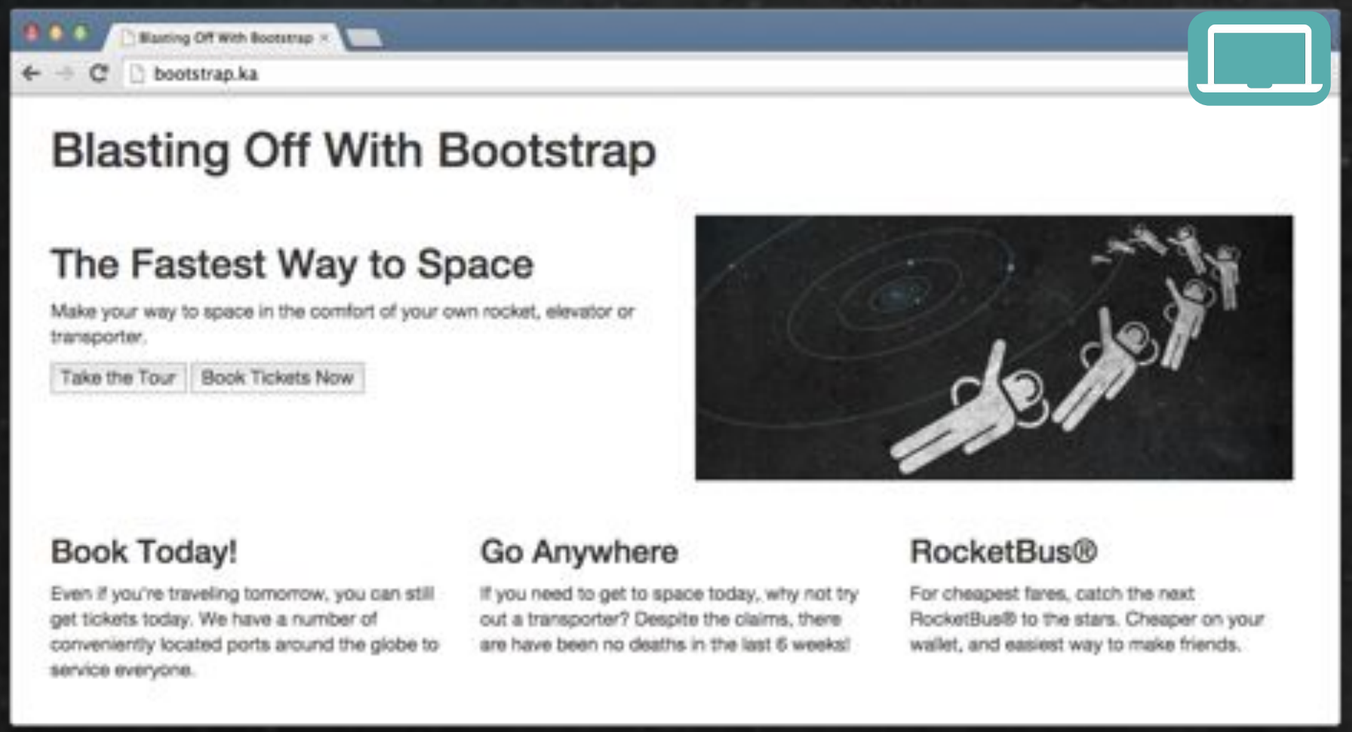
Blasting Off
with Bootstrap

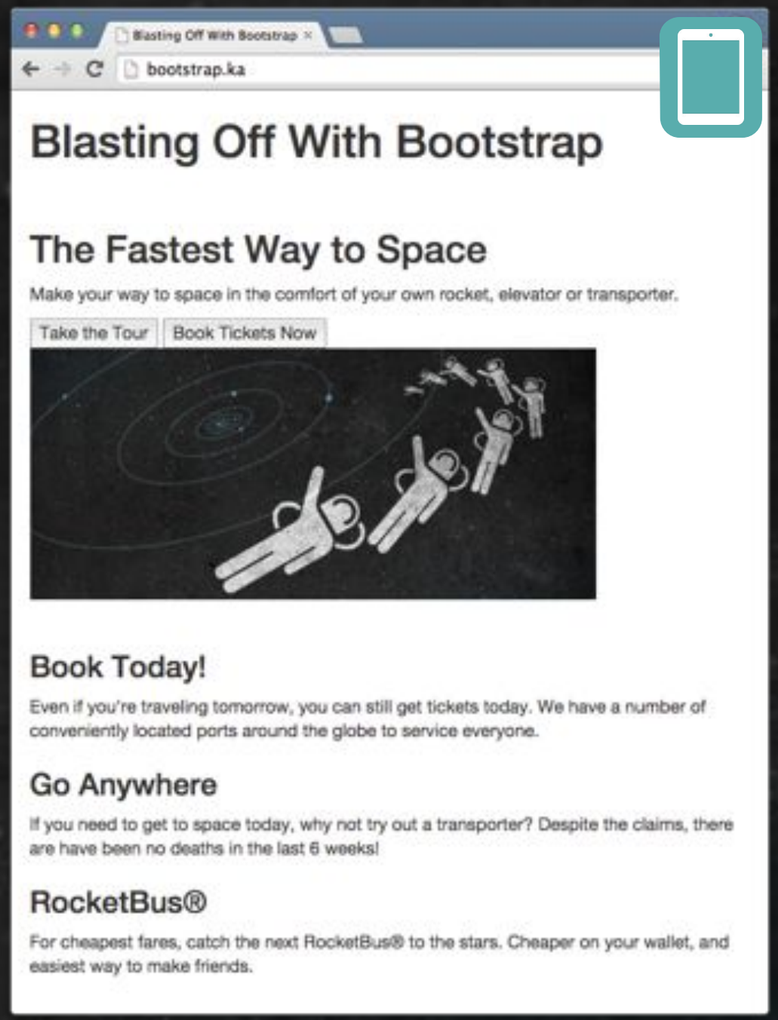
Responsive Gridding

Level 2, Section 2

Our Website So Far

It looks great on our desktop's screen, but if we view it on a phone, our columns are gone!



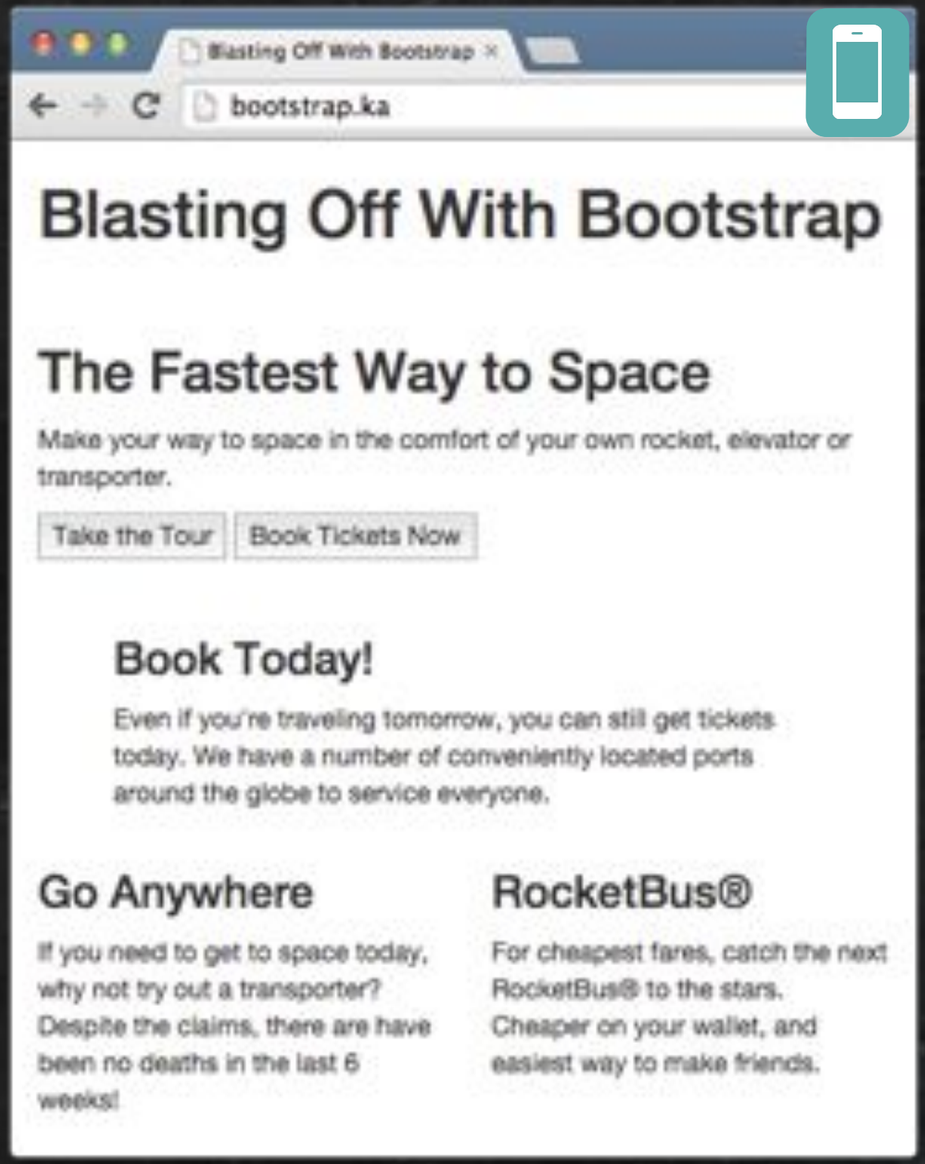


None of our columns are applied for screens below 992px.

Our Goal Mobile Layout

Hide big image in smaller resolutions

Put Book Today on its own row



This icon means we're seeing the same styling as on a Phone

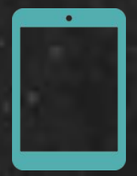
Medium Screen Size

A good starting point for your design. Looks good on laptops and desktops.

Grid Size	Grid Class	Offset Class	Screen Size
Medium	`.col-md-*`	`.col-md-offset-*`	**992px+**

Designing for Smaller Screens

The “small” grid size is used for smaller resolutions, often tablets or compact laptop screens.



Grid Size	Grid Class	Offset Class	Screen Size
Small	`.col-sm-*`	`.col-sm-offset-*`	**768px+**
Medium	`.col-md-*`	`.col-md-offset-*`	**992px+**

Our Current Features

Our columns only work with a resolution of 992px and up.

index.html

```
<div class='row'>
  <div class='col-md-4'>
    <h3>Book Today!</h3>...
  </div>
  <div class='col-md-4'>
    <h3>Go Anywhere</h3>...
  </div>
  <div class='col-md-4'>
    <h3>RocketBus&reg;</h3>...
  </div>
</div>
```

Each feature shows up on a different row on smaller screens.

Adding Grids for Smaller Resolutions

Our featured items will have the same grid sizes in small and medium mode.

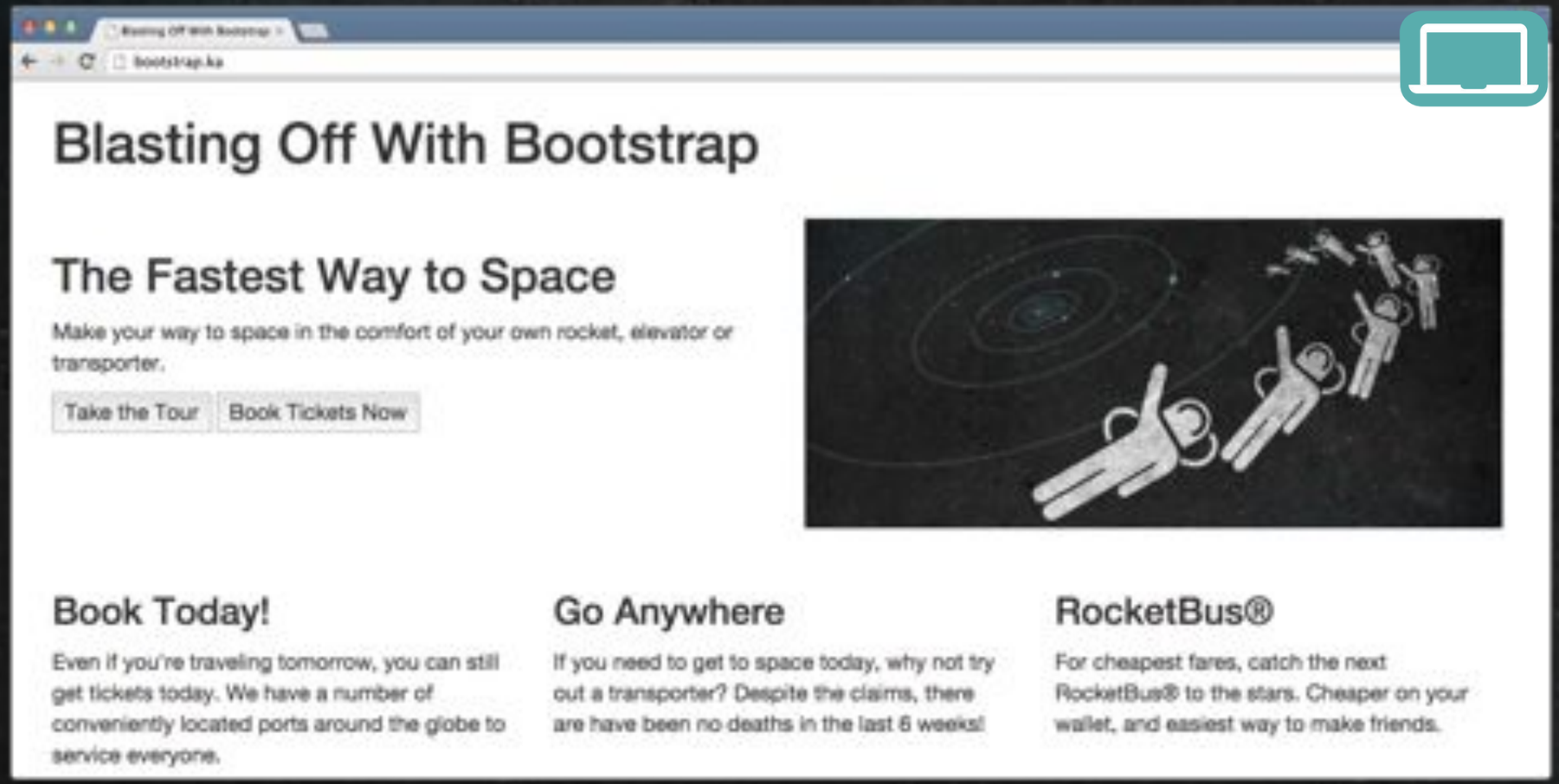
index.html

```
<div class='row'>
  <div class='col-sm-4'>
    <h3>Book Today!</h3>...
  </div>
  <div class='col-sm-4'>
    <h3>Go Anywhere</h3>...
  </div>
  <div class='col-sm-4'>
    <h3>RocketBus&reg;</h3>...
  </div>
</div>
```

These will work in 768px and higher

HTML

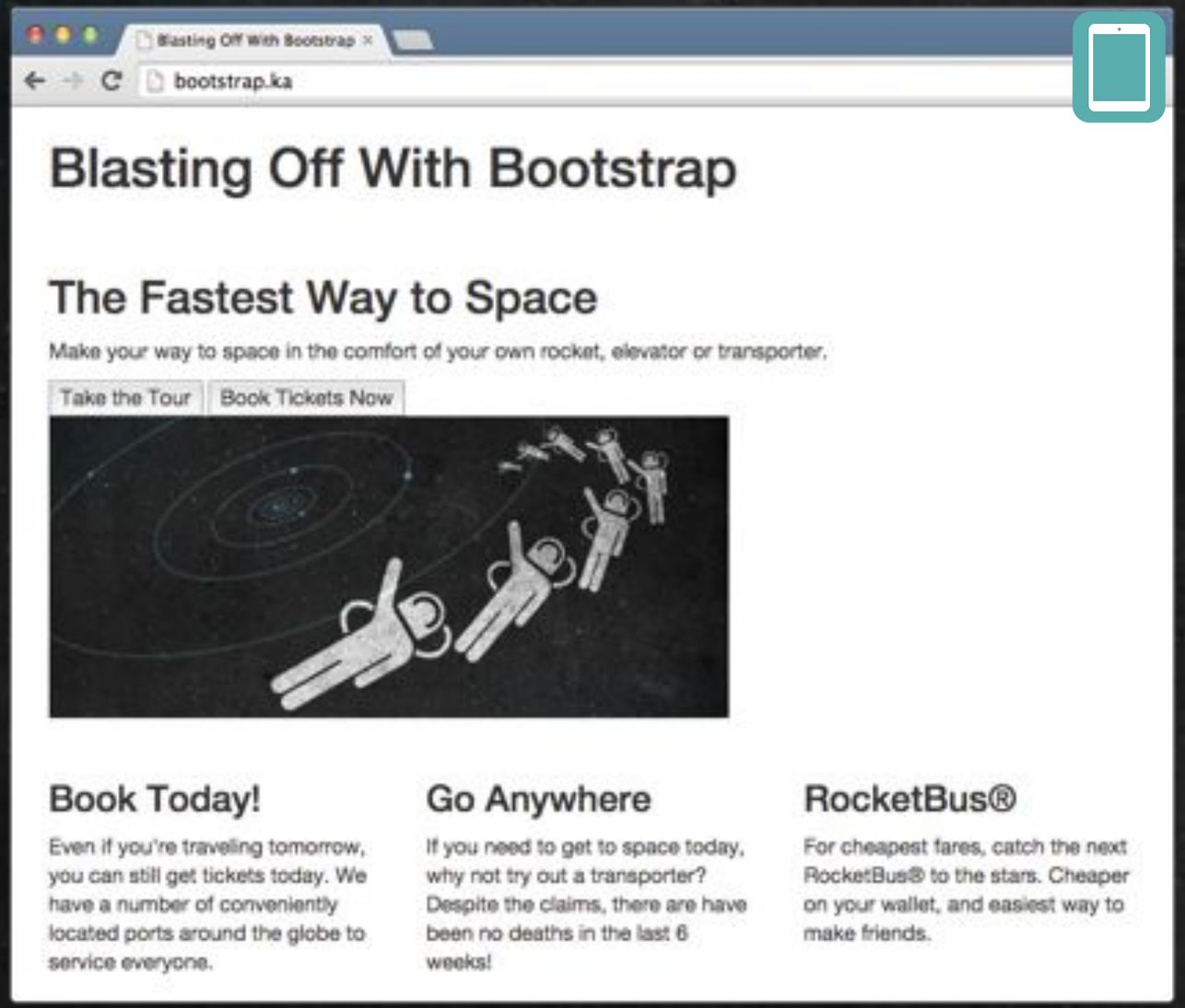
Feature Columns in Medium Sized Screens



Viewing the page in "medium" mode

Features are still spanning 4 columns each

Feature Columns in Small Sized Screens



Viewing this page on a tablet.

Our features each span 4 columns in "small" mode and above.

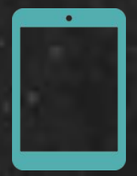
Extra Small Mode

What about below 768px?
Here's our phone view,
called "extra small" mode.

We've lost our columns again!
Let's look into how to use a
bit more space.

Extra Small Browser Sizes

Great for specifying the minimum width for elements. Also the layout used on many phones.



Grid Size	Grid Class	Offset Class	Screen Size
Extra Small	`.col-xs-*`	`.col-xs-offset-*`	0px+
Small	`.col-sm-*`	`.col-sm-offset-*`	768px+
Medium	`.col-md-*`	`.col-md-offset-*`	992px+

Adding Grids for Extra Small Screens

We could use the extra small grids, but there's a better way.

index.html

```
<div class='row'>
  <div class='col-xs-4'>
    <h3>Book Today!</h3>...
  </div>
  <div class='col-xs-4'>
    <h3>Go Anywhere</h3>...
  </div>
  <div class='col-xs-4'>
    <h3>RocketBus&reg;</h3>...
  </div>
</div>
```

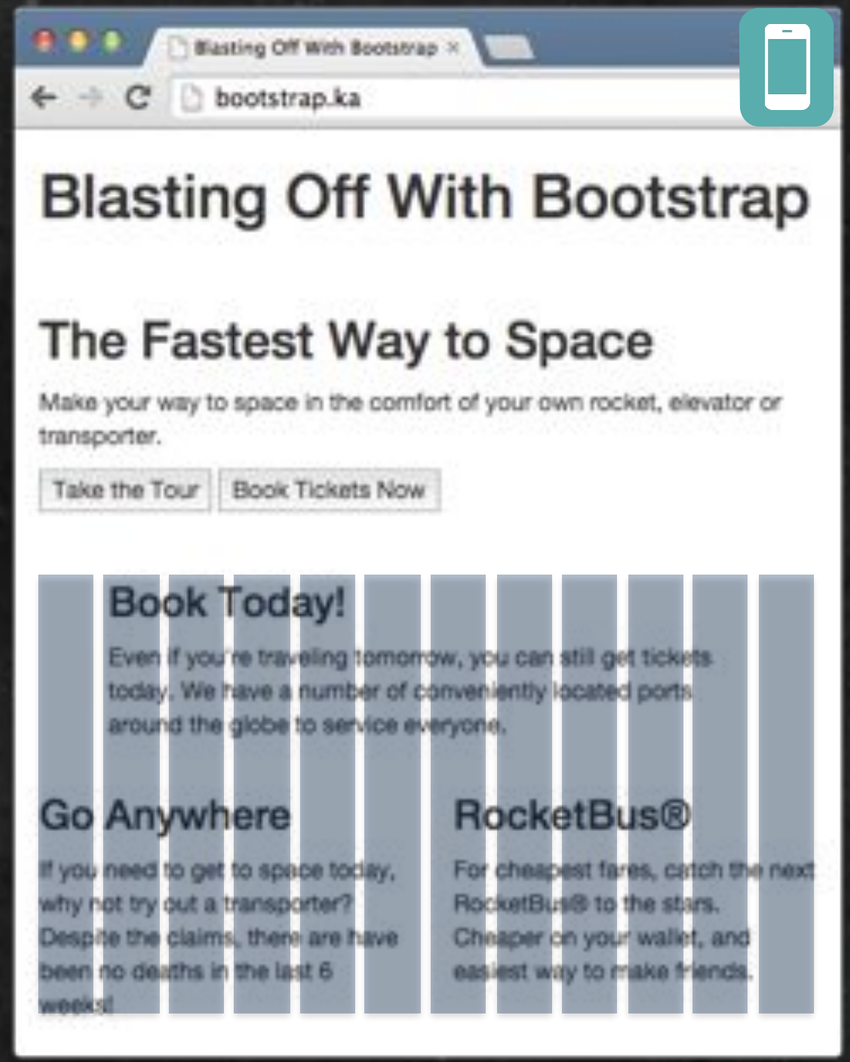
HTML

Looks a bit cramped. We can do better!

Reviving our Goal Layout

We can plan out how many columns each of our elements will use prior to jumping into the code.

"Book Today" will use 10 columns.



Our other features will each use 6 columns.

It'll have an offset on the left and right.

Features in Extra Small Screens

index.html

```
<div class='row'>
  <div class='col-sm-4 col-xs-12'>
    <h3>Book Today!</h3>
  </div>
  <div class='col-sm-4 col-xs-6'>
    <h3>Go Anywhere</h3>
  </div>
  <div class='col-sm-4 col-xs-6'>
    <h3>RocketBus&reg;</h3>
  </div>
</div>
```

HTML

"Book Today" will take up all 12 columns

The other two features will take up 6 columns, and be below "Book Today".

Extra Small Feature Layout

Using our new extra small classes, our features section is taking shape.

What this looks like on a phone

We still need to add an offset to "Book Today".

Centering Features for Extra Small Screens

This will center this column giving it a column of spacing on each side

Use the middle 10 columns

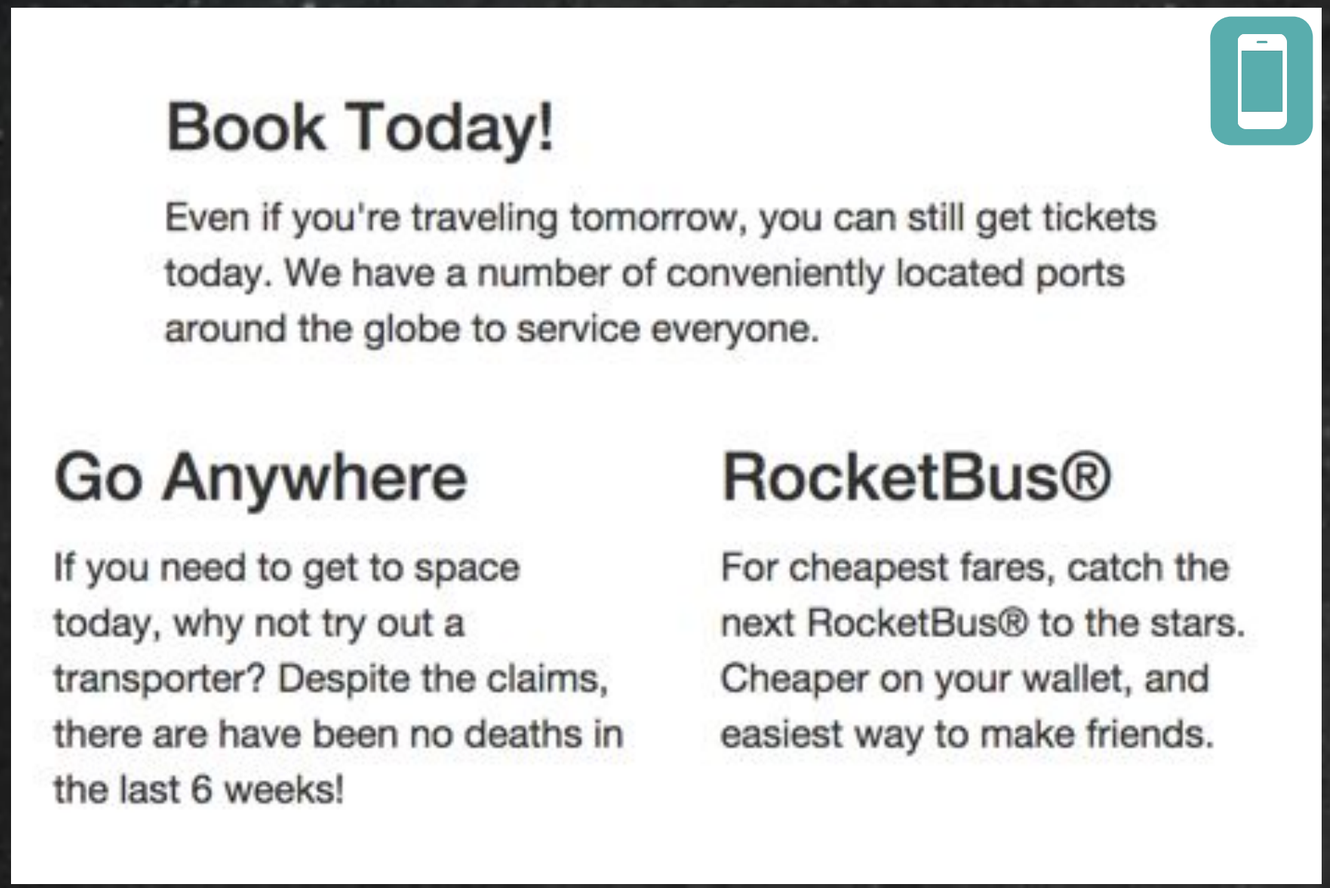
```
<div class='row'>
  <div class='col-sm-4 col-xs-10 col-xs-offset-1'>
    <h3>Book Today!</h3>
  </div>
  <div class='col-sm-4 col-xs-6'>
    <h3>Go Anywhere</h3>
  </div>
  <div class='col-sm-4 col-xs-6'>
    <h3>RocketBus&reg;</h3>
  </div>
</div>
```

HTML

The order of the classes doesn't matter.

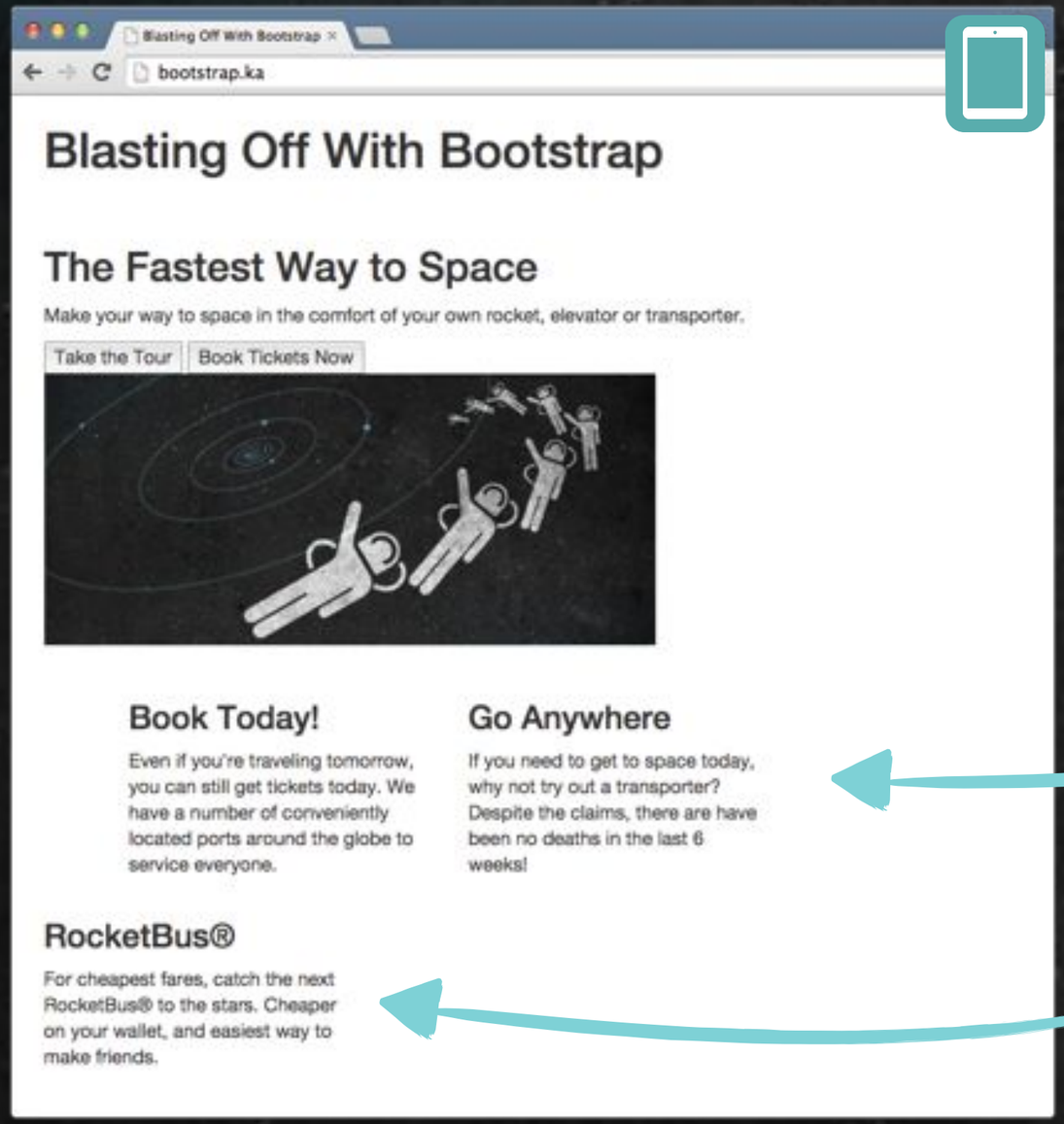
“Book Today” On Extra Small Screens

“Go Anywhere” started on a new row because it needed 6 columns and only 1 was available.



“Book Today” stands out on extra small screens.

Overriding Offsets for Small Screens



Our `.col-xs-offset-1` is being applied to "small" and "medium" resolutions as well.

Since we're using 9 columns in the first horizontal space, the the overflowing element is moved to the next row.

Removing the Offset for Small Screens

index.html

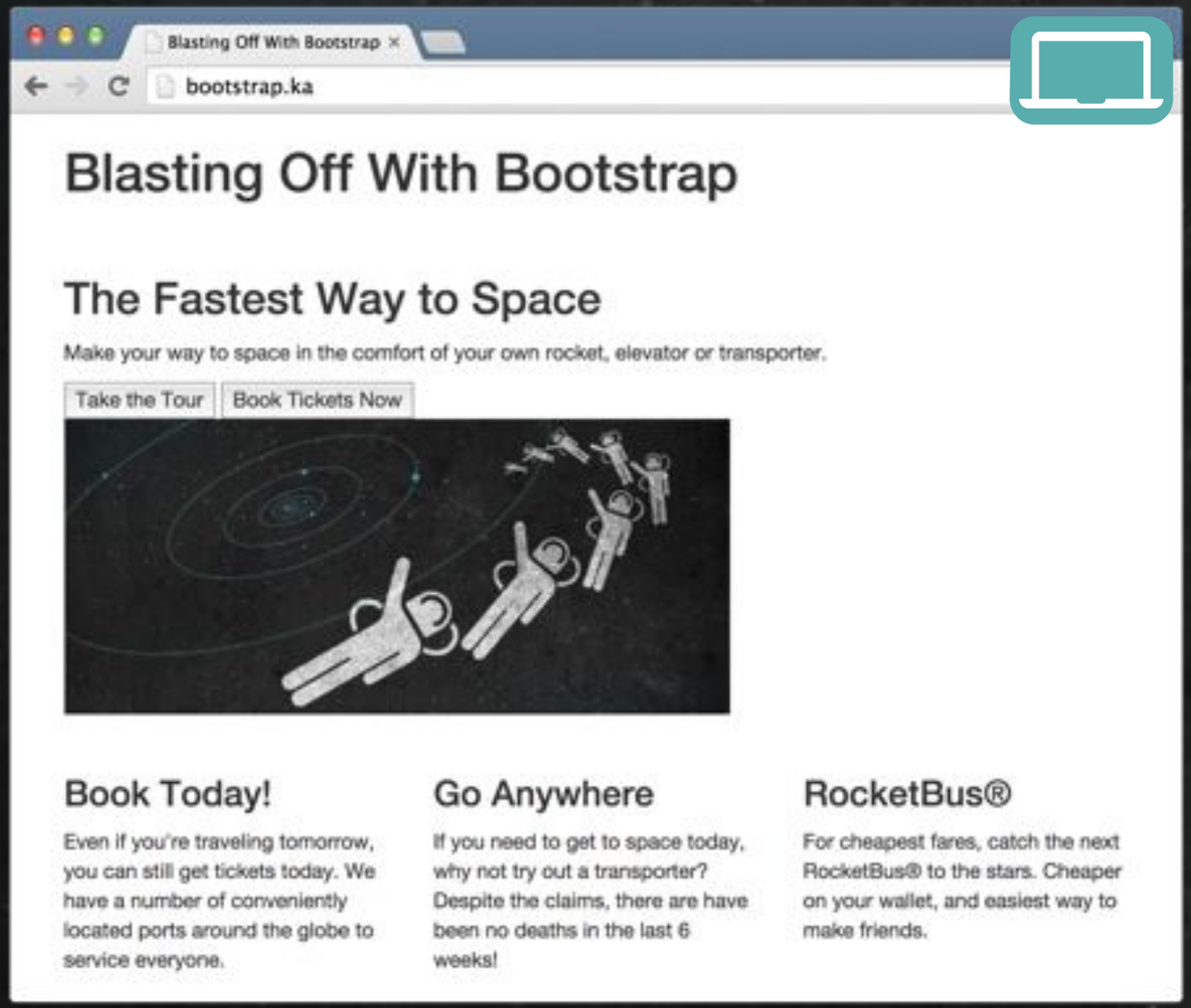
```
<div class='row'>
  <div class='col-sm-4 col-xs-10 col-xs-offset-1
    col-sm-offset-0'>
    <h3>Book Today!</h3>
  </div>
  <div class='col-md-3 col-sm-4 col-xs-6'>
    <h3>Go Anywhere</h3>
  </div>
  <div class=‘col-md-3 col-sm-4 col-xs-6'>
    <h3>RocketBus&reg;</h3>
  </div>
</div>
```

Remove the offset in “small” mode and above

HTML

Removing Offsets

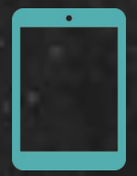
This will center this column giving it a column of spacing on each side



No offset before the first feature except in extra small mode

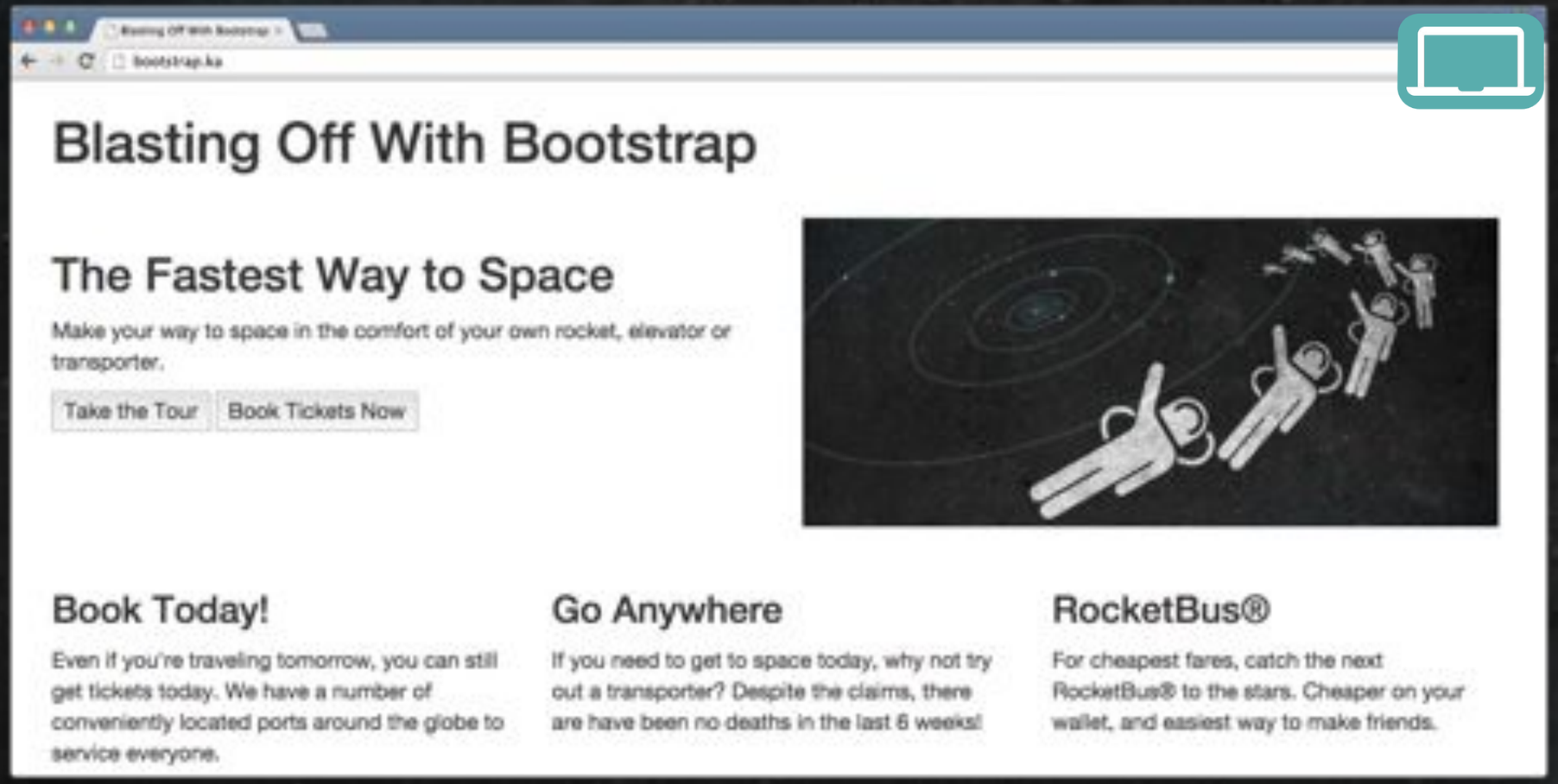
Very Large Screens

Great for monitors with a lot of space. Not used as often as other grid sizes.



Grid Size	Grid Class	Offset Class	Screen Size
Extra Small	`.col-xs-*`	`.col-xs-offset-*`	0px+
Small	`.col-sm-*`	`.col-sm-offset-*`	768px+
Medium	`.col-md-*`	`.col-md-offset-*`	992px+
Large	`.col-lg-*`	`.col-lg-offset-*`	1200px+

Hiding Columns



we should only show this image for "medium" and "large" resolutions.

Hiding Elements using `.hidden-*`

We can hide elements in specific screen sizes

index.html

```
<div class='row'>
  <div class='col-md-6'>...</div>
  <div class='col-md-6 hidden-sm hidden-xs'>
    <img src='images/blast.png' alt='Blasting Off' />
  </div>
</div>
```

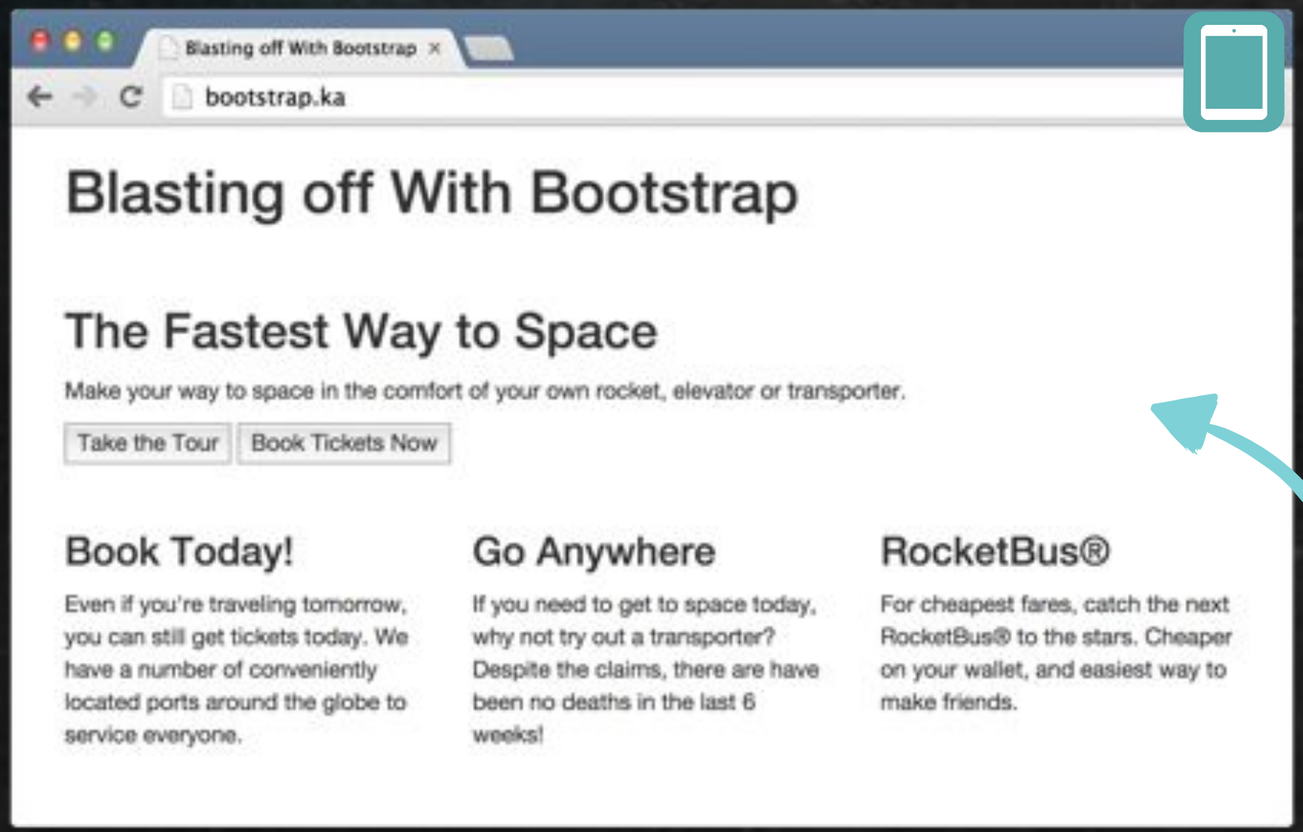
HTML

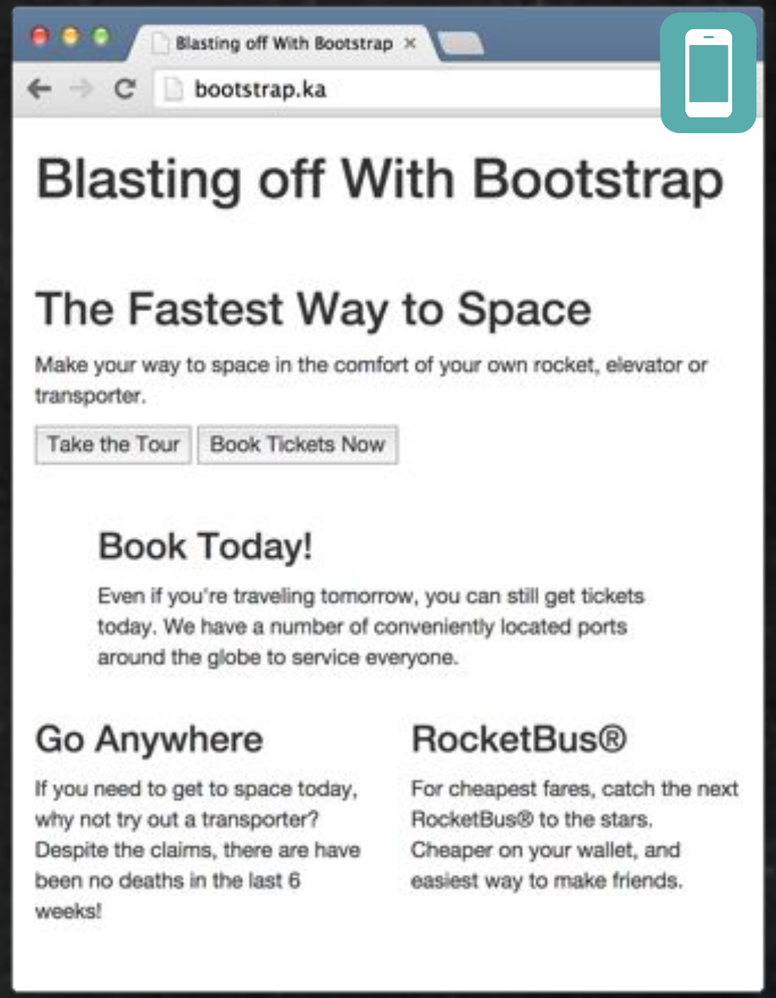
Hide this element for small and extra small resolutions

- `.hidden-xs`
- `.hidden-sm`
- `.hidden-md`
- `.hidden-lg`

You can hide elements in other screen sizes too

Hiding Elements using `.hidden-*`





The image is hidden for small and extra small resolutions

Making Elements Visible using `.visible-*`

We can specify a screen size for elements to be visible

index.html

```
<div class='row'>
  <div class='col-md-6'>...</div>
  <div class='col-md-6 visible-md visible-lg'>
    <img src='images/blast.png' alt='Blasting Off' />
  </div>
</div>
```

Only show this element in medium and large resolutions

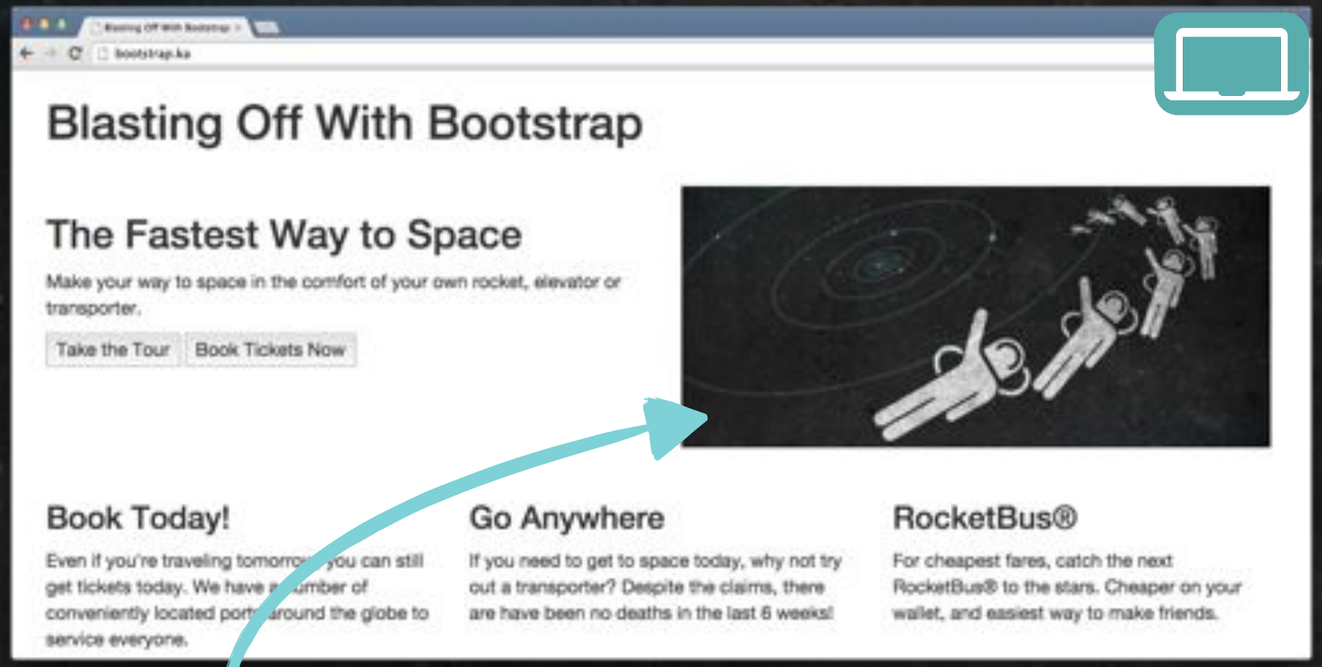
HTML

`.visible-xs` `.visible-md`

`.visible-sm` `.visible-lg`

You can specify other screen sizes too

Making Elements Visible using `.visible-*`



The element is visible in "medium" and "large" resolutions, but nothing else.