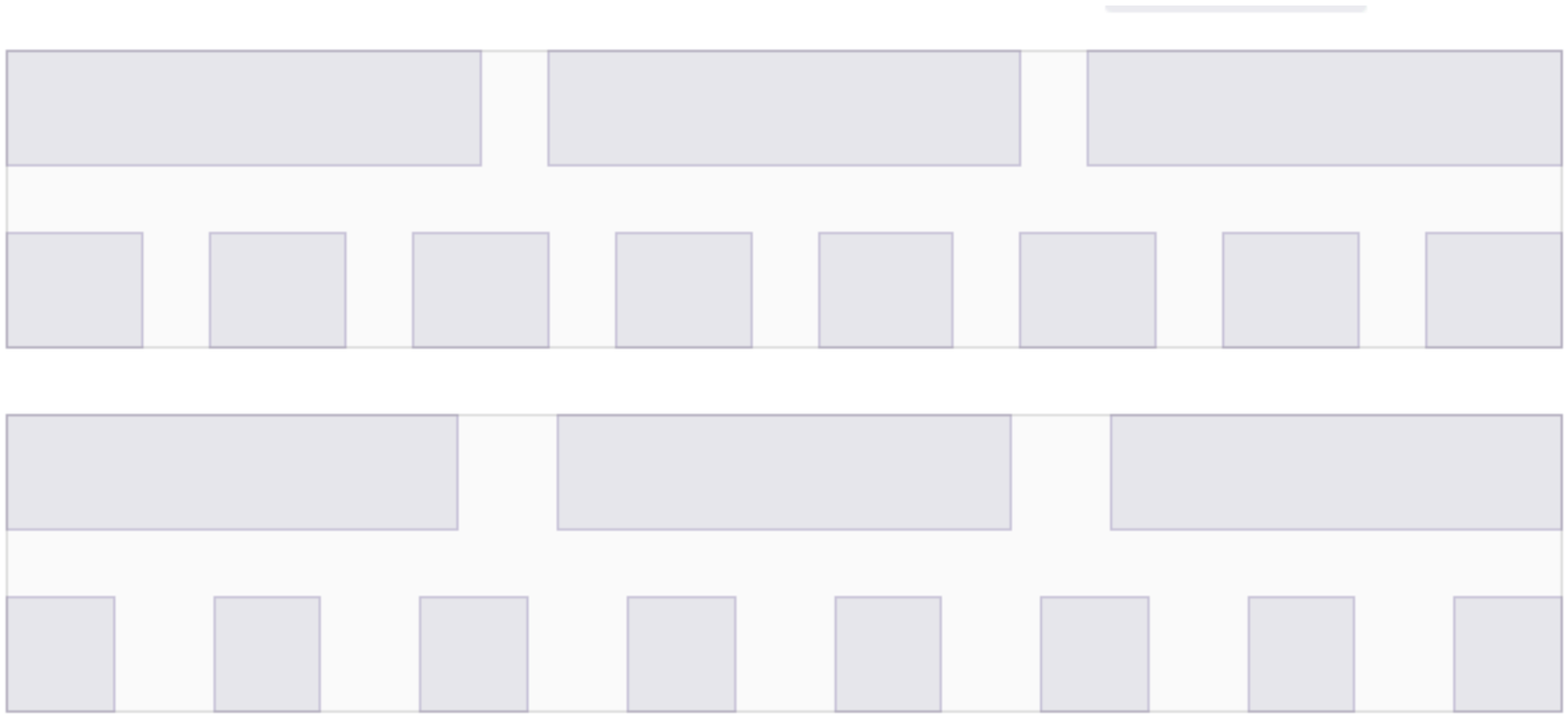
Semantic UI



Grids & Images

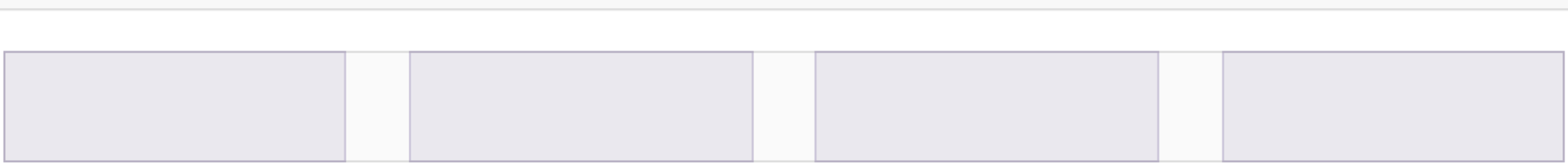
Grids

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

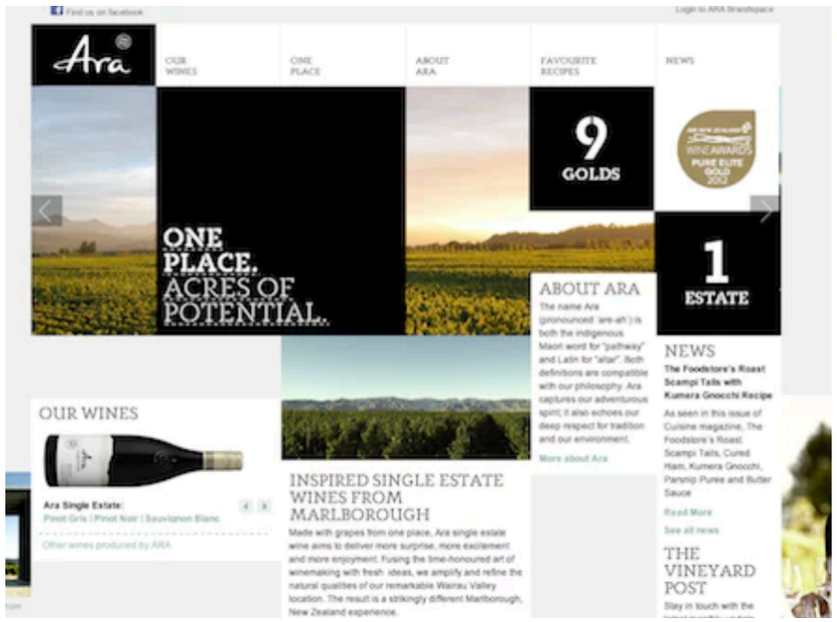
Example

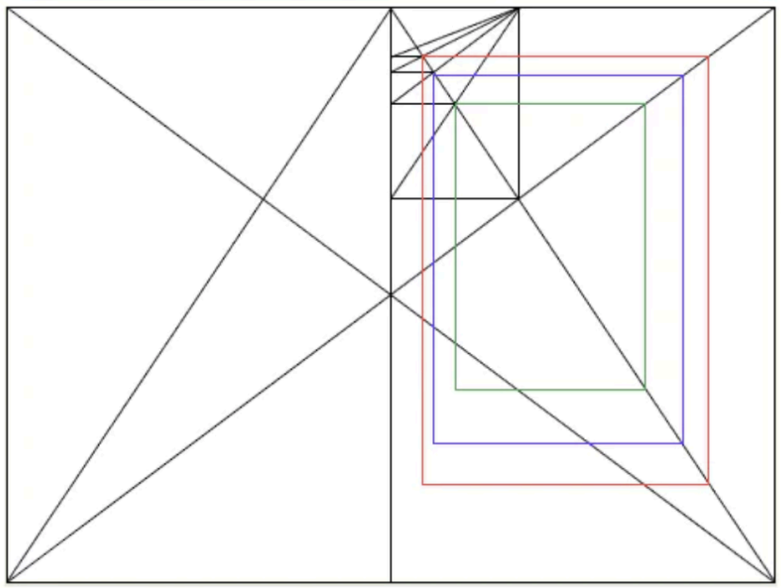


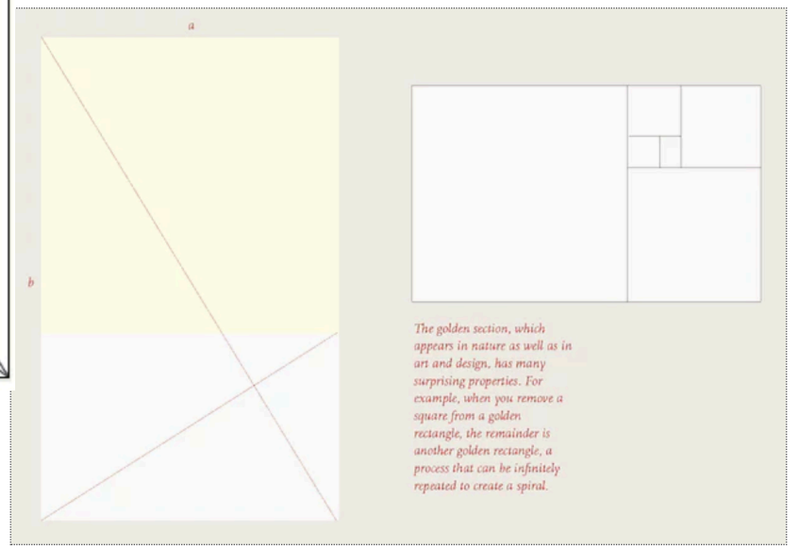
```
<div class="ui grid">
  <div class="four wide column"></div>
  <div class="four wide column"></div>
  <div class="four wide column"></div>
  <div class="four wide column"></div>
</div>
```

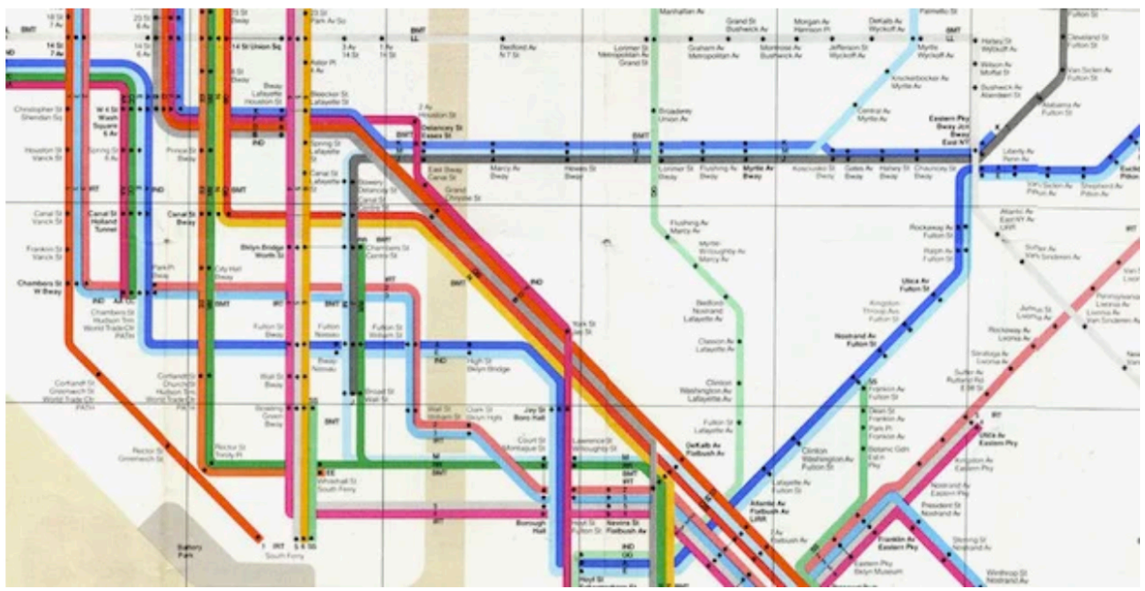
https://99designs.ie/blog/tips/history-of-the-grid-part-1

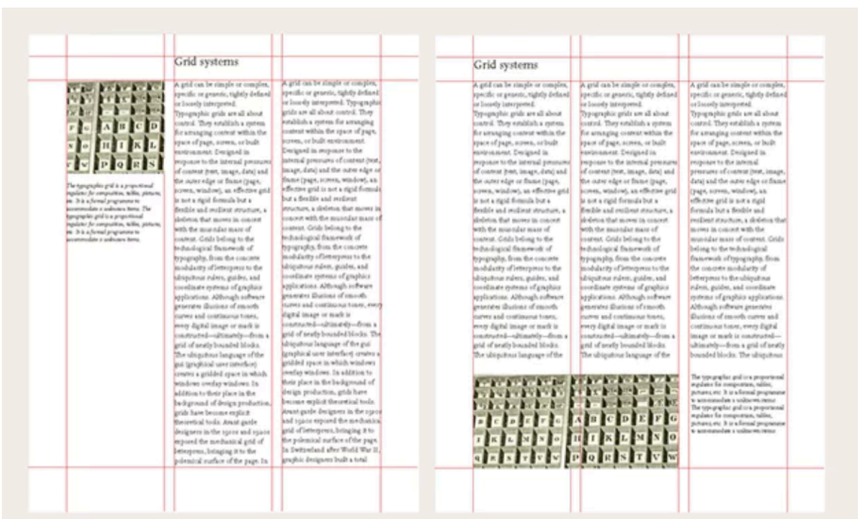
History of the design grid











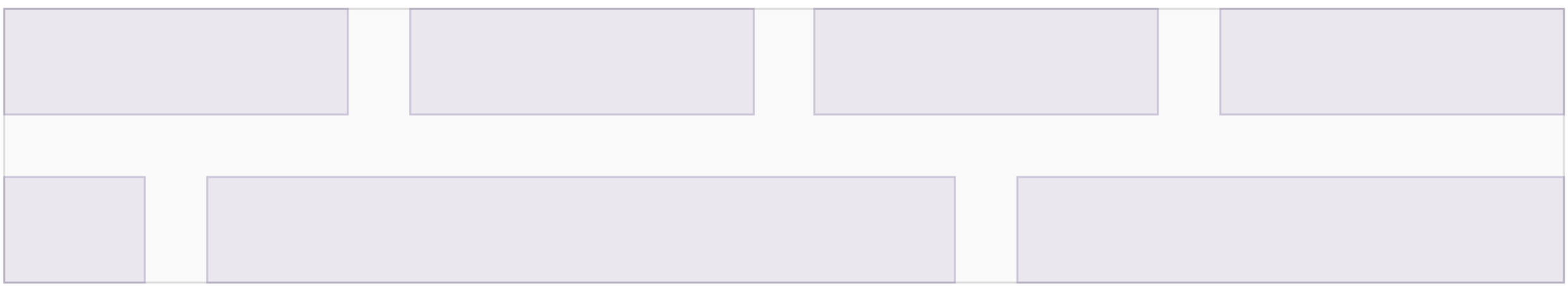
Columns

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.

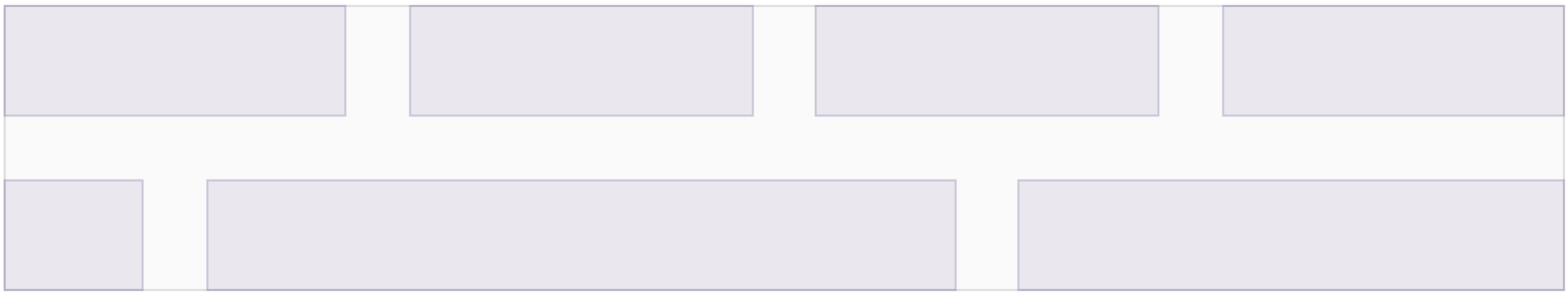
All grid systems chooses an arbitrary column count to allow per row. Semantic's default theme uses **16 columns**.

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



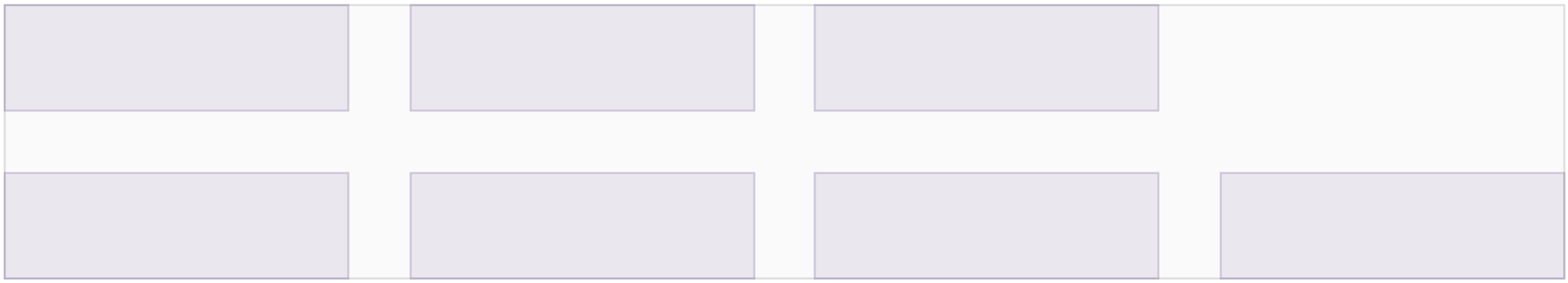
```
<div class="ui grid">
  <div class="four wide column"></div>
  <div class="four wide column"></div>
  <div class="four wide column"></div>
  <div class="four wide column"></div>
  <div class="two wide column"></div>
  <div class="eight wide column"></div>
  <div class="six wide column"></div>
</div>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

Rows

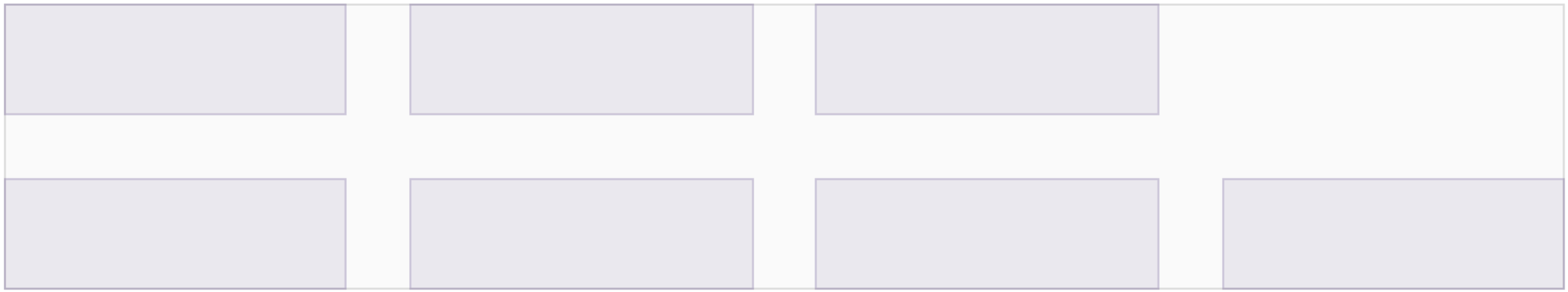
Rows are groups of columns which are aligned horizontally.

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>
    <img class="header-crest-img" src="assets/images/wit-crest.png" alt="WIT Crest">
    Department of Computing &amp;amp; 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

Waterford Institute *of* Technology

INSTITIÚID TEICNEOLAÍOCHTA PHORT LÁIRGE

Department of Computing & Mathematics

BSc (Hons) the Internet of Things

Waterford Institute *of* Technology
INSTITIÚID TEICNEOLAÍOCHTA PHORT LÁIRGE

Two Columns

Department of Computing & Mathematics

BSc (Hons) the Internet of Things

Waterford Institute *of* Technology

INSTITIÚID TEICNEOLAÍOCHTA PHORT LÁIRGE

```
<header class="ui two column grid segment">
  <div class="ui column">
    <h2 class="ui header"> Department of Computing &amp;amp; Mathematics </h2>
    <h3 class="ui header"> BSc (Hons) the Internet of Things </h3>
  </div>
  <div class="ui column">
    <p>
      <img class="ui medium image" src="assets/images/wit-crest.png" alt="WIT Crest">
    </p>
  </div>
</header>
```

combining grid with segment

+ introducing 2 “ui column” divisions

Centre Alignment + ui image

Department of Computing & Mathematics

BSc (Hons) the Internet of Things

Waterford Institute *of* Technology
INSTITIÚID TEICNEOLAÍOCHTA PHORT LÁIRGE

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

Department of Computing & Mathematics

BSc (Hons) the Internet of Things

Waterford Institute *of* Technology
INSTITIÚID TEICNEOLAÍOCHTA PHORT LÁIRGE

```
    <img class="ui medium image" src="/assets/images/wit-crest.png" alt="WIT Crest">
```

Middle Alignment


```
<header class="ui two column center aligned middle aligned grid segment">
  <div class="ui column">
    <h2 class="ui header"> Department of Computing &amp;amp; Mathematics </h2>
    <h3 class="ui header"> BSc (Hons) the Internet of Things </h3>
  </div>
  <div class="ui column">
    <p>
      <img class="ui medium image" src="assets/images/wit-crest.png" alt="WIT Crest">
    </p>
  </div>
</header>
```

Waterford Institute *of* Technology
INSTITIÚID TEICNEOLAÍOCHTA PHORT LÁIRGE

Department of Computing & Mathematics

BSc (Hons) the Internet of Things

Department of Computing & Mathematics

BSc (Hons) the Internet of Things

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Department of Computing & Mathematics

BSc (Hons) the Internet of Things

Waterford Institute *of* Technology
INSTITIÚID TEICNEOLAÍOCHTA PHORT LÁIRGE

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

Image

An image is a graphic representation of something

Size

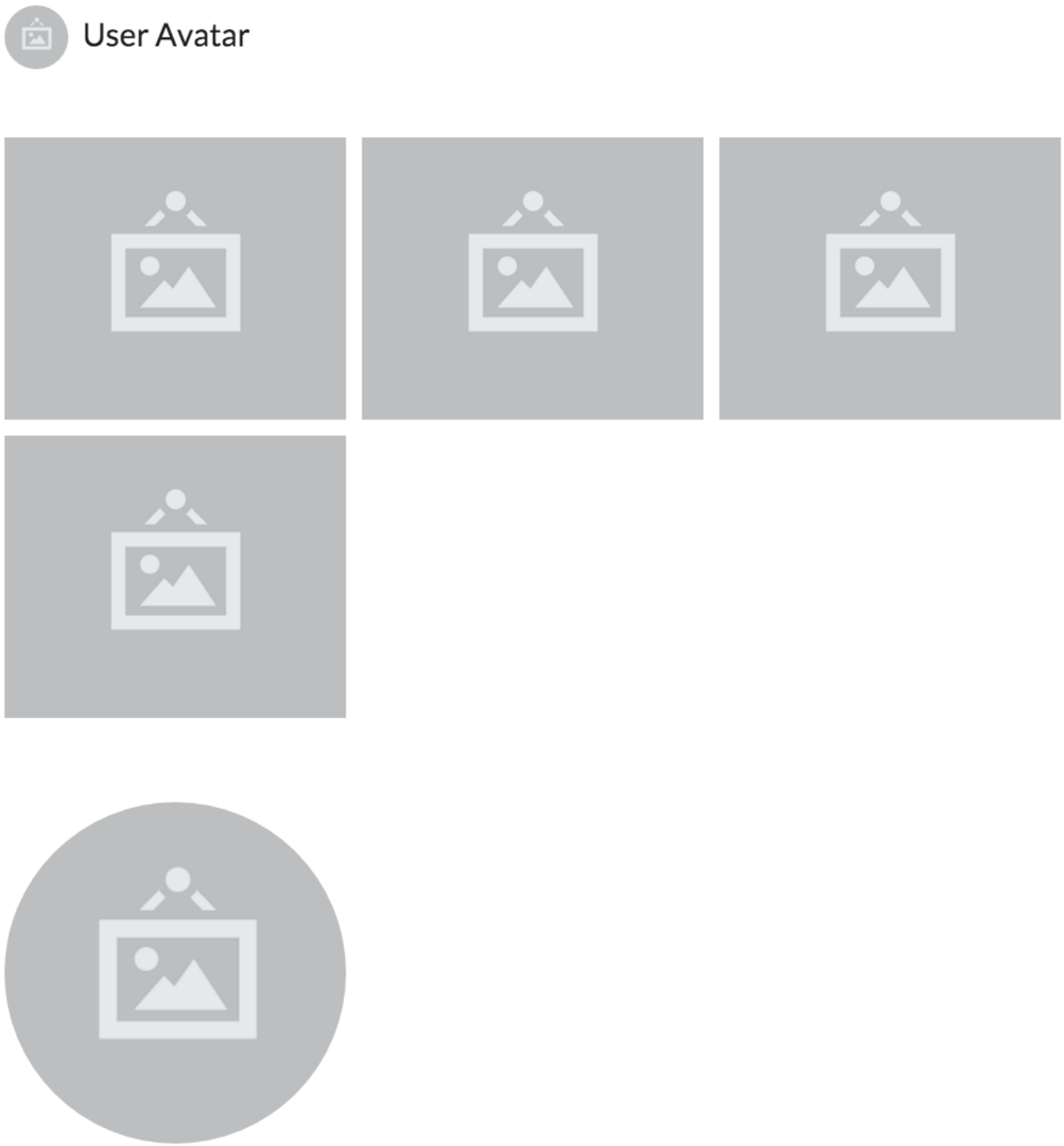
An image may appear at different sizes

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
Mini	35px
Tiny	80px
Small	150px
Medium	300px
Large	450px
Big	600px
Huge	800px
Massive	960px

```
<img class="ui mini image" src="/images/wireframe/image.png">
<img class="ui tiny image" src="/images/wireframe/image.png">
<img class="ui small image" src="/images/wireframe/image.png">
<img class="ui medium image" src="/images/wireframe/image.png">
<img class="ui large image" src="/images/wireframe/image.png">
<img class="ui big image" src="/images/wireframe/image.png">
<img class="ui huge image" src="/images/wireframe/image.png">
<img class="ui massive image" src="/images/wireframe/image.png">
```

Image Variations



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>
    <img class="footer-img" src="assets/images/tssg.png" alt="TSSG">
    <img class="footer-img" src="assets/images/ctrg.png" alt="CTRG">
    <img class="footer-img" src="assets/images/automotive.png" alt="ATG">
  </p>
</section>
```

Supported by leading edge research at...

Grids & Image Example - After

Supported by leading edge research at...

TSSG

ctrg
convergent technologies research group

AUTOMOTIVE CONTROL GROUP
Software Engineering for the Connected Car

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

Grids & Image Example - After

Supported by leading edge research at...

TSSG

ctrg
convergent technologies research group

AUTOMOTIVE CONTROL GROUP
Software Engineering for the Connected Car

```
<section class="ui 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">
      <img class="ui image" src="assets/images/tssg.png">
    </div>
    <div class="ui column">
      <img class="ui image" src="assets/images/ctrg.png">
    </div>
    <div class="ui column">
      <img class="ui image" src="assets/images/automotive.png">
    </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 porfolio of facinating aplications.

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. C
world is the subject of this strand.

Networks

This strand will explore modern networks and cloud technolc
categories of computer systems from simple controlers to sir
workstations.

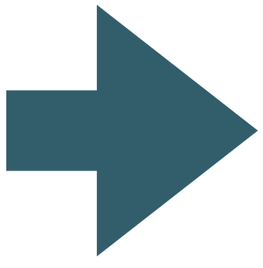
Project

Building exciting IoT projects in every semester of the progra
from the other strands and enable you to build a comprehens
and services.

Mathematics

Introduce foundation concepts for many of the more applied
mathematical techniques in a modern context and apply core

Text Grid Example



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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 controlers to single board 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 an 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 an interesting ways.

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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 an interesting ways.

```
<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 seconod 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>
```

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