

# LocalStorage i JavaScript

# Att spara data hos användaren!

- ... alltså på klientsidan
- För att komma ihåg lokala inställningar
- För att spara gammal data, t.ex. från ajax-anrop
- För att snabba upp webbapplikationen
- M.m.

Kan vi inte detta?

För att göra innehållet personligare, anpassa och mäta annonser och erbjuda en säkrare användarupplevelse använder vi cookies. Genom att klicka eller navigera på webbplatsen godkänner du att vi använder cookies för att samla information på och utanför Facebook. Läs mer, inklusive om tillgängliga kontrollfunktioner: [Policy för cookies](#)



# facebook

E-post eller telefon

Lösenord

Logga in

[Glömt kontot?](#)

Facebook hjälper dig att hålla kontakten med  
vänner och familj.



## Gå med

Det är gratis och kommer alltid att vara det.

 Efternamn eller e-post

1993 ▼

Varför måste man tala om när  
man är född?

lan

konto godkänner du våra  
att du har läst vår datapolicy,  
användning av cookies. Du kan  
ar från Facebook och kan när som

to

ändis, ett band eller företag.





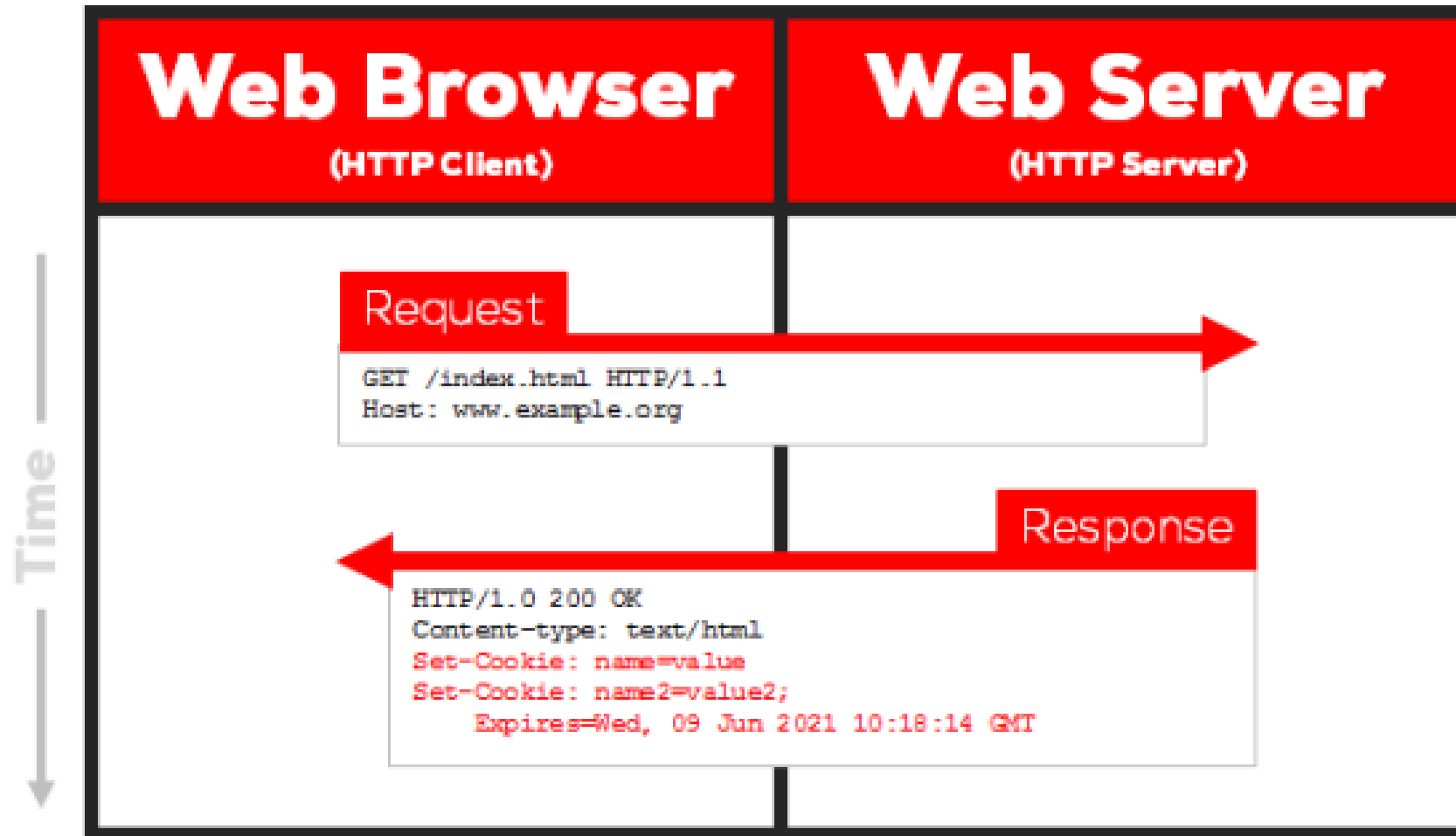
# Cookies

## Egenskaper

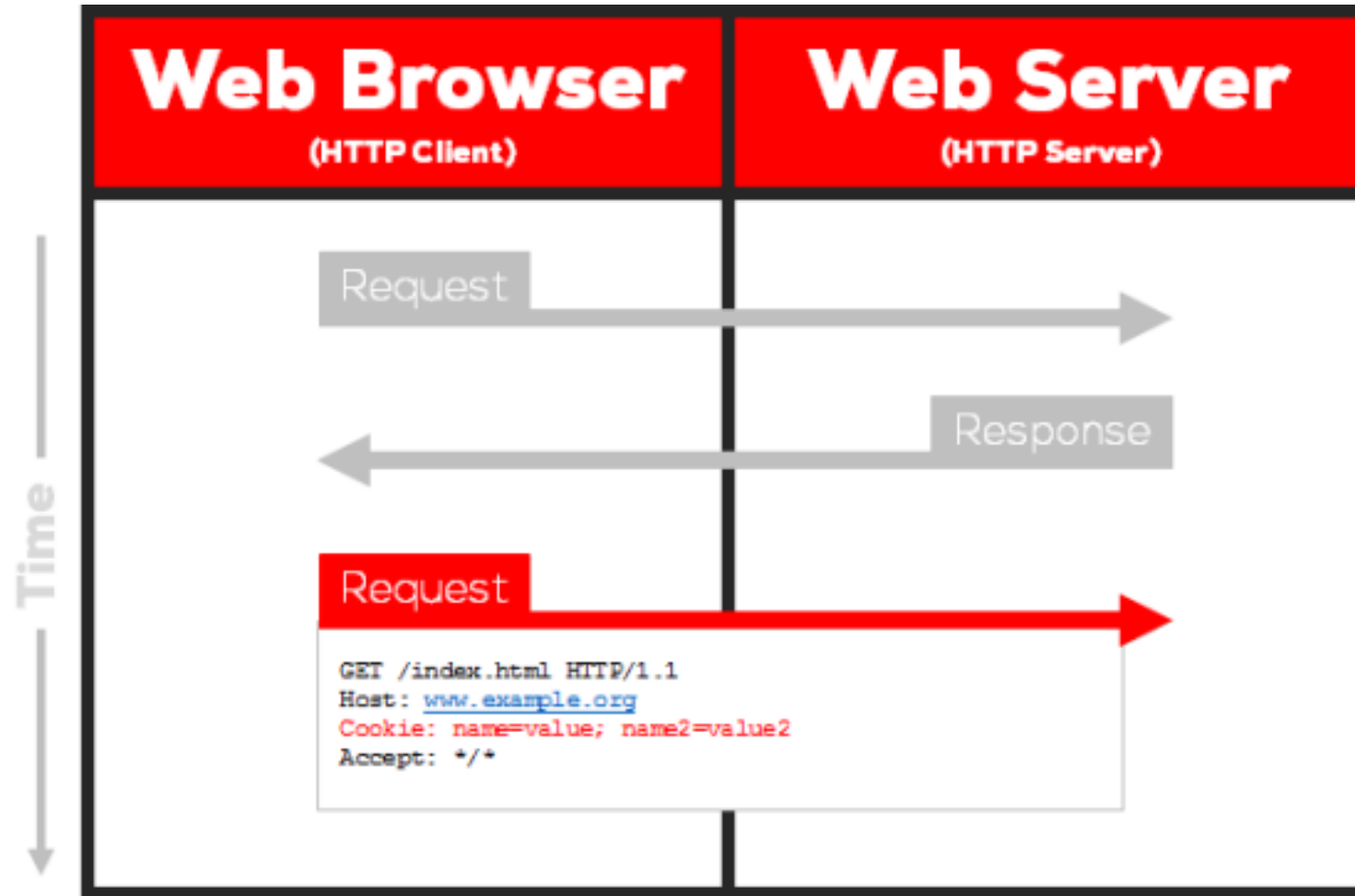
- Skickas med till servern automatiskt vid HTTP-anrop
- Kan användas för hela domäner (inkl. subdomäner)
- Utgångsdatum

## Nackdelar

- Är väldigt små (4kb)
- Skickas med vid *varje* anrop till servern
- En enda text-sträng



<https://www.twilio.com/blog/wp-content/uploads/2014/06/6-19-2014-10-43-17-PM.png>



<https://www.twilio.com/blog/wp-content/uploads/2014/06/6-19-2014-10-44-43-PM.png>



# Hur skriver man cookie?

```
// Skapa en cookie, med nyckel och värde
document.cookie = "Name=Anton";
document.cookie = "Course=Flerplattformapplikationer";

console.log(document.cookie);
//#=> "Name=Anton; Course=Flerplattformapplikationer"
```

[https://www.w3schools.com/js/js\\_cookies.asp](https://www.w3schools.com/js/js_cookies.asp)



# LocalStorage

## Fördelar

- Egenskaper i ett objekt (nyckel/värde)
- Inget utgångsdatum
- Lokal till sin subdomän
- Cirka 5mb

## Nackdelar

- Fungerar inte alltid i äldre webbläsare
- Också bara strängar

# Scenario för att spara data hos klienten

- Snabba upp
  - Spara data
  - Minska http-anrop
- Förbättra användarupplevelsen
  - "Single login"
  - Spara data utan inloggning
  - Komma ihåg en webbapplikations tillstånd
  - Snabba upp formulärfyllande (komma ihåg användaren)
- Appar som bara lever hos klienten (en todo-lista?)

Hur använder vi det?

# Spara ett värde i localStorage

```
// Sparar ett värde i localStorage  
localStorage.setItem("name", "Anton");  
localStorage.name = "Anton";  
localStorage["name"] = "Anton";
```

# Hämta ett värde i localStorage

```
// Hämtar ett värde i localStorage  
localStorage.getItem("name");  
localStorage.name;  
localStorage["name"];
```

# Radera ett värde i localStorage

```
// Ta bort ett värde i localStorage  
localStorage.removeItem("name");  
delete localStorage.name;  
delete localStorage["name"];
```



# Ta bort **alla** värde i localStorage

```
// Ta bort alla värde i localStorage  
localStorage.clear();
```

Om vi vill spara mer än en  
sträng...



**JSON**

Demo!

# Del 2 - Projekt

# Tre val

1. Göra en mobil-/tabletanpassad/desktop webbplats av en befintlig (ej anpassad) webbplats
  - Fokus på användbarhet/gränssnitt för olika enheter
2. Bygga en egen applikation mot *minst ett API*
  - Bygga en applikation som ser mervärde/förenkling av datakälla
3. Bygga en egen applikation med datavisualisering (d3.js)
  - Bygga en applikation med fokus på datavisualisering för data

Grupper?



**Bootstrap**





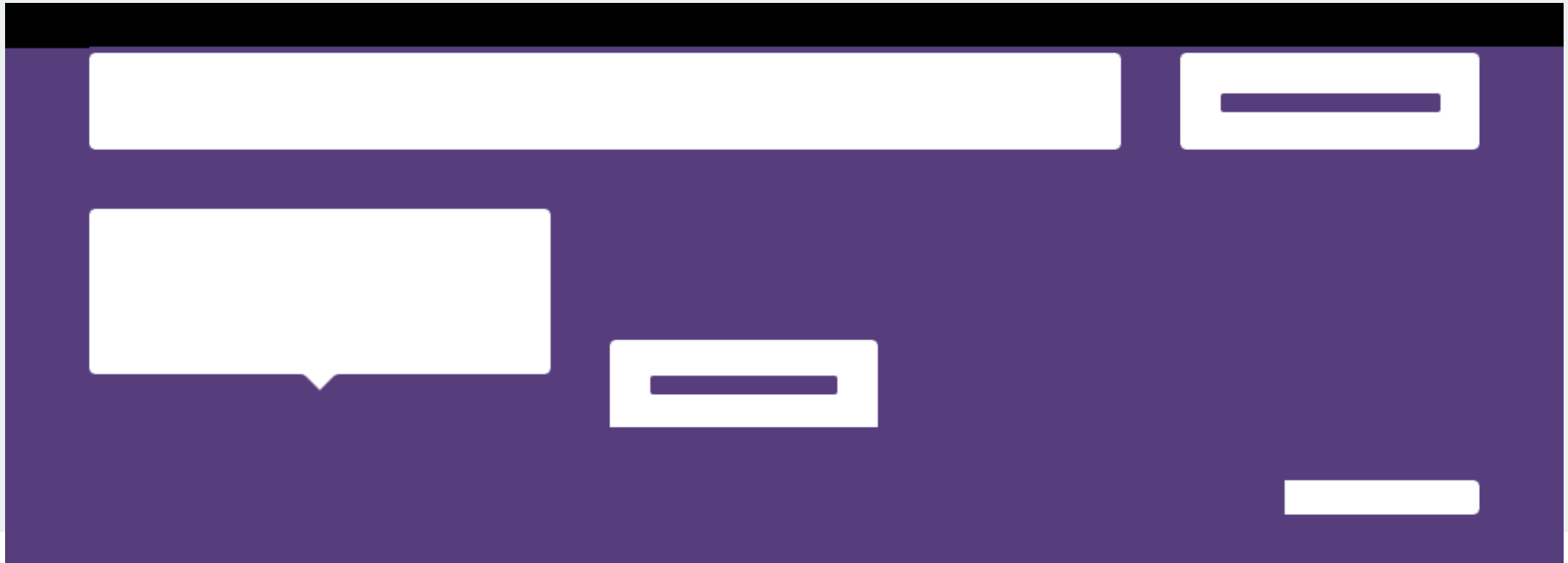
# Bootstrap Basic

[http://www.slideshare.net/perthmon/work-press-meetup-bootstrap?qid=5edf1d96-0bc3-4987-b9d6-4a6c854c0479&v=&b=&from\\_search=3](http://www.slideshare.net/perthmon/work-press-meetup-bootstrap?qid=5edf1d96-0bc3-4987-b9d6-4a6c854c0479&v=&b=&from_search=3)



# Front-end Framework

HTML, CSS, and JS framework for  
developing responsive, mobile first projects on the web.



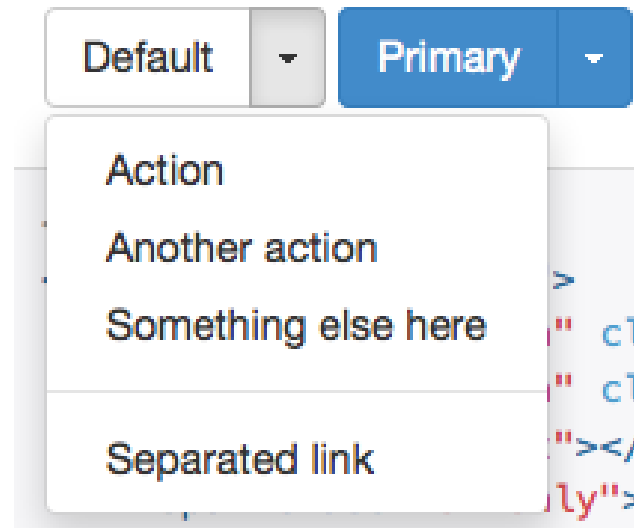
## Ready-to-use Web Elements

HTML / CSS elements for button, form, table, image, navbar, label, progress bar, alert etc.

# EXAMPLES

## of Bootstrap Elements

#	Column heading	Column heading	Column heading
1	Column content	Column content	Column content
2	Column content	Column content	Column content
3	Column content	Column content	Column content
4	Column content	Column content	Column content
5	Column content	Column content	Column content
6	Column content	Column content	Column content
7	Column content	Column content	Column content
8	Column content	Column content	Column content
9	Column content	Column content	Column content



Oh snap! You got an error!

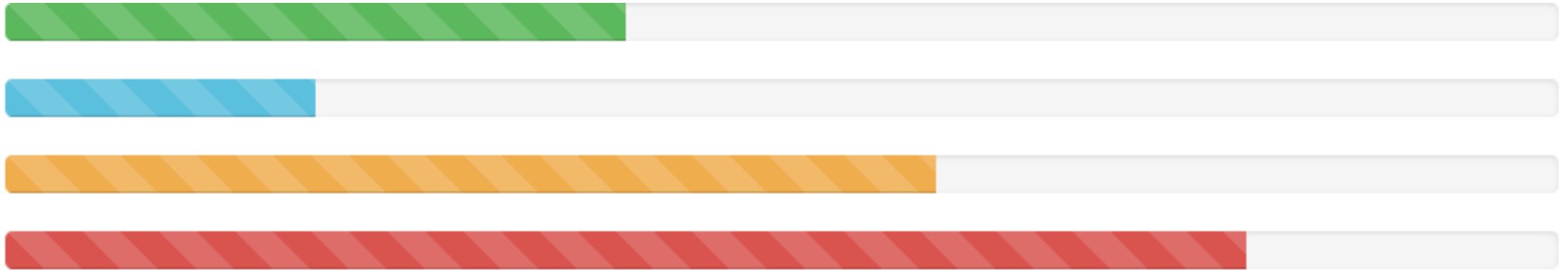










Change this and that and try again. Duis mollis, est non commodo luctus, nisi erat porttitor ligula, eget lacinia odio sem nec elit. Cras mattis consectetur purus sit amet fermentum.

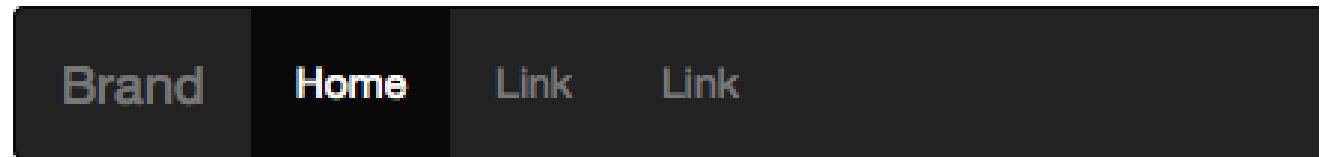
Take this action

Or do this

# more EXAMPLES of Bootstrap Elements



 glyphicon glyphicon-music	 glyphicon glyphicon-search	 glyphicon glyphicon-heart	 glyphicon glyphicon-star
 glyphicon glyphicon-th	 glyphicon glyphicon-th-list	 glyphicon glyphicon-ok	 glyphicon glyphicon-remove



# Websites created by Bootstrap

<http://unroll.me>



Your Rollup

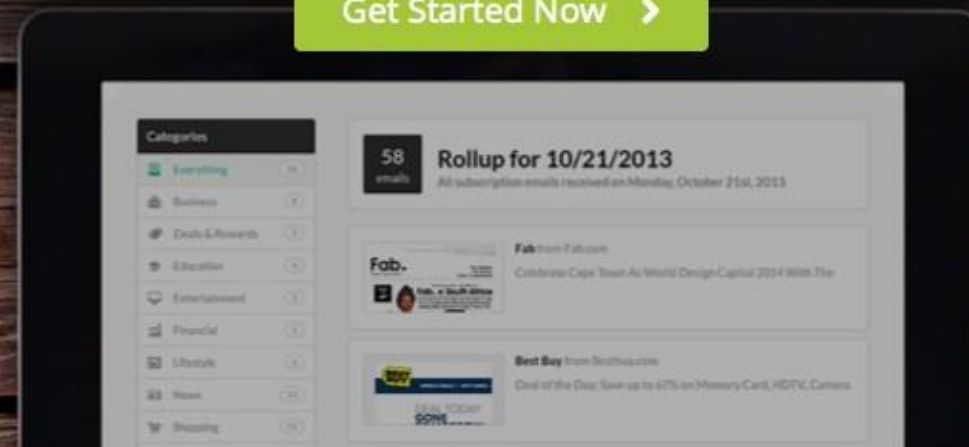
Edit Subscriptions

hotwora@gmail.com ▼

## Clean up your inbox

Save time on email with Unroll.me [▶ Watch our video](#)

Get Started Now ▶



# Websites created by Bootstrap

[www.fliplingo.com](http://www.fliplingo.com)

**Fliplingo.**

TOUR

LANGUAGES

PRICING

LOGIN

GO GLOBAL

## More Global. No More Barriers.

Fliplingo is the simplest way to translate your tweets, with real human translators.

LEARN MORE

GET STARTED — IT'S FREE!



My American Tweets  
I love Fliplingo!



My Swedish Tweets  
Jag älskar Fliplingo!

# Why Bootstrap?

- Save 100+ hours of coding
- Easy to use web elements
- Quick responsive prototype / website
- Great documentation



# Bootstrap Package

- **CSS** - bootstrap.css
- **JS** - bootstrap.js
- **Icon Fonts** - glyphs-halflings-regular.ttf

# Bootstrap CDN

[www.bootstrapcdn.com](http://www.bootstrapcdn.com)

## Quickstart

### Complete CSS

```
//maxcdn.bootstrapcdn.com/bootstrap/3.2.0/css/bootstrap.min.css
```

### Complete JavaScript

```
//maxcdn.bootstrapcdn.com/bootstrap/3.2.0/js/bootstrap.min.js
```

## Mad Love



**Lewis Lehe**  
@LewisLehe

Follow

this rules! #BootstrapCDN:  
@twBootstrap hosted by  
@MaxCDN bootstrapcdn.com  
#webperf via @jdorfman

11:48 PM - 8 Nov 2013

2 RETWEETS



**Tim Watson**  
@visualinventor

Follow

Twitter Bootstrap gets a speed  
bump via CDN serving.

[bootstrapcdn.com](http://bootstrapcdn.com)

# Bootstrap Components

[Start Workshop](#)

# What is Grid in web design?

The screenshot displays the Drupal.org homepage, which is organized into a clear grid structure. At the top is a blue header with navigation links and a search bar. Below the header, the main content area is divided into three primary columns. The first column, 'Why Choose Drupal?', contains text about the platform's flexibility and a 'Get Started with Drupal' button. The second column, 'Sites Made with Drupal', features a screenshot of The Economist website and mentions its migration to Drupal. The third column, 'Develop with Drupal', lists statistics on modules, themes, and developer activity. A 'Get Drupal Security Announcements' box is positioned below these columns. At the bottom, a world map highlights the global reach of Drupal, with a callout for 'DrupalCon Chicago March 7-10 2011'. To the right of the map is a 'News' section with links to recent updates and announcements.

Drupal

Come for the software, stay for the community

Drupal is an open source content management platform used to power millions of websites and software applications. It's built, used, and supported by an active and diverse community of people from around the world.

Drupal Homepage Login / Register

Search Drupal.org

Refine your search

- Modules
- Themes
- Documentation
- Forums & Issues
- Groups

### Why Choose Drupal?

Drupal can be used to build everything from personal blogs to sophisticated enterprise applications. It features thousands of add-on modules and design themes that enable you to build any kind of site you can imagine. Drupal is free software that is flexible, robust, and constantly being improved by a community of hundreds of thousands of passionate users. Come join us!

Get Started with Drupal

### Sites Made with Drupal

The Economist

The Economist.com data migration to Drupal

Drupal is used by some of the biggest sites on the Web, like The Economist, Examiner.com and The White House. Read more Drupal success stories.

### Develop with Drupal

Drupal is extensible, powerful, scalable, and flexible.

**Current activity:**  
6,988 modules  
862 themes  
3,740 active developers

**This week:**  
31 new modules  
1,355 code commits  
5,410 issue comments

Drupal API  
Download Drupal  
Security Info  
Handbook  
Modules and Themes  
Explore Drupal modules and themes

Get Drupal Security Announcements  
Keep your site secure.

708,149 people in 230 countries speaking 182 languages power Drupal.

DrupalCon Chicago  
March 7-10 2011

News Docs Updates Forum Posts Commits

Support Drupal by voting in the 2010 Open Source Awards  
October 13, 2010

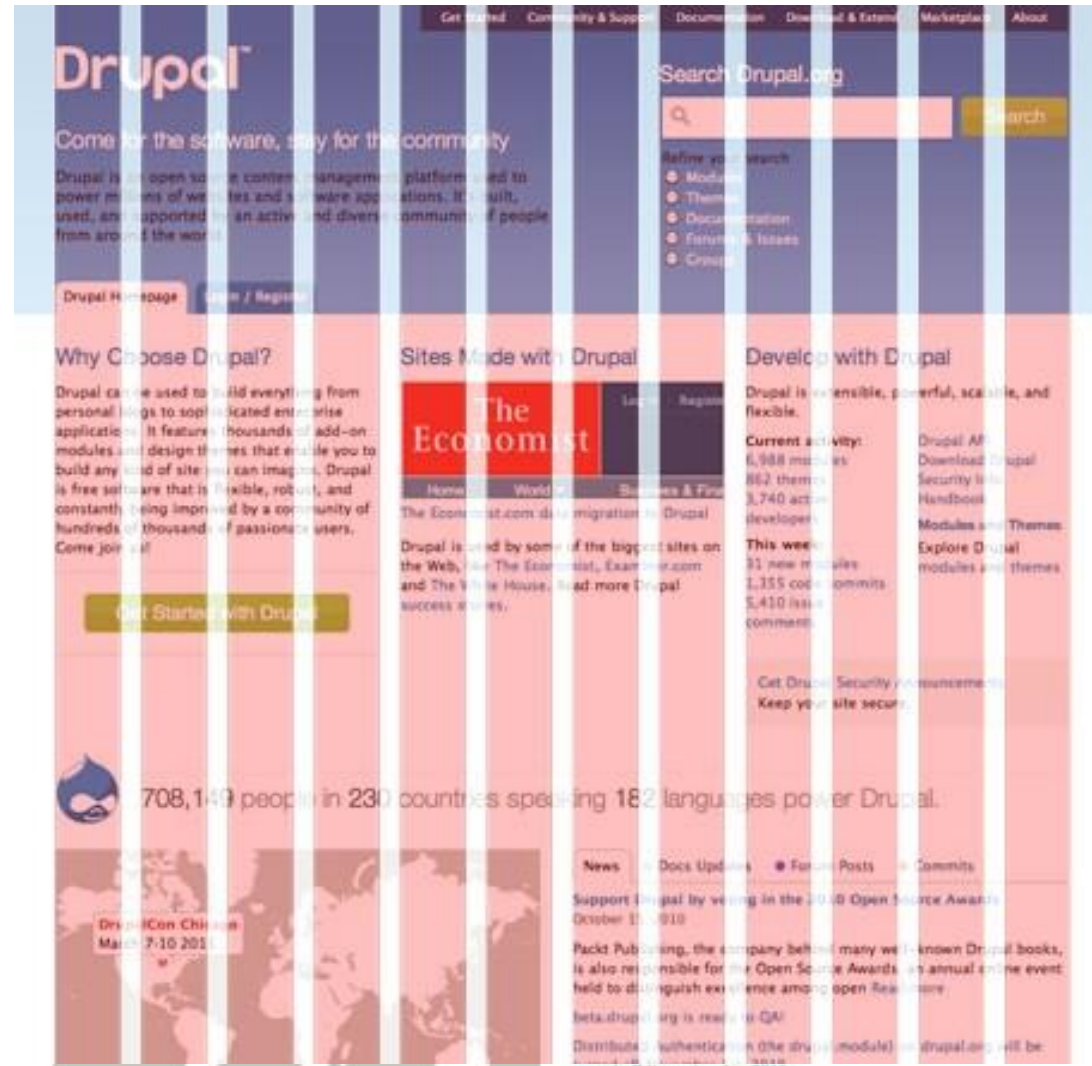
Packet Publishing, the company behind many well-known Drupal books, is also responsible for the Open Source Awards, an annual online event held to distinguish excellence among open [Read more](#)

beta.drupal.org is ready to GO!

Distributed Authentication (the drupal.module) on drupal.org will be moved off November 1st, 2010

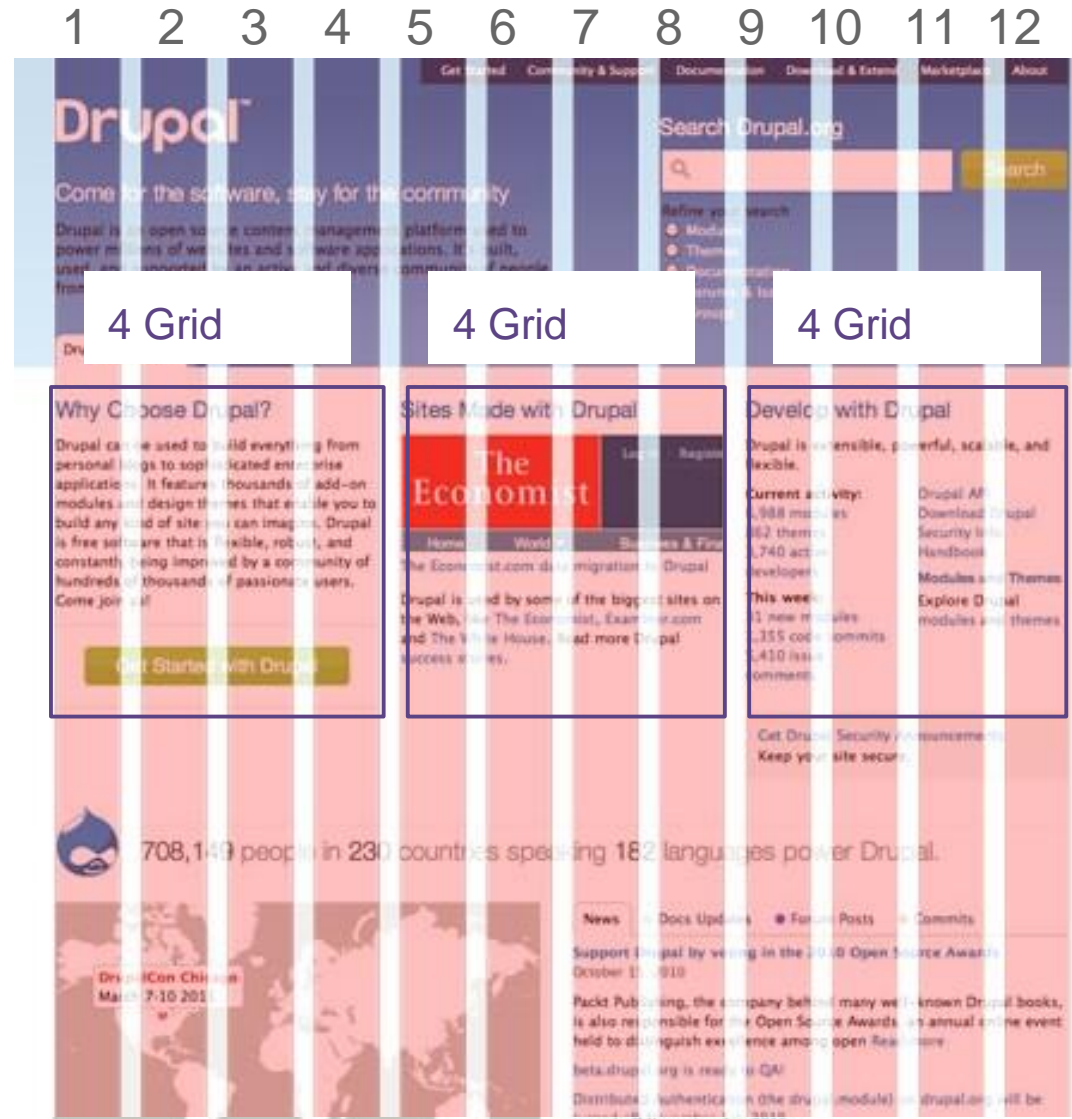
# What is Grid in web design?

1 2 3 4 5 6 7 8 9 10 11 12



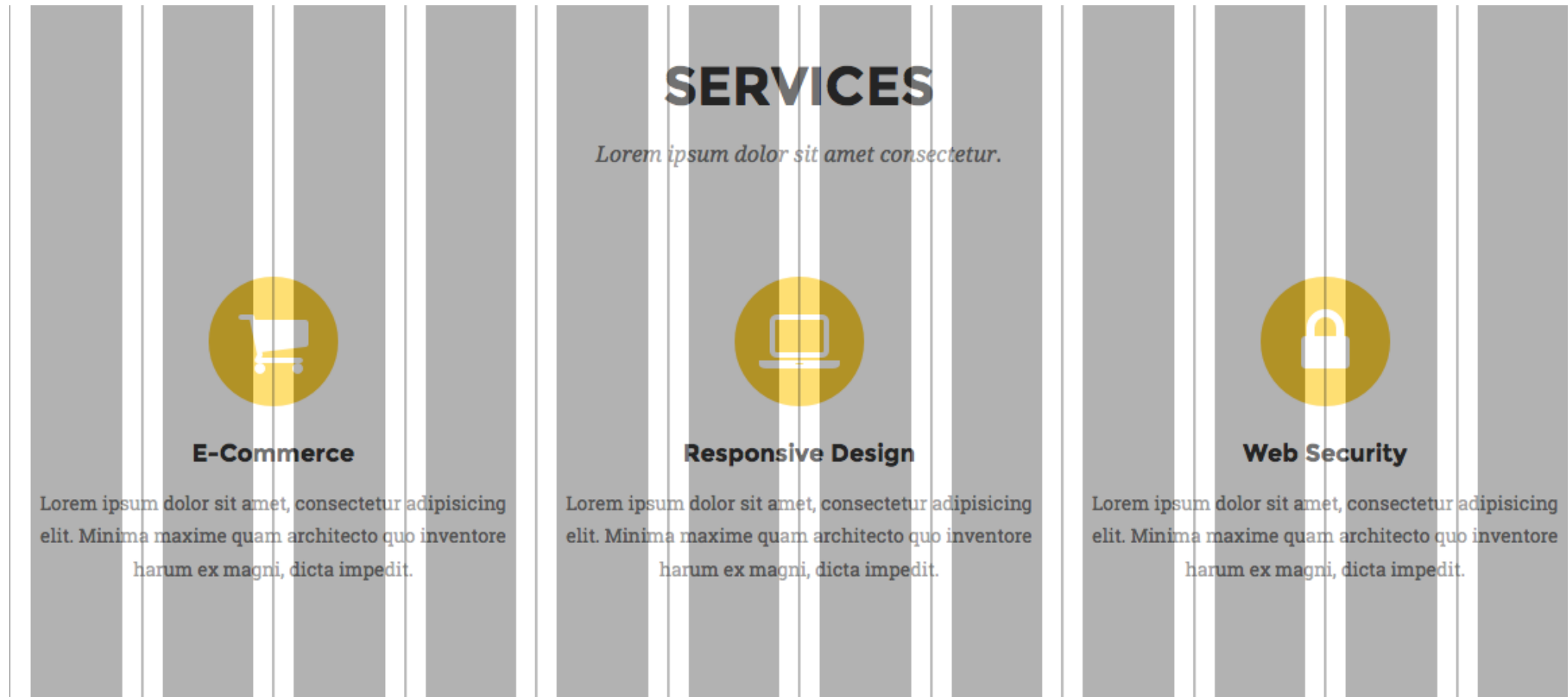
12 Grid

# What is Grid in web design?



4 Grids x 3 Columns  
= 12 Grids

# Bootstrap Grid



12 Responsive Grid

# 4 Sizes of Bootstrap Grid

Size Name	Screen Size	CSS Class
Extra Small Devices (Phone)	0 - 767 px	.col-xs-1 ~ .col-xs-12
Small Devices (Tablet)	768 - 991 px	.col-sm-1 ~ .col-sm-12
Medium Devices (Desktop)	992 - 1219 px	.col-md-1 ~ .col-md-12
Large Devices (Large screen desktop)	1200px +	.col-lg-1 ~ .col-lg-12



# Bootstrap Grid Example

<http://bit.ly/bs-agency>



**Round Icons**  
*Graphic Design*



**Startup Framework**  
*Website Design*



**Treehouse**  
*Website Design*

**How many grids in each box?**

# Bootstrap Grid Example



4 grids x 3 Columns

# Bootstrap Grid Example

## HTML

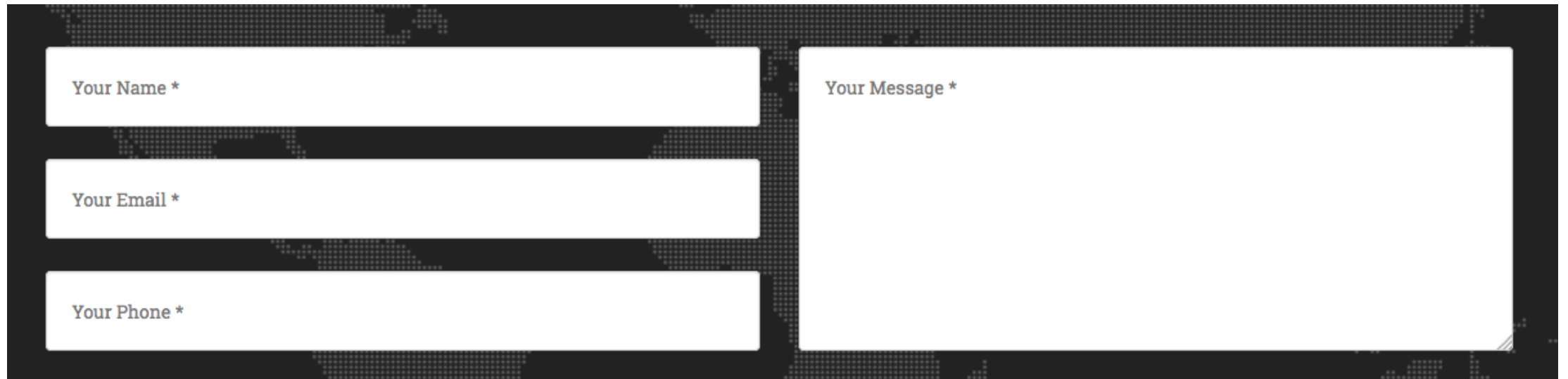
```
1 <div class="container">
2   <div class="row">
3     <div class="col-md-4">
4       ...
5     </div>
6     <div class="col-md-4">
7       ...
8     </div>
9     <div class="col-md-4">
10      ...
11    </div>
12  </div><!-- row -->
13 </div><!-- container -->
14
```

# Bootstrap Grid Example

```
⚙ HTML
1 <div class="container">
2   <div class="row">
3     <div class="col-md-4">
4       ...
5     </div>
6     <div class="col-md-4">
7       ...
8     </div>
9     <div class="col-md-4">
10      ...
11    </div>
12  </div><!-- row -->
13 </div><!-- container -->
14
```



# Bootstrap Grid Example 2

A screenshot of a web form using the Bootstrap grid system. The form is set against a dark background with a subtle world map pattern. It consists of two main columns. The left column contains three stacked text input fields, each with a label and an asterisk: 'Your Name \*', 'Your Email \*', and 'Your Phone \*'. The right column contains a single, larger text area with the label 'Your Message \*'. The layout demonstrates a 2-column grid where the first column has a width of 4 grid units and the second column has a width of 4 grid units, totaling 8 grid units.

Your Name \*

Your Email \*

Your Phone \*

Your Message \*

**How many grids in each box?**

# Bootstrap Grid Example 2

## 6 grids x 2 Columns

# Bootstrap Grid Example 2

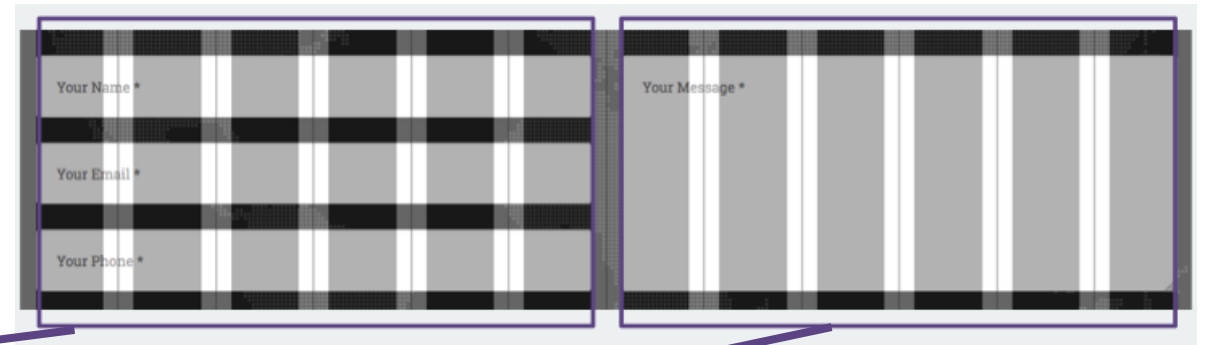
## HTML

```
1 <div class="container">
2   <div class="row">
3     <div class="col-md-6">
4       ...
5     </div>
6     <div class="col-md-6">
7       ...
8     </div>
9   </div><!-- row -->
10 </div><!-- container -->
11
12
```

# Bootstrap Grid Example 2

⚙ HTML

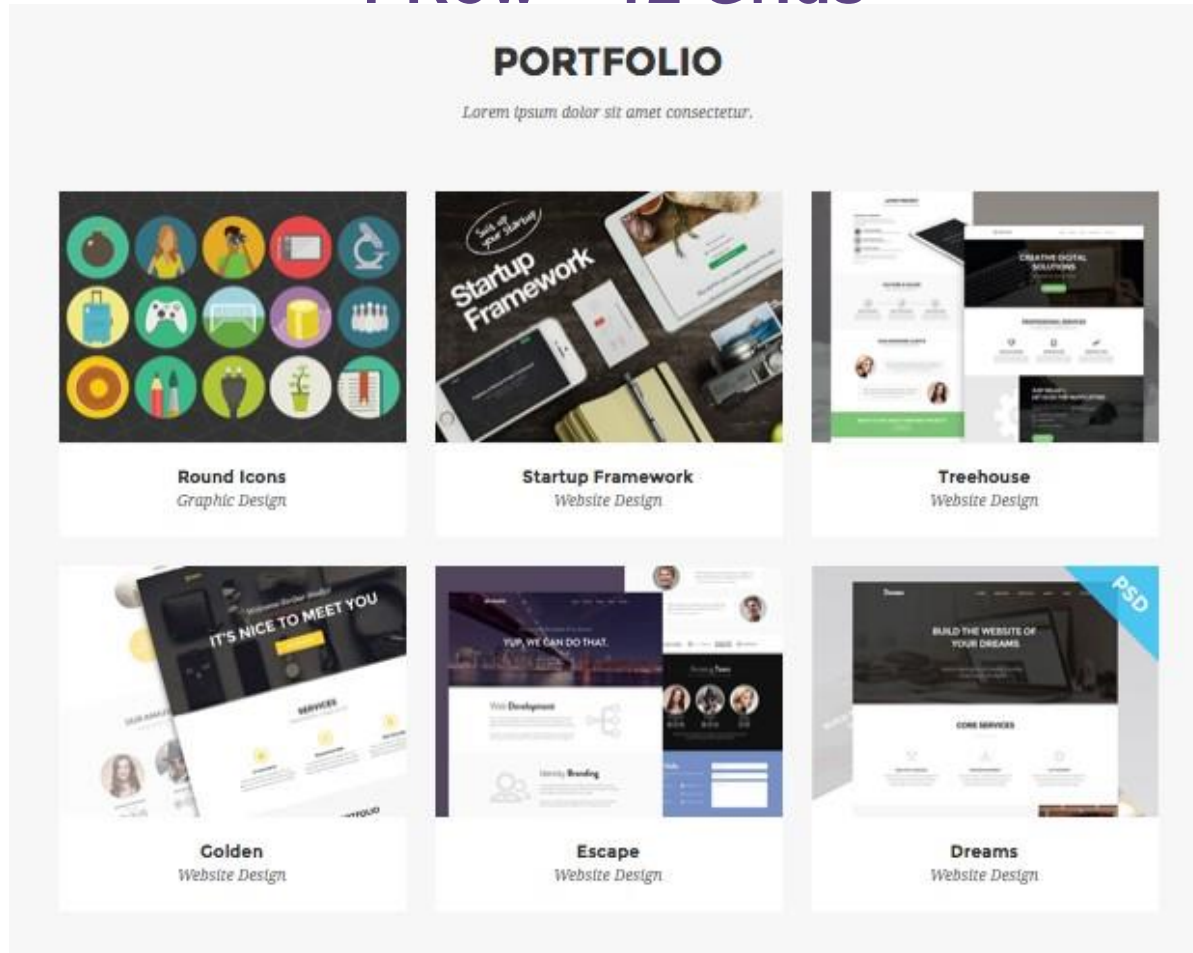
```
1 <div class="container">
2   <div class="row">
3     <div class="col-md-6">
4       ...
5     </div>
6     <div class="col-md-6">
7       ...
8     </div>
9   </div><!-- row -->
10 </div><!-- container -->
11
12
```



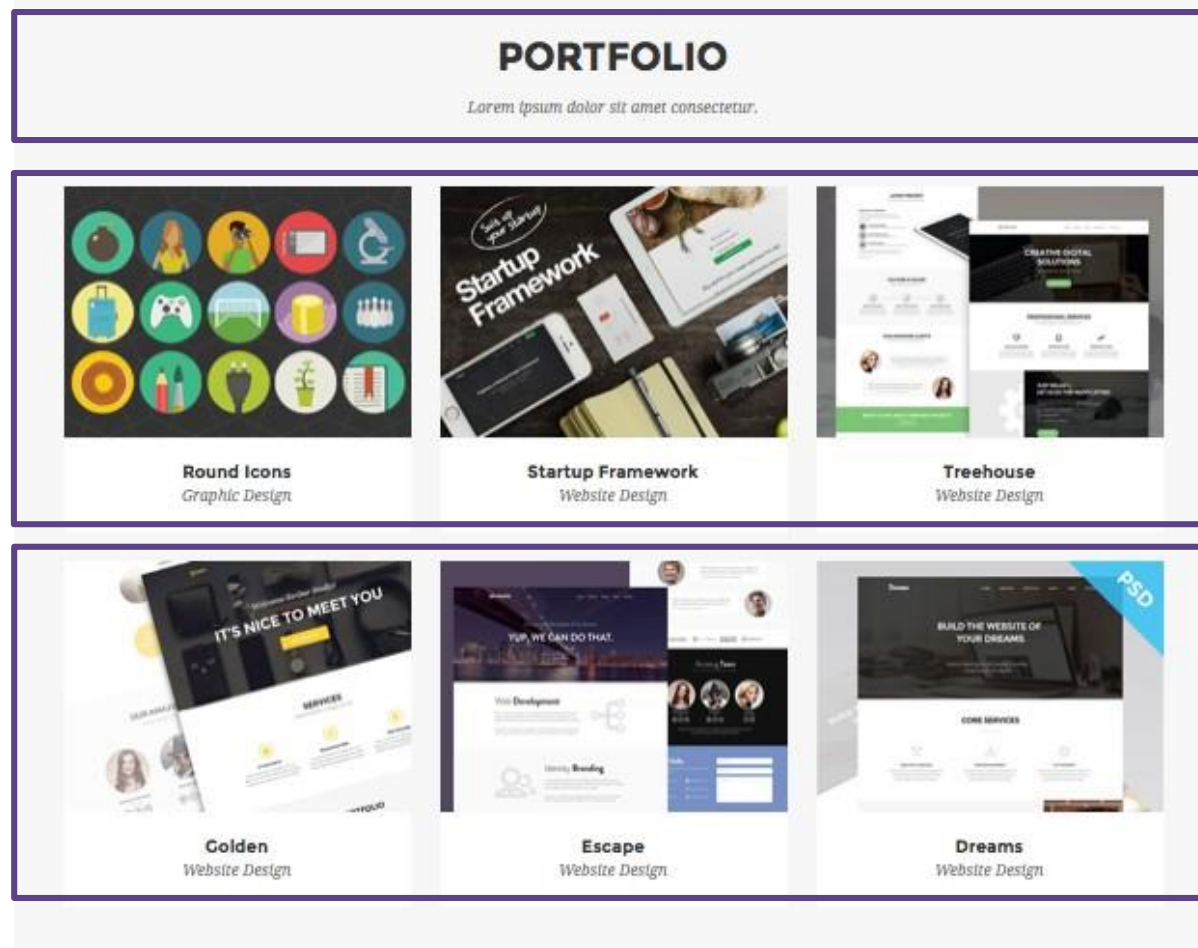


# Bootstrap Row

1 Row = 12 Grids



# Bootstrap Row

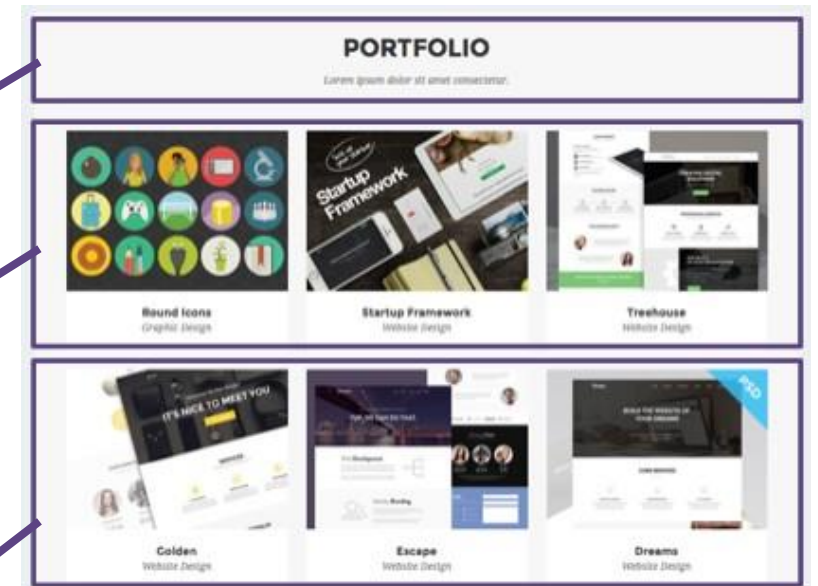


3 Rows



# Bootstrap Row Example

```
HTML
1 <div class="container">
2   <div class="row">
3     <div class="col-md-12"> ... </div>
4   </div><!-- row -->
5   <div class="row">
6     <div class="col-md-4"> ... </div>
7     <div class="col-md-4"> ... </div>
8     <div class="col-md-4"> ... </div>
9   </div><!-- row -->
10  <div class="row">
11    <div class="col-md-4"> ... </div>
12    <div class="col-md-4"> ... </div>
13    <div class="col-md-4"> ... </div>
14  </div><!-- row -->
15 </div><!-- container -->
16
```



# Bootstrap Responsive Grid



**Round Icons**  
*Graphic Design*



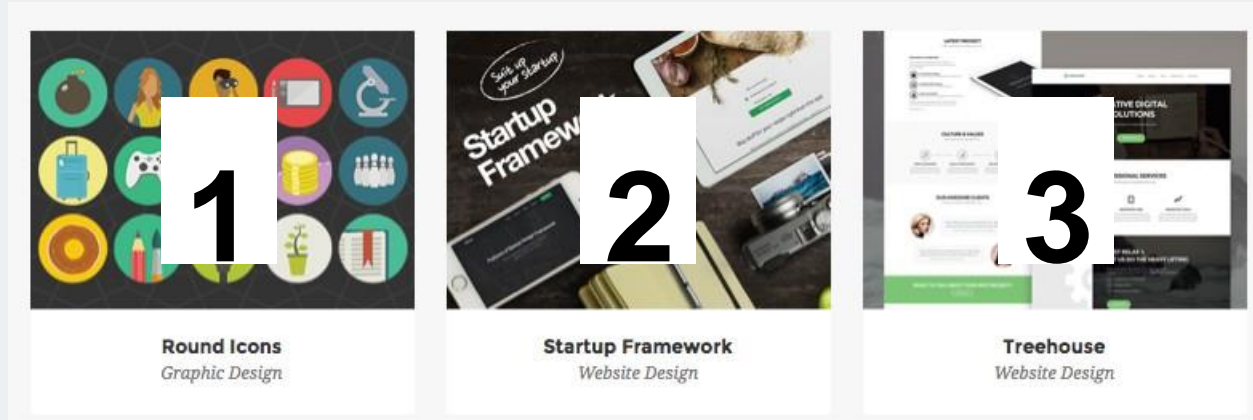
**Startup Framework**  
*Website Design*



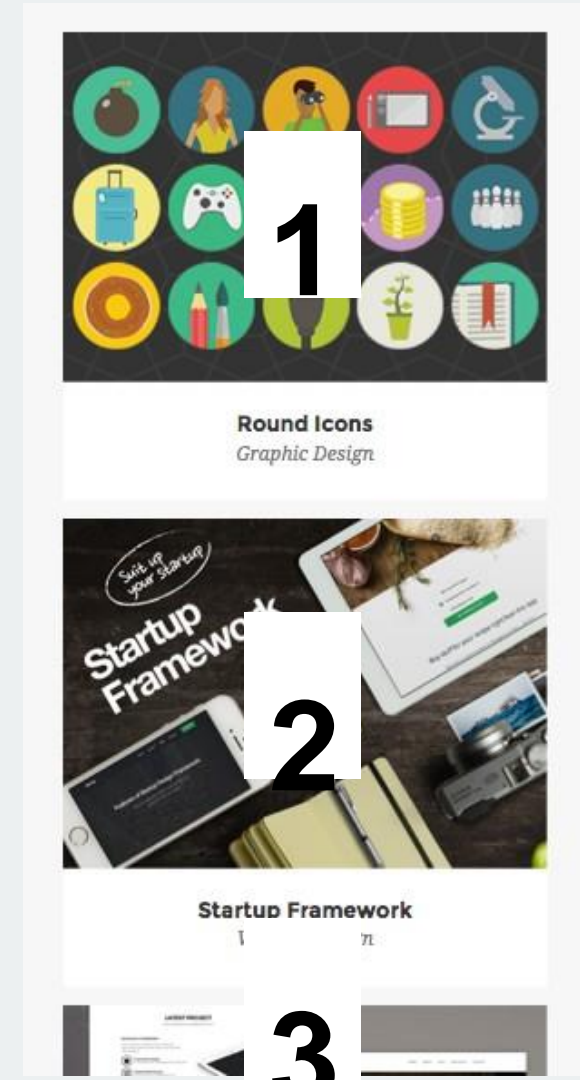
**Treehouse**  
*Website Design*

**Columns will stack when responsive**

# Bootstrap Responsive Grid



Columns stack on mobile



<http://getbootstrap.com/>