

# ***Behold Bootstrap!***

---

**The Coding Bootcamp**

**Heeeelp Meeeee.....**



**Hhhblub**

**blub**

**blub**

take a deep breath.







IT'S ALL GOING  
TO BE OKAY.

**YOU ARE**  
FREAKING  
**AWESOME**



# ***Today's Class***

---

# Objectives

---

1. Use the **Bootstrap CSS Framework** to create layouts
2. Learn to use **media queries** for mobile responsive websites
3. Learn to use the **meta** tag to make sure all devices are displaying web pages optimally for their **viewport**.

# Focus!



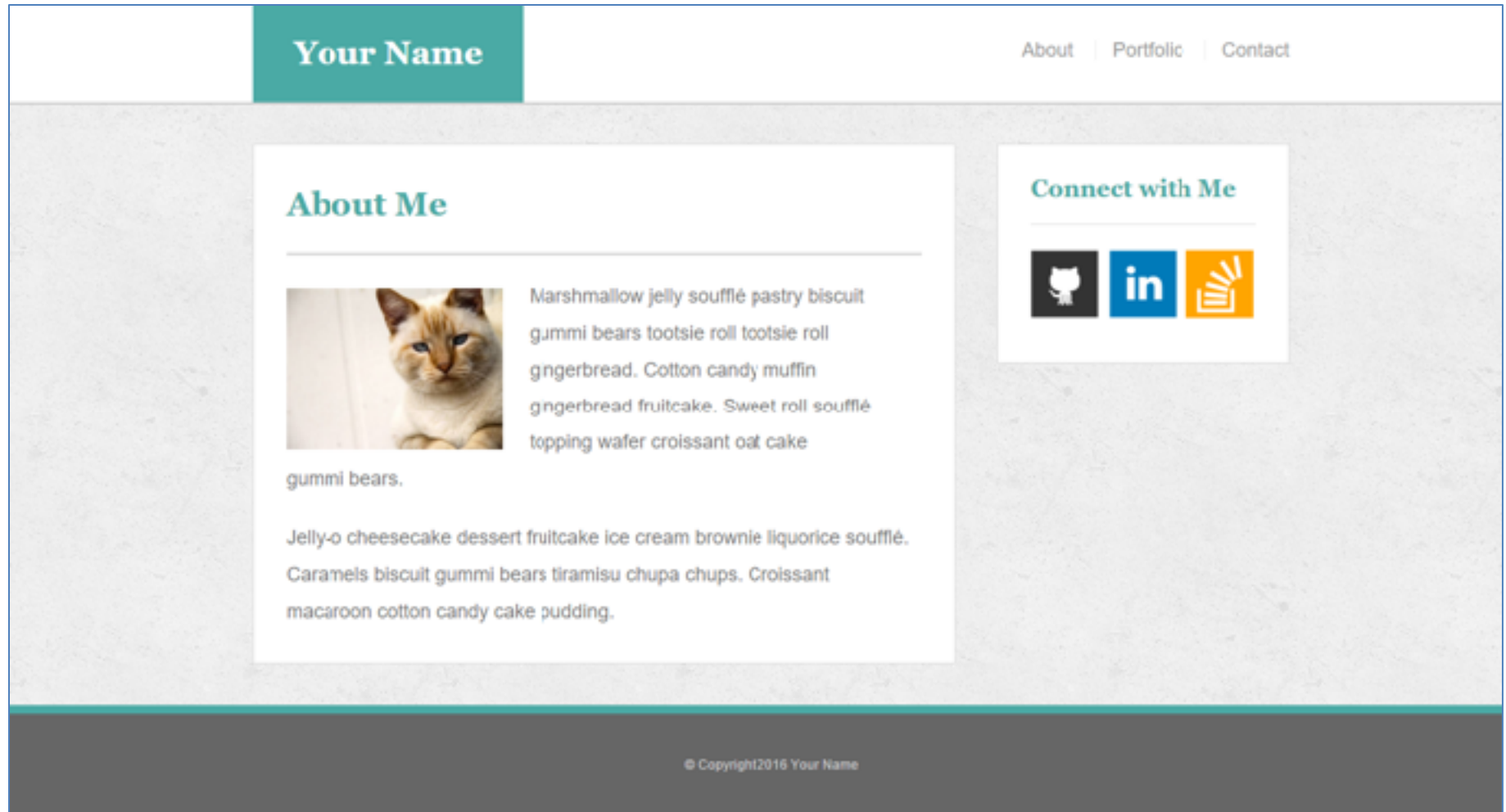
***This stuff is important...***



# ***Recap Bootstrap***

---

# The Pains of HW 1



***Plain HTML + CSS makes layout building challenging***

# How You (Probably) Feel About CSS

---

## CSS in a nutshell



# But Then Came Bootstrap...

The Coding Bootcamp

Home

About

Contact

Dropdown ▾

Default

Static top

Fixed top

## Awesome Header

Smaller Awesome Header

Even Smaller Header

✉ [Learn more](#)



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# Powered by Bootstrap

## External CSS Link

```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4     <title>My First Website</title>
5     <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/
      bootstrap/3.3.6/css/bootstrap.min.css">
6 </head>
7 <body>
```

## Pre-Defined CSS Class (ex: “Jumbotron”)

```
<div class="jumbotron">
  <h1 class="text-center"><strong>Awesome Header</strong></h1>
  <h2 class="text-center">Smaller Awesome Header</h2>
  <h3 class="text-center">Even Smaller Header</h3>
  <p class="text-center"><a class="btn btn-danger btn-lg" href="#" role="button">
<span class="glyphicon glyphicon-envelope"></span> Learn more</a></p>
</div>
```



# Powered by Bootstrap

The Coding Bootcamp

Home

About

Contact

Dropdown ▾

Default

Static top

Fixed top

# Awesome Header

Smaller Awesome Header

Even Smaller Header

✉ Learn more

class="jumbotron"



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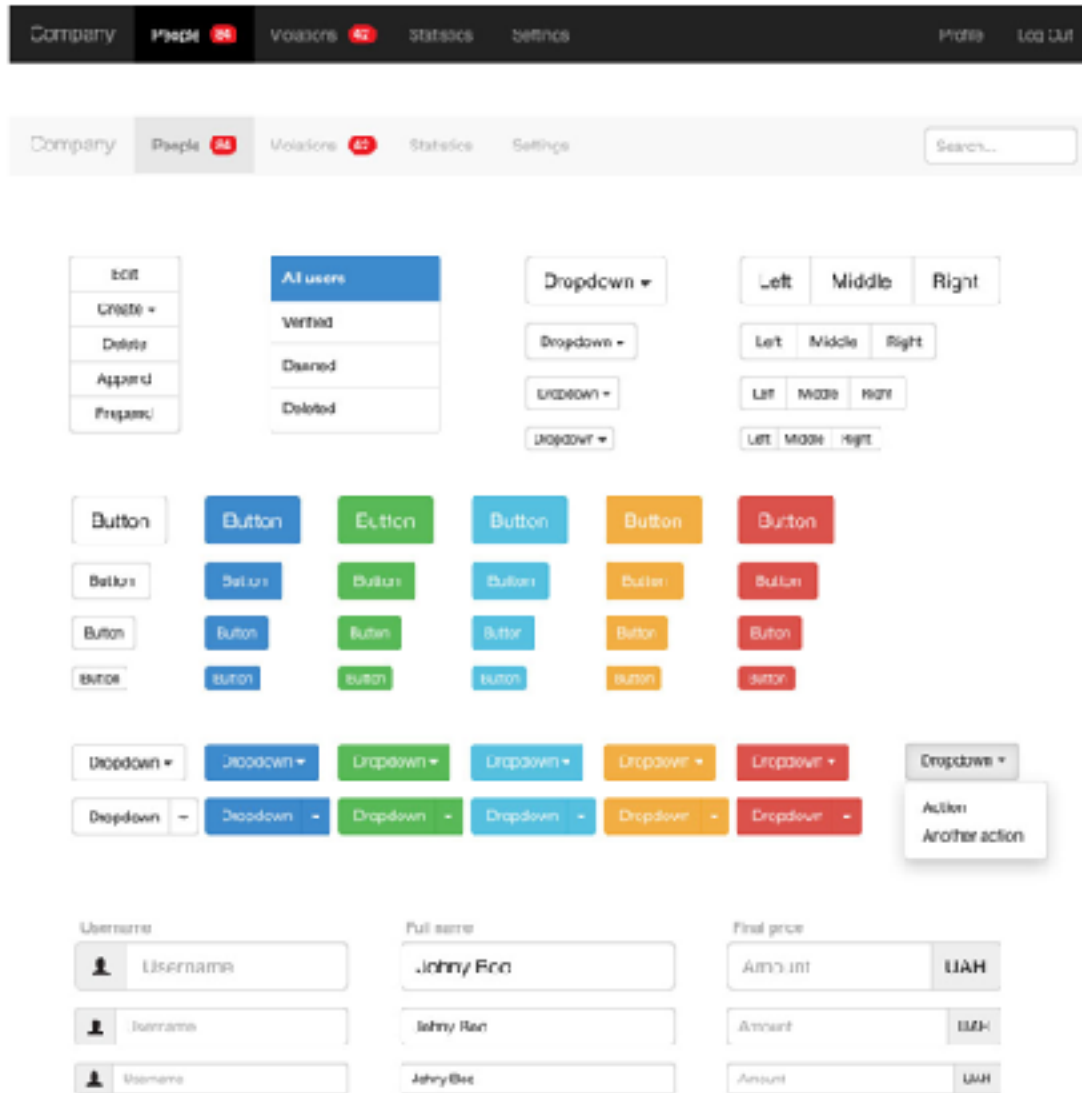
# Big Deal!!!

---



***Using Bootstrap,  
we have PRE-DEFINED CSS Styles.***

# Why Use Bootstrap?



## • Reason #1: UI Kit

• Familiarize yourself with the UI features it offers via the documentation.

• Once Bootstrap is active, you can simply copy snippets from the documentation to save yourself major time of creating elements yourself.

# Why Use Bootstrap?

## Reason #2: Mobile Responsiveness

- One of the most compelling reasons to use Bootstrap is the default **mobile-responsive** quality it provides.
- This means that your website will look “good” automatically when viewed on screens ranging from monitors to tablets to phones.



## > YOUR TURN!!

---

### **Warmup Activity:**

As a repeat of last class, quickly create an HTML web page.

Then add in a Bootstrap component of your choosing.

*Hint: Copy the Bootstrap CSS link. Then copy the code from any Bootstrap element or CSS.*



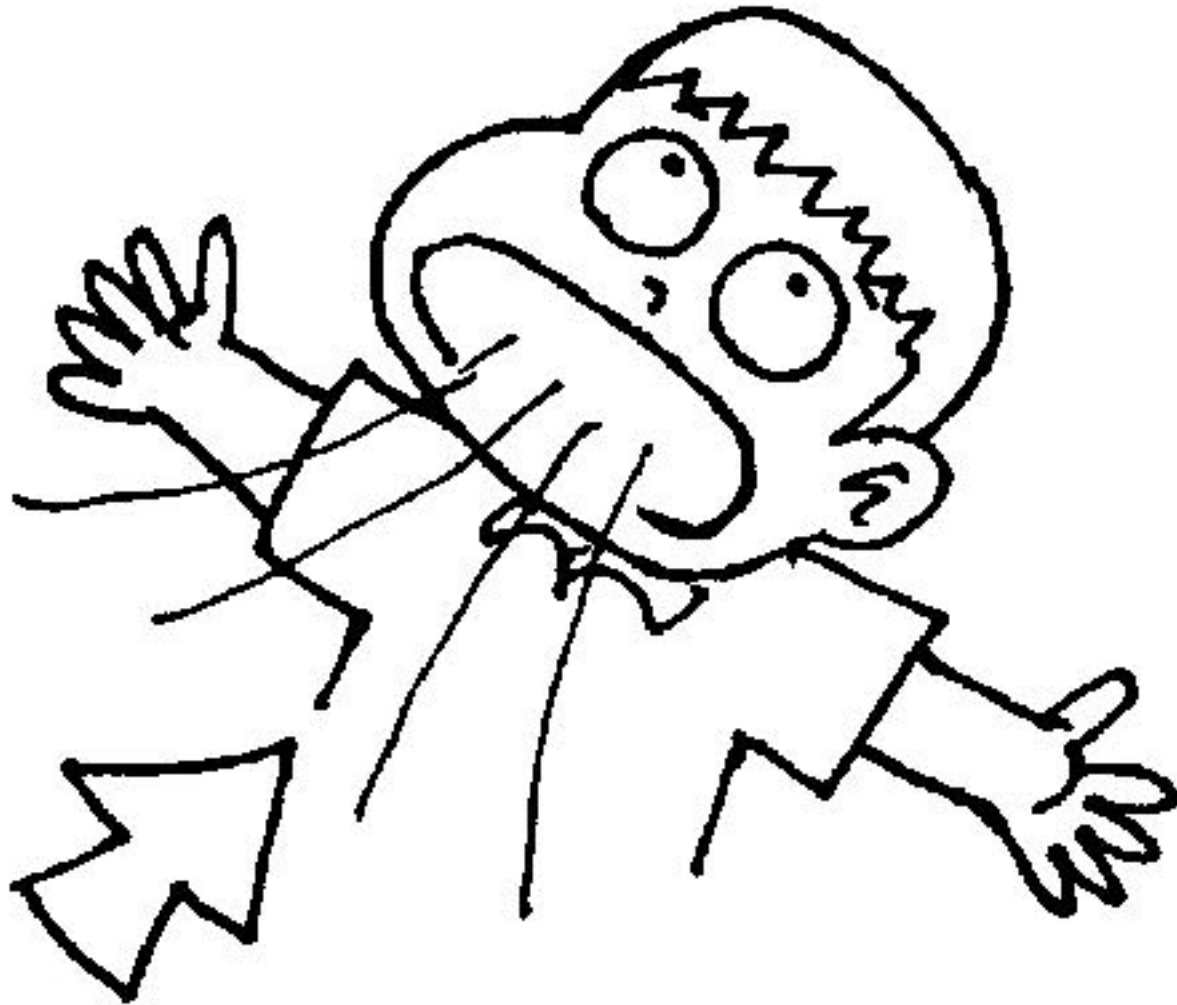
***Last class, we focused on Bootstrap Components (like buttons and tables).***

***Today we'll be focused on using Bootstrap to build layouts.***

# ***Sketching / Grid Layouts***

**Take a Huge Breath...**

---



# FOCUS!

---

Because in our opinion, these next two sections are some  
of the  
**MOST IMPORTANT ONES**  
in the ENTIRE program.



*Facebook surf at your own peril (and to the peril of the galaxy)*

# FOCUS!

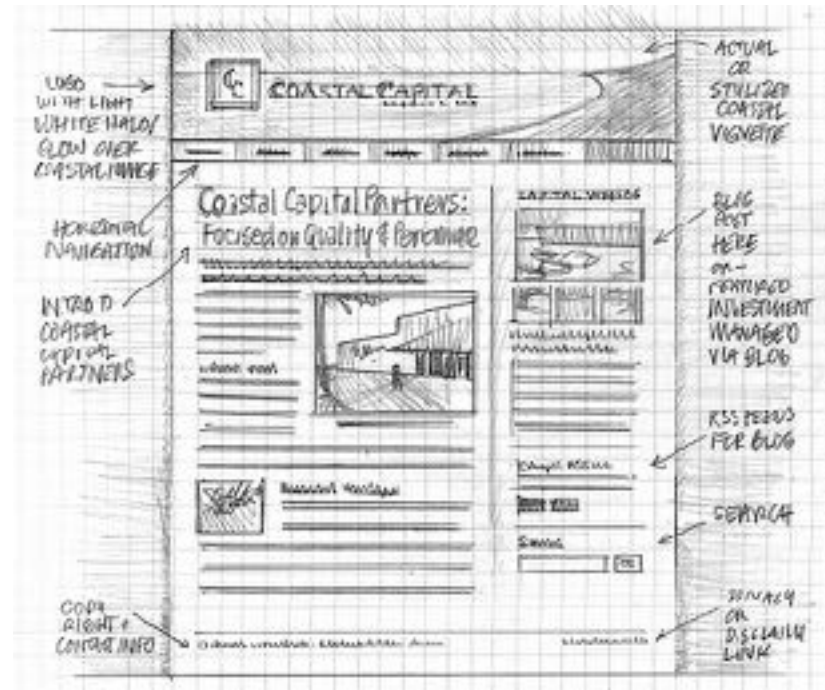
---

Relax. That doesn't mean its hard.

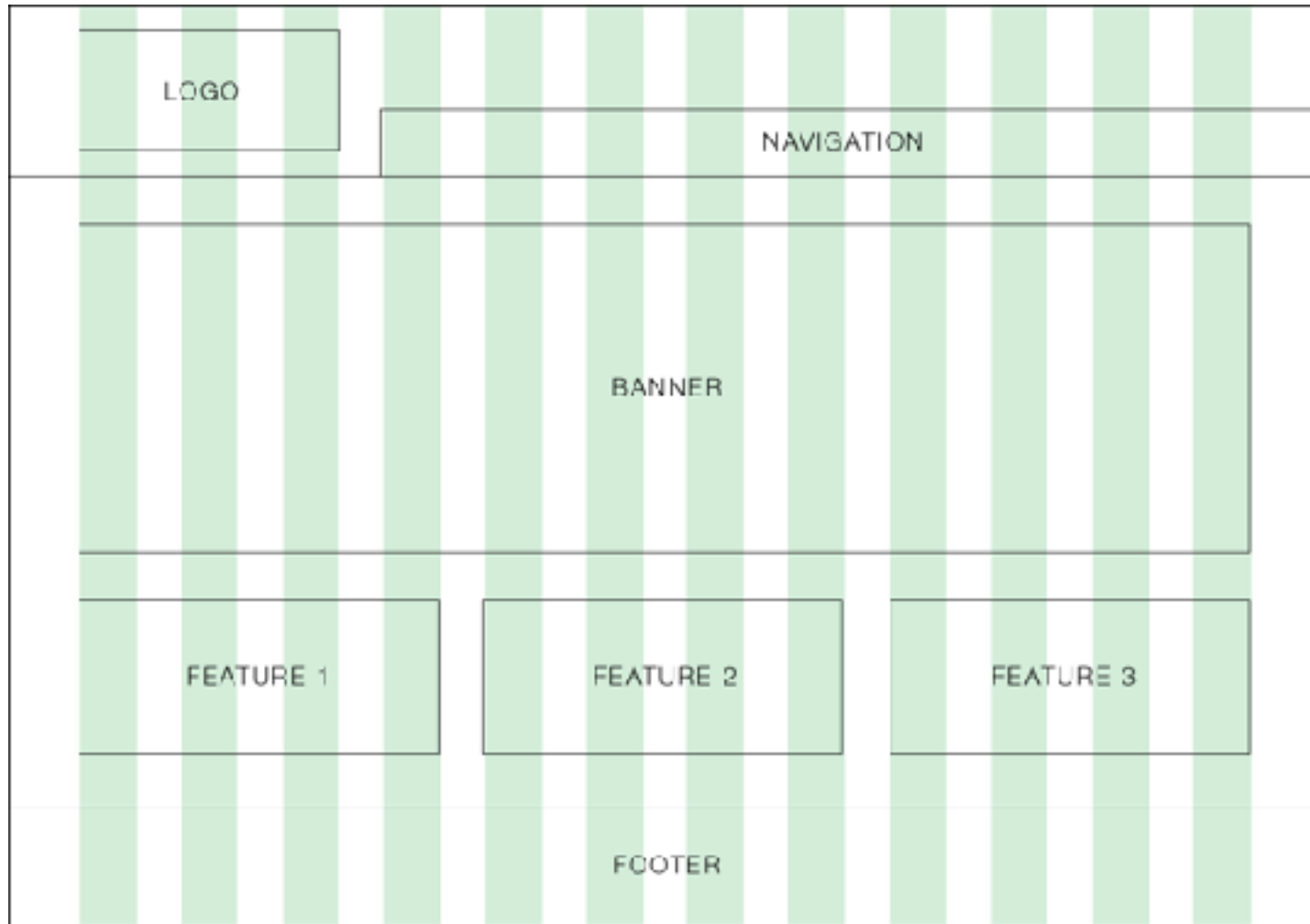


# Importance of Sketches

- Because every aspect of a site's “look” is defined by HTML/CSS – it is crucial to have a detailed sketch going in.
- Pay particular attention to the location of navigation bars, titles, headers, content, images, footers etc.
- When imagining alignments, in particular, be mindful of the **grid**

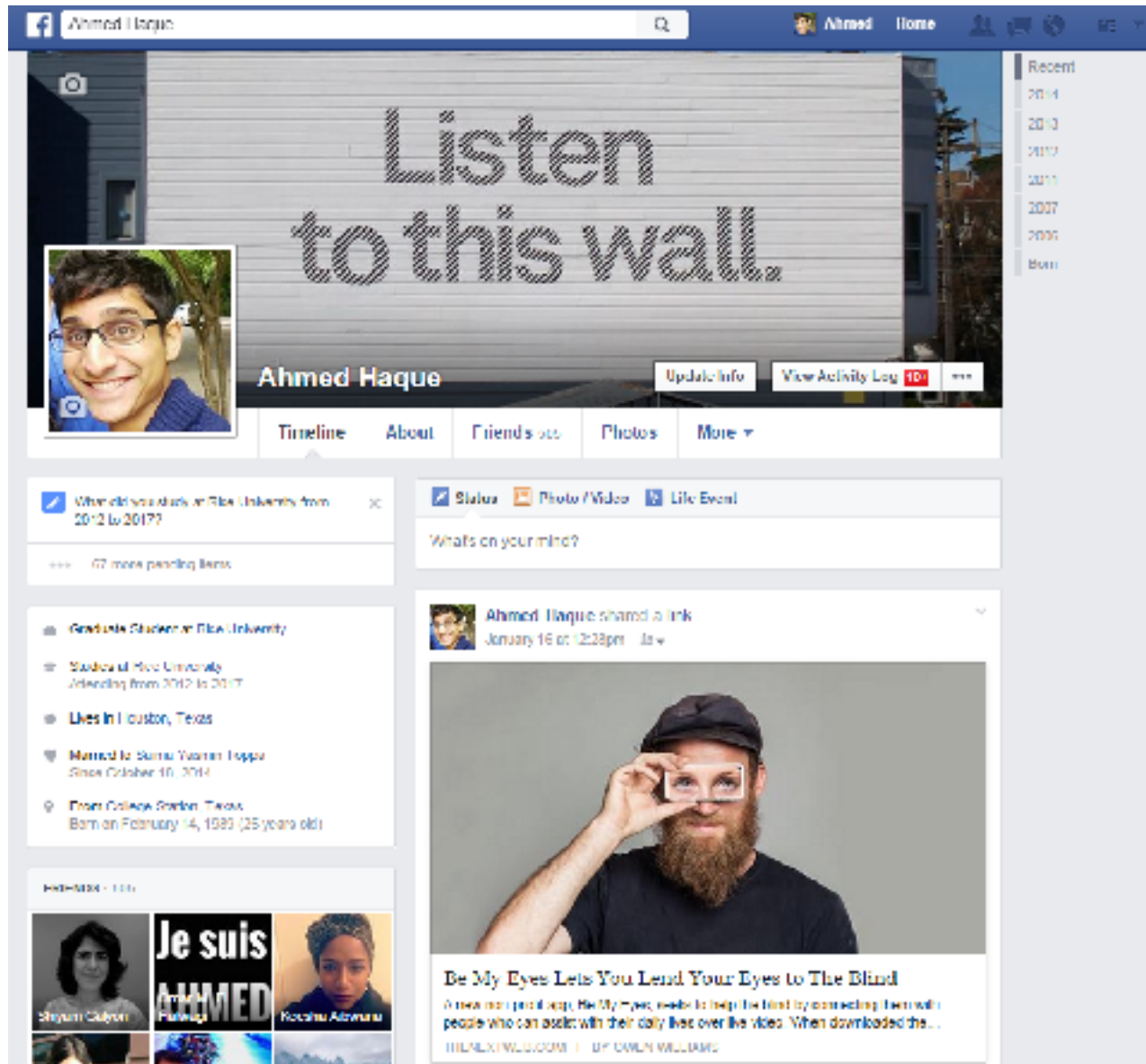


# Designing with a Grid in Mind



- Grids serve to align elements aesthetically.

# Facebook's Grid




Facebook is a perfect example of a website where the “grid-layout” is obvious.

Grids make it easy to have content (text, images, and regions) align aesthetically.

# A More Complex Grid...

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**Breaking news:** Mississippi's sole abortion clinic faces fresh legal fight to stay open [\(11\)](#)

## Cameron takes on tax avoiders in Davos speech



Prime minister strongly attacks companies that avoid paying tax as he lays out agenda for G8 summit in June

173 comments


- [LIVE: Davos 2013: day two - live coverage](#)
- [Richard Murphy: Tax avoidance starts at home](#)
- [Let's talk, says Merkel, after Cameron's EU speech](#)
- [Politics Weekly: Cameron promises referendum](#)
- [EU's legacy in workplaces is not to be sniffed at](#)

### Iran fakes blogs to smear journalists


BBC Persian staff become victims of online identity theft designed to discredit them

## Denzel Washington interview


'I don't want movie-star friends'



### guardianjobs

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Advertise all your jobs here for a year from £350  
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### Online dating

 Find your soulmate with the Guardian's dating site

# A More Complex Grid...

EDITION: INTERNATIONAL | U.S. | MÉXICO | ARABIC

TV: CNN | CNN en Español

Set edition preference



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Jan. 16, 2013 - Updated: 2001 GMT (1401 HKT)

Make CNN Your Homepage

EDITOR'S CHOICE

Dreamliner • Mayhem in Mali • Costa Concordia • Oscar nominations • Saudi beheading • GCS 2013 • Syrian refugees



**Syria rebels claim to have taken key military base**

Syrian rebels say they have captured a base used to combat opposition forces — but U.N. envoy Lakhdar Brahimi insists there can be “no military solution” full story

- U.N.: Syrian war most complex in world
- Sheltering refugees from bitter cold
- Special | iReport | CNNAnalytics



**Why Syrian refugee lives in dread**

With young lives shattered by the continuing war in Syria, refugee Saleh tells CNN how he lives in fear that when the phone rings it will mean he has lost another brother in the fighting. WATCH | REFUGEES FULL COVERAGE

SYRIA CRISIS



Sheltering refugees from bitter winter  
2:29



Tracking violence against women  
5:58



Sonic Why I fight the Assad regime  
2:05

SYRIAN REFUGEES



Focus on plight of Syrian refugees: Digging in for Winter

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Full Schedule

WEATHER

Enter a U.S. Zip or Intl city

GO

London, United Kingdom

Current conditions



10 Cloudy  
High 51° Low 27°  
Feels like 11°

10-day

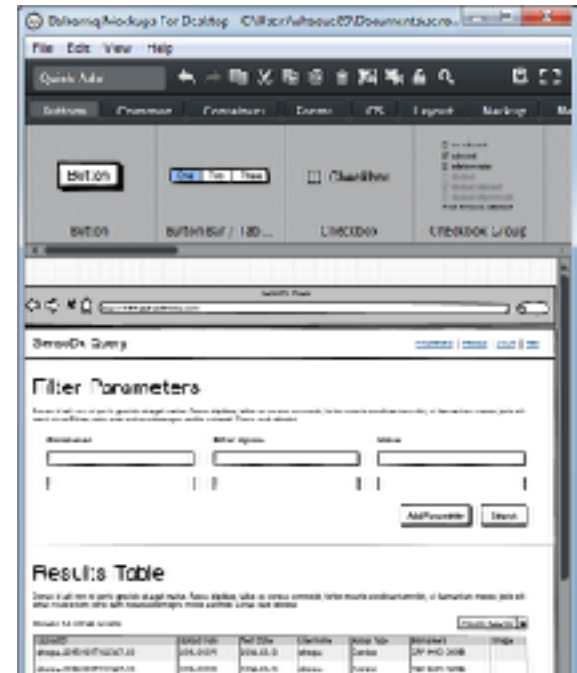
# Tools for Sketch / Grid Creation

## Wireframing Tools:

- Balsamiq\*\*\*: <https://balsamiq.com/>
- Framebox: <http://framebox.org/>
- Pen and Paper: Your notebook

## Grids for Photoshop / Illustrator:

- 960 GS: <http://960.gs/>
- GuideGuide: <https://guideguide.me/>



## Designing with Grids Guides:

- 960 Grid System Made Easy: <http://bit.ly/1sjYaFC>
- Design by Grid: <http://www.designbygrid.com/>
- Designing with Grid-Based Approach: <http://bit.ly/1CM4Hzo>



# *Rows and Columns*

---

*Workshop*

# Web Design Fundamentally = Wireframes



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ROWS

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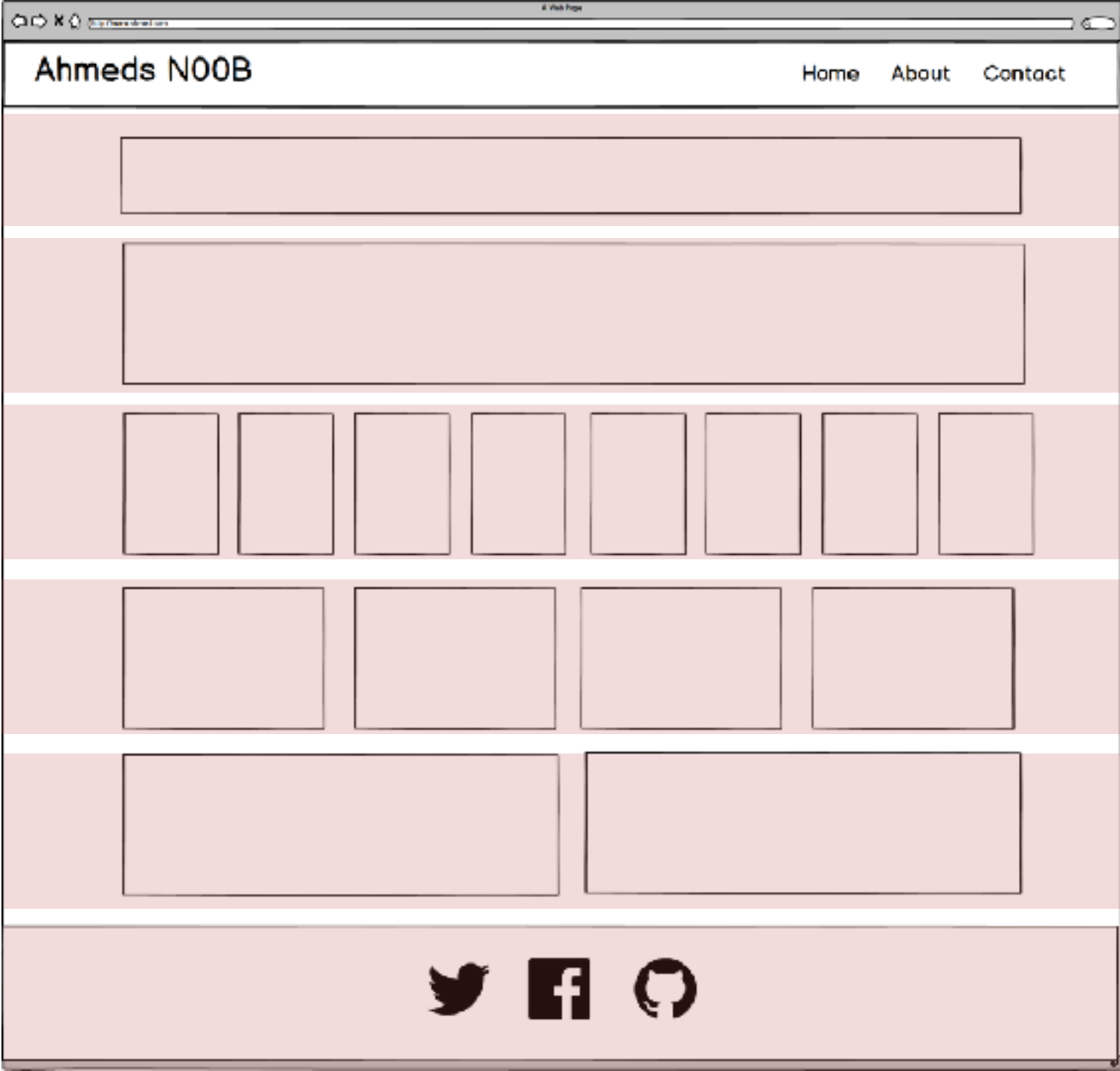
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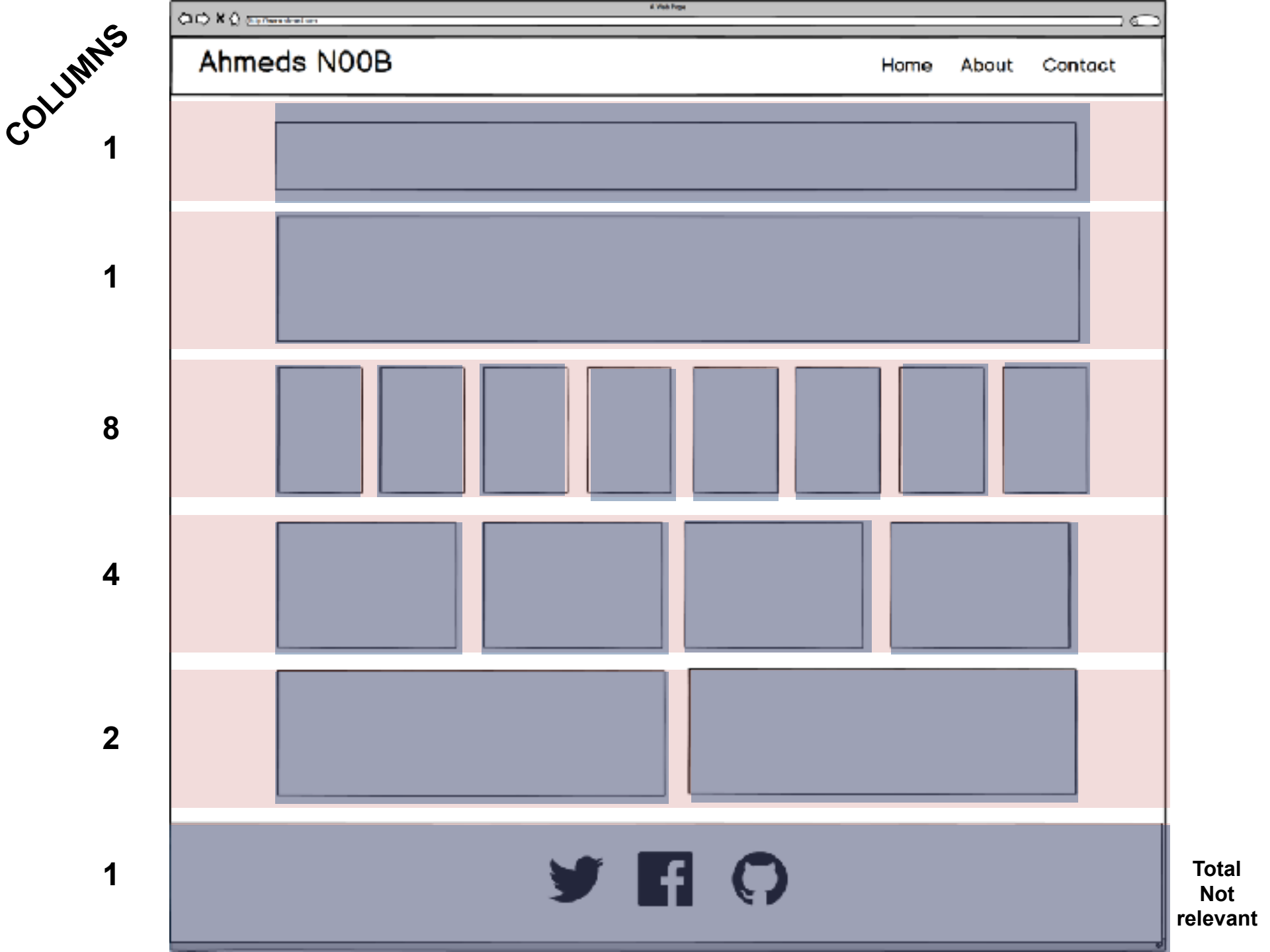
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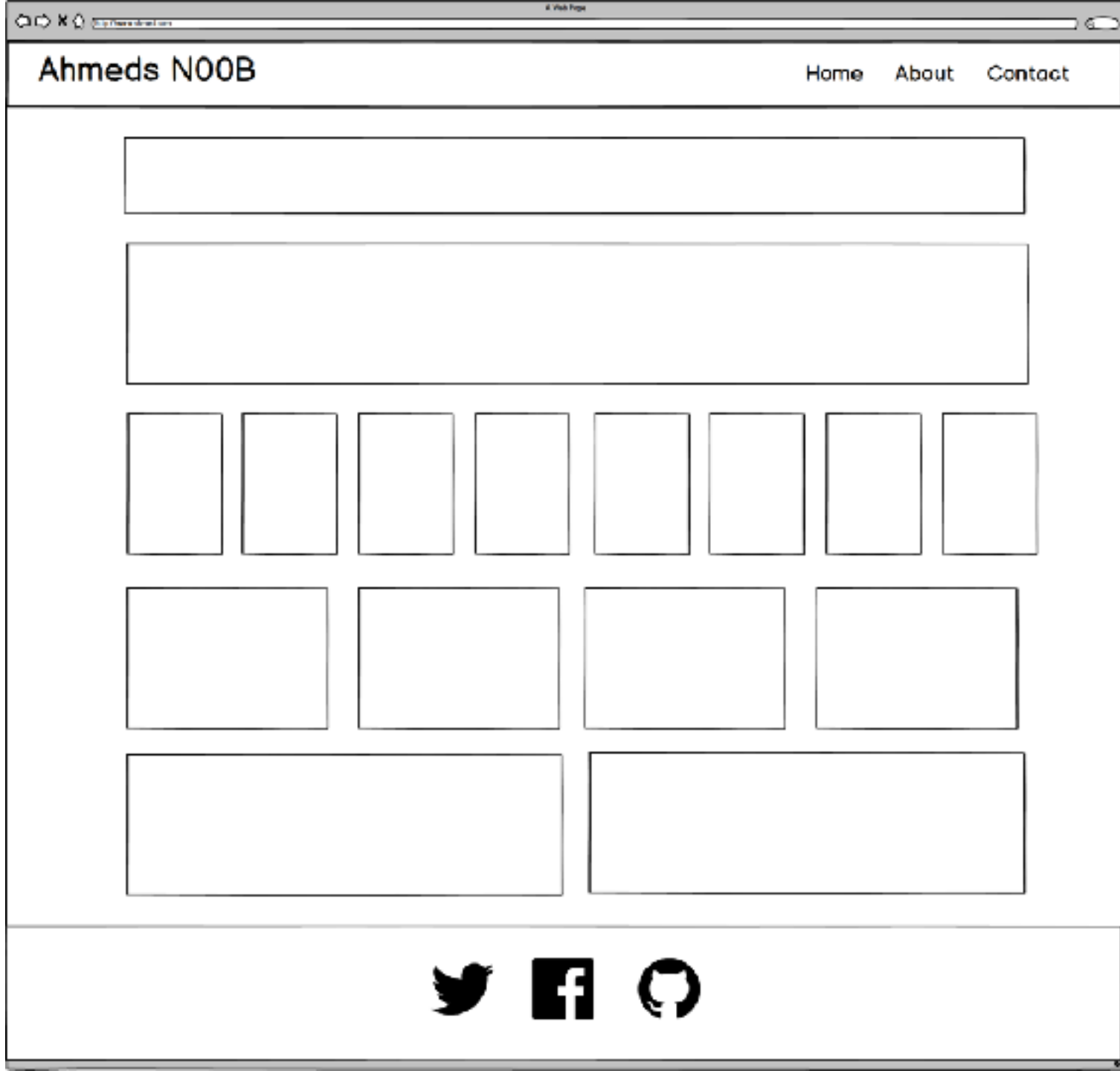
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6  
Total



You Try!



Level Up!

Now, let's make it more challenging...



## Awesome Stories



### The Greatest Website Ever Made

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### The Greatest Website Ever Made

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ROWS

1

## Awesome Stories

1



### The Greatest Website Ever Made

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1



### The Greatest Website Ever Made

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1

**4**  
Total



Level Up!

Now for another...

## The Greatest Website Ever Made



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## The Greatest Website Ever Made

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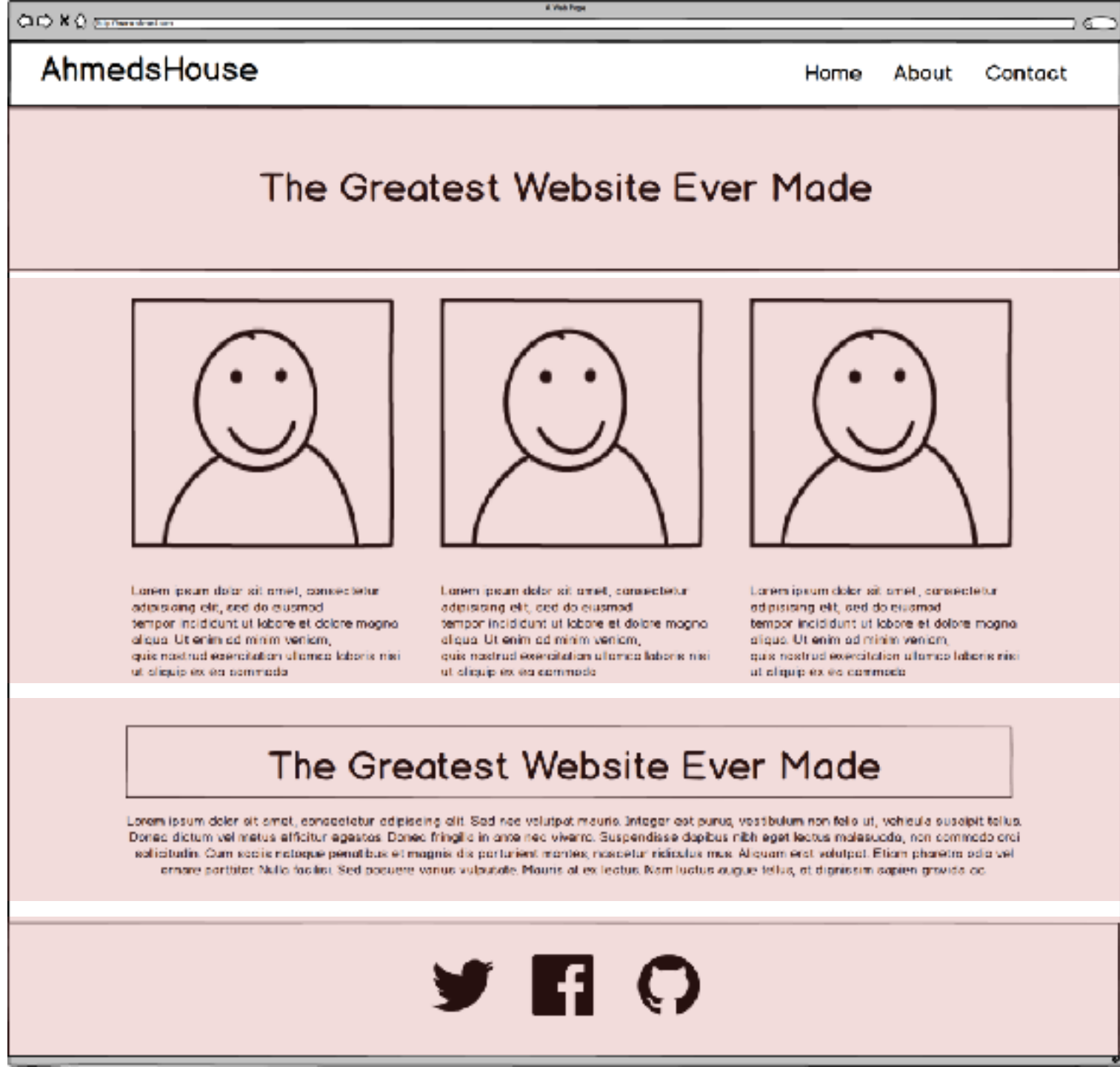
ROWS

1

1\*\*\*

1

1



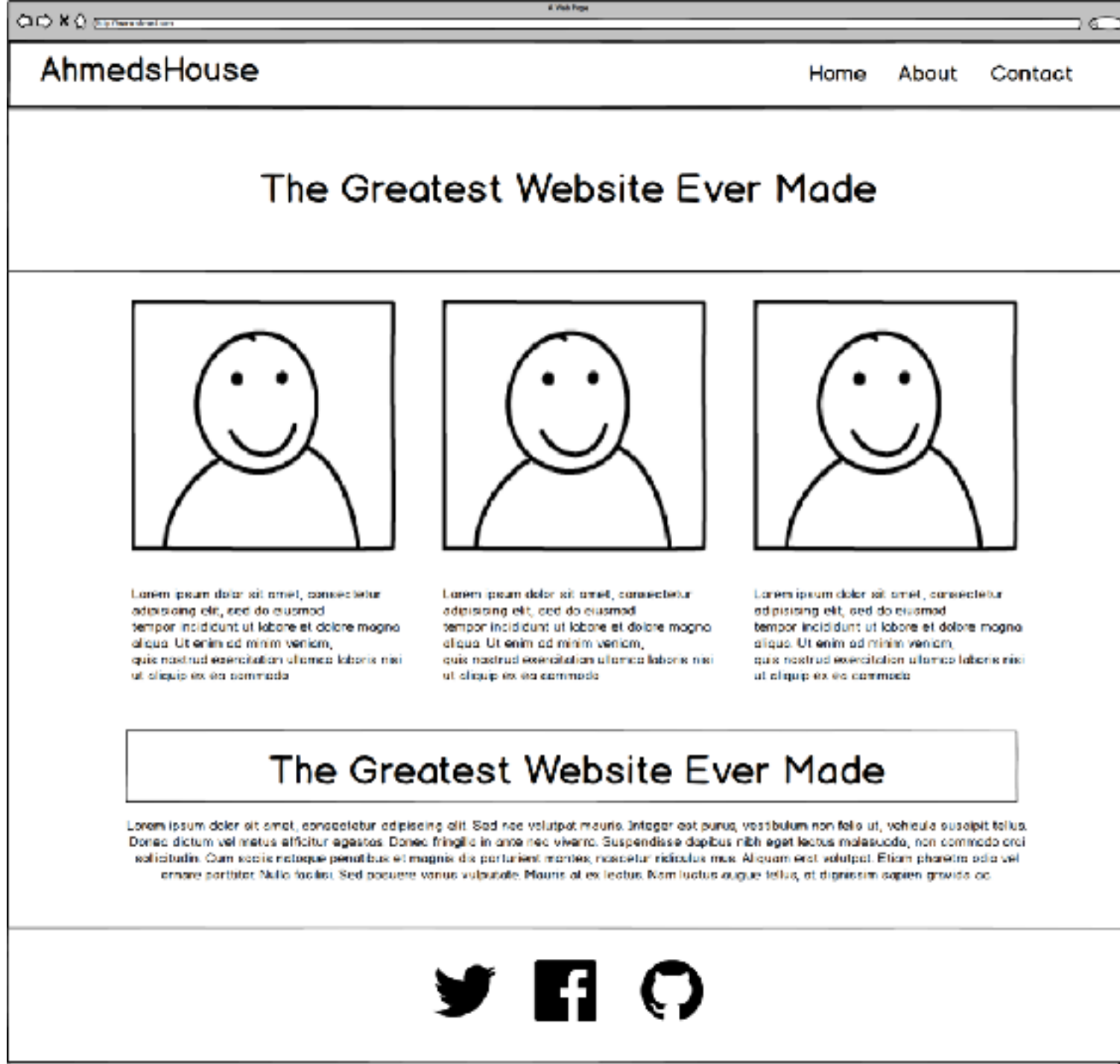
4

Total





You Try!



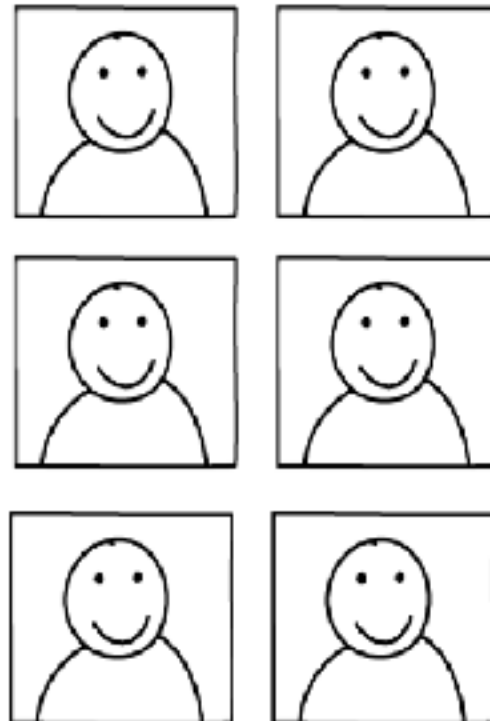
Level Up!

This final one is tricky...

## Awesome Photos



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[Click Photo to View](#)



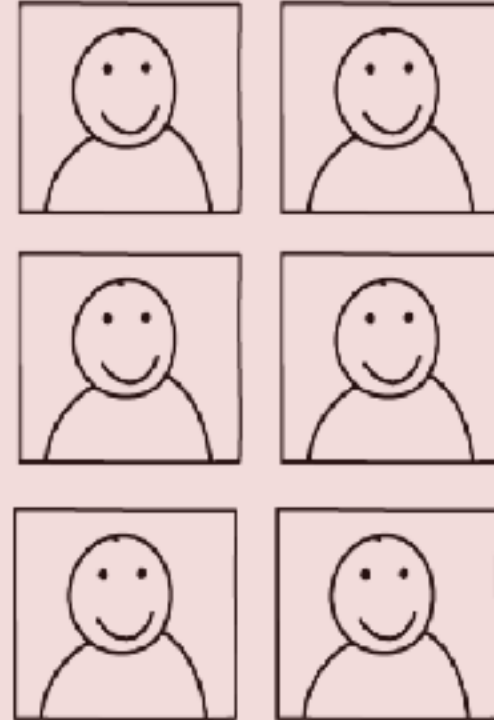
Didn't quite work right?

*For this one we need sub-rows and sub-columns*

ROWS

1

## Awesome Photos



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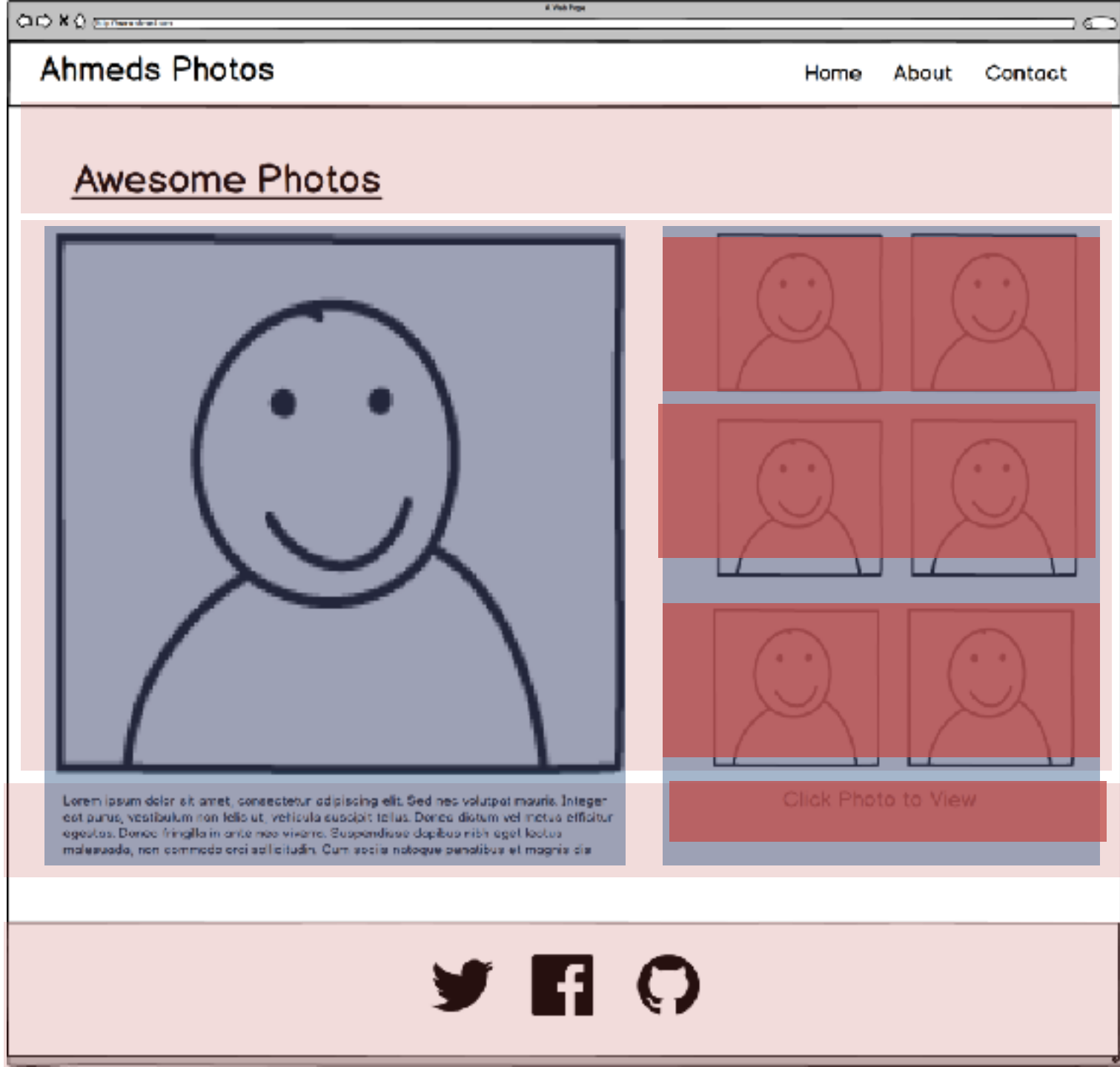
[Click Photo to View](#)



1

**4**  
Total





SUB-  
ROWS

1

1

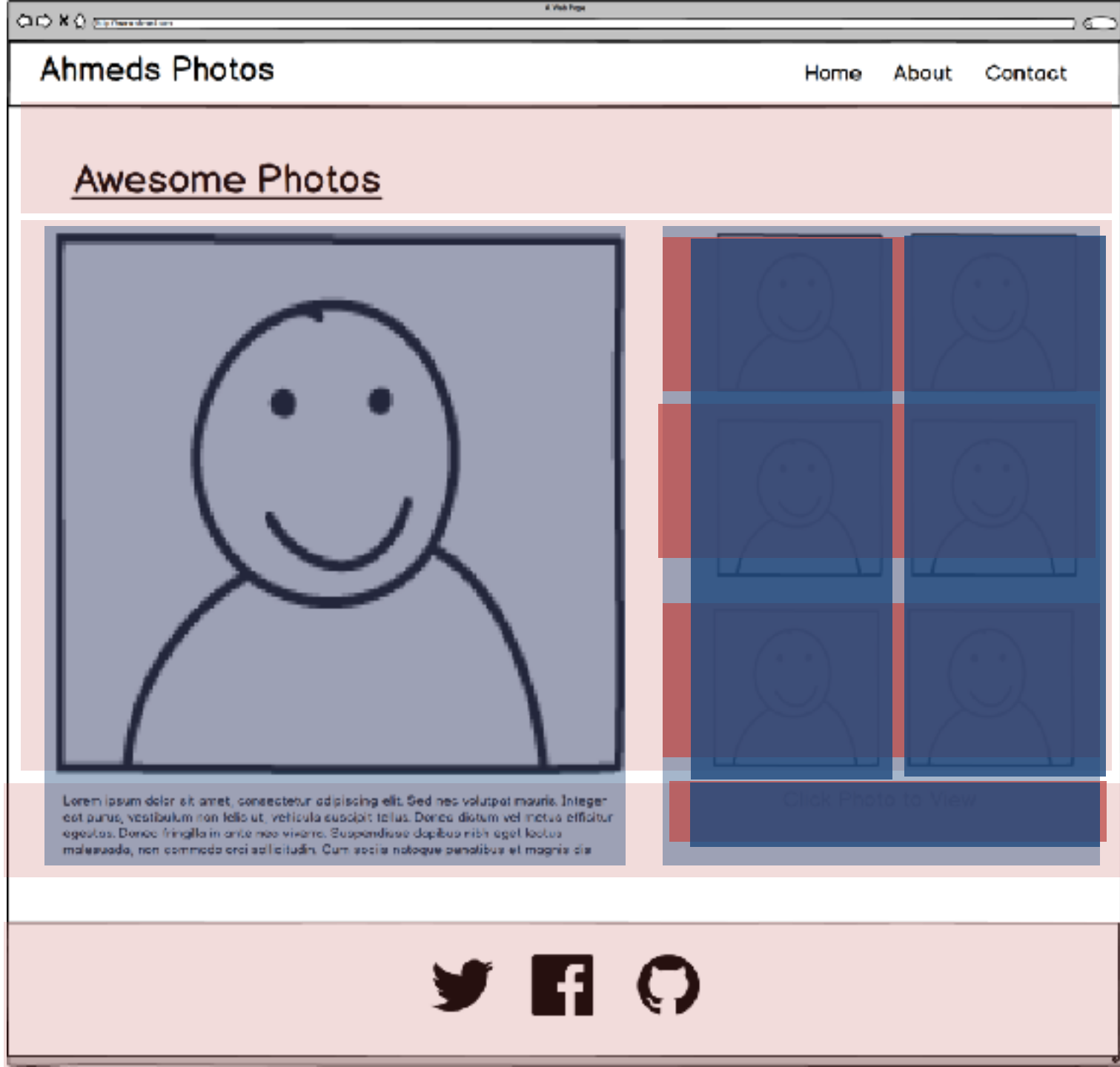
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Total



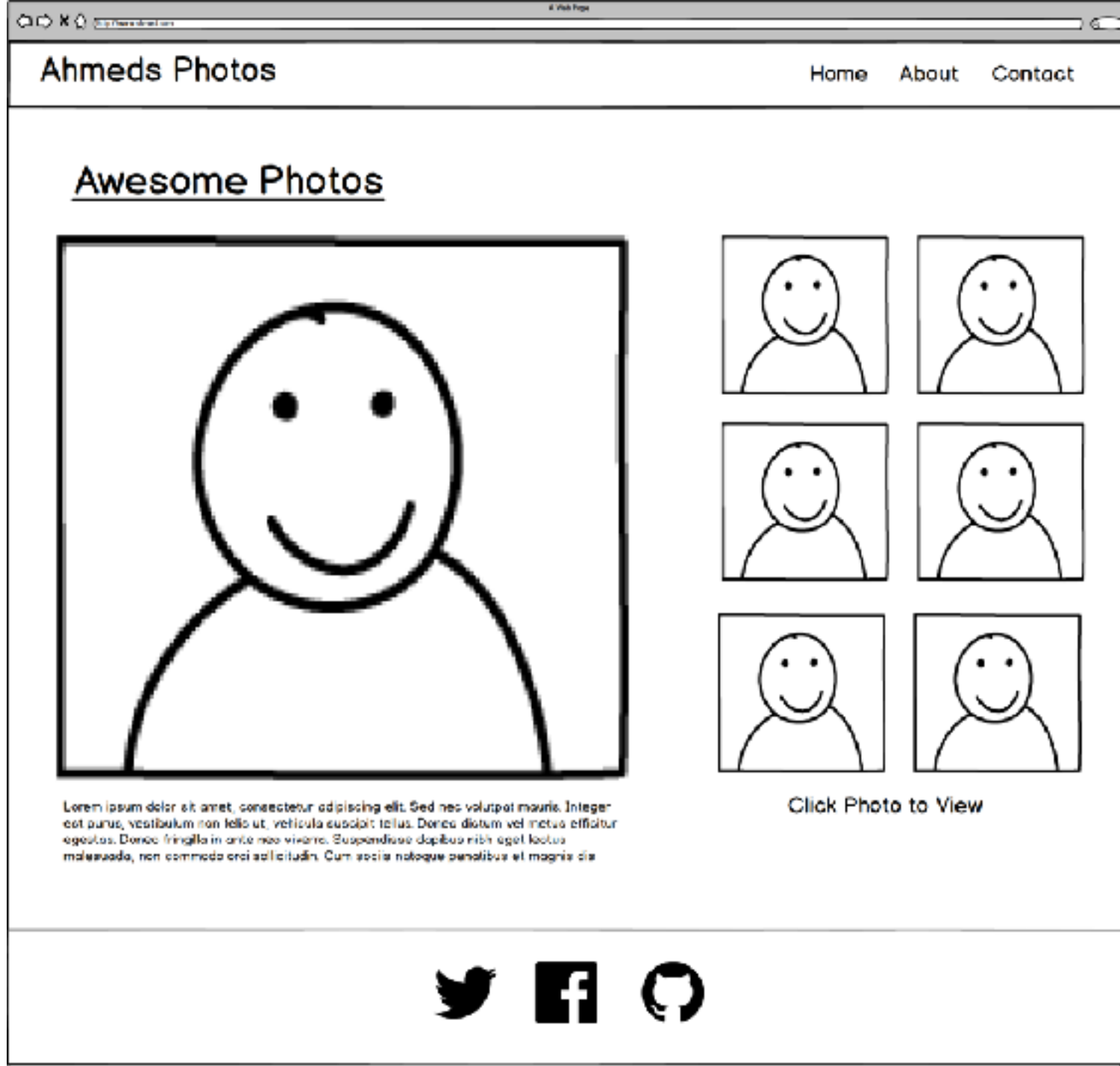


SUB-COLUMNS

2

1

You Try!



**YOU**

**MADE**

**IT**

# ***Grid Design with Bootstrap***

# More Genius Time!

## Warning!

This is a fairly “tricky”... but **VERY IMPORTANT** topic.



# Time to channel that inner genius.

## Awesome Stories



### The Greatest Website Ever Made

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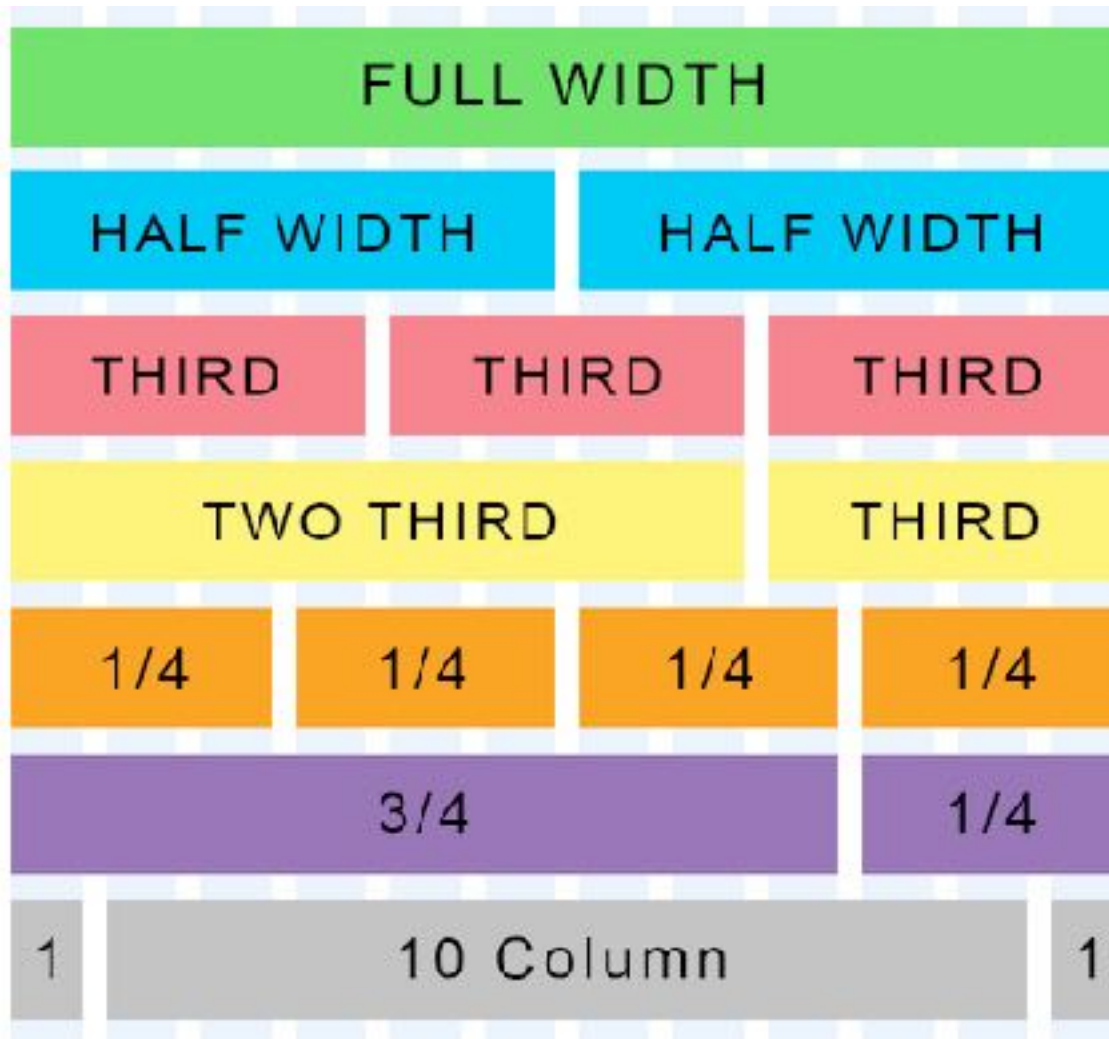


### The Greatest Website Ever Made

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# Bootstrap Grid



Bootstrap lets you organize content based on the “number of columns” a div spans – out of a total 12 columns.

## Example:

`<div class="col-md-12">`  
(Spans full width)

`<div class="col-md-4">`  
(Spans 1/3 of full width)

# Bootstrap Grids

---

- Every Bootstrap Grid is made up of...
  - **containers** - which wrap around the entire grid
  - **rows** - which are defined first and are just rows
  - **columns** - which are defined within rows and specify the columns. The sum total of all columns within a row **must** add up to 12.
- Each of these elements is implemented by creating a **div** with a specific class name.



# Defining Columns

---

Container

Row #1

Column#1

Column#2

Column#3

Column#4



## > YOUR TURN!!

---

### Quick Activity:

Turn to your neighbors and explain to one another:

1. The relationship between **containers**, **rows**, and **columns**.  
(Draw it on a piece of paper for them)
2. The syntax for each.
3. The specific syntax details for columns.

# ***Coding Grids***

---

***Instructor: Demo***  
***(quickgrid.html | 13-InstructorGrids)***



# Bootstrap Grid

```
<!-- Creates the Overall Grid -->  
<div class="container">  
  
  <!-- First Row -->  
  <div class="row">  
    <!-- First (and only column) -->  
    <div class="col-12">
```

file:///C:/Users/ahmed.LAU-GALMEAI/Desktop/BootstrapQuick.html

Apps Inbox (695) boot LearnerNation

I'm in Column 1 of 1. I stretch the entire width. And keep going.

I'm in Column 1 of 2

I'm in Column 2 of 2

```
</div>  
<!-- Second of two columns -->  
<div class="col-lg-6">  
  <h1>I'm in Column 2 of 2</h1>  
</div>  
</div>  
</div>
```

Note the rows, columns (col-lg-6), and containers

# Defining Containers

---

```
<!-- Creates the Container -->  
<div class="container">  
    <!-- Inside we fill it up with rows and columns -->  
</div>
```

“Containers” are like the box that the entire grid sits inside.



# Defining Rows

```
<div class="container">  
  <!-- Defines the row -->  
  <div class="row">  
    <!-- Columns fit inside -->  
  </div>  
</div>
```

“Rows” are like the rows we talked about earlier.

# Defining Columns

```
<div class="row">

  <div class="col-md-4">
    <!-- This is column 1 of 3 -->
  </div>
  <div class="col-md-4">
    <!-- This is column 2 of 3 -->
  </div>
  <div class="col-md-4">
    <!-- This is column 3 of 3 -->
  </div>
</div>
```

“Columns” fit inside of rows. Note the syntax: col-sz-#

**Col** = column

**sz** = viewing size (in this case: medium)

**#** = number of “columns taken” out of 12. (in this case 4 of 12)

## > YOUR TURN!!

---

### Activity:

Using Bootstrap, create a layout that looks like the one shown on the next screen.

- Spend some time prior to coding to draw out the grid layout
- Count the number of rows and columns
- Then use the bootstrap grid syntax to code it out.
- Slack a screenshot of your page when you are done.
- Ipsum Generator: <http://www.lipsum.com/>

# > YOUR TURN!!

## Header

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# ***Building Bootstrap Layouts***

## ***Instructor: Demo***

*(in-class-demo-layout.html | 15-InstructorLayout)*

## > YOUR TURN!!

---

### **Activity:**

Working in pairs and using Bootstrap make the following design.

Be sure to note the:

- **Grid Layout**
- **Navbar**
- **Sidebar panel**
- **Thumbnail**

Additional details will be sent to you via slack.

# > YOUR TURN!!

Navbar | About | Portfolio | Contact

## About Me

150 x 150

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Quisque dignissim, felis ut dictum fringilla, nibh erat fringit libero, sit amet fringilla mauris velit in mi. Duis tempus felis vitae felis vulputate pretium. Nullam conmodo. Etiam acuctor ornare, eros nisl fringilla sed, non pulvinar tortor lacus sit amet sem. Aeneas quis eort facilisis, portitor ex curat, lacinia enim. Curabitur et vestibulum lacus, ut aliquam sagittis et in lorem. Maecid nisl et neque fringilla ultricies. Amare et fringit nisl, a posuere justo. Pellentesque egetas dolor et nisl viverra, nec tristique urna fringilla. Quam efficitur porta purus, id posuere sem congue a.

### Card title

Card subtitle

Some quick example text to build on the card title and make up the bulk of the card's content.



# Common Questions

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## 1. **Can I reverse the order (i.e. rows inside columns)?**

Not usually. Columns should go inside of rows. Though, you can create sub-rows inside of columns. But those columns would still need to be inside of a row of their own.

## 2. **Can I just avoid having a container?**

You could... But it will mess things up. Just throw in a container.

## 3. **What if I have columns that go past 12?**

Then your bootstrap grid won't behave as expected. Don't go past 12.

## 4. **What if I don't add up to 12?**

Nothing. You will have empty space at the end. But be careful, because the next column you add in this row will fill up the empty space (sometimes without your intention).

take a deep breath.



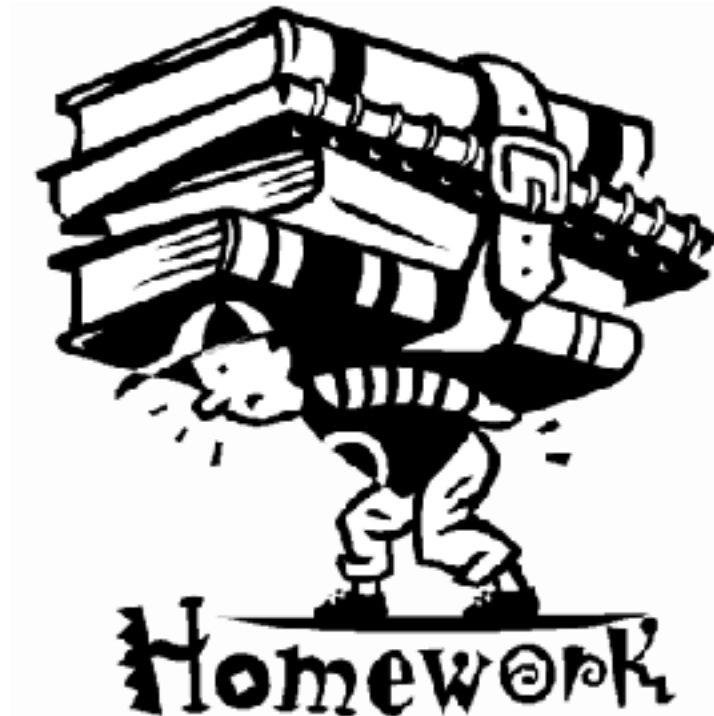
# ***Mobile Responsive (HW)***

# Still No Facebook Time

---

## Warning!

This next section matters a lot for your homework



# Media Queries

---

**Media Queries** define how CSS styles are applied in relation to the characteristics of the device viewport.

Through media queries we can change the way a web page is displayed based on width, height, orientation, and even media type (screen, paper, braille, etc).

Bootstrap extensively uses media queries under the hood to help you create mobile responsive websites.

But remember! Media queries must be declared last.

***Instructor: Demo  
(17-InstructorMedia)***

# Quick Demo

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Nunc in laoreet nunc. Quisque accumsan tincidunt neque, at  
dictum turpis. In hac habitasse platea dictumst.

## > YOUR TURN!!

### Activity:

Explain to your partner what the following CSS code does:

```
@media screen and (max-width: 768px) {  
  
  body {  
    background-color: #333;  
  }  
  
  .wrapper {  
    width: 600px;  
  }  
}
```



## > YOUR TURN!!

---

### **Activity:**

Build your own mobile responsive HTML /CSS page using media queries.

Just follow the steps sent to you via Slack.

# Viewport

---

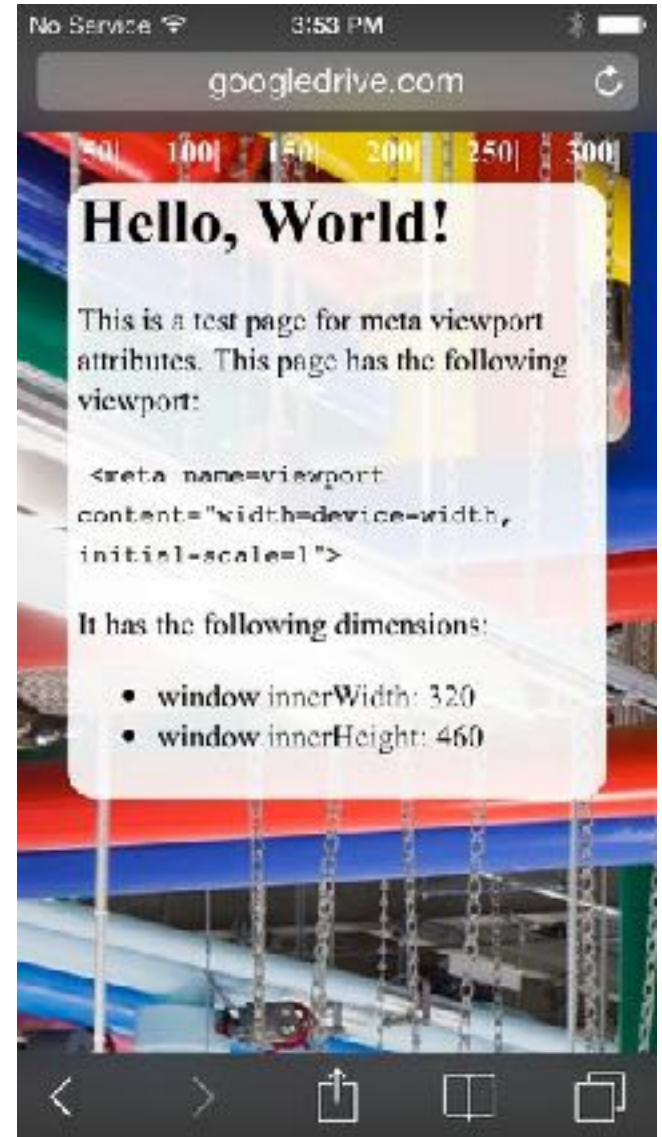
- **Viewport** refers to the display being used to view the website.
- By default, mobile devices with small screen, high resolution viewports may render content at a typical desktop screen ratio (scaled down at the smaller screen size).
- We can specify that a web page should scale its content to the width of its current viewport using a `meta` tag.

# Viewport

## No Viewport Content Scaling



## Yes Viewport Content Scaling



# Viewport Inclusion

---

Just include this line in the head

```
<meta name="viewport" content="width=device-width, initial-scale=1">
```

And then include a variety of @media queries for various sized screens.

```
@media screen and (max-width: 768px) {
```

```
@media screen and (max-width: 480px) {
```

## > YOUR TURN!!

---

### **Activity:**

Spend the next few moments on the site [viewportemulator.com](http://viewportemulator.com) and visit your favorite websites using various viewports.

Notice how the sites change display wise.



*Questions?*

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