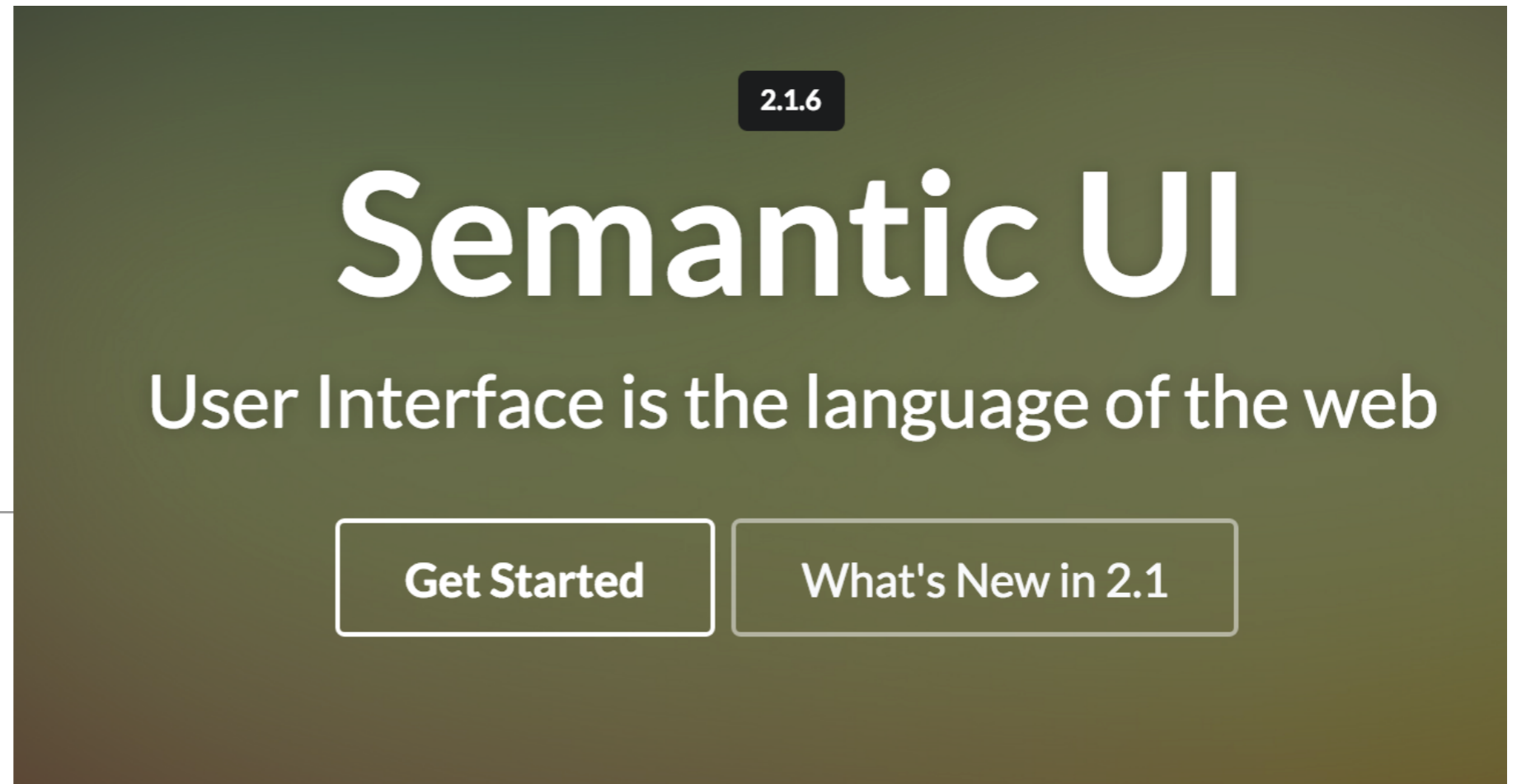


# Semantic UI

---



Grids & Images



# Grids

A grid is a structure with a [long history](#) used to align negative space in designs.

Using a grid makes content appear to flow more naturally on your page.

Toggle Animation

Example



```
<div class="ui grid">  
  <div class="four wide column"></div>  
  <div class="four wide column"></div>  
  <div class="four wide column"></div>  
  <div class="four wide column"></div>  
</div>
```

## Columns

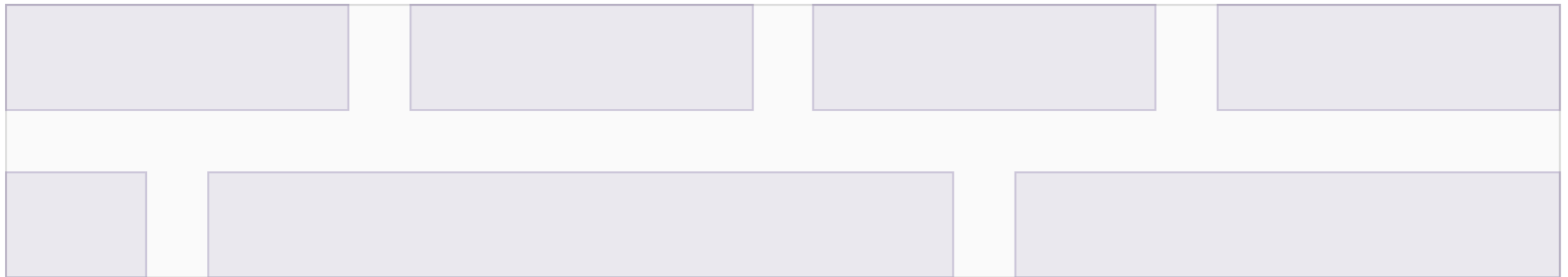


Grids divide horizontal space into indivisible units called "columns". All columns in a grid must specify their width as proportion of the total available row width.

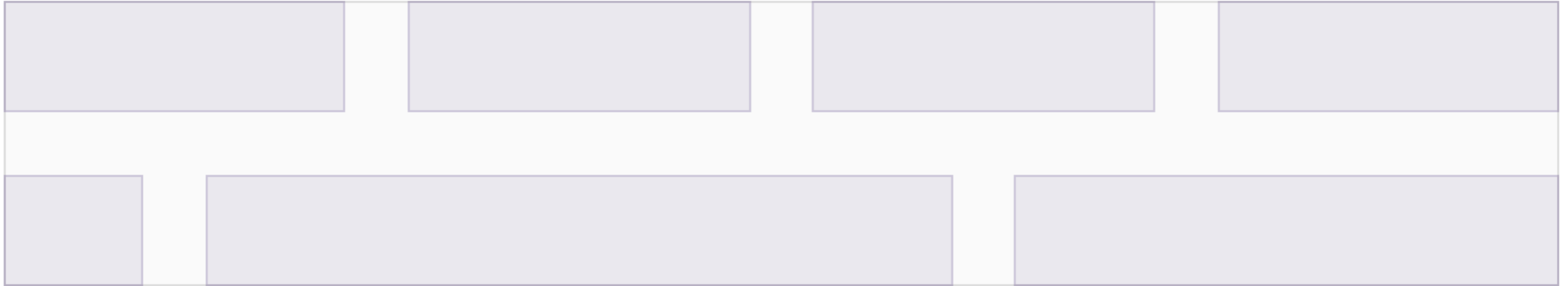
All grid systems chooses an arbitrary column count to allow per row. Semantic's default theme uses **16 columns**.

The example below shows four **four wide** columns will fit in the first row,  $16 / 4 = 4$ , and three various sized columns in the second row.  $2 + 8 + 6 = 16$

The default column count, and other arbitrary features of grids can be changed by adjusting Semantic UI's underlying [theming variables](#).



## Example



```
<div class="ui grid">  
  <div class="four wide column"></div>  
  <div class="four wide column"></div>  
  <div class="four wide column"></div>  
  <div class="four wide column"></div>  
  <div class="two wide column"></div>  
  <div class="eight wide column"></div>  
  <div class="six wide column"></div>  
</div>
```

## Rows



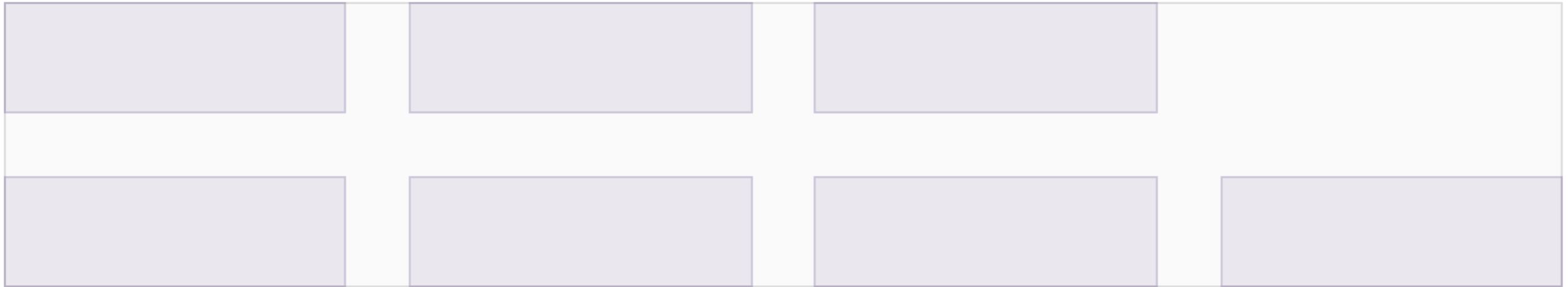
Rows are groups of columns which are aligned horizontally.

Rows can either be *explicit*, marked with an additional `row` element, or *implicit*, automatically occurring when no more space is left in a previous row.

After each group of columns vertical spacing is added to separate each group of columns, creating vertical rhythm.



## Example



```
<div class="ui four column grid">  
  <div class="row">  
    <div class="column"></div>  
    <div class="column"></div>  
    <div class="column"></div>  
  </div>  
  <div class="column"></div>  
  <div class="column"></div>  
  <div class="column"></div>  
  <div class="column"></div>  
</div>
```

# Grids in IoT Site



Waterford Institute *of* Technology  
INSTITIÚID TEICNEOLAÍOCHTA PHORT LÁIRGE

Department of Computing & Mathematics

BSc (Hons) the Internet of Things

```
<header class="ui segment">  
  <h2>  
      
    Department of Computing & Mathematics  
  </h2>  
  <h3> BSc (Hons) the Internet of Things </h3>  
</header>
```

- How to adapt this to render as shown below?

Department of Computing &  
Mathematics

BSc (Hons) the Internet of Things



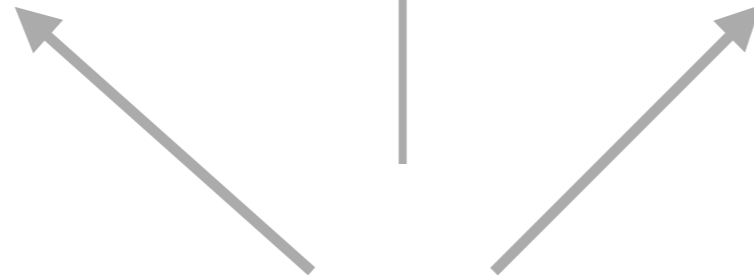
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Two Columns



## Department of Computing & Mathematics

BSc (Hons) the Internet of Things



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INSTITIÚID TEICNEOLAÍOCHTA PHORT LÁIRGE

```
<header class="ui two column grid segment">
  <div class="ui column">
    <h2 class="ui header"> Department of Computing & Mathematics </h2>
    <h3 class="ui header"> BSc (Hons) the Internet of Things </h3>
  </div>
  <div class="ui column">
    <p>
      
    </p>
  </div>
</header>
```

combining grid with segment

+ introducing 2 “ui column” divisions

# Centre Alignment + ui image

---

Department of Computing &  
Mathematics

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```
<header class="ui two column center aligned grid segment">
```

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BSc (Hons) the Internet of Things



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```

```

# Middle Alignment

---

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```
<header class="ui two column center aligned middle aligned grid segment">
  <div class="ui column">
    <h2 class="ui header"> Department of Computing & Mathematics </h2>
    <h3 class="ui header"> BSc (Hons) the Internet of Things </h3>
  </div>
  <div class="ui column">
    <p>
      
    </p>
  </div>
</header>
```



Waterford Institute *of* Technology  
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## Department of Computing & Mathematics

BSc (Hons) the Internet of Things

Department of Computing &  
Mathematics

BSc (Hons) the Internet of Things



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# Image

An image is a graphic representation of something

## Size

An image may appear at different sizes



Semantic uses arbitrary default values for image sizes from mini to massive. It is recommended to update these with values used in your project in `image.variables`.

Class Name	Size
<b>Mini</b>	35px
<b>Tiny</b>	80px
<b>Small</b>	150px
<b>Medium</b>	300px
<b>Large</b>	450px
<b>Big</b>	600px
<b>Huge</b>	800px
<b>Massive</b>	960px



```
  
  
  
  
  
  
  

```



# Image Variations

---

 User Avatar



## Variations

Avatar

Bordered

**Fluid**

Rounded

Circular

Vertically Aligned

Centered

Spaced

Floated

Size

# Grids & Image Example - Before

```
<section class="ui segment">
  <h4> Supported by leading edge research at... </h4>
  <p>
    
    
    
  </p>
</section>
```

Supported by leading edge research at...

TSSG



ctrng

convergent technologies research group

AUTOMOTIVE CONTROL GROUP

Software Engineering for the Connected Car



# Grids & Image Example - After

---

Supported by leading edge research at...



- Grid - center aligned
- Two Rows
  - Row 1 - single column
  - Row 2 - 3 columns

# Grids & Image Example - After

Supported by leading edge research at...



```
<section class="ui center aligned grid segment">
  <section class="ui row">
    <p> Supported by leading edge research at... </p>
  </section>
  <section class="ui three column row">
    <div class="ui column">
      
    </div>
    <div class="ui column">
      
    </div>
    <div class="ui column">
      
    </div>
  </section>
</section>
```

## Programming

Learn a broad range of programming and problem solving skills, including exciting new platforms, software tools and languages. Use these skills to build apps for mobile, cloud and device based IoT applications. Evolve a portfolio of fascinating applications.

## Data Science

At the heart of many IoT applications is data: measurements, events alarms and other information that must be relayed, stored and ultimately turned into knowledge. Learn the fundamentals of modern approaches to data in this strand.

## Devices

The 'Things' we connect to are often physical devices. These can range from simple temperature sensors to sophisticated control systems like traffic lights or cameras. Connecting to and interacting with the physical world is the subject of this strand.

## Networks

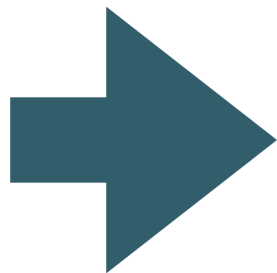
This strand will explore modern networks and cloud technology. Be able to configure, network and manage all categories of computer systems from simple controllers to single board computers, mobiles and full workstations.

## Project

Building exciting IoT projects in every semester of the programme. Your projects will combine skills acquired from the other strands and enable you to build a comprehensive and compelling portfolio of IoT applications and services.

## Mathematics

Introduce foundation concepts for many of the more applied concepts in the other Strands. Learn mathematical techniques in a modern context and apply core principles in new and interesting ways.



# Text Grid Example

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Introduce foundation concepts for many of the more applied concepts in the other Strands. Learn mathematical techniques in a modern context and apply principles in new and interesting ways.

- Two Rows
  - Row 1 - three columns
  - Row 2 - three columns

```
<section class="ui grid segment">
  <section class="ui three column row">
    <article class="column">
      ... code for the first column
    </article>
    <article class="column">
      ... code for the second column
    </article>
    <article class="column">
      ... code for the third column
    </article>
  </section>

  <section class="ui three column row">
    <article class="column">
      ... code for the first column
    </article>
    <article class="column">
      ... code for the second column
    </article>
    <article class="column">
      ... code for the third column
    </article>
  </section>
</section>
```