

**CSS FRAMEWORKS**  
**WEBDEV@RGU**

# OVERVIEW

WHAT ARE FRAMEWORKS

TYPES OF FRAMEWORKS

FRONTEND (CSS) FRAMEWORKS

UNSEMANTIC

**WHAT ARE  
FRAMEWORKS?**

# IN GENERAL

a **standardised** set of concepts,  
practices and criteria for dealing  
with a **common type of problem**

# IN WEB DESIGN

a package made up files and  
folders of standardised code to aid  
in the development of websites

# websites have common features, menu bars...layout in grids...columns

The screenshot shows the homepage of the ASSETS 2010 conference website. At the top left is the ASSETS logo, which is a red diamond containing a stylized lamp or tree. To the right of the logo is the title "ASSETS 2010" in large red letters, followed by the subtitle "The 12th International ACM SIGACCESS Conference on Computers and Accessibility". Below the title is a small image of the Orlando skyline at night. On the far left, there is a sidebar with links for "ASSETS 2010 SIGACCESS ORLANDO, FL" and various conference details like "Call for Papers", "Important Dates", and "Technical Papers". The main content area contains a list of target populations and a brief description of the conference's focus on assistive technologies.

The screenshot shows the homepage of the ASSETS 2011 conference website. It features a prominent blue header bar with the text "ASSETS 2011" and "24-26 October 2011 Dundee, Scotland". A vertical menu bar on the left lists categories such as HOME, AUTHORS, COMMITTEES, AWARDS, SCHEDULE, REGISTRATION, ATTENDING, PARTNERS & SPONSORS, and social media links. The main content area includes a large "ASSETS 2011" logo, a brief description of the conference, and a list of target populations. To the right, there is a sidebar titled "Important Dates" with a detailed timeline of events, and a small image of a bridge.

# MENU BARS

surely there must therefore be an  
easy way for us to use this to our  
advantage

The image shows two side-by-side screenshots of the ASSETS conference websites from 2012 and 2013. Both sites have a similar layout structure:

- Header:** The top features a large banner image of a mountain range.
- Title:** The conference name "ASSETS" is prominently displayed in the upper left.
- Date and Location:** The dates "22-24 October 2012" and location "Boulder, Colorado, USA" are in the upper right.
- Navigation Bar:** A vertical sidebar on the left contains links for "HOME", "AUTHORS", "COMMITTEES", "AWARDS", "SCHEDULE", "REGISTRATION", "ATTENDING", and "SPONSORS".
- Content Area:** The main content area includes a paragraph about the conference's focus on assistive technologies, a bulleted list of target populations, and a note about peer-review and publication.
- Call-to-Action:** A button labeled "Important Dates" with the text "18th August 2012 Early-bird registration deadline" and "22-24 October 2012 ASSETS Conference".
- Footer:** A small footer at the bottom left credits "Photo by Ken Kinder and used under creative commons".

The 2013 version is identical in structure but has a different background image of a city skyline.

# COLUMN LAYOUTS

and have a layout system that we can call on to do all the hard work for us

The image shows two side-by-side screenshots of the ASSETS conference websites. The left screenshot is for the 2014 conference in Rochester, NY, USA, and the right is for the 2015 conference in Lisbon, Portugal. Both sites feature a blue header bar with the conference name and date. Below the header, there's a large image of a city skyline. The main content area is organized into a grid with several columns and rows. On the far left, there's a sidebar with links like Home, Authors, Committees, Awards, Program, Registration, Attending, and Partners & Sponsors. The main content area includes sections for Important Dates (with specific dates and descriptions), Scope (describing the conference's focus on people with disabilities and older adults), Authors (information for authors including submission deadlines), Program (program details), Registration (registration information), Committee (committee members), Venue (venue information), and Sponsors (sponsor information). The 2015 site also features a large green graphic on the right side.

# GRID SYSTEM

“the aim of frameworks is to give developers a common structure so that we don't have to make everything from scratch every time that we want to make a new websites”

# in simpler terms...think of these like templates!

Choose a Theme

Standard   Wide

Black

White

Gradient

Showroom

Modern Type

Exhibition

Drafting

Photo Essay

Classic

This Presentation

Office Theme: used by all slides

Aa

Office

Browse for Themes...

Save Current Theme...

# **TYPES OF FRAMEWORKS**

**PRESENTATION  
LAYER**

**APPLICATION  
LAYER**

**DATA  
LAYER**

**FRONTEND  
(CLIENT SIDE)**

**BACKEND  
(SERVER SIDE)**

These are frameworks that effect the overall look and feel of the website - the **user interface**

CSS



FLEXBOX



Bootstrap



not really a  
framework but its  
still quite cool

unsemantic

FRONTEND (CLIENT SIDE)

These frameworks can effect the overall logic and operation of a website



django



BACKEND (SERVER SIDE)

# FRONTEND (CSS) FRAMEWORKS

frontend frameworks usually consist of a package with several files for standardising our code.

1. CSS Source to create a grid
2. Typography and style definitions
3. Solutions for browser incompatibility
4. Creation of standard classes

# lots (and lots and lots) exist that you can use!

CSS Front-end Frameworks

usablica.github.io/front-end-frameworks/compare.html

Let others know

Follow @usablica 1,293 followers

Tweet Like 3.3k Star 2,400 Fork 308

Search Frontend Frameworks

Framework	Version	Support	Less	Sass	Mobile	Licence
Semantic UI	9+	9+ + 6+ 12+	LESS	SASS	Mobile	MIT
Bootstrap	8+	9+ + 6+ 12+	LESS	SASS	Mobile	MIT
Foundation	9+	9+ + 6+ 12+	LESS	SASS	Mobile	MIT
UIkit	9+	9+ + 6+ 12+	LESS	SASS	Mobile	MIT
960 Grid System	7+	9+ + 6+ 12+	LESS	SASS	Mobile	GPL & MIT
Skeleton	7+	9+ + 6+ 12+ 3+ 0+	LESS	SASS	Mobile	MIT
99lime HTML KickStart	8+	9+ + 6+ 12+	LESS	SASS	Mobile	MIT
Kube	8+	9+ + 6+ 12+	LESS	SASS	Mobile	Open Source
Less Framework	7+	9+ + 6+ 12+	LESS	SASS	Mobile	MIT
Flaminwork	7+	9+ + 6+ 12+	LESS	SASS	Mobile	Open Source
G5 Framework	7+	9+ + 6+ 12+	LESS	SASS	Mobile	Open Source

<http://usablica.github.io/front-end-frameworks/compare.html>

we're going to look at the first in this list

## **1. CSS Source to create a grid**

2. Typography and style definitions
3. Solutions for browser incompatibility
4. Creation of standard classes

two introductions and then you can give them a go yourself

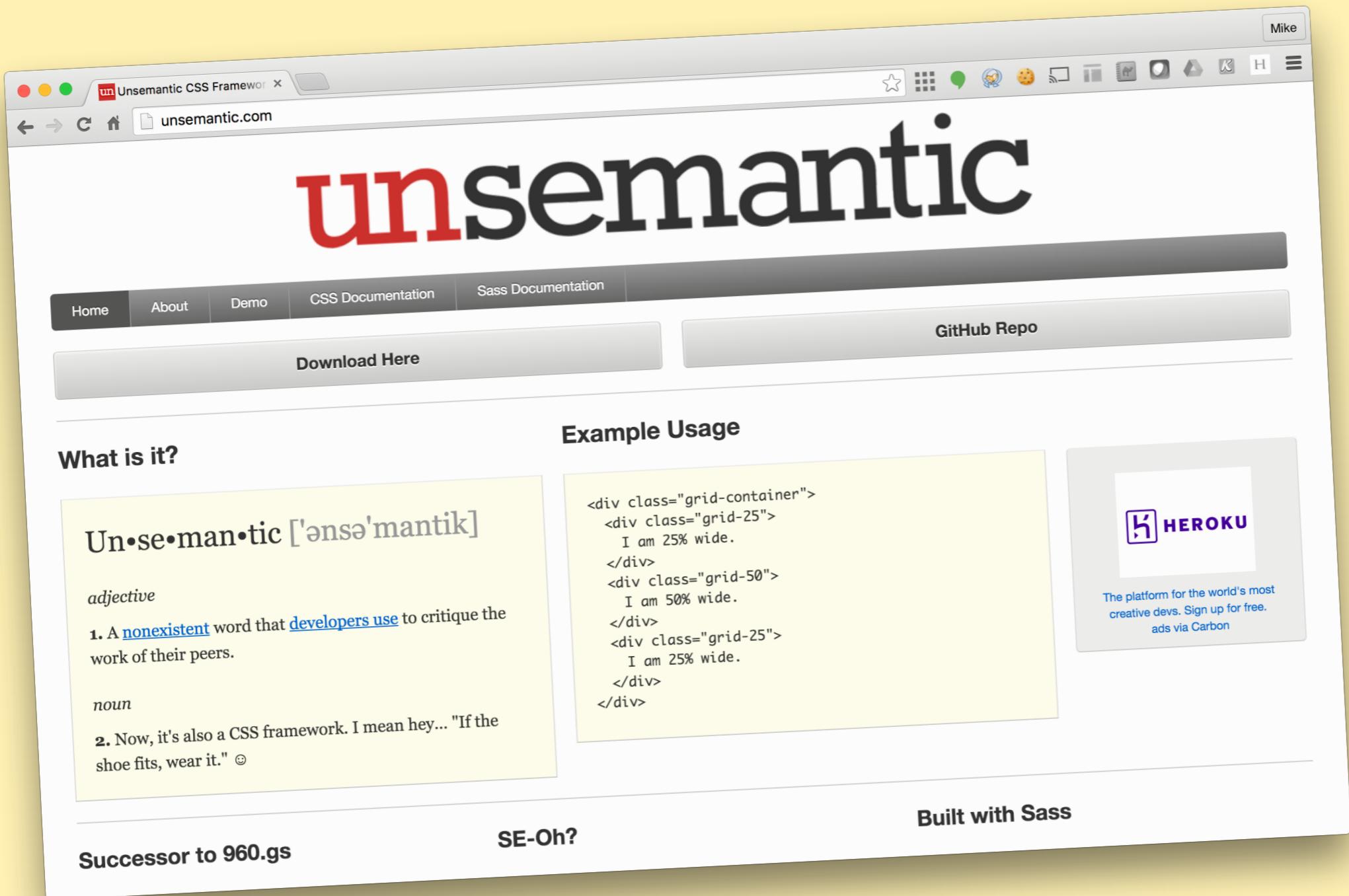
PS - there is no **right** answer for which of these is better - it is up to you!

# **UNSEMANTIC**

## **FRONTEND (CSS)**

## **FRAMEWORKS**

works in a similar way to flexbox but  
(I think) it is a lot easier to use



The screenshot shows a web browser window with the title bar "Unsemantic CSS Framework" and address bar "unsemantic.com". The main content area features a large, bold "unsemantic" logo where "un" is red and "semantic" is black. Below the logo is a navigation bar with links for Home, About, Demo, CSS Documentation, and Sass Documentation. A "GitHub Repo" button is also present. Two large buttons are visible: "Download Here" and "GitHub Repo". On the left, there's a section titled "What is it?" defining "Un•se•man•tic" as an adjective and noun, with two numbered examples. Example 1 describes it as a word used by developers to critique peers, and Example 2 notes it's a CSS framework. On the right, there's a "Example Usage" section showing a snippet of CSS code for a grid system and a "HEROKU" logo with a brief description.

What is it?

**Un•se•man•tic** ['ənsə'mantik]

*adjective*

1. A nonexistent word that developers use to critique the work of their peers.
2. Now, it's also a CSS framework. I mean hey... "If the shoe fits, wear it." ☺

*noun*

**Example Usage**

```
<div class="grid-container">
  <div class="grid-25">
    I am 25% wide.
  </div>
  <div class="grid-50">
    I am 50% wide.
  </div>
  <div class="grid-25">
    I am 25% wide.
  </div>
</div>
```

**SE-Oh?**

**Built with Sass**

**Successor to 960.gs**

<http://unsemantic.com/>

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Title</title>
  <link rel="stylesheet" href="style.css">
  <b><link rel="stylesheet" href="unsemantic-grid-responsive-tablet.css"></b>
</head>
<body>

<main>

  <section class="container" id="cont1">
    <h2>Section 1</h2>
    <p>Lorem ipsum...</p>
  </section>

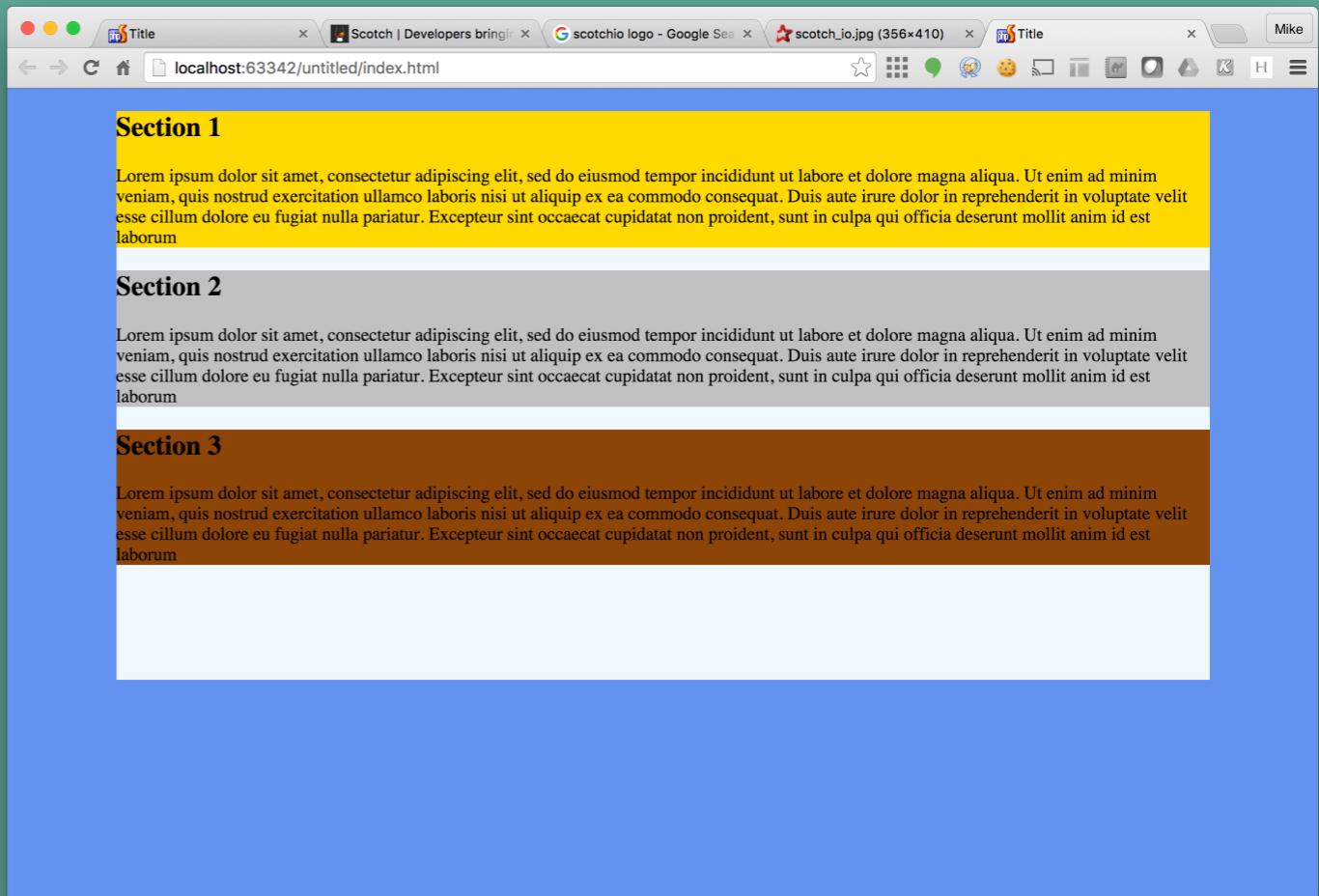
  <section class="container" id="cont2">
    <h2>Section 2</h2>
    <p>Lorem ipsum ...</p>
  </section>

  <section class="container" id="cont3">
    <h2>Section 3</h2>
    <p>Lorem ipsum...</p>
  </section>

</main>

</body>
</html>

```



# ADD THE UNSEMANTIC STYLE SHEET TO YOUR HTML

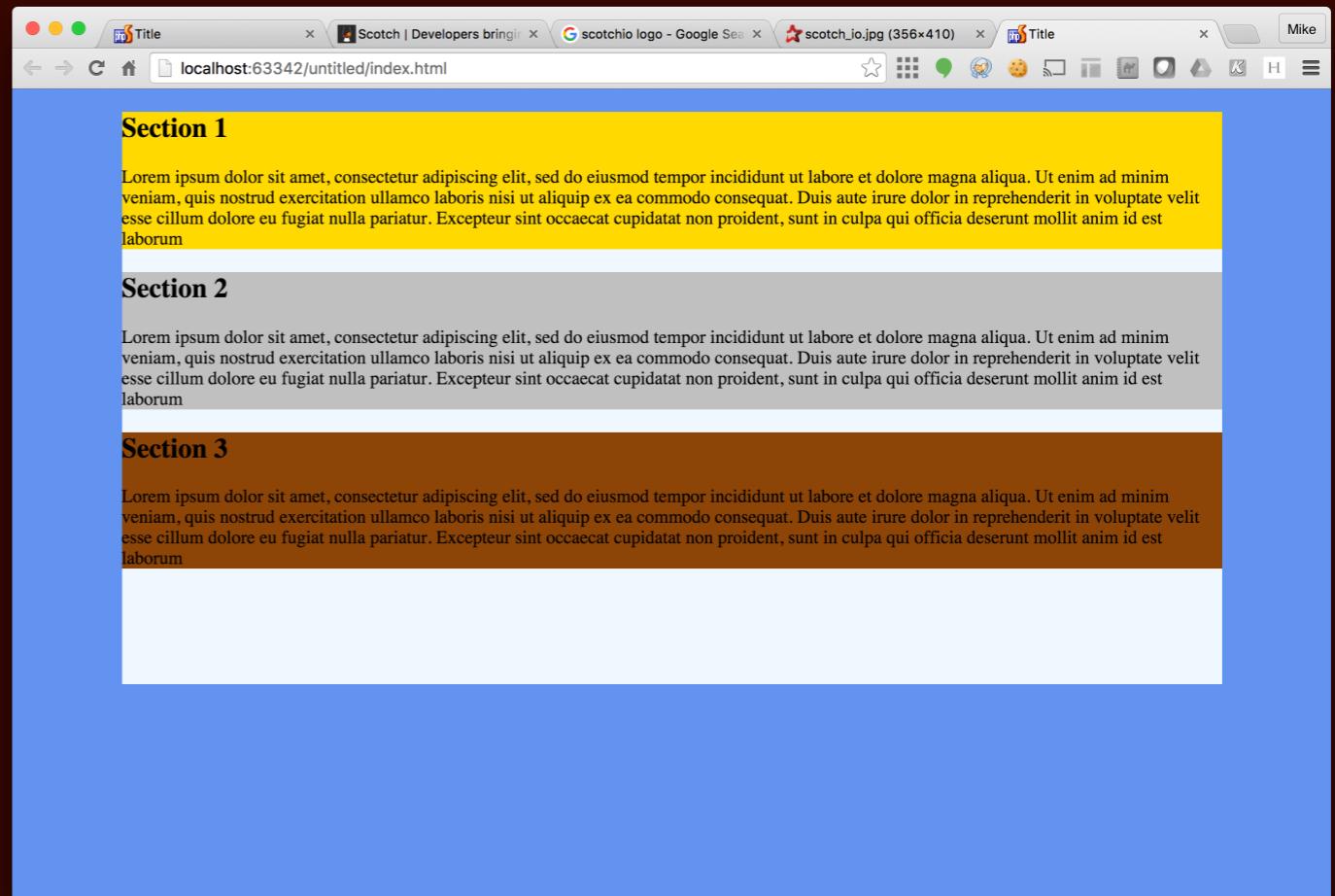
```
body {  
    background-color: cornflowerblue;  
}
```

```
main {  
    max-width: 960px;  
    margin-right: auto;  
    margin-left: auto;  
    height: 500px;  
    background-color: aliceblue;  
}
```

```
#cont1 {  
    background-color: gold;  
}
```

```
#cont2 {  
    background-color: silver;  
}
```

```
#cont3 {  
    background-color: saddlebrown;  
}
```



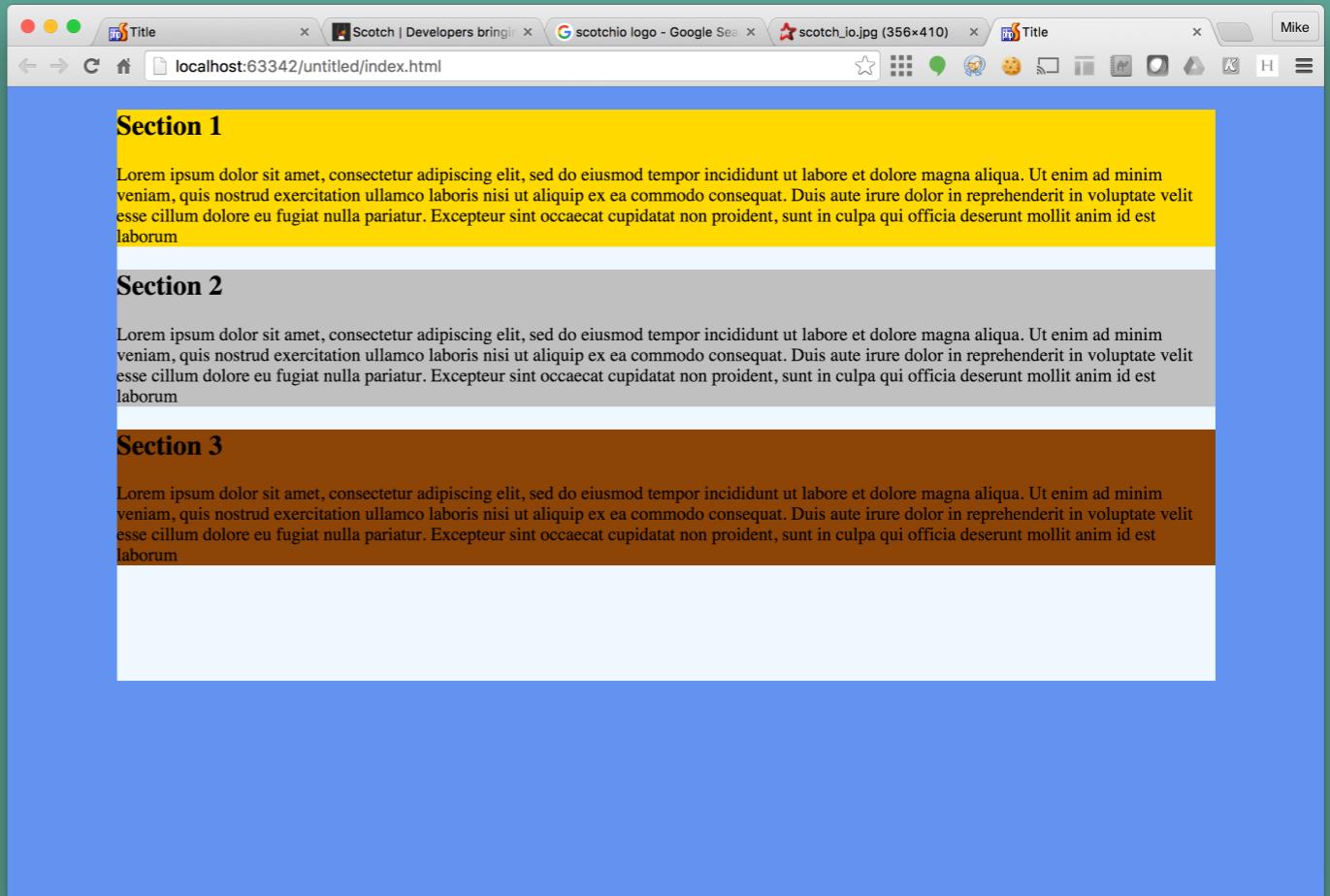
**AND THIS IS OUR CSS...LETS  
NOT TOUCH IT AGAIN!!!**

WE'RE GOING TO USE THE CSS THAT  
IS ALREADY MADE FOR US BY  
UNSEMANTIC FROM THIS POINT

## QUICK GAME

1. OPEN UP THE UNSEMANTIC CSS FILE
2. CRY
3. CLOSE IT AND NEVER OPEN IT AGAIN

```
<head>
  <meta charset="UTF-8">
  <title>Title</title>
  <link rel="stylesheet" href="style.css">
  <link rel="stylesheet" href="unsemantic-
grid-responsive-tablet.css">
  <meta
    name="viewport"
    content="
      width=device-width,
      initial-scale=1,
      minimum-scale=1,
      maximum-scale=1"
  />
</head>
```



STEP 1 - ADD THIS LINE INSIDE YOUR  
<HEAD>  
THIS SAVES <HEAD>ACHES LATER ON!

```
<body>
```

```
<main class="grid-container">
```

```
<section id="cont1">  
  <h2>Section 1</h2>  
  <p>Lorem ipsum...</p>  
</section>
```

```
<section id="cont2">  
  <h2>Section 2</h2>  
  <p>...</p>  
</section>
```

```
<section id="cont3">  
  <h2>Section 3</h2>  
  <p>Lorem ipsum...</p>  
</section>
```

```
</main>
```

```
</body>
```

**STEP 2 - CONTENT THAT WE WANT INSIDE A GRID MUST LIVE INSIDE A GRID CONTAINER CLASS**



```
<body>
```

```
<main class="grid-container">
```

```
<section class="grid-33" id="cont1">
```

```
  <h2>Section 1</h2>
```

```
  <p>Lorem ipsum...</p>
```

```
</section>
```

```
<section class="grid-33" id="cont2">
```

```
  <h2>Section 2</h2>
```

```
  <p>...</p>
```

```
</section>
```

```
<section class="grid-33" id="cont3">
```

```
  <h2>Section 3</h2>
```

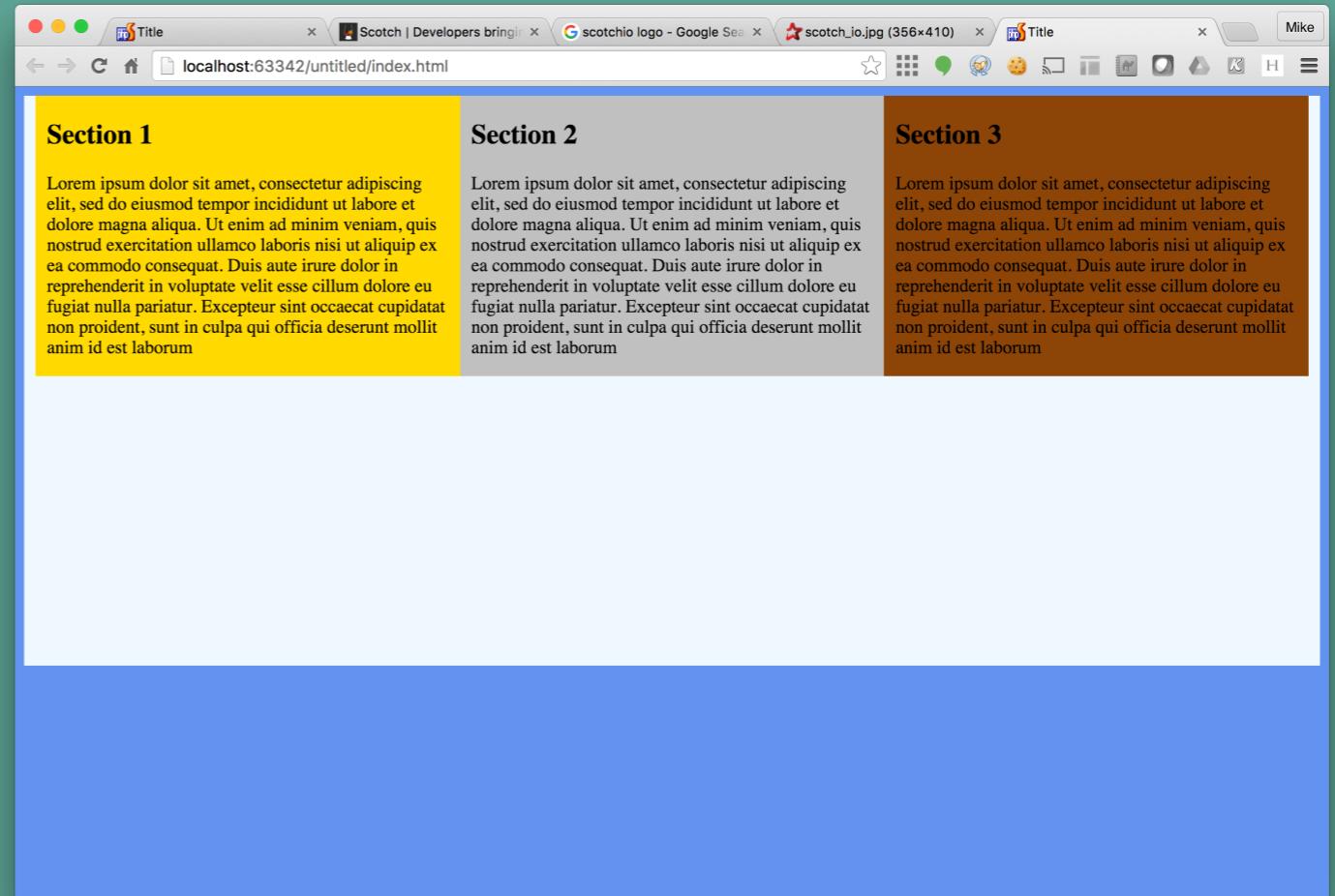
```
  <p>Lorem ipsum...</p>
```

```
</section>
```

```
</main>
```

```
</body>
```

**STEP 3- WE GIVE OUR COLUMNS A CLASS THAT CORRESPONDS TO THE % WIDTH THAT WE WANT THEM TO BE**



```
<body>
```

```
<main class="grid-container">
```

```
<section class="grid-25" id="cont1">
```

```
  <h2>Section 1</h2>
```

```
  <p>Lorem ipsum...</p>
```

```
</section>
```

```
<section class="grid-50" id="cont2">
```

```
  <h2>Section 2</h2>
```

```
  <p>...</p>
```

```
</section>
```

```
<section class="grid-25" id="cont3">
```

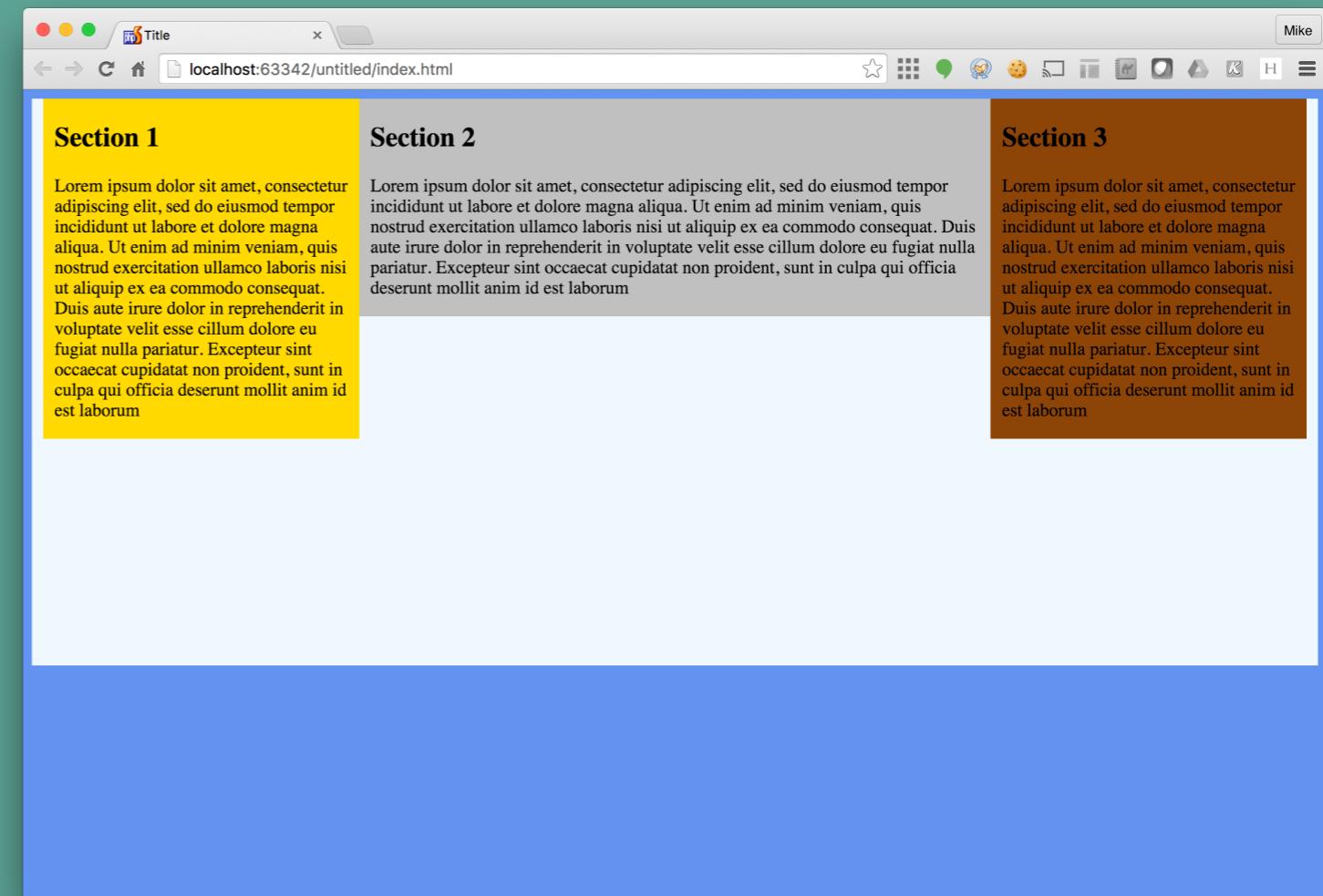
```
  <h2>Section 3</h2>
```

```
  <p>Lorem ipsum...</p>
```

```
</section>
```

```
</main>
```

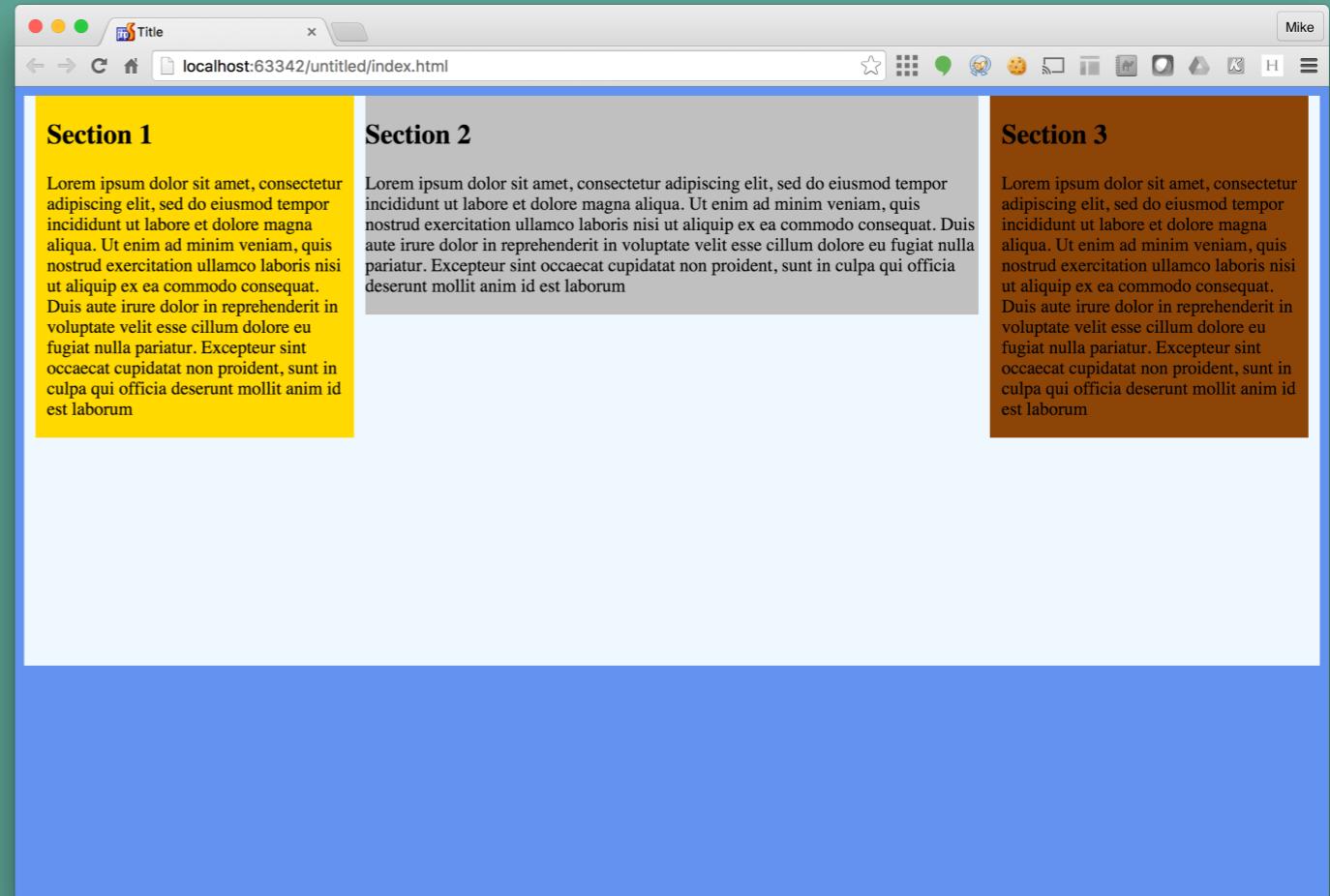
```
</body>
```



```
...  
<section class="grid-25" id="cont1">  
  <h2>Section 1</h2>  
  <p>...</p>  
</section>
```

```
<div id="subsection" class="grid-50  
grid-parent">  
  <section class="grid-90 suffix-5  
prefix-5" id="cont2">  
  
    <h2>Section 2</h2>  
    <p>Lorem ipsum...</p>  
  </section>  
</div>
```

```
<section class="grid-25" id="cont3">  
  <h2>Section 3</h2>  
  <p>...</p>  
</section>
```



**STEP 4- IF YOU WANT A MARGIN YOU  
NEED TO USE GRID-PARENT AND  
NEXT YOUR ITEMS**

#RESPONSIVE?



## Section 1

Placeholder text for Section 1.

## Section 2

Placeholder text for Section 2.

## Section 3

Placeholder text for Section 3.

```
<main class="grid-container">
```

```
  <section class="grid-33 tablet-grid-50
```

```
    mobile-grid-100" id="cont1">
```

```
    <h2>Section 1</h2>
```

```
    <p>...</p>
```

```
  </section>
```

```
  <section class="grid-33 tablet-grid-50
```

```
    mobile-grid-100" id="cont2">
```

```
    <h2>Section 2</h2>
```

```
    <p>...</p>
```

```
  </section>
```

```
  <section class="grid-33 tablet-grid-100
```

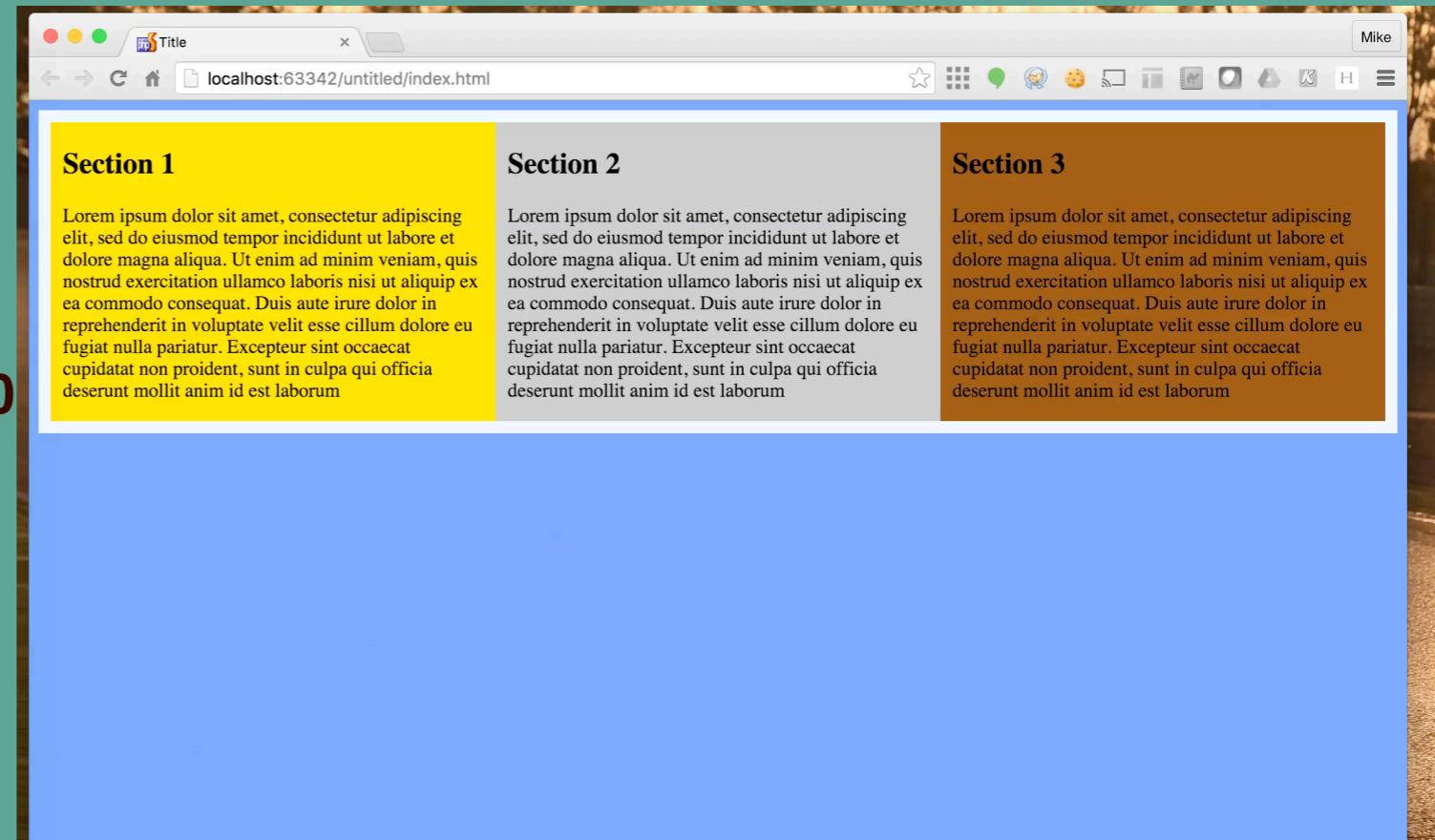
```
    mobile-grid-100" id="cont3">
```

```
    <h2>Section 3</h2>
```

```
    <p>...</p>
```

```
  </section>
```

```
</main>
```



(SLIGHTLY) RESPONSIVE OUT OF THE  
BOX BUT WE CAN MAKE THIS EVEN  
BETTER

# NORMAL SIZE

# SIZE ON A MOBILE

```
<section class="grid-33 tablet-grid-50 mobile-grid-100" id="cont1">
```

# SIZE ON A TABLET

(SLIGHTLY) RESPONSIVE OUT OF THE  
BOX BUT WE CAN MAKE THIS EVEN  
BETTER



# OUT OF THE BOX

# ADJUSTED

