# Web Development



Eamonn de Leastar (edeleastar@wit.ie)

Department of Computing, Maths & Physics Waterford Institute of Technology

http://www.wit.ie

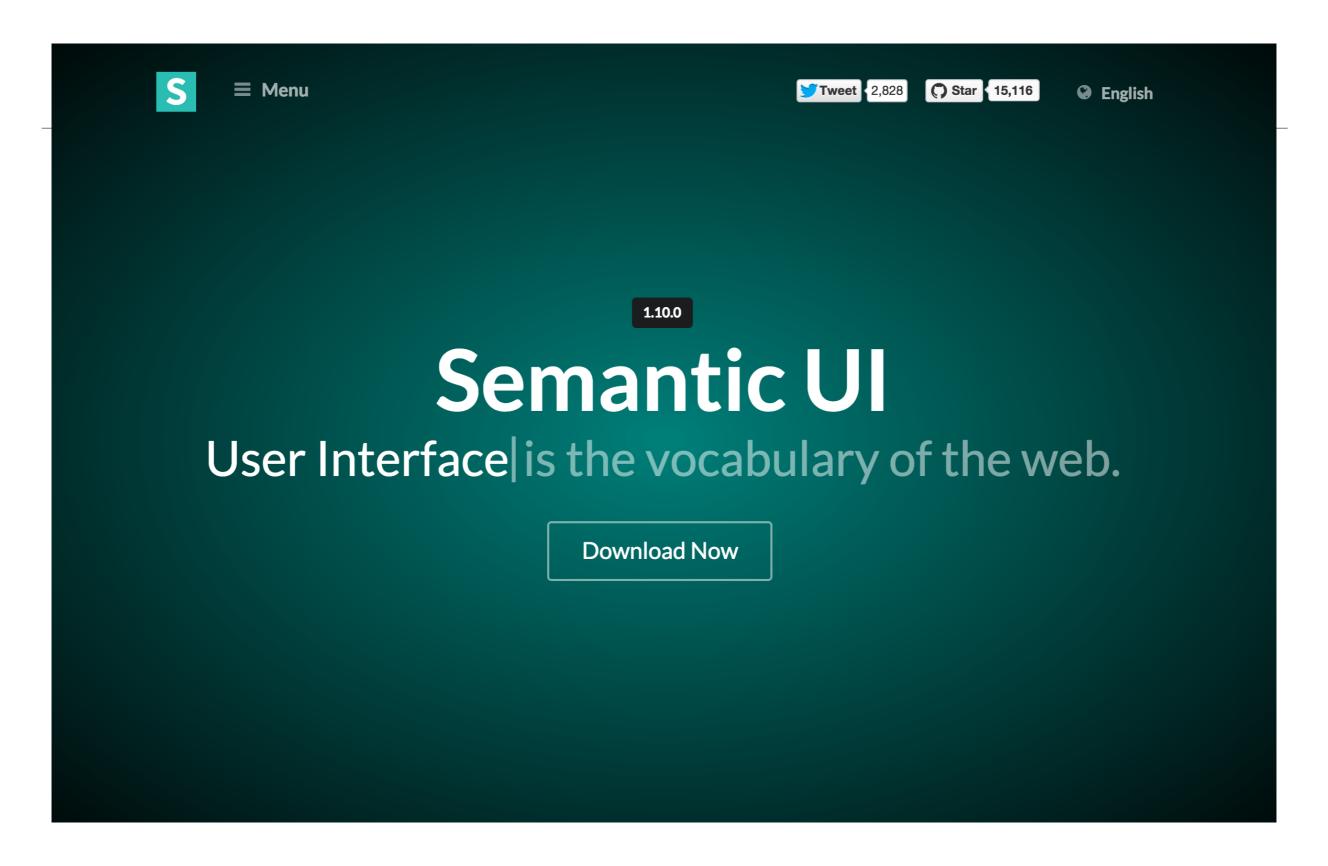
http://elearning.wit.ie





# Semantic UI

# Semantic UI



http://semantic-ui.com/

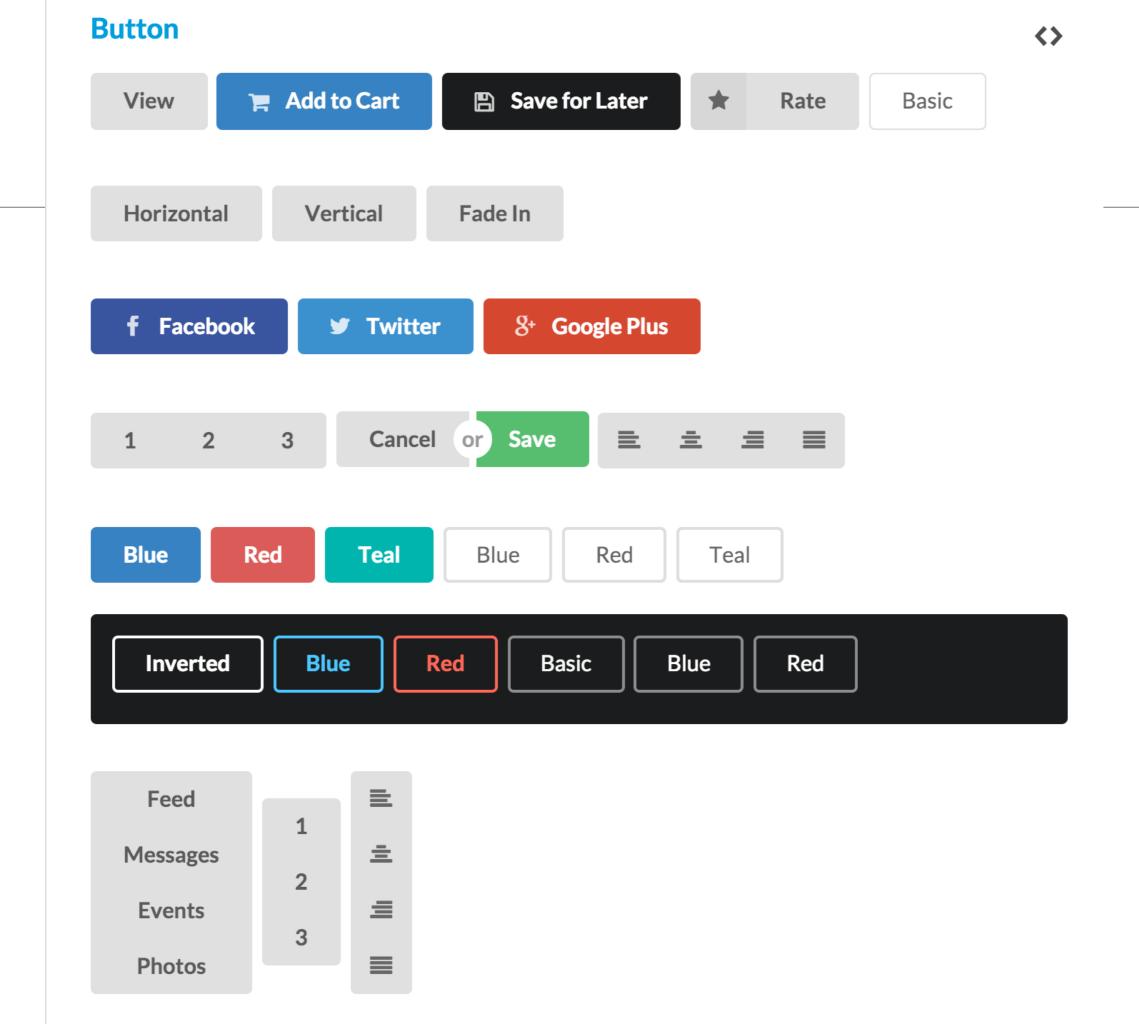
# Semantic UI Components

- Elements: The smallest useful homogenous unit for describing page content
- Collections: Heterogeneous group of several elements which are usually found together.
- Views: Ways of presenting common website content like comments, activity feeds, cards
- Modules: Elements where behavior and design are both an essential part of its definition

# Elements

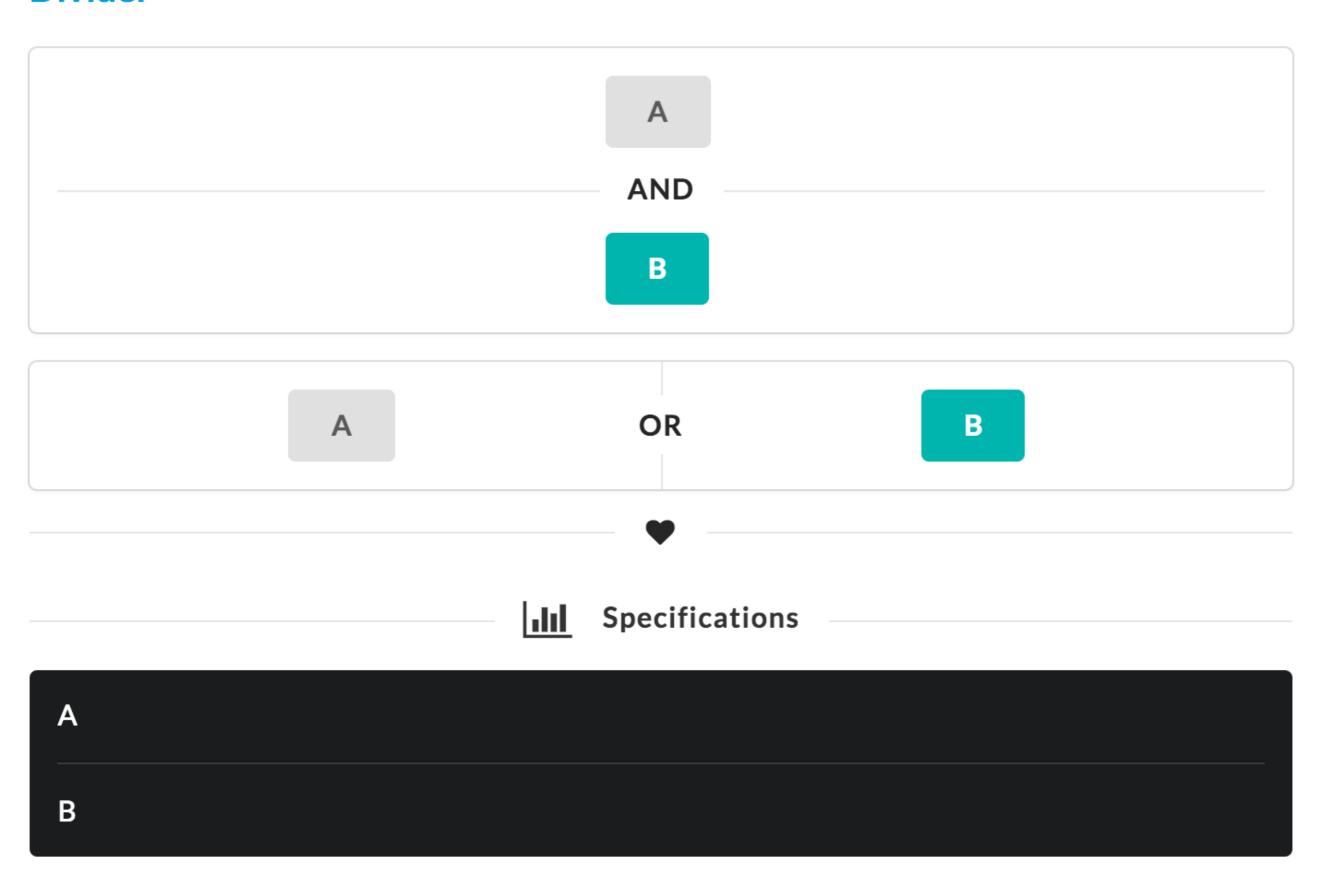
 The smallest useful homogenous unit for describing page content





## <>

## **Divider**



**H1** 

**H2** 

**H3** 

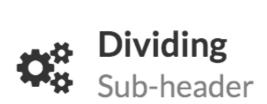
**H4** 

**H5** 







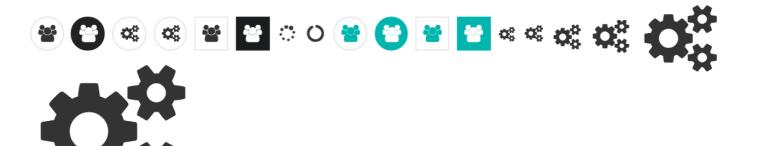




**Attached** 

Attached

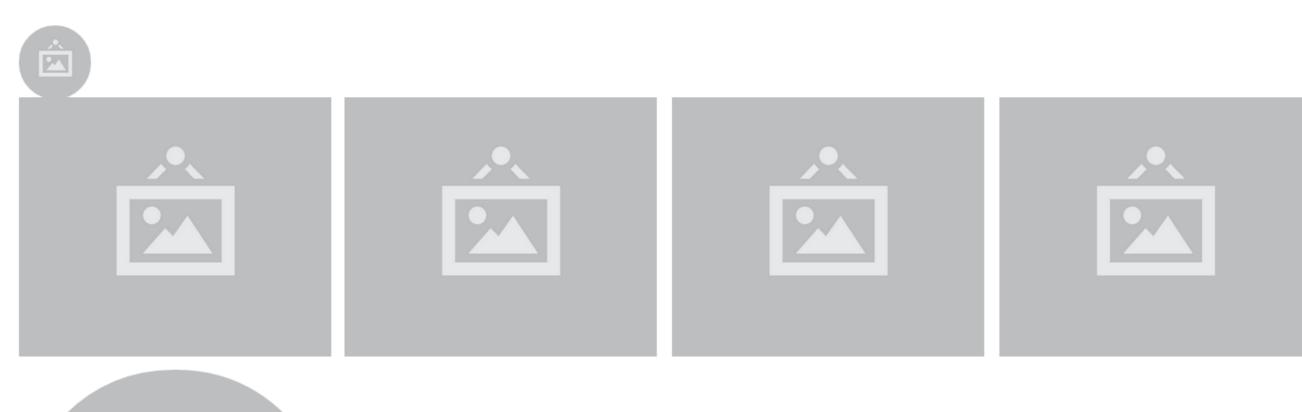
4 **②** Θ Q 8  $\checkmark$  $\oplus$ ₹  $\Rightarrow$  $\odot$ • U mm w • x P å **4**)) 4 \$  $x^2 \times H$ £ €  $\mathbf{m}$   $\mathbf{B}$ in 0 You 8 9 9 t 8 8 P g ■ **②** \* **®** Y 💩 😃 🏵 git git \Upsilon **∞** V ⊗ **x x 0 0 0** ..l ② ② **⑤** C ; **; X** 24 **3** □ ★ **C. €** = 1 



#### 57

# **Image**

User Avatar

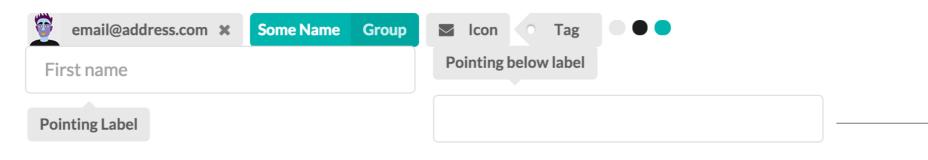




# Input

Search Search... Required Field http:// domain.com Label Placeholder... Label Placeholder...

Label



Item Item







Top Labeled

Bottom Labeled

Top Left

Top Right

Bottom Right

Ribbon

## List



**Header** Description

- Sub Header Sub Description
- Sub Header
  Sub Description



**Header** Description

- Sub Header
  Sub Description
- Sub Header
  Sub Description
- ★ Header Description
- ★ Header Description
- ★ Header Description
- Header Description
- Header Description
- Header
  Description

- Link
- Link
- Link
- Link
- Link

Selection

Selection

Selection

Selection

Selection

- Header Description
  - Sub-header
  - Sub-header
  - Sub-header
- **Header** Description
- **Header** Description
- 1 Getting Started
- 2 Introduction
- 3 Languages
- 3.1 HTML
- 3.2 Javascript
- 3.3 CSS
- 4 Review



**Header** Description



**Header** Description



**Header** Description



## **Segment**

## Step

**Step** Description

**Step**Description

- Previous Step
  Description
- 2 Active Step
  Description
- 3 Disabled Step
  Description



Previous Step
Description



Active Step
Description

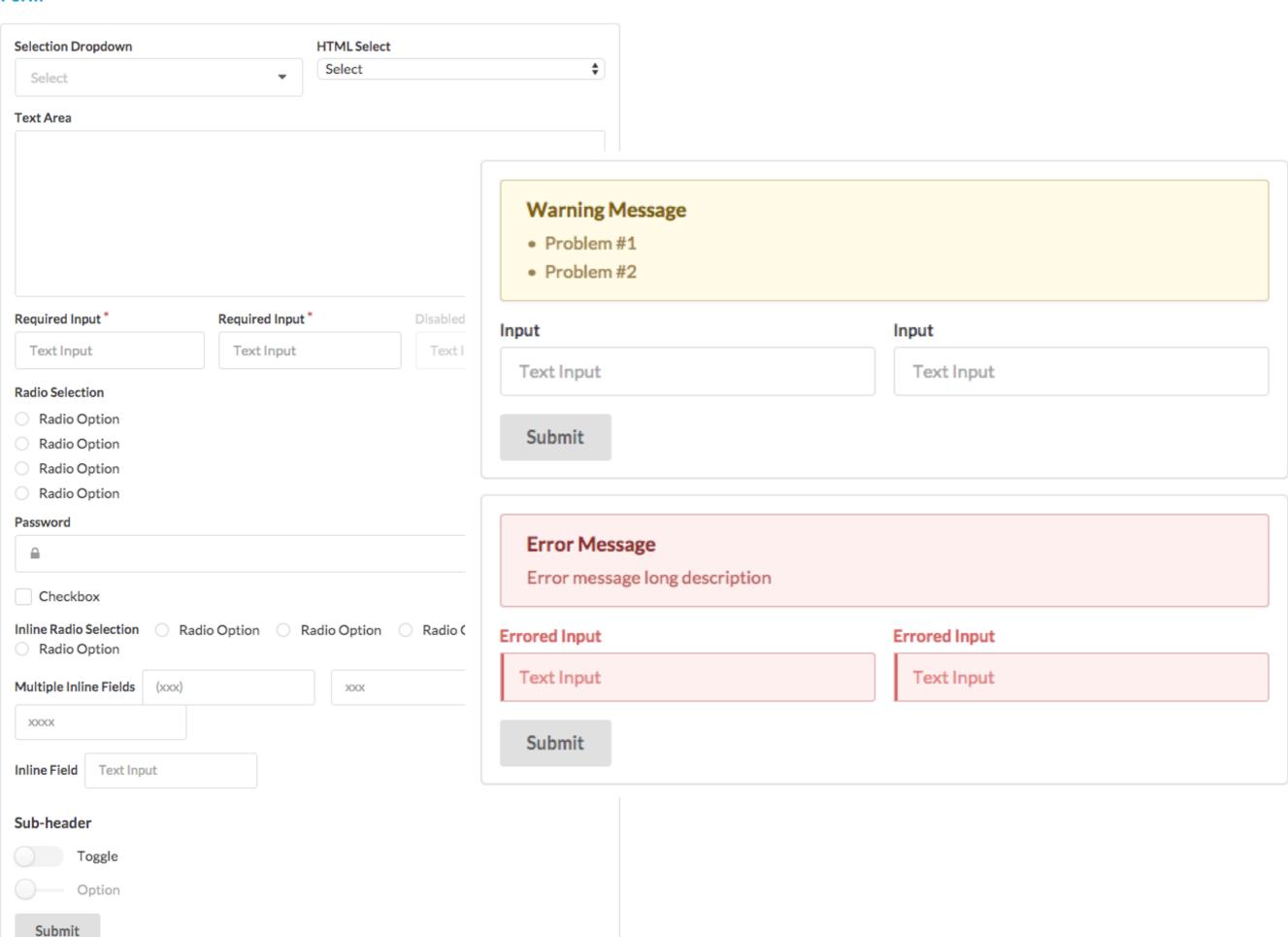
Disabled Step
Description

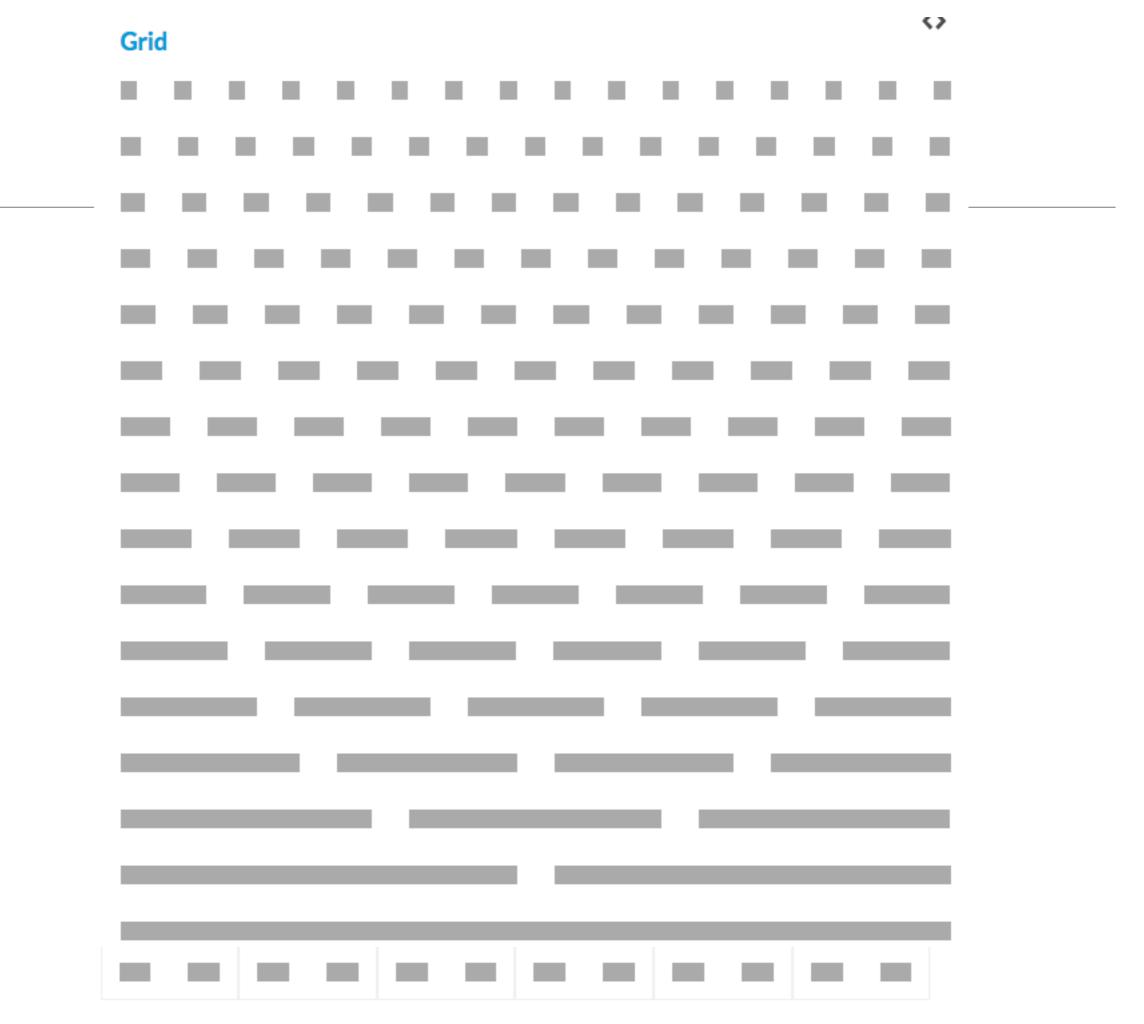
# Collections

 Heterogeneous group of several elements which are usually found together.

# | Color | Class="ui large breadcrumb" | Color | Class="section" | Color | Class="section" | Color | Class="divider" | Color | Class="divider" | Color | Class="section" | Color | Class="divider" | Color | Color

#### **Form**







## Menu

Α		В	С
А			
В	1		
Search	Q		
<b>Tab</b> Tab			
<b>A</b> B C			
А В С			
Α		В	С
Α			
В			
С			
Α			
В			
С			

## Message

Closable message

×

<>

## Warning Message

- List item
- · List item

## List Message

- List item 1
- List item 2
- List item 3

## Info Message

Example description

## Positive Message

Example description



## Negative Message

Example description

Top attached

Bottom attached

## **Table**

Files		
folder	Comment	10 hours ago
folder2	Comment	10 hours ago
folder3	Comment	10 hours ago
package.json	Comment	10 hours ago
☐ Gruntfile.js	Comment	10 hours ago

	Header 1	Header 2
Definition	1A	1B
Definition	2A	2B

	Name	Registration Date	E-mail address	Premium Plan
0-				
0-				
$\bigcirc$				
	Button			Primary

Name	Status	Notes
User 1	Value	Comment
User 1	Selected	Data
User 1	Value	Comment
User 2	Value	Data
User 1	Value	! Warning
User 3	Value	Data
User 1	Value	* Positive
User 2	! Warning	Data
User 2	✓ Positive	Data
User 2	Value	Data

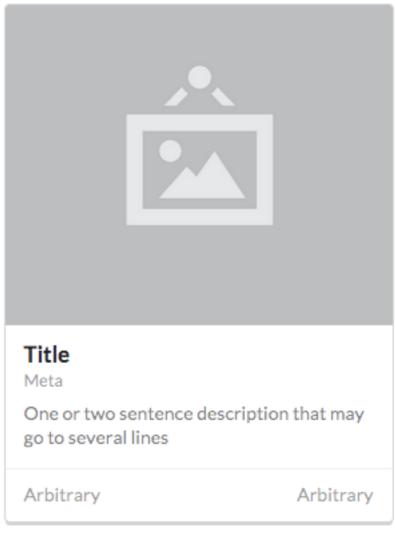
\_

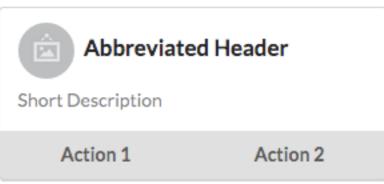
Name	Status	Notes
User 1	Data	Data
User 3	Data	Data
User 2	Denied	Data
Footer	Footer	

# Views

 Views: Ways of presenting common website content like comments, activity feeds, cards

#### Card









Username added you as a friend



You added Username to the group Group Name



Time period ago

Userrname added new photos



1 Like



You wrote something Time period ago

Blockquote

Metadata Metadata



You uploaded a photo Time period ago

Metadata Metadata

Elliot Fu added Jenny Hess as a friend

Stevie Feliciano added Elliot Fu as a friend

Helen Troy added Christian Rocha as a friend

Christian Rocha signed up for the site.



#### **Content Header**

Date Category

A description which may flow for several lines and give context to the content.



Username



#### **Content Header**

Date Category

A description which may flow for several lines and give context to the content.

Limited

Primary >



#### **Content Header**

Date Category

A description which may flow for several lines and give context to the content.

Primary >



#### Content Header

A description which may flow for several lines and give context to the content.



#### **Content Header**

A description which may flow for several lines and give context to the content.



#### **Content Header**

A description which may flow for several lines and give context to the content.



Top Label

4:05

22

Bottom Label





P 22 Horizonal Label

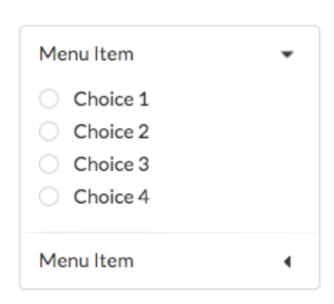


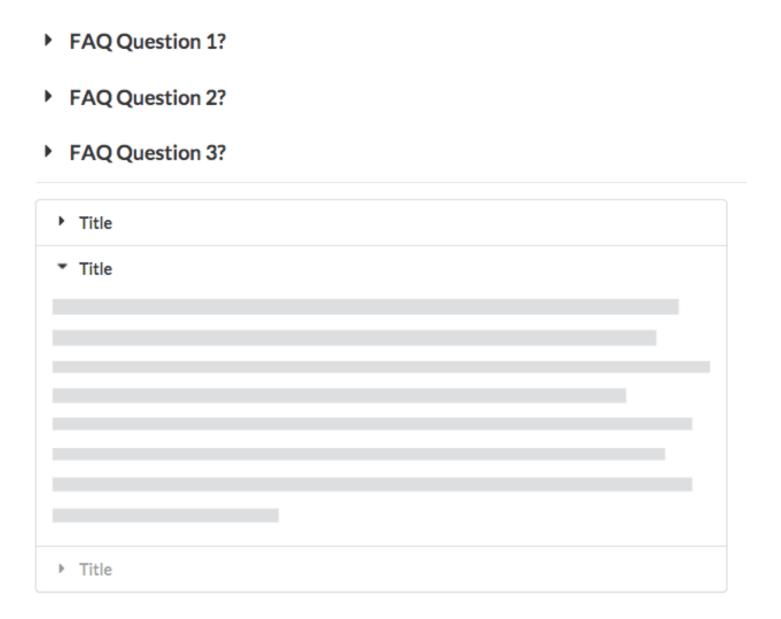


# Modules

 Modules: Elements where behavior and design are both an essential part of its definition

## Accordion







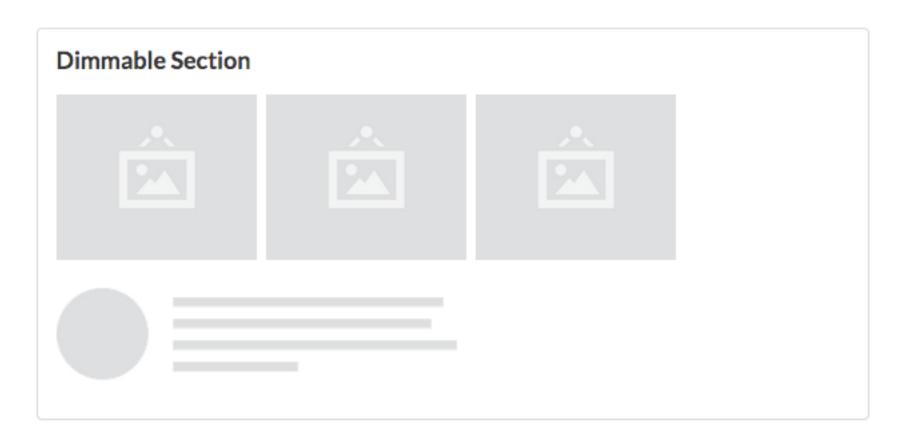


**<>** 



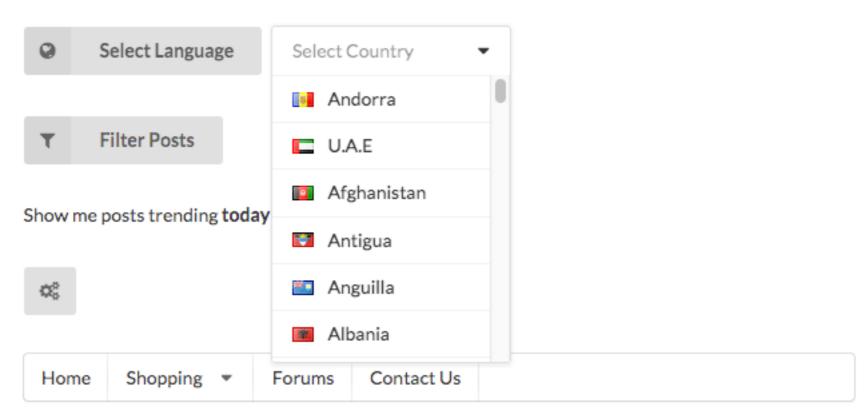


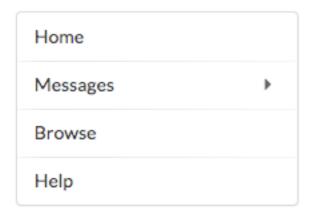
## **Dimmer**





## Dropdown







## Modal

Standard Modal

Basic Modal

Full-Screen Modal

## **Profile Picture**

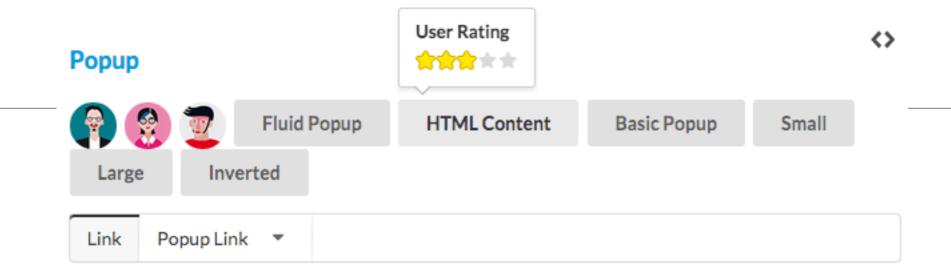


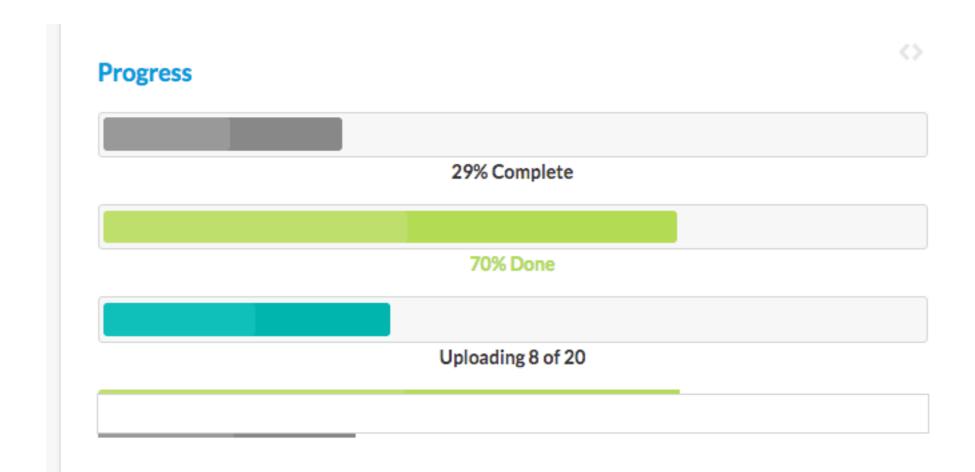
## We've auto-chosen a profile image for you.

We've grabbed the following image from the gravatar image associated with your registered e-mail address.

Is it okay to use this photo?









## Rating





Choice #1





Choice #2





Choice #3



#### **Content Header**

A description which may flow for several lines and give context to the content.





## **Content Header**

A description which may flow for several lines and give context to the content.

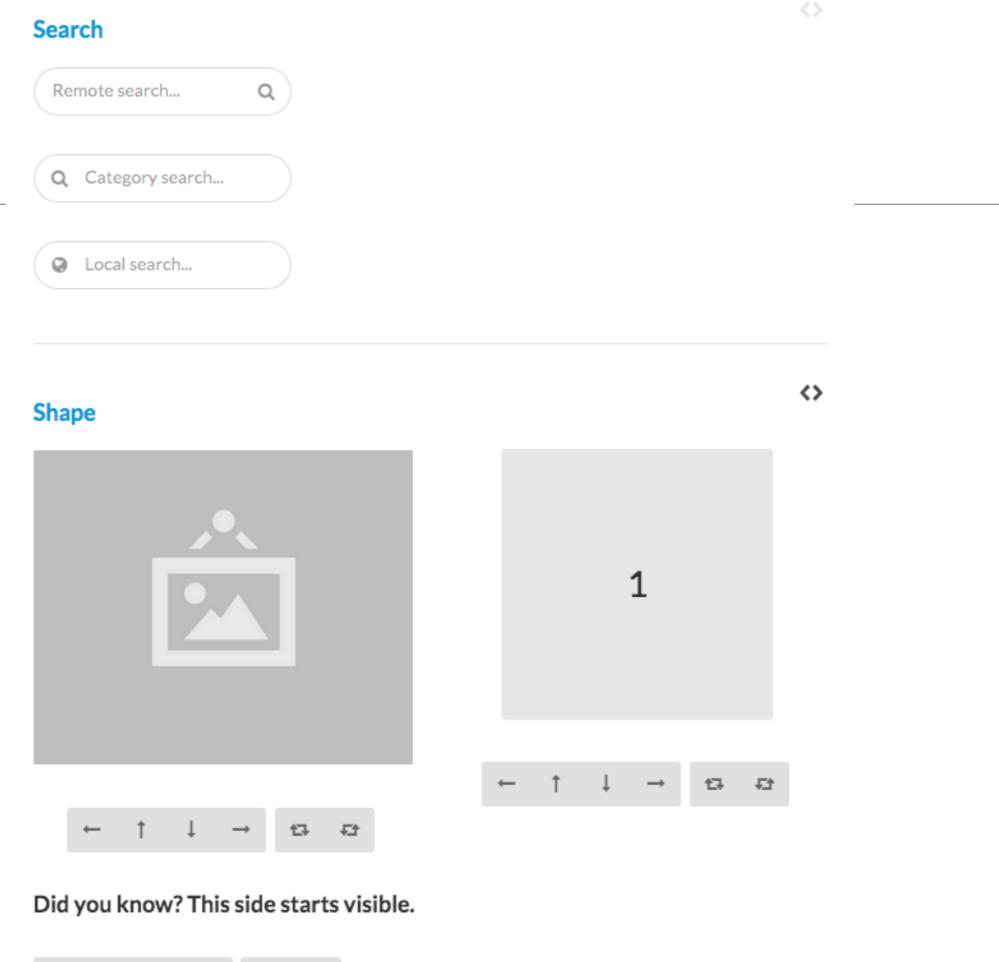




#### **Content Header**

A description which may flow for several lines and give context to the content.







Tab

First Second Third

1A 1B 1C

**1**A

<>

## **Transition**







# Interfacing Carefully

- UI definitions in Semantic are given the class name ui.
- This is to help tell the difference between ui elements and parts of the definition of an element.
- This means any element with the class name UI has a corresponding UI definition.

## Changing an Element

- Class names in Semantic always use single english words.
- If a class name is an adjective it is either a type of element or variation of an element.
- CSS definitions always define adjectives in the context of a noun. In this way class names cannot pollute the namespace.

# Combining an Element

- All UI definitions in semantic are stand-alone, and do not require other components to function.
- However, components can choose to have optional couplings with other components.
- For example you might want to include a badge inside a menu. A label inside of a menu will automatically function as a badge

```
USING A UI LABEL INSIDE A UI MENU
                                        HTML
<div class="ui compact menu">
  <a class="item">Home</a>
  <a class="item">
    Inbox
    <div class="ui label">22</div>
  </a>
</div>
         Inbox 22
Home
```

## Types / Variations

- A ui definition in Semantic usually contains a list of mutually exclusive variations on an element design.
- A type is designated by an additional class name on a UI element

```
TYPES OF UI BUTTON
                                                         HTML
<div class="ui labeled icon button">
  Download <i class="download icon"></i>
</div>
<div class="ui icon button">
  <i class="download icon"></i></i>
</div>
<div class="ui button">
  Download
</div>
<div class="ui facebook button">
  <i class="facebook icon"></i></i>
  Facebook
</div>
                                                  FACEBOOK
(
      DOWNLOAD
                      (
                            DOWNLOAD
```

## Types / Content

- Types may require different html structures to work correctly.
- For example, an icon menu might expect different content like icons glyphs instead of text to be formatted correctly

```
ICON MENU TYPE
                                                            HTML
<div class="ui icon menu">
  <a class="item">
    <i class="mail icon"></i>
  </a>
  <a class="item">
    <i class="lab icon"></i></i>
  </a>
  <a class="item">
    <i class="star icon"></i></i>
  </a>
</div>
```

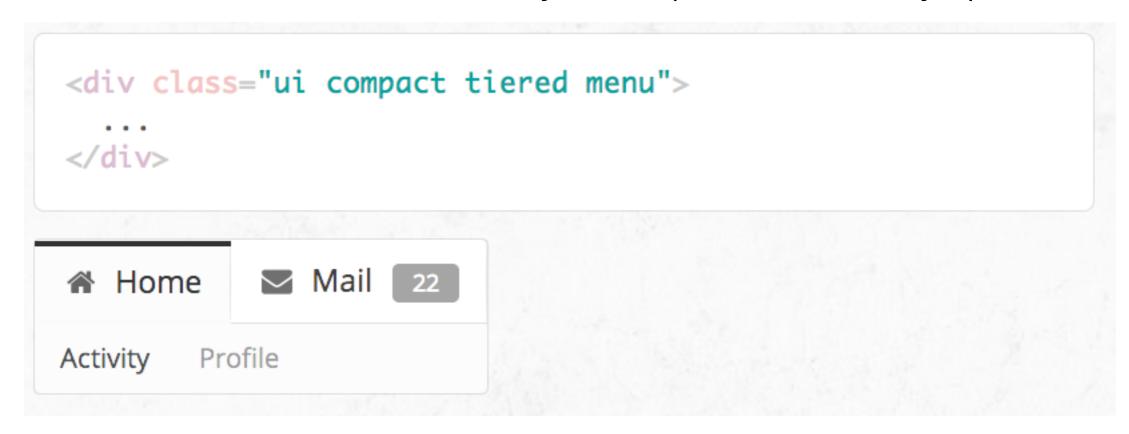
#### Types / HTML Differences

- Types may also each require slightly different html.
- For example, a tiered menu needs html specified for a sub menu to display itself correctly

```
TIERED MENU TYPE
                                                         HTML
<div class="ui tiered menu">
  <div class="menu">
    <div class="active item">
      <i class="home icon"></i></i>
      Home
    </div>
    <a class="item">
      <i class="mail icon"></i></i>
      Mail
      <span class="ui label">22</span>
    </a>
  </div>
  <div class="sub menu">
    <div class="active item">Activity</div>
    <a class="item">Profile</a>
  </div>
</div>
            ✓ Mail 22
Activity
        Profile
```

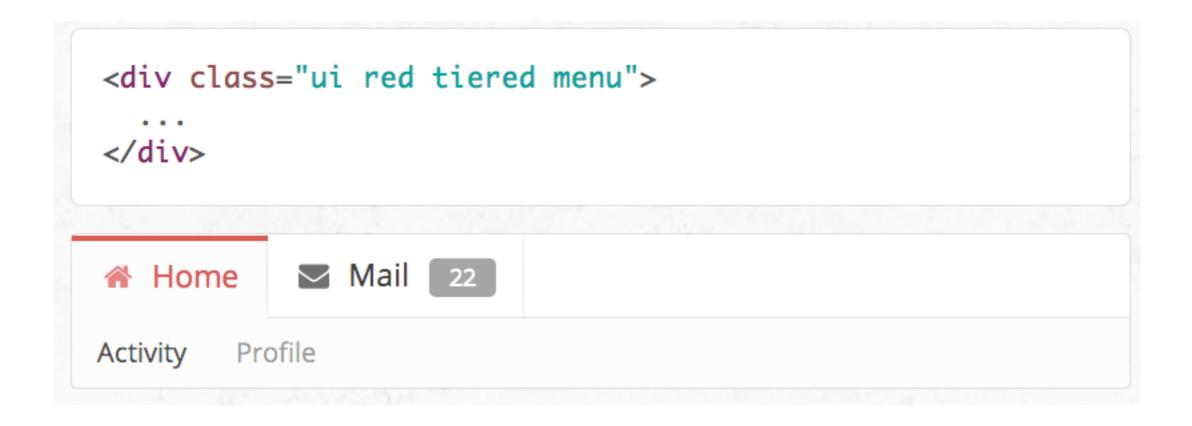
#### **Variations**

- A variation alters the design of an element but is not mutually exclusive.
- Variations can be stacked together, or be used along with altering an element's type.
- For example, having wide menus that take up the full width of its parent may sometimes be overwhelming. You can use the compact variation of a menu to alter its format to only take up the necessary space.



## Intersecting Variations

 The definition for the variation red contains css specifically for describing the intersection of both red and inverted.



## Whats Different?

## Build Responsive Layouts Easier

- Designed Completely with EM
- Every component is defined using em and rem so that components can be resized simply on the fly.
- Want a menu to get smaller on mobile? Simply have it's font-size change using a media query.

## Self Explanatory

- Descriptive not Prescriptive
- Writing front end code shouldn't require learning the naming or programming conventions of a particular developer.
- Instead of using short-hand, or codifying naming conventions, Semantic uses simple, common language for parts of interface elements, and familiar patterns found in natural languages for describing elements.

# Tag Agnostic

- Use whatever html tags you please.
- Interface definitions in Semantic are tag ambivalent.
- That means you can use div, article, section, span without affecting the display of the element.
- Special tags like a, table, td still carry special meaning in certain circumstances however.

# Powerful tools for expressing groups and collections.

- Don't repeat yourself
- In English it's much easier to say "There are three tall men" than "There is a tall man, a tall man and a tall man".
- In Semantic element definitions can be expressed in groups have shared attributes like size, color, type avoiding repetitive declarations.

#### Portable and self-contained.

- Using Semantic doesn't mean adopting an entire framework, or rewriting your code base
- Semantic components are written in a singular style, but are not part of mandated overarching library. Only like a couple components? No problem, use only what you need.
- UI components in Semantic also define optional and required couplings with other components where their usage intersect. That means for example, a popup can check for the existence of CSS animation component before using the fallback javascript animations.

#### Shared language, different implementations

- Restyle your site without Restructuring it
- Describing your site's content using a common language like Semantic allows other developers to create UI definitions to match one shared vocabulary.
- This means you can redesign your website without retooling your html.
- Simply alter the look and feel of your UI using a different UI style definition.



Except where otherwise noted, this content is licensed under a Creative Commons Attribution-NonCommercial 3.0 License.

For more information, please see http://creativecommons.org/licenses/by-nc/3.0/



