

# App Examples and Mobile Design Options

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Making A Mobile App

School of Journalism and Mass Communication

Texas State University



# Top 15 Apps

## Top 15 Smartphone Apps October 2019

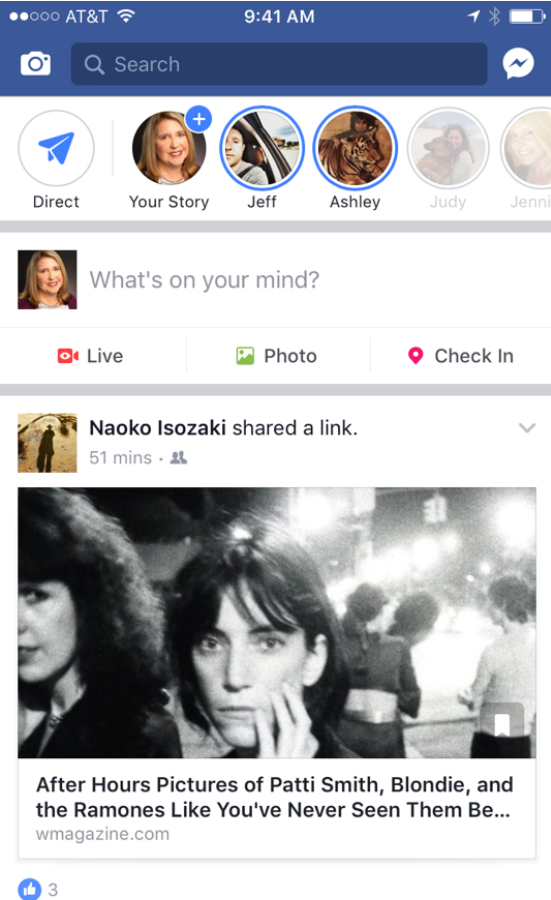
Total U.S. Smartphone Mobile Media Users, Age 18+ (iOS and Android Platforms)

[COPY](#) [CSV](#) [EXCEL](#)

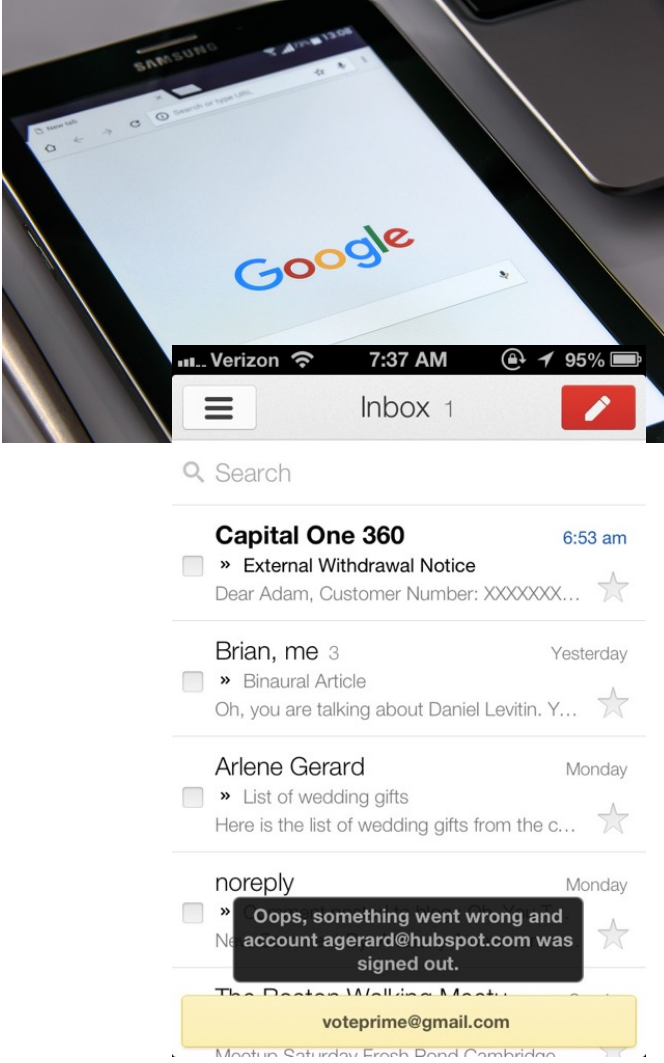
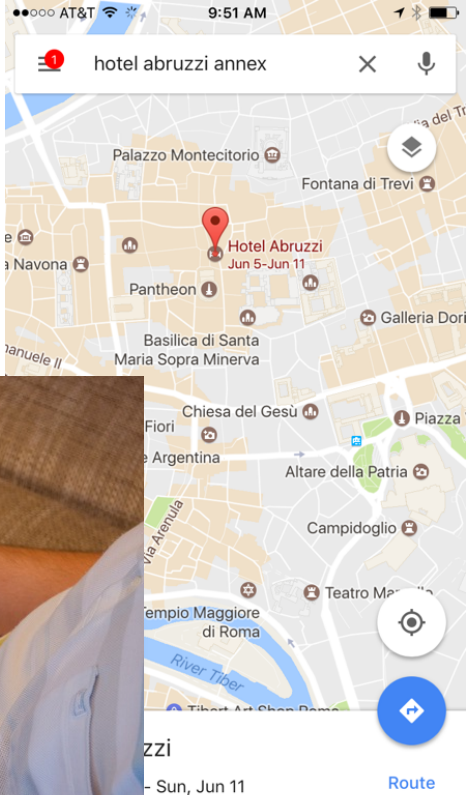
SEARCH:

#	↑↓ Top 15 Apps	↑↓ % Reach
1	YouTube (Mobile App)	77.6
2	Facebook (Mobile App)	69.4
3	Google Search (Mobile App)	63.9
4	Google Maps (Mobile App)	62.2
5	Gmail (Mobile App)	60
6	Facebook Messenger (Mobile App)	59.9
7	Google Play (Mobile App)	51.7
8	Amazon Mobile (Mobile App)	49.8
9	Snapchat (Mobile App)	46.6
10	Instagram (Mobile App)	45.1
11	Google Drive (Mobile App)	38.9
12	Pandora Radio (Mobile App)	36.3
13	Google Photos (Mobile App)	36
14	Weather Channel - Native Apple (Mobile App)	34.2
15	Spotify (Mobile App)*	30.3

# Social Media

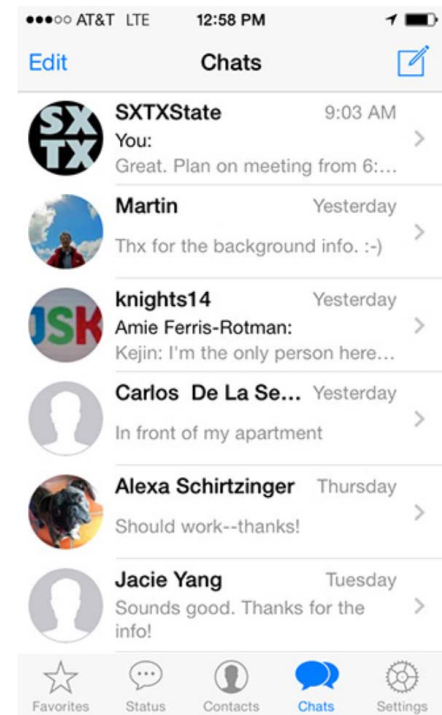
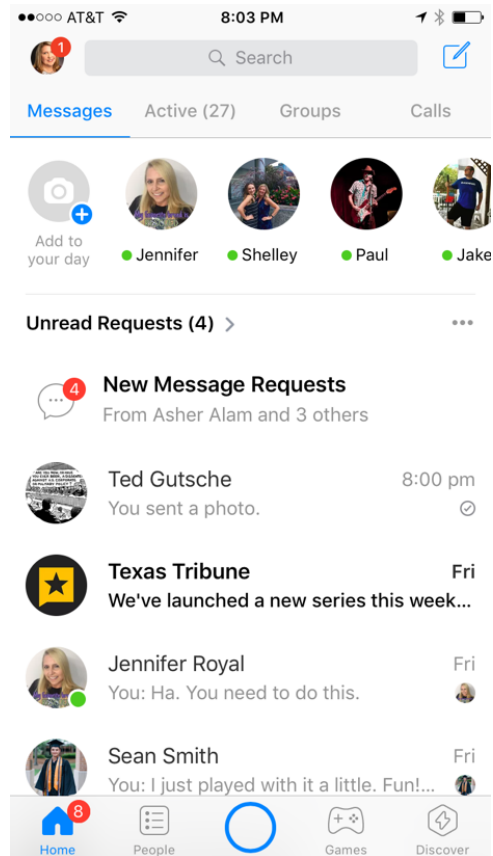


# Google Products



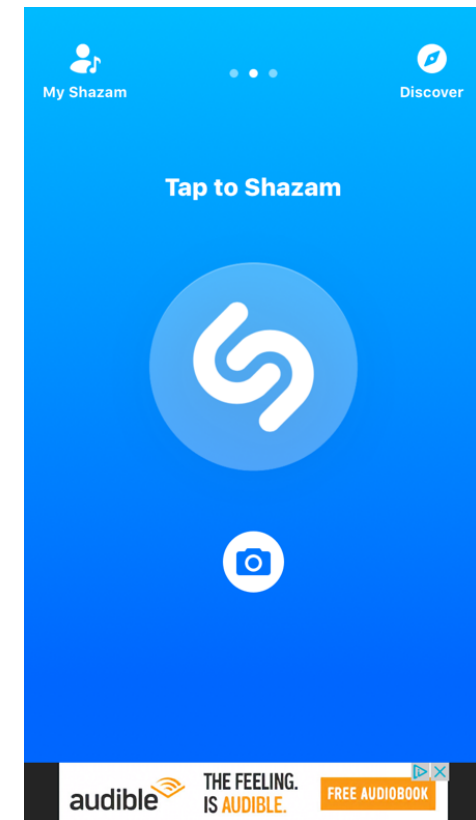
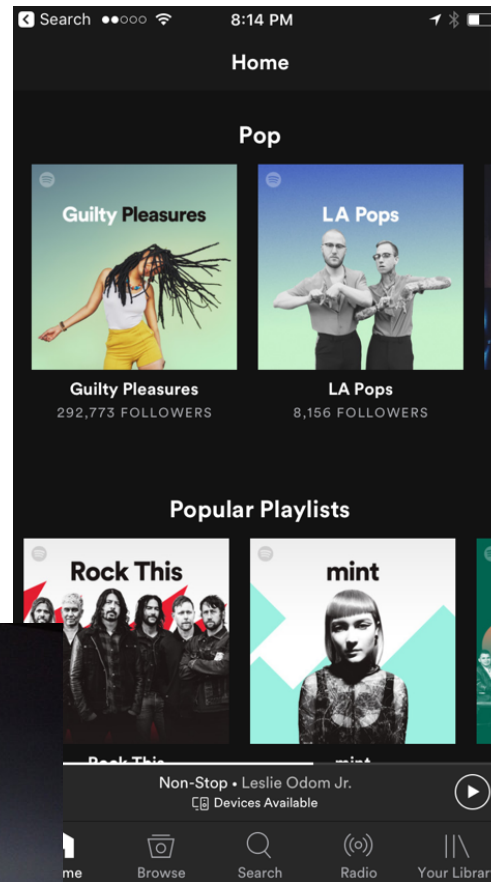
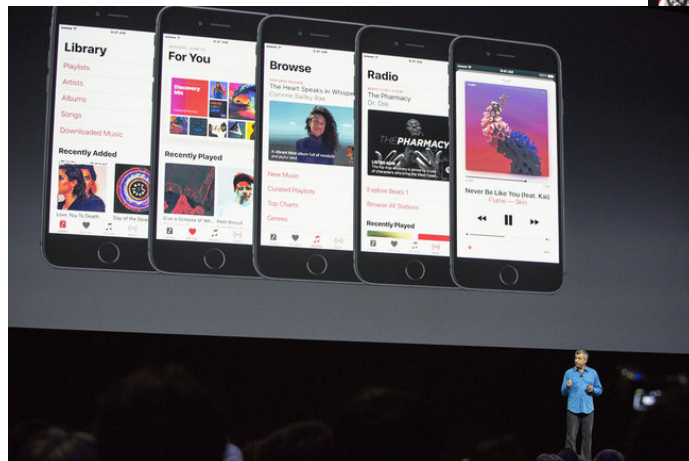
# Messaging

- Facebook Messenger
- Messages
- WhatsApp



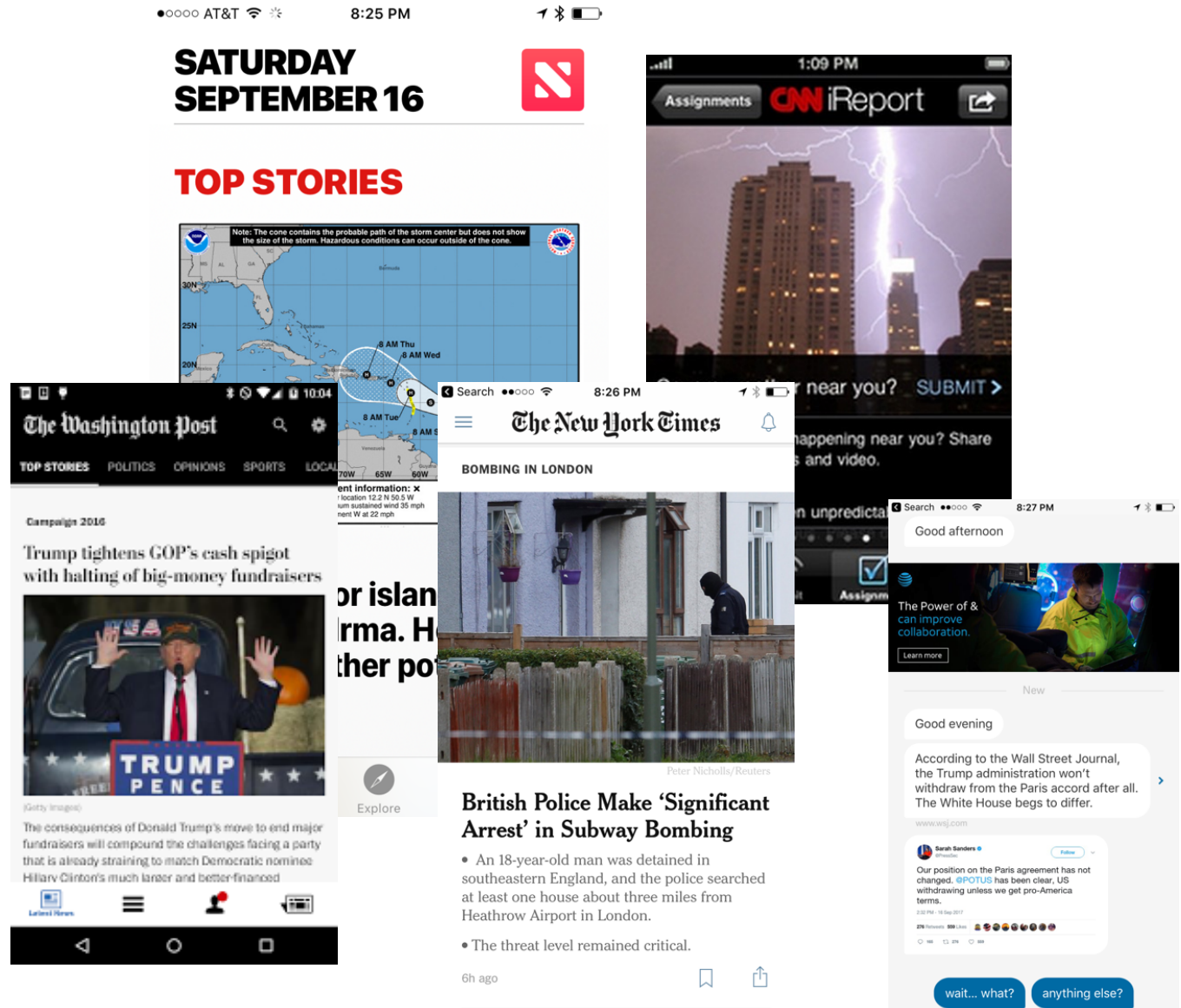
# Music

- Apple Music
- Pandora Radio
- Spotify
- Shazam



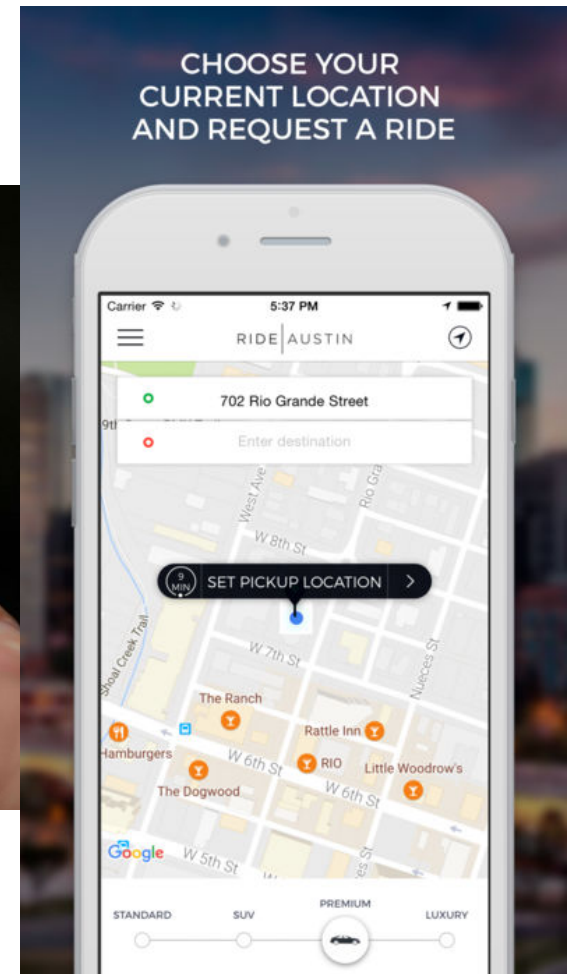
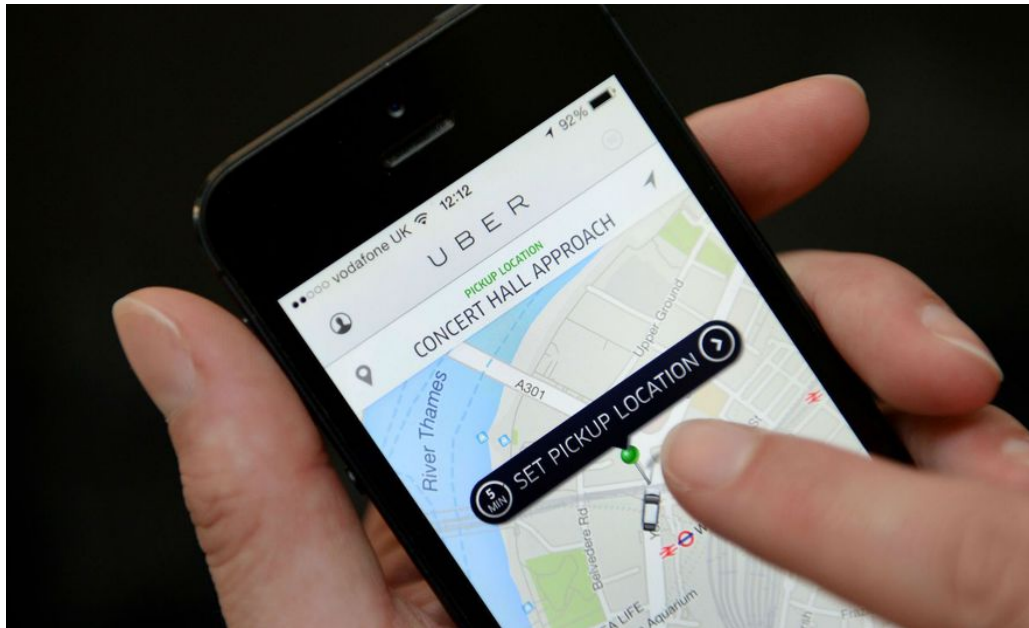
# News

- Apple News
- CNN
- New York Times
- Washington Post
- Quartz



# Transportation

- Uber
- Lyft
- Others





# Augmented Reality

- Pokemon Go
- Snapchat



# Features

- GPS and Location
- Accelerometer
- Touchscreen gestures



## TOUCH GESTURES



TAP



DOUBLE TAP



DRAG



SLIDE



HOLD / PRESS



SWIPE



ROTATE



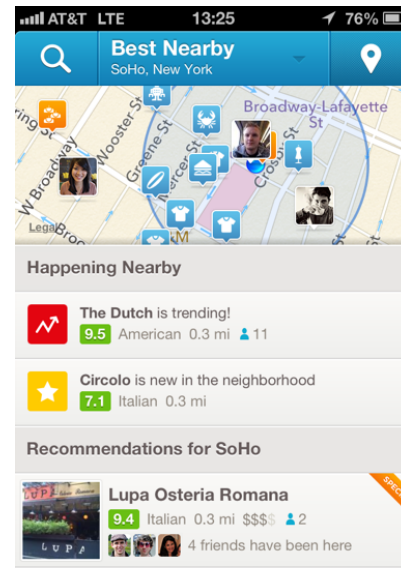
PRESS & DRAG



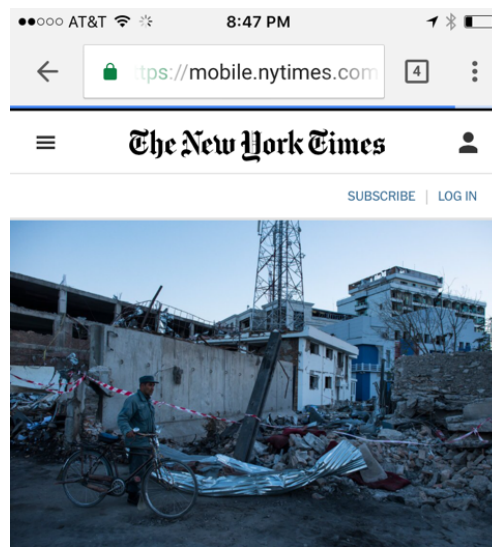
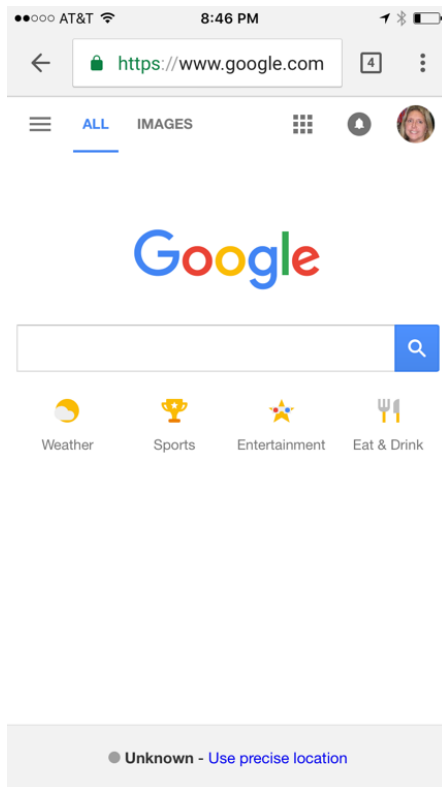
PINCH



SPREAD

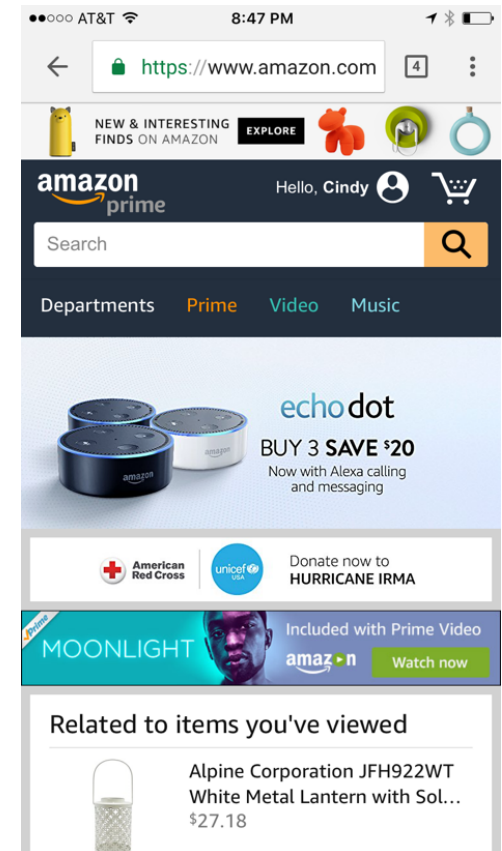


# Responsive Web Sites



## Bracing for Next Decade, U.S. Expands Kabul Security Zone

- The remaking of the Afghan capital almost triples the footprint of a fortresslike Green Zone to take in nearly all ministries and Western compounds.
- The project reflects how unsafe the city's central districts have become and signals

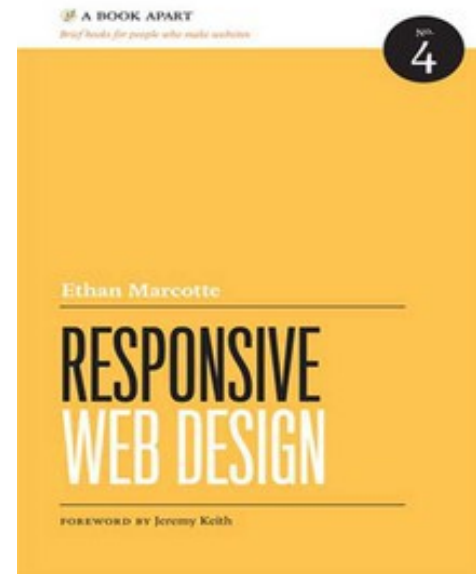


# Responsive Design

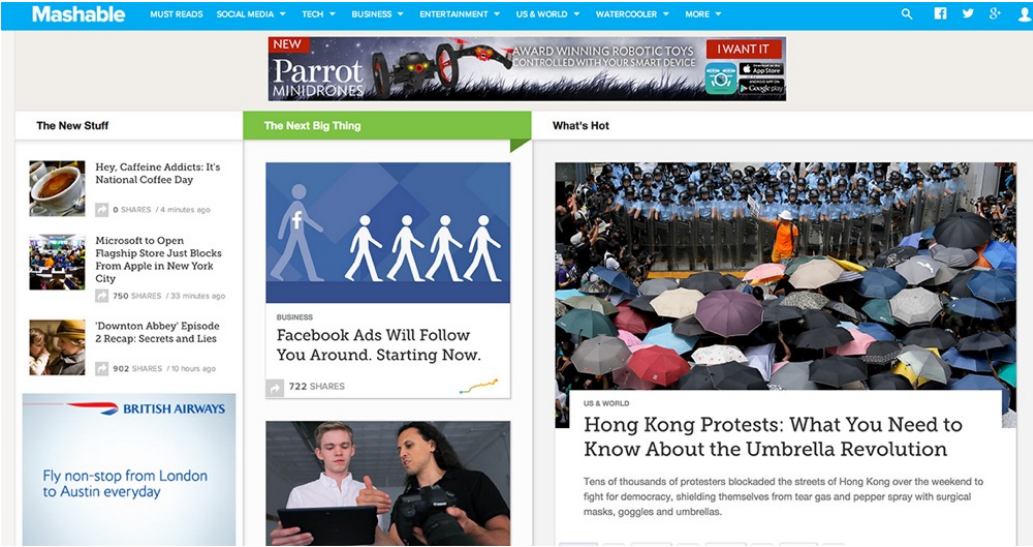
- Developing websites to create an optimal viewing experience, regardless of device.
- Improvements in the ability to view, read, navigate with minimal scrolling, panning or pinching
- Mobile browsing now outpaces desktop
- Input devices vary – mouse, touchscreen
- It's like we are building a house on land that is constantly changing shape, form, dimension

# Responsive Design

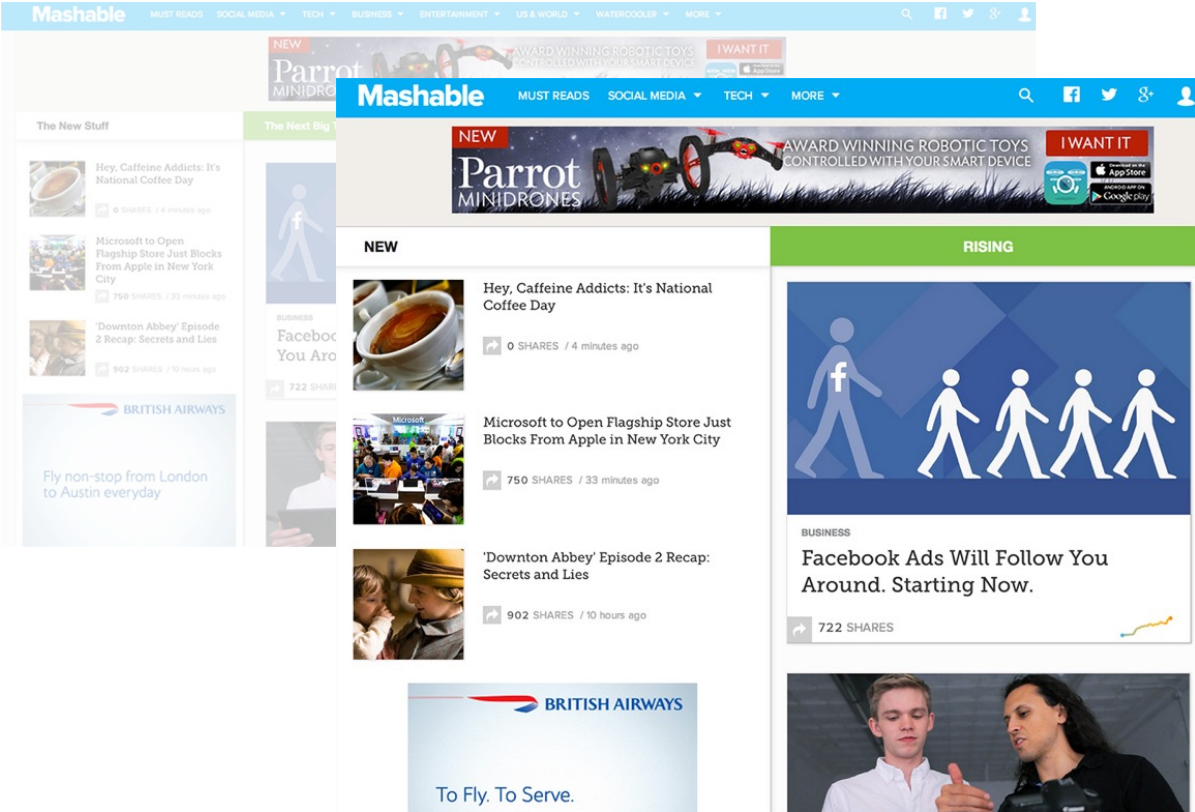
- Ethan Marcotte first articulated challenges in AListApart
- Wrote book Responsive Web Design
- Now all websites need to be developed with responsive characteristics



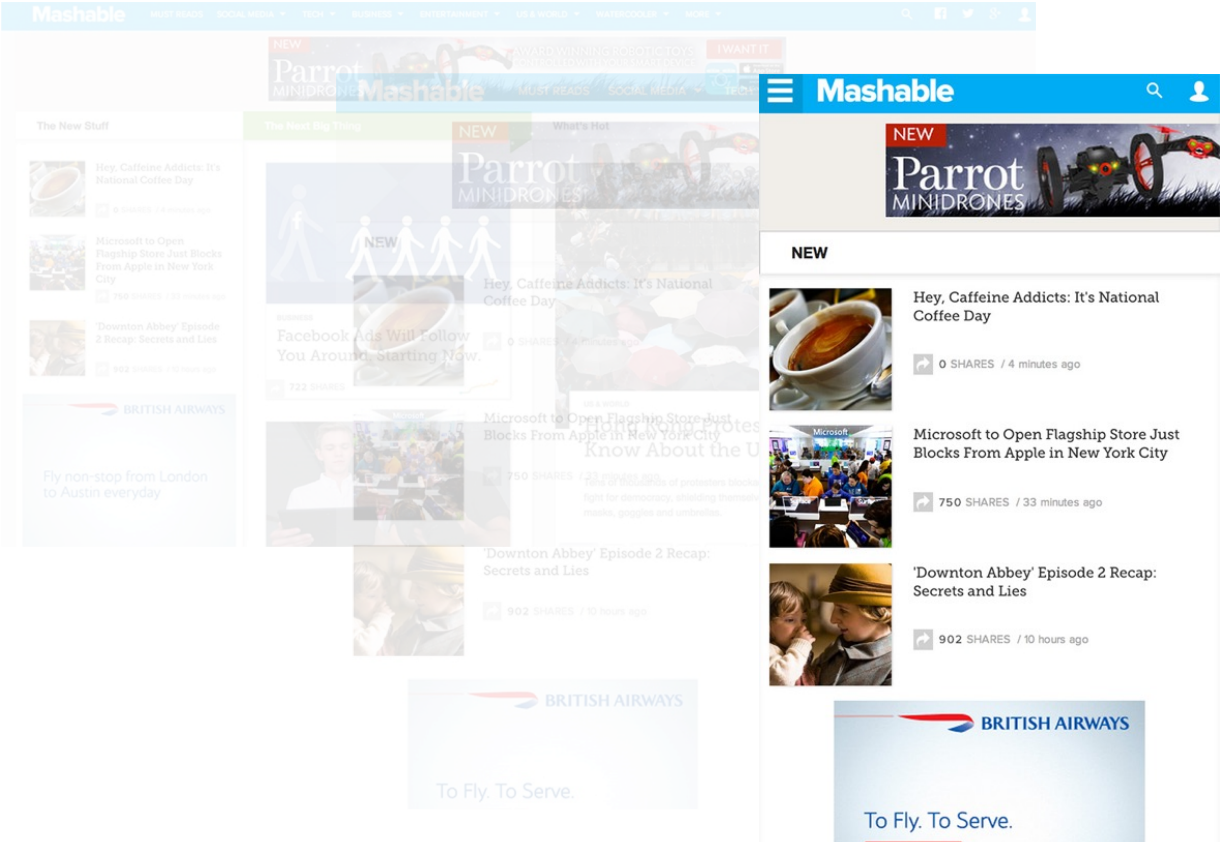
# 3-2-1 Approach



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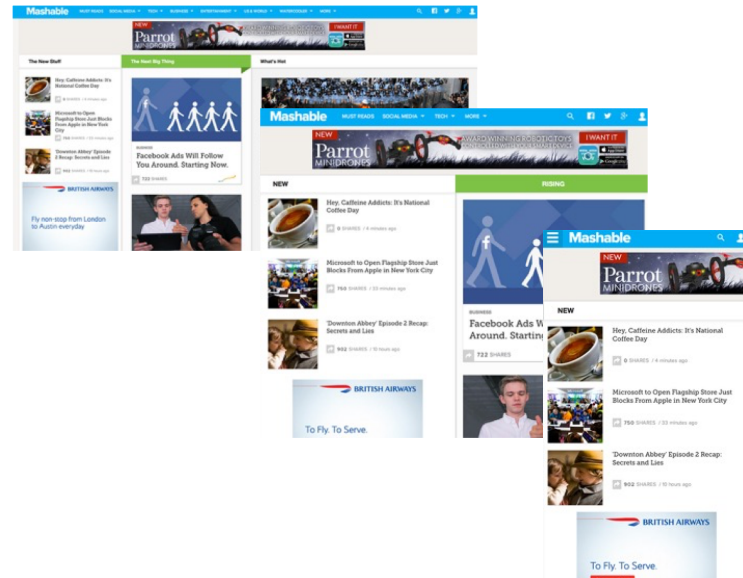
# Pros and Cons

- Pros

- Single website/single url
- Easy SEO
- Easy marketing
- Low cost

- Cons

- Single website may not take advantage of the platform/may not optimize user experience
- Outdated browsers may not display properly



# Mobile Web App

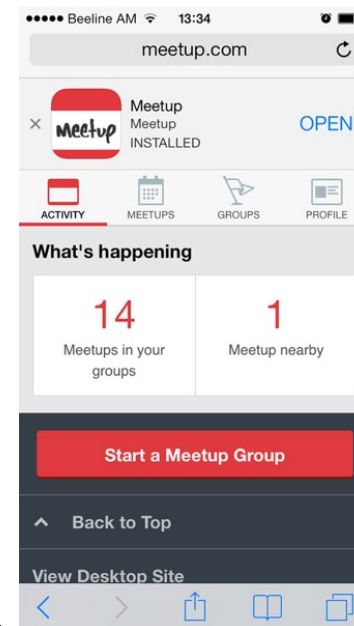
- Pros

- Better user experience
- Faster
- Might cost less than making an app
- Search/accessibility

- Cons

- Multiple URLs
- Maintenance
- Many different devices

- Best for sites you want available in browser (say because you want to have links to them), but need specific functionality - ex. Meetup.com



# Native Mobile App

## Native Mobile App

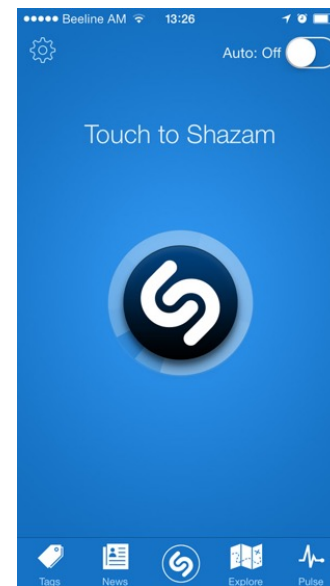
- Pros

- Better user experience
- Load fast, content may be accessible offline
- Feature rich
- Visibility on device

- Cons

- Must develop for each OS
- Not flexible for updates
- Expensive/complicated development
- Can't link to it
- Marketing and SEO – different strategies for native app

- Best for games and apps that require specific functionality/apps that have a very specific/defined purpose – Shazam, Foursquare



# Website Development

- Hypertext Markup Language – HTML

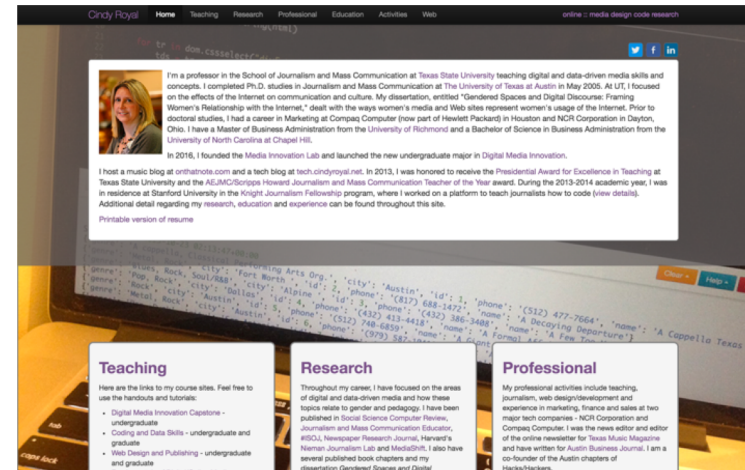
```
<h1>This is the top-level heading</h1>
```

```
<p>This is a paragraph</p>
```

- Cascading Stylesheets – CSS

```
h1 {  
  color: blue;  
  font-size: 32px;  
}
```

- JavaScript – adds interactivity
- Cross platform
- Browser interprets code and displays to users
- File transfer protocol – ftp; site is available on the Web immediately after FTP.



```

<!-- Section #1 -->
<section id="intro" data-speed="6" data-type="background">
  <div class="container">
    <div class="row-fluid rowtop">
      <a href="http://linkedin.com/in/cindyroyal" target="_blank"></a>
      <a href="http://facebook.com/cindyroyal" target="_blank"></a>
      <a href="http://twitter.com/cindyroyal" target="_blank"></a>
    </div>
    <div class="hero-unit">
      <div class="figure"></div>
      <p>I'm a professor in the
School of Journalism and Mass Communication at <a href="http://txstate.edu" target="_blank">Texas State University</a> teaching digital and data-driven media skills and concepts. I completed
Ph.D. studies in Journalism and Mass
Communication at <a href="http://utexas.edu" target="_blank">The University of Texas at Austin</a> in May 2005. At UT,
I focused on the effects of the Internet on communication and culture.
My dissertation, entitled "Gendered Spaces and Digital Discourse:
Framing Women's Relationship with the Internet," dealt with the ways
women's media and Web sites represent women's usage of the Internet.
Prior to doctoral studies, I had a career in Marketing at Compaq
Computer (now part of Hewlett Packard) in Houston and NCR
Corporation in Dayton, Ohio. I have a Master of Business Administration
from the <a href="http://richmond.edu" target="_blank">University of Richmond</a> and a Bachelor of Science in Business
Administration from the <a href="http://unc.edu" target="_blank">University of North Carolina at Chapel Hill</a>.</p>
<p>In 2016, I founded the <a href="http://www.masscomm.txstate.edu/media-innovation.html" target="_blank">Media Innovation Lab</a> and launched the new undergraduate major in <a
href="http://www.masscomm.txstate.edu/degrees-programs/digital-media-innovation.html" target="_blank">Digital Media Innovation</a>.

<p>I host a music blog at <a href="http://onthatnote.com" target="_blank">onthatnote.com</a> and a tech
blog at <a href="http://tech.cindyroyal.net" target="_blank">tech.cindyroyal.net</a>. In 2013, I was honored to receive the <a
href="http://www.finearts.txstate.edu/presidential_excellence_awards.html" target="_blank">Presidential Award for Excellence in Teaching</a> at Texas State University and the <a
href="http://www.shawards.org/" target="_blank">AEJMC/Scripps Howard Journalism and Mass Communication Teacher of the Year</a> award. During the 2013-2014 academic year, I was in residence at
Stanford University in the <a href="http://knight.stanford.edu/news-notes/2013/innovation-from-many-corners-2013-14-u-s-knight-fellows-selected/" target="_blank">Knight
Journalism Fellowship</a> program, where I worked on a platform to
teach journalists how to code (<a href="http://knight.stanford.edu/journalism-challenges/2013/how-can-we-teach-programming-and-data-skills-in-the-journalism-profession/" target="_blank">view
details</a>).

Additional detail regarding my <a href="research.html">research</a>,
<a href="education.html">education</a> and <a href="experience.html">experience</a> can be found throughout this site.
<p><a href="royal_resume.pdf">Printable
version of resume</a></p>

```

```

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      <a href="http://facebook.com/cindyroyal" targe
      <a href="http://twitter.com/cindyroyal" target
    </div>
    <div class="hero-unit">
      <div class="figure"><img class="headshot"

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href="http://www.finearts.txstate.edu/presidential_excelle
href="http://www.shawards.org/" target="_blank">AEJMC/Scri
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details</a>).

      Additional detail regarding my <a href="
<a href="education.html">education</a> and <a href="experi
<p><a href="royal_resume.pdf">Printable
      version of resume</a></p>

    </div>
  </div>
</section>

body {
background: url(../images/scrapper_photo.jpg) 50% 0 scroll;
background-repeat: no-repeat;
}

#intro {
background: url(../images/gray_trans.png) 50% 0 fixed;
//background-color: #ecedd5;
height: auto;
margin: 0 auto;
width: 100%;
position: relative;
//border-bottom: 2px solid darkgray;
//box-shadow: 0 0 50px rgba(0,0,0,0.8);
padding-top: 75px;
padding-bottom: 30px;
//padding: 100px 0;
}
#home {
background: url(../images/scrapper_photo.jpg) 50% 0 fixed;
background-repeat: no-repeat;
background-color: gray;
height: auto;
margin: 0 auto;
width: 100%;
position: relative;
//box-shadow: 0 0 50px rgba(0,0,0,0.8);
//padding: 200px 0;
padding-top: 150px;
padding-bottom: 100px;
}
#about {
//background: url(../images/about.png) 50% 0 fixed;
background-color: #c7c2c2;
height: auto;
margin: 0 auto;
width: 100%;
position: relative;
//box-shadow: 0 0 50px rgba(0,0,0,0.8);
padding-top: 0px;
padding: 25px 0;
color: #000;
}

```

# Elements of Responsive Design

- Fluid Layout for Divs and Images
- Media Queries
- Override iPhone default



# Fluid Layout

```
#section {  
  width: 90%;  
  max-width: 1000px;  
}  
img {  
  max-width: 100%;  
}
```



# Media Queries

- Special rules for presentation at a certain size. Can use multiple media queries to design for a range of styles.
- Most frequently change things like width, height, margin and float, but can change anything like padding, backgrounds and whether something should display or not.

```
@media screen and (max-width: 480px) {  
  #aside { float: none; width: 90%; border: none;}  
  #nav li:first-child {padding-left: .5%;}  
  #nav li {padding: 2%; display: inline;}  
}
```

Can also use min-width for specific sizing

# Override iPhone Default

Include this code to make sure the iPhones display with your media queries, rather than a smaller version of your desktop site.

```
<meta name="viewport" content="initial-scale=1.0, width=device-width" />
```

# Native App Development

- Native to the device
- Interactive development environment
- Xcode for iPhone iOS  
Android Studio for Android
- Swift programming language
- Must submit application to a store (App Store or Google Play) for download

