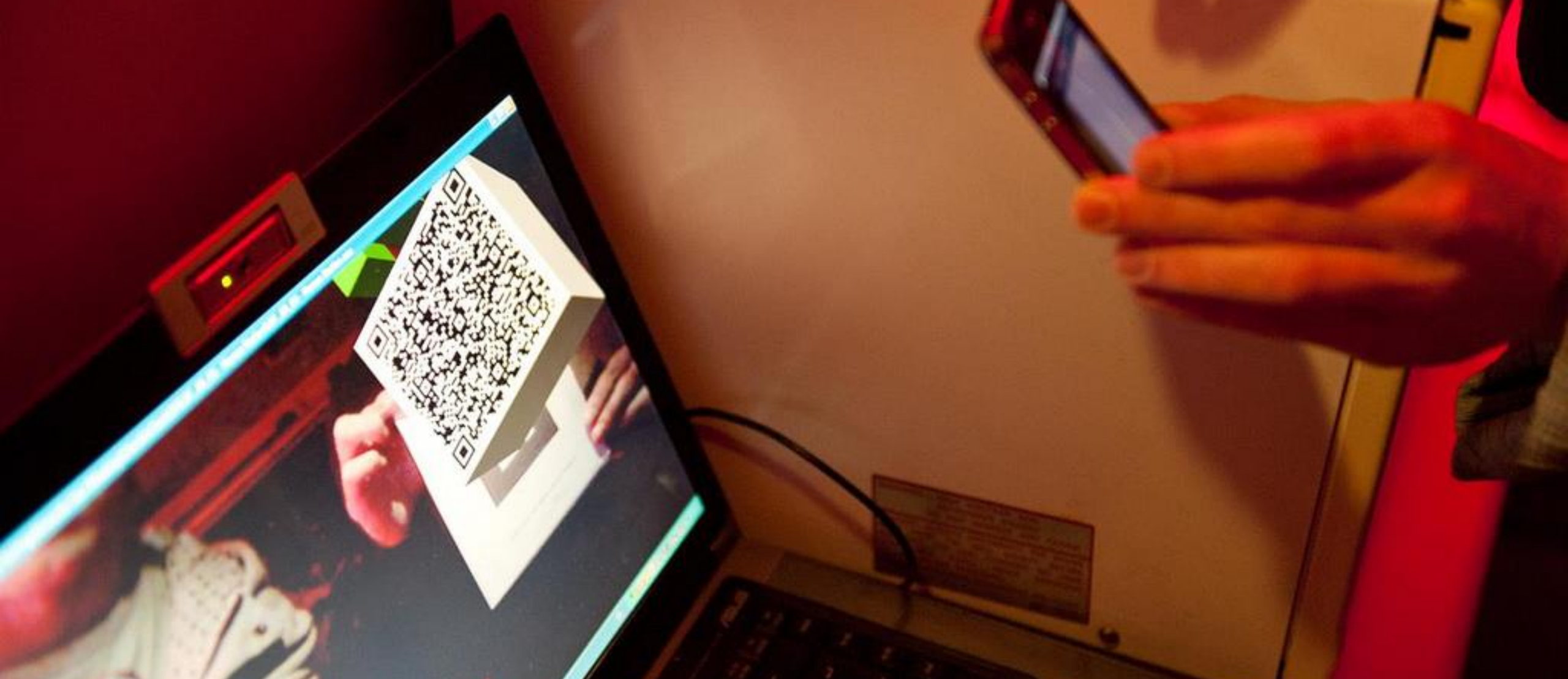
[codecademy.com/courses/learn-alexa-skills-kit](https://codecademy.com/courses/learn-alexa-skills-kit)





In 2011 – AR was .. limited

Photo by Rick Harrison



In 2011 – AR was ... limited

[www.checkincheckoff.co.uk](http://www.checkincheckoff.co.uk)

Photo by Rick Harrison



#ContikiLegends Cliff Jumping in 360!

11,490 views

210

3

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In 2015 – 360 YouTube Videos



Contiki

Published on 26 Aug 2015

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In 2016 – Pokemon Go



# BACK TO THE MOON

A charming illusionist, an adventurous queen of hearts and an evil green man journey through early cinema, film magic and love.

**Directed by Fx Goby & H el ene Leroux**

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2018







2014 - iBeacons



2015 – Eddystone

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1 2 3 4 5 6 7 8 9 10

Quick search Advanced search

Budget per person

E1 to E2000+

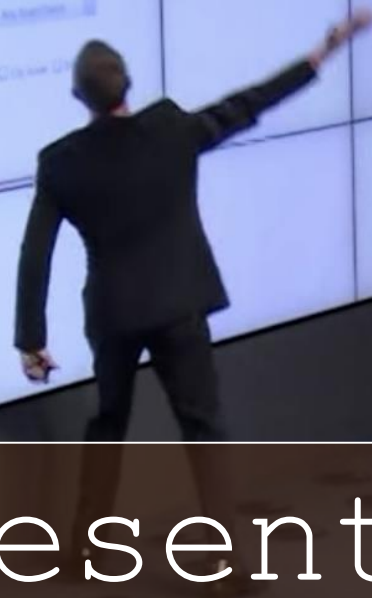
E1

Departing

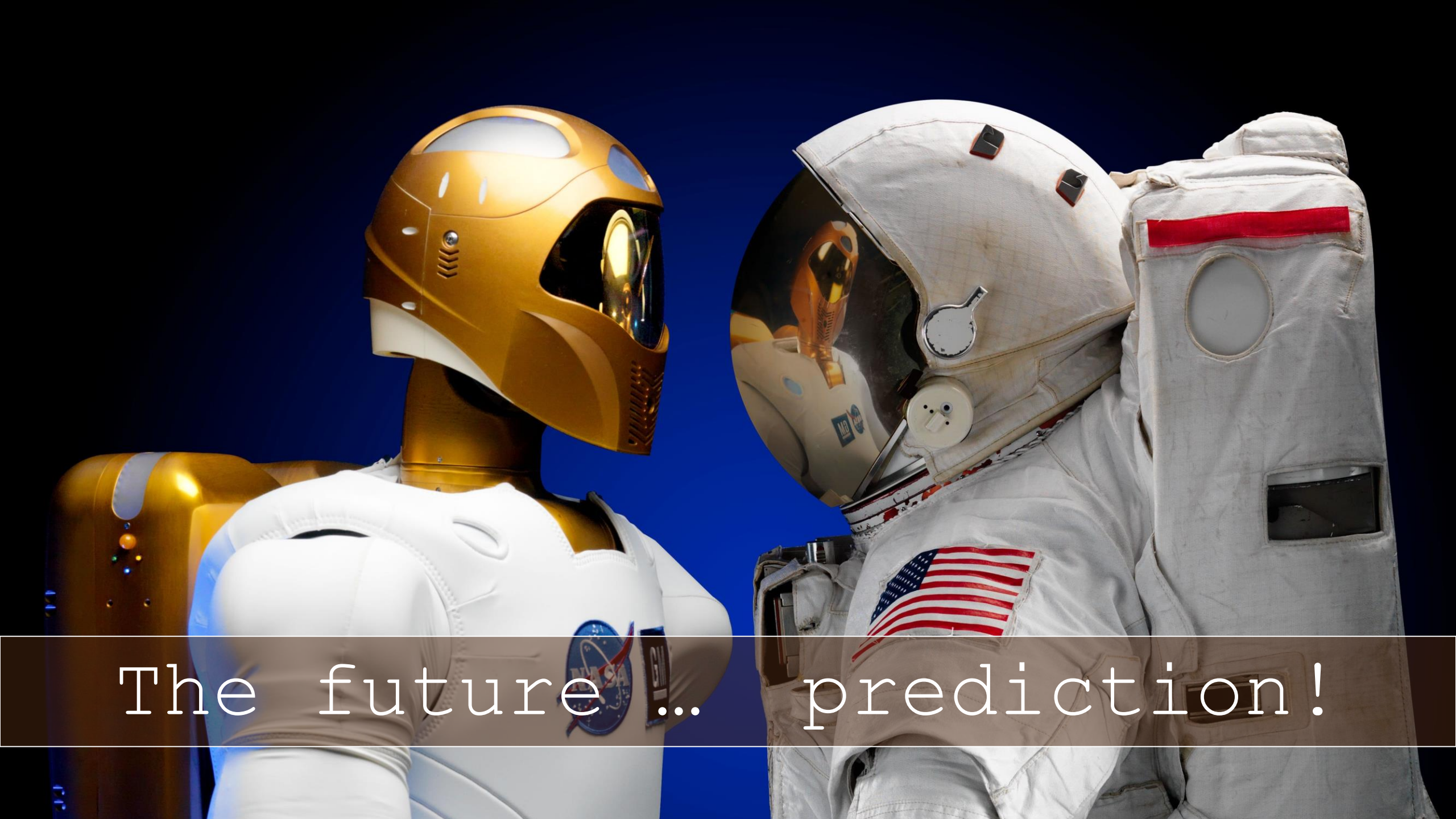
March

Travel class

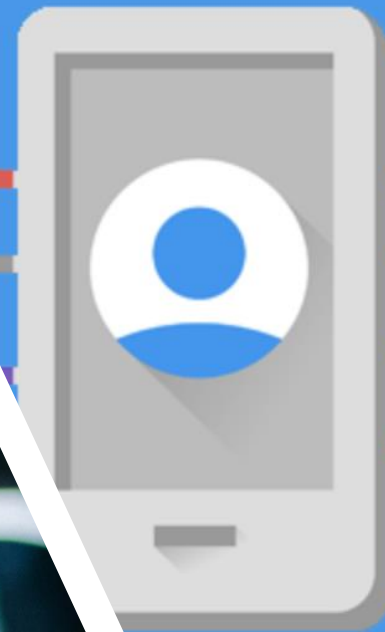
Economy



The Present ...



The future ... prediction!





Thanks!

Gerry White

[Gerry@takeitoffline.co.uk](mailto:Gerry@takeitoffline.co.uk)

[\*\*TakeItOffline.co.uk\*\*](http://TakeItOffline.co.uk)

Twitter - [\*\*@dergal\*\*](https://twitter.com/dergal)

