

Humanities & Arts Requirement

Humanities and Arts Project Title Page

Angels and Devils:

A Tool for Understanding Ethical and Unethical Persuasion

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Humanities and Arts Course Sequence:

PY	3401	PHIL. THEORIES---REALITY	Fall 1976
PY	3402	ETHICS AND POL. PHIL.	Fall 1976
PY	3403	PHIL. OF RELIGION	Spring 1978
PY	3404	PHILOSOPHY OF ART	Spring 1978
HU	3323	BIOETHICS	Spring 1979

Presented to: Professor Brenton Faber

Department of Humanities & Arts

Term Spring, 2017

Humanities Sufficiency Project

Submitted in Partial Fulfillment of

The Humanities & Arts Requirement

Worcester Polytechnic Institute

Worcester, Massachusetts

Introduction

Persuasion is everywhere. Individuals and organizations, both large and small, are constantly trying to persuade us to take some action, be it is buying a product, supporting a cause, or voting for a particular candidate. While persuasion can take many forms, a lot of it happens via text; much of what we read is trying to persuade us.

As with all things, there are ethical and unethical ways of persuading people. Telling the difference between them is a valuable skill. It is easy to recognize the ethical extremes; most people will say that telling, “the truth, the whole truth and nothing but the truth” is ethical and that outright lying is unethical. But identifying some persuasive element as “somewhat ethical” or “somewhat unethical” can be more difficult.

This project provides a mechanism to improve this skill by showing marketing messages of various persuasion types. The user can request the system to visually illustrate how ethical these messages are based on four ethical levels. In most cases, for any particular message, the user can select a similar persuasive message at a different ethical level, thus letting them see how the levels differ. A brief definition of each ethical level can be displayed as well. Finally, the user can disagree with the ethical level displayed if they feel the persuasive message doesn't fit the definition given. In that case, the user can select what ethical level they feel best describes the persuasive message.

Description

The mechanism chosen for this project is a proof-of-concept web site entitled *Market Like a Boss!* [<http://e-o-v-p.com/>] (Figure 1).

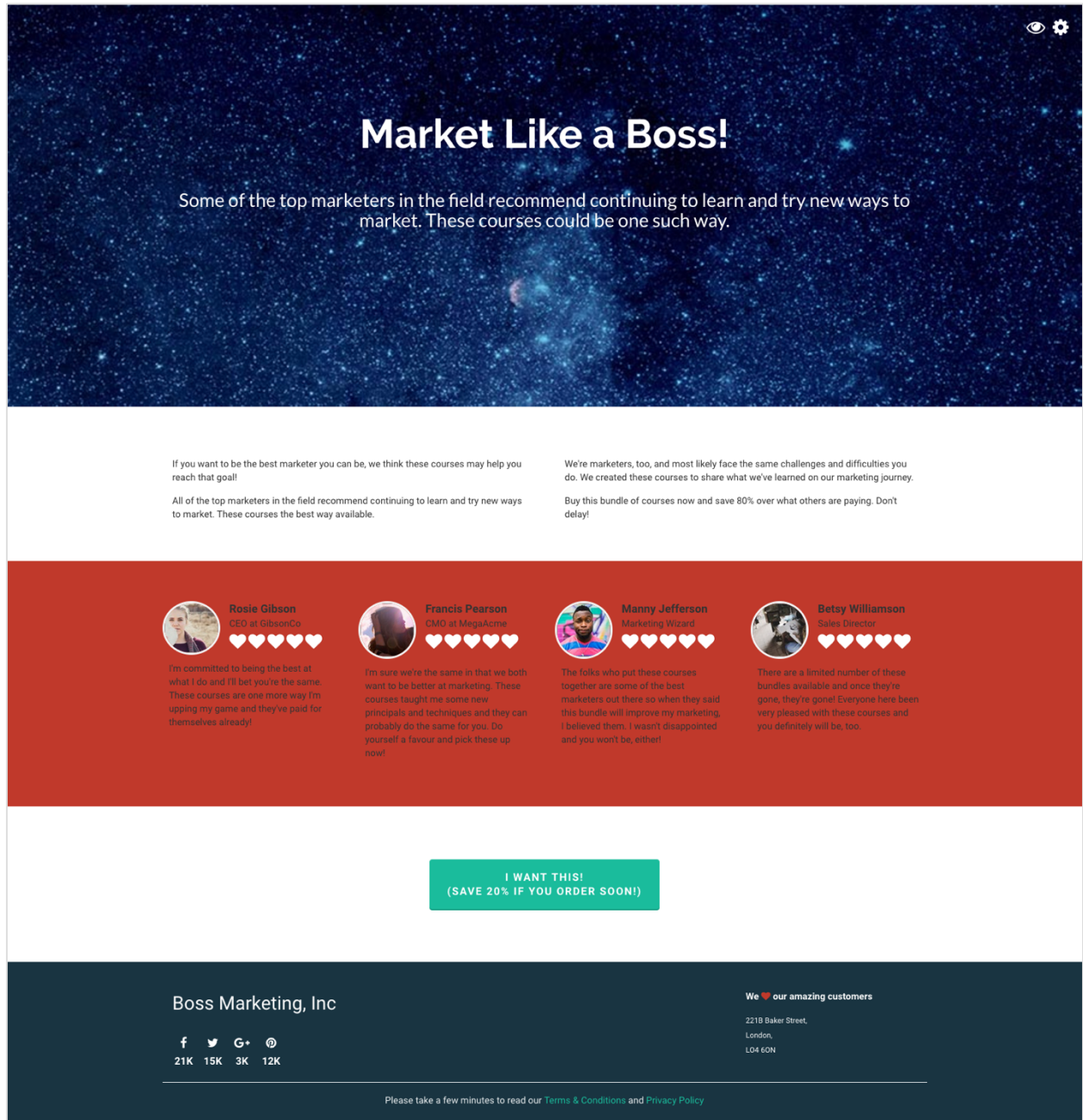


Figure 1 - Market Like a Boss! proof-of-concept ethical teaching site (accessed 4-25-2017)

The site presents itself as a typical marketing site, in this case selling a bundle of courses related to marketing. It contains several persuasive elements explaining why the user should purchase the product including testimonials from satisfied customers. Also included are social media sharing counts and an element declaring how much the seller appreciates their customers. Prominently featured is a call-to-action (CTA) button, also containing a persuasive message, which will allow the user to “buy” the bundle. However, should the user click the button, a modal dialog explains the site is a school project and they shouldn't expect to actually get any courses.

Since the site is a proof-of-concept, it has limited content, although each persuasion type has at least one entry at each ethical level. In addition, there are some specialized entries, including the testimonials and the call-to-action button. The feature that allows the user to disagree with the specified ethical rating doesn't actually change the level of the persuasive element as there is no server component to handle such a task. If this were a fully functional web site or educational software, then a server component would provide responses to the actions of users.

The six persuasion types are taken from “Influence: The Psychology of Persuasion” (Robert B. Cialdini). The definitions below are from an interview (MarketingSherpa, LLC) with Dr. Cialdini and Noah Goldstein.

The persuasion types are:

1. **Reciprocation** - Reciprocation recognizes that people feel indebted to those who do something for them or give them a gift.

2. **Commitment and Consistency** - People strive for consistency in their commitments. They also prefer to follow pre-existing attitudes, values and actions.
3. **Social Proof** - When people are uncertain about a course of action, they tend to look to those around them to guide their decisions and actions. They especially want to know what everyone else is doing – especially their peers.
4. **Liking** - People prefer to say 'yes' to those they know and like. People are also more likely to favor those who are physically attractive, similar to themselves, or who give them compliments.
5. **Authority** - People respect authority. They want to follow the lead of real experts.
6. **Scarcity** - ...the less there is of something, the more valuable it is. The more rare and uncommon a thing, the more people want it.

These persuasion types were chosen because they are very familiar to marketers and, thus, are likely to appear on marketing sites throughout the Internet. They are tools often used to persuade people and can be used in various ways, both ethically and unethically. Dr. Cialdini is quite clear that using these types in an unethical manner is counterproductive. In an interview, he says, "When these tools are used unethically as weapons of influence ... any short-term gains will almost invariably be followed by long-term losses" (MarketingSherpa, LLC).

Not all marketers share Dr. Cialdini's views so the site can present each persuasion type in four different ethical levels:

1. **Ethical** – All pertinent information is included allowing you to make an informed decision. This could be described by the classic phrase as telling, “the truth, the whole truth and nothing but the truth.”
2. **Somewhat ethical** – Some information is missing but it won't change your ability to make an informed decision. If it were included, it wouldn't lower your confidence in your decision. This is most likely, “the truth and nothing but the truth”, but perhaps not, “the whole truth”.
3. **Somewhat unethical** – Some information is missing and it is relevant to, or would lower confidence in, your decision if it were known. This clearly is not, “the whole truth”.
4. **Unethical** - Outright deception or information is missing that is highly relevant and changes, or destroys confidence in, your decision. This is neither, “the truth” nor, “the whole truth”, and probably also fails the test of including, “nothing but the truth”.

These definitions were chosen because they are quite simple and align with the definitions held by most people who are likely to encounter these marketing sites.

Ethics Discussion

The definitions align with the Data & Marketing Association's (DMA) Ethical Guidelines. In their *Terms of the Offer* section, Article #1, they recommend that “All offers should be clear, honest, and complete so that the consumer may know the exact nature of what is being offered, the price, the terms of payment (including all extra

charges) and the commitment involved in the placing of an order” (Data & Marketing Association).

The definitions also align with The Federal Trade Commission’s (FTC) “Frequently Asked Advertising Questions: A Guide for Small Business,” which states (Federal Trade Commission):

- advertising must be truthful and non-deceptive;
- advertisers must have evidence to back up their claims; and
- advertisements cannot be unfair.

The FTC “is a bipartisan federal agency with a unique dual mission to protect consumers and promote competition” (Federal Trade Commission) and has the responsibility to enforce Federal law concerning, among other things, advertising and marketing.

That only honest and accurate persuasive messages are ethical can be considered a deontological argument, of the Kantian variety, because the marketer has a duty to obey the law as embodied by the FTC’s rules and, if one is a member, the DMA’s Guidelines. Implicit in this consideration is that obeying the law is a categorical imperative and while there is disagreement about this, it is mostly in the area of civil disobedience (Wit), not Internet marketing.

By acting with good will, and against desire (in the form of greed), a marketer must create persuasive messages that are truthful and non-deceptive. Only these are legal by FTC standards and, thus, *ethical*. Failing to do so (say, as a result of desire for

more sales) is *unethical*. The *somewhat ethical* and *somewhat unethical* definitions reflect a mix of good will and desire.

An Example

To illustrate the ethical definitions given above, consider the following example of a *Social Proof* persuasion type at each ethical level. The sections making claims are in *italics* with the reasons for the assigned level given below and identified via superscript.

- 1) **Ethical** - We surveyed all our customers (*over 200 and growing!*)^(a) and over 75%^(b) increased conversions by at least 10%^(c).
 - a) The minimum number of surveys done is specified.
 - b) The minimum number of positive responses received is specified.
 - c) The minimum increase is both reasonable and specified.
- 2) **Somewhat Ethical** - We surveyed *all our customers*^(a) and *most*^(b) increased conversions by at least 10%^(c).
 - a) No minimum given but we're told it is all of their customers. This can be misleading if they have a very small customer base.
 - b) No minimum given but it will be expected to be above 50% because the site says "most."
 - c) The minimum increase is both reasonable and specified.
- 3) **Somewhat Unethical** - We surveyed *customers*^(a) and *many*^(b) increased conversions by at least 10%^(c).
 - a) No number or criterion given at all.
 - b) No number given but users will probably assume it is over 50%.
 - c) The minimum increase is both reasonable and specified.
- 4) **Unethical** - *You'll*^(a) increase conversions by at least 50%^(b)!
 - a) No reason given to back this up.

b) Number is suspect and no reason given.

General Controls





At the top of the site are two controls (Figure 2). The eye () enables the visual highlighting and the ethical controls. These controls allow the user to select different ethical levels as well as disagree with the initial ethical level displayed by the site. The eye icon was chosen because it allows the user to see more information. Once clicked, the icon changes to a “slashed eye” () to indicate a return to the normal presentation. The slash is widely understood as meaning “not.”



Figure 2 - Visual highlighting controls (accessed 4-26-2017)

The gear () icon opens a panel on the right side of the screen that contains explanatory information about the site as well as a set of checkboxes that control which persuasion types will be highlighted (Figure 3). This allows the user to concentrate on specific persuasion types which can be particularly helpful in teaching situations. Finally, there is a master reset which will set all the persuasion elements on the page to a specific ethical level (Figure 4). Once the panel is open, the gear icon changes to a close icon () which closes the panel. Note that opening the panel also enables the visual

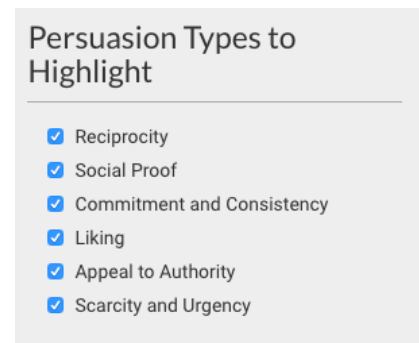


Figure 4 - Controls to select which persuasion types to highlight (accessed 4-26-2017)

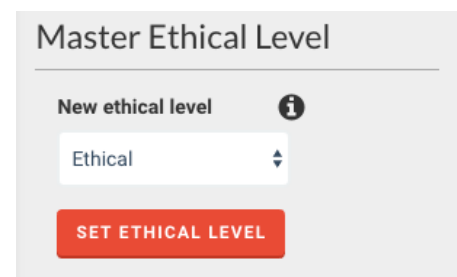


Figure 3 - Master ethical level control (accessed 4-26-2017)

highlighting so the user can see their changes take effect immediately.

General ethical controls

Once the user has enabled the visual highlighting, the *Ethical Control* is shown (Figure 5) for each persuasive element. The control has several parts which are described below and correspond to the numbers in Figure 5.

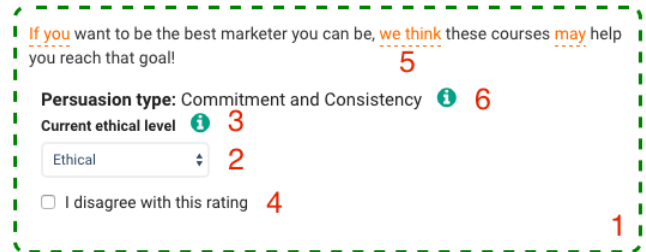


Figure 5 - Ethical Control (accessed 4-27-2017)

1. A colored border showing the ethical

level. The site uses the standard “traffic light” based system of green meaning

“go” - *good* or *ethical*, red meaning “stop” - *bad* or *somewhat unethical* or

unethical, and yellow meaning *in between* or *somewhat ethical*. The specific

colors used, from ethical to unethical, are *green*, *goldenrod*, *darkred* and *red*.

These are Cascading Style Sheet named colors (Worldwide Web Consortium

(W3C)) and were chosen to be visible against all the backgrounds on the site as

well as be visually distinguishable from each other. The most difficult choice was

the *somewhat unethical* level as it had to be distinguishable from both yellow

and pure red and also had to be visible against the red background of the

testimonial section. There is a further discussion of color selection in Appendix

1.

2. A select box that shows the current ethical level and allows the user to select a new level which will produce a similar persuasive message as well as update the color of the border. See Appendix 1 for a discussion of alternatives to the select box.

3. An information icon that will show a definition of the current ethical level when the mouse is placed over it

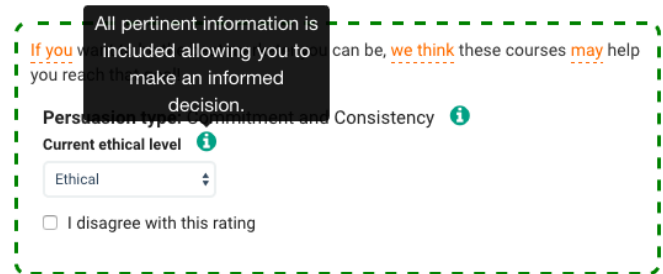


Figure 6 - Ethical description tooltip (accessed 4-27-2017)

- decide if they think the current ethical level accurately describes the message.

4. A checkbox that indicates the user disagrees with the ethical level and allows

them to select a new level they feel best describes the persuasive message. (Figure 7). Note that the information icons for both the current and the new ethical levels are available. When the user clicks

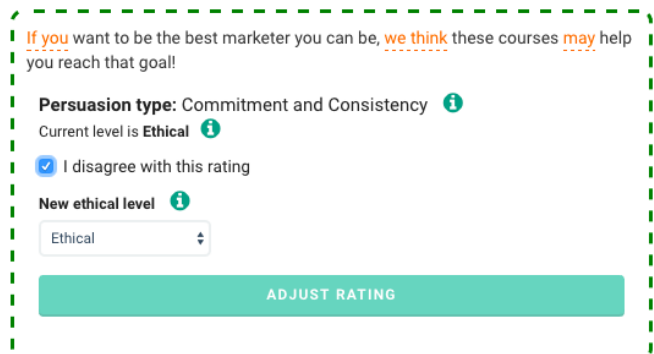


Figure 7 - When the user disagrees with the ethical level (accessed 4-27-2017)

the “Adjust Rating” button, a modal dialog is shown that thanks them for voting. Note that since this is a proof-of-concept site and there is no server component, the vote isn’t actually recorded anywhere.

5. The persuasive message may have sections styled in color with a dashed line

underneath, similar to traditional web links. If the user places their mouse over these sections, a tooltip message is shown explaining why this section illustrates the ethical level shown for the

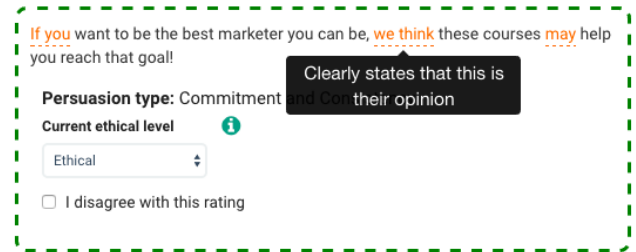


Figure 8 - Tooltip showing a reason behind the ethical level given to a persuasive message (accessed 4-27-2017)

persuasive message (Figure 8). Although not visible in the screenshot, the cursor changes to a question mark when the mouse moves over these sections.

6. The persuasion type is also shown as well as an information icon that gives a description of that persuasion type (Figure 9).

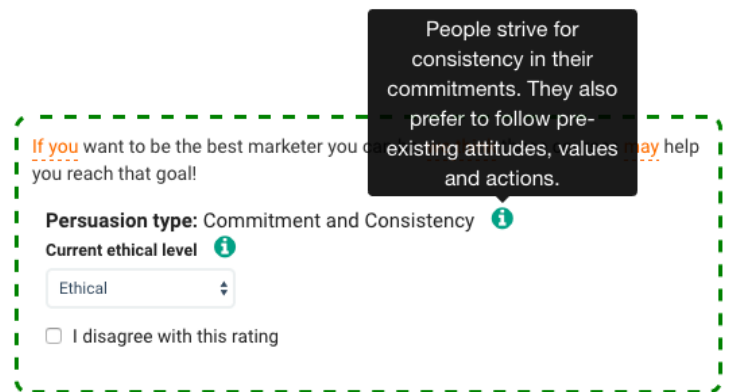


Figure 9 - Persuasion type description tooltip (accessed 4-27-2017)

Special ethical controls

A few persuasive elements have no adjustable ethical level. They are part of the page design and have no reasonable way to be replaced with more or less ethical elements. These include social media sharing counts (Figure 10)

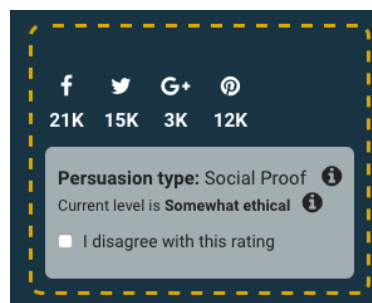


Figure 11 - Social media sharing block (accessed 4-27-2017)

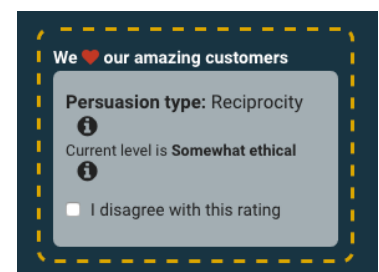


Figure 10 - Customer appreciation block (accessed 4-27-2017)

and the customer appreciation text (Figure 11). These controls still display the ethical level definitions and allow the user to disagree with the initially displayed ethical level.

For information on the technology used on the site and a discussion of the site design process, see Appendix 1. It contains a detailed example of how the visual and layout design for the testimonial section evolved during the design and development process.

Future Enhancements

A number of enhancements can be made to this proof-of-concept site. While at least one example of each ethical level for all persuasion types is included in the regular persuasive texts, additional content should be added to provide a variety of messages.

A server component should be added so that users who disagree with the initial ethical level shown for a persuasive message can provide feedback to help adjust that level. The algorithm that would adjust the ethical level for each disagreement vote would have to take into account those who vote the level up or down by more than one level to accurately reflect the overall feedback.

Design elements can be used to persuade the user to take an action. The site could be modified to display, and allow adjustment of, ethical levels for design elements other than the persuasive text messages. These include header background images, font size and spacing (Boulton), amount of whitespace (Boulton), element layout, and iconography. If the persuasive aspects of design were explained to users, their visual literacy could be significantly enhanced. Many people understand being lied

to or persuaded by words but far fewer understand the persuasive power of visual symbols, images, typeface or layout.

A more ambitious enhancement was suggested by our advisor. It augments the teaching potential of the site by allowing users that click the CTA button to then select which of the persuasive messages on the site they found the *most* persuasive. A new set of messages is then shown and the process repeats. After several repetitions, the site analyzes their choices and displays the persuasive type, or types, that the user found most effective, along with descriptions of those types, and strategies to resist their influence. This could be a powerful teaching tool.

Acknowledgements

I would like to thank The Wayback Machine (<https://archive.org/>) for allowing me to retrieve older web documents. I would also like to thank Rachael Stark for proof-reading and editing assistance, Dr. Alan Girelli and Dr. Ruth Smith for good conversations, advice, and willingness to help, and my advisor, Dr. Brenton Faber, for helpful ideas and suggestions.

Appendix 1

Technology Components

The site uses the VueJS 2 (<https://vuejs.org/v2/guide/>) front-end framework. It provides a way to create reusable visual components that can be quickly and efficiently updated via changes to JavaScript variables rather than requiring the developer to update the HTML on the web page directly. Three components were created with the first component rendering the persuasive text message. When given an array of persuasive messages, a persuasion type, an ethical level and, optionally, an index into that array, this component will display the persuasive text message. In addition, when requested by the ethical control, this component displays the styling of the sections in each persuasive message along with the tooltips displaying the reasons associated with those sections.

The second component is the most complex as it handles all the ethical control capability. It displays the visual highlighting, allowing the user to request a message with a new ethical level or disagree with the initial ethical level, as well as updating all the tooltip displays for ethical levels. VueJS components support nesting so the text component is nested within the ethical control component and controlled by it.

The last component is used to create the testimonials. It is given an array of objects, each containing a picture, name and title. It is also given an index which specifies which object from the array is used to create the visual part of the testimonial.

The persuasive message is added by a text component from an array of testimonial messages. Both of these are nested within an ethical control.

The site also uses CSS styles and JavaScript components from Bootstrap 3 (<http://getbootstrap.com/getting-started/>) as well as the JavaScript toolset jQuery (<http://jquery.com/>) and the Font Awesome set of icons (<http://fontawesome.io/>).

Site Design

The site visual and interaction design evolved over the course of the project. The first iteration (Figure 12) was built using an online wire-framing tool (<http://wireframeapp.io/>). The tool allows the user to drag and drop pre-defined blocks of placeholder content.

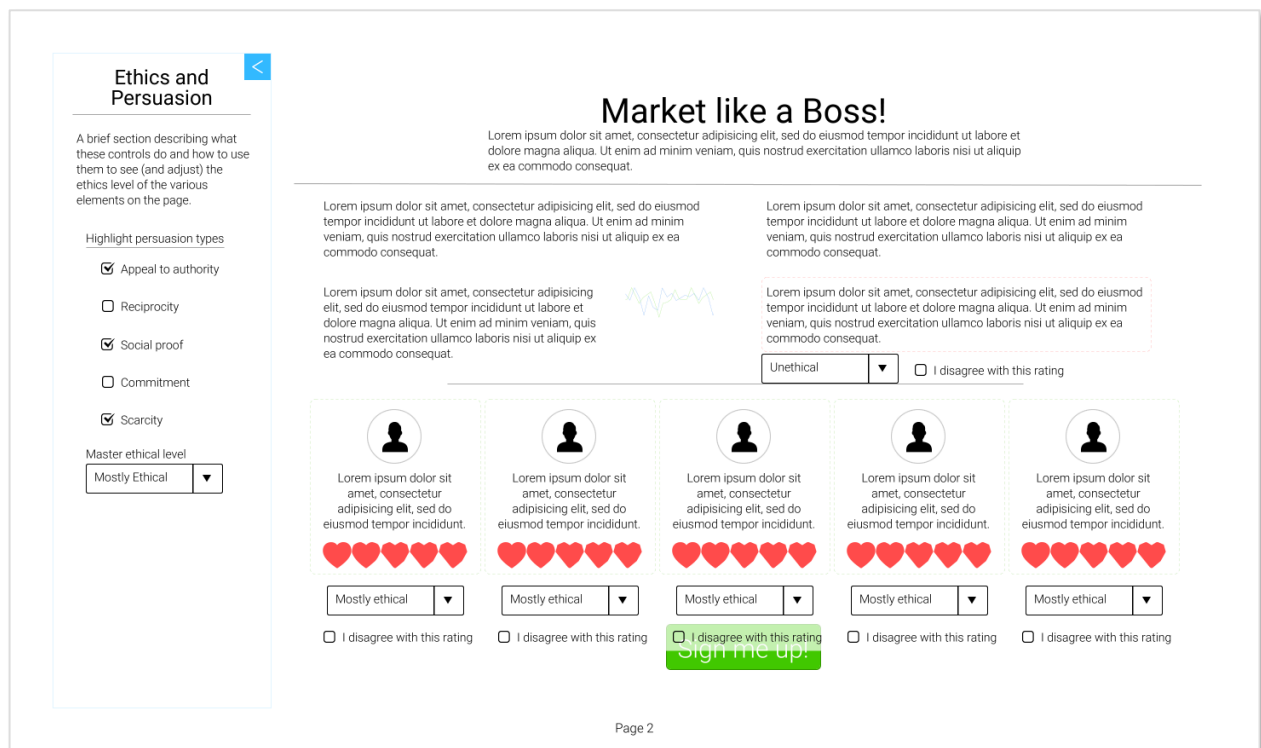


Figure 12 - Wire-frame of site with sidebar open and ethical controls shown

The design was then recreated in Sketch (<https://www.sketchapp.com/>), an Apple Macintosh desktop web design and layout tool. The high-resolution mockup

(Figure 13) moved the sidebar to the right as it has been my experience that right-handed people prefer having sidebar controls and content on the right.

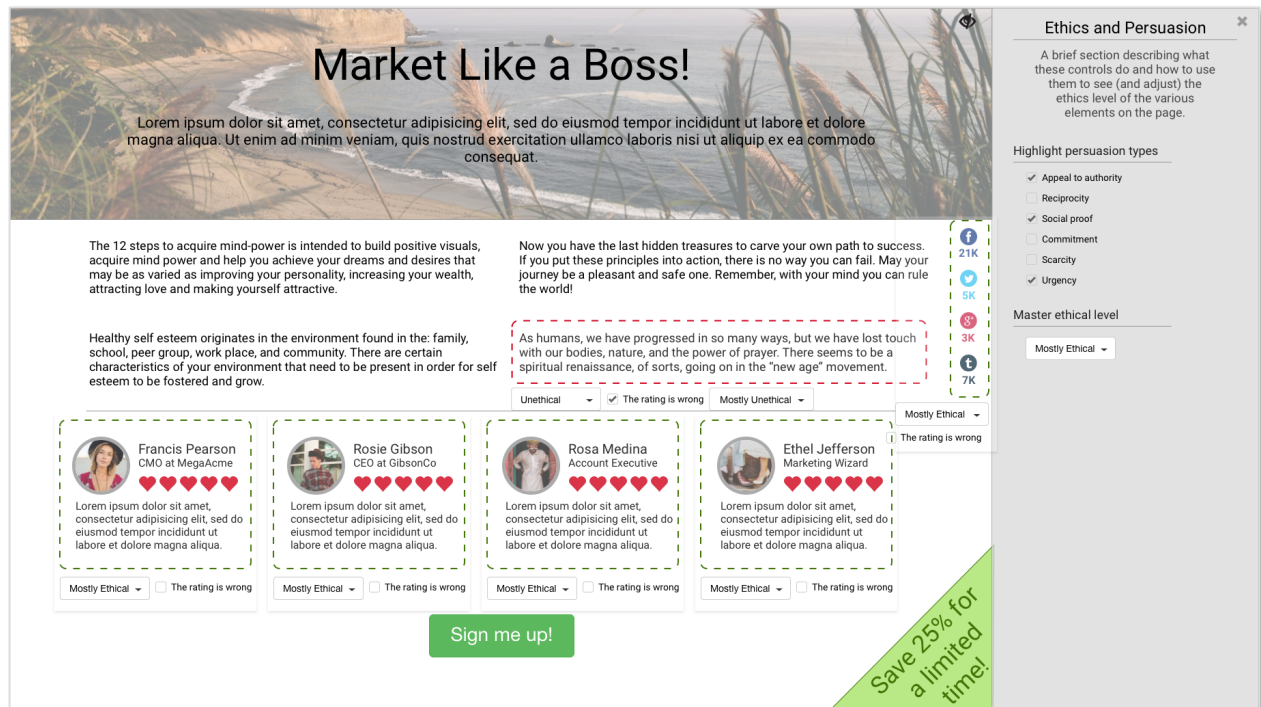


Figure 13 - High-resolution mockup with sidebar open and ethical controls shown

The mockup introduces the highlighting of each persuasive element using a dashed line. Other ways to highlight the elements were considered, including adding a faint colored background to the persuasive text (Figure 14), but the dashed line was the least intrusive way to both distinguish the element from its surroundings while still visually indicating the ethical level. The dashed line will also have fewer color

interactions with any colored or patterned background, such as the picture in the header section.

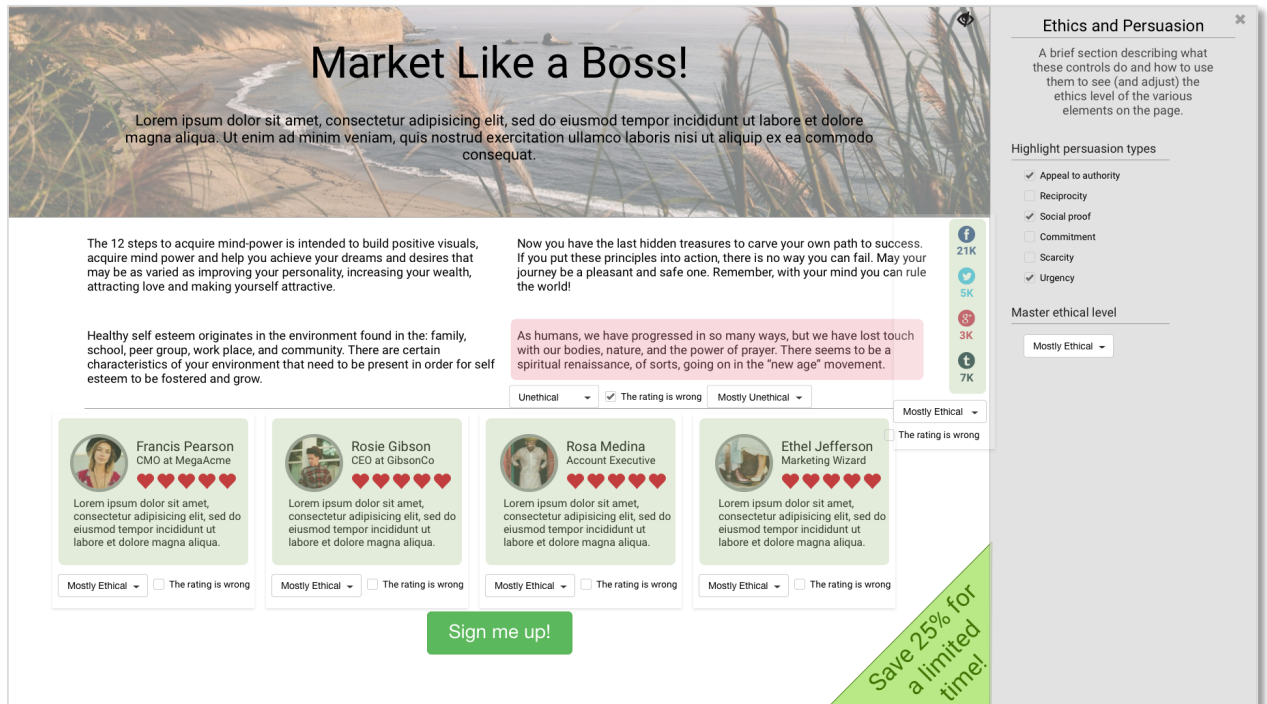


Figure 14 - Ethical level shown by using a 15% opacity colored background

The social media block is introduced as well as an urgency block in the lower right corner. The ethical controls don't adapt well to the social media block since it is tall and narrow and the controls are much wider.

I experimented with the urgency text in various location including centered under the CTA button and left and right aligned on the bottom but each of those alternatives looked unbalanced.

This iteration added visual design to the testimonial as well as a name and job title for each person. By having the picture next to the name, job title, and row of hearts, there is plenty of space for the ethical controls.

The next step was either to create an interactive clickable prototype that would allow the interaction design to be tested or to start coding the site for use on the web. I experimented with a couple of online prototyping tools but it became clear that a number of mostly similar mockups would have to be created in order to simulate the interactions. Given the time allowed for the project, it seemed wiser to begin coding the site rather than spend more time mocking it up.

The site was initially created using the Pinegrow web editor (<https://pinegrow.com>) and then edited as needed to add the required capabilities. Pinegrow features a drag-and-drop web page creation tool. This allows one to insert pre-defined blocks of HTML (<http://docs.pinegrow.com/bootstrap-blocks>), based on Bootstrap 3, into a new page and makes assembling a page much faster. All the blocks share a CSS stylesheet so the page looks consistent.

However, once additional elements were added by hand, including the VueJS components, several of those styles had to be adjusted to get the desired visual layout. This was done using a custom stylesheet built using the LESS CSS preprocessor (<http://lesscss.org/>).

In both the wire-frame and the high-resolution mockups, the sidebar menu would slide in and share space with the main content of the site. Since Bootstrap 3 provides CSS classes that make it easier to have web content respond to changes in

the amount of space that is available (known as responsive design (Marcotte)), this would allow the main content of the site to adapt to the sidebar menu sliding in.

When the sidebar menu was implemented using a jQuery plugin (<https://nnattawat.github.io/slideReveal/>), however, it slid over the main content, thus obscuring some content. While not optimal, it wasn't worth the time to change this behavior and enough of the site is visible to allow the user to keep context and see the effects of the controls in the sidebar menu.

Design Discussion: The Testimonials Section

Because the site is responsive, it will adapt to various screen widths, although it currently is poorly displayed on mobile phones. The testimonials section required the most adjustments for various screen sizes. At normal desktop widths, four testimonials are presented in a line with the name, title, and row of hearts next to the picture (Figure 15).

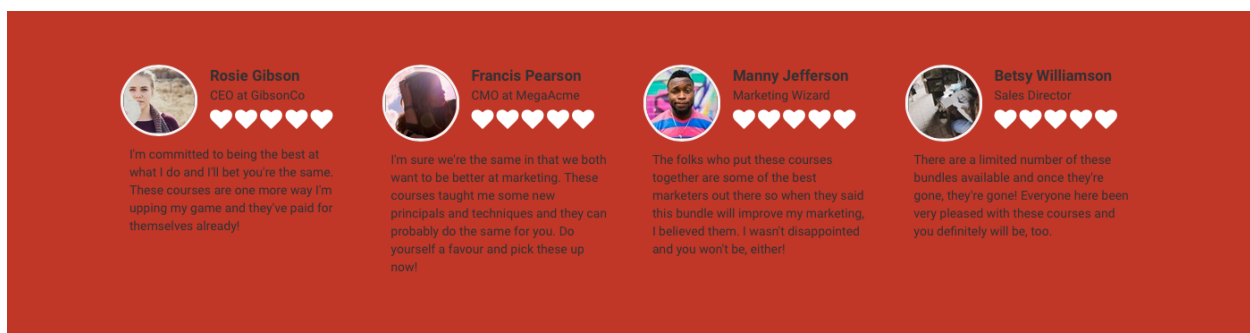


Figure 15 - Four testimonials in a row (accessed 4-29-2017)

If the browser width is between 992 and 1200 pixels, this layout no longer displays properly as the name and title can wrap. The solution is to use the CSS media query feature to change the styles to place the name, title, and row of hearts

underneath the picture for that range of browser widths (Figure 16).

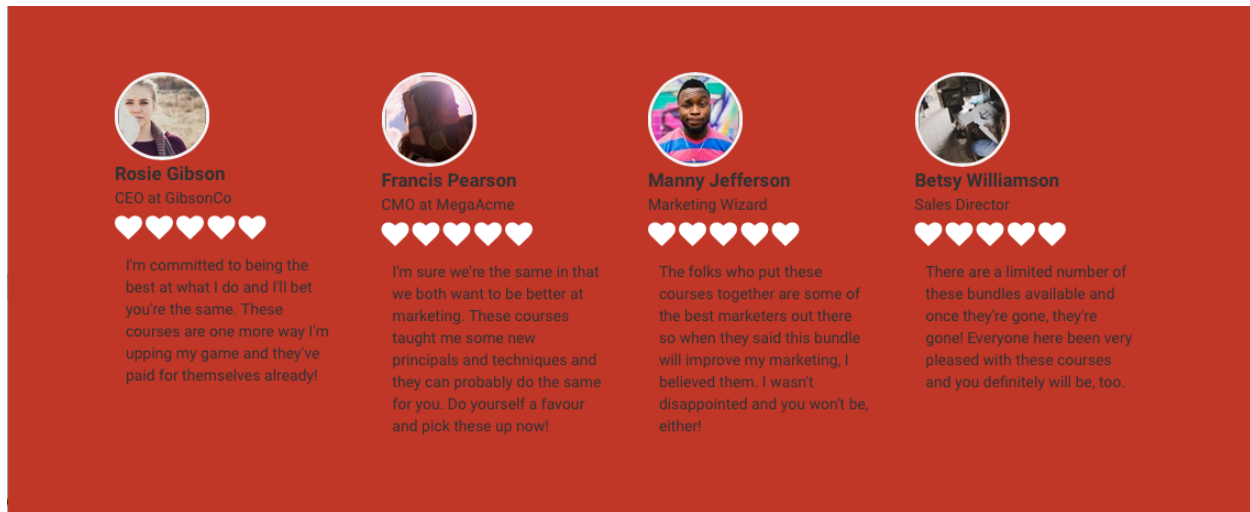


Figure 16 - Four testimonials in a row with name and title underneath the picture (accessed 4-29-2017)

At browser widths below 992 pixels, the Bootstrap CSS classes used cause the display to change to having two rows with two testimonials per row with the name, title and hearts row next to the picture (Figure 17).

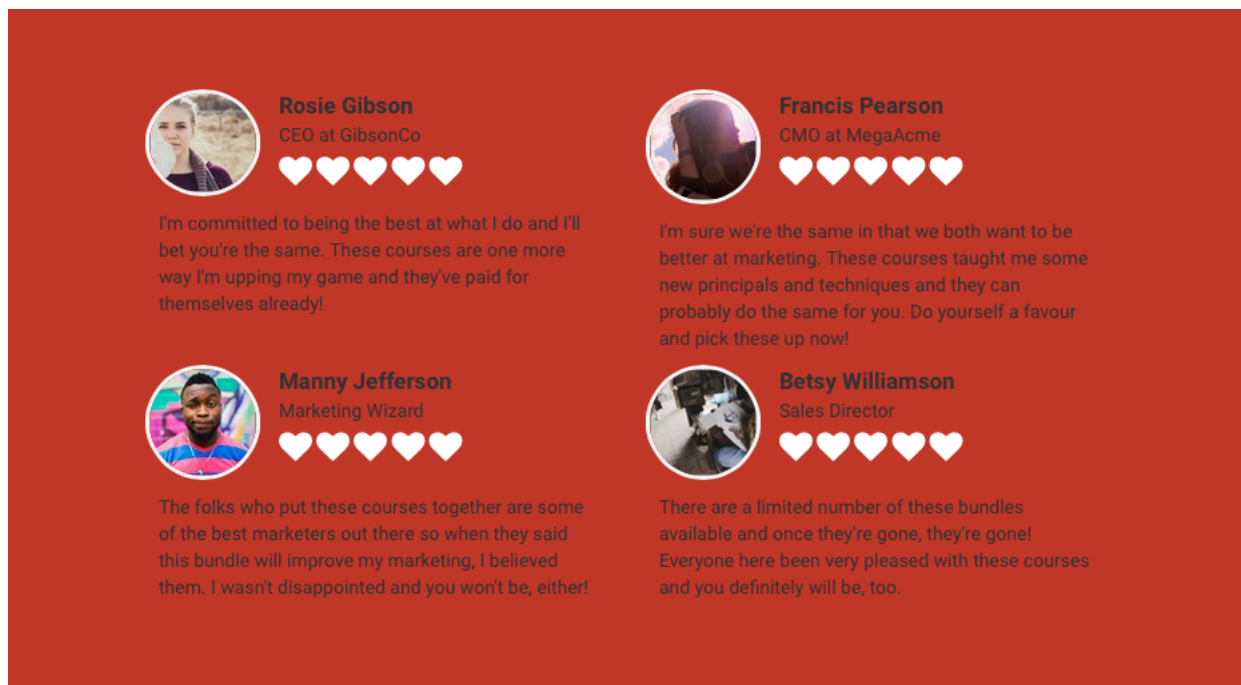


Figure 17 - Two rows with two testimonials on each row (accessed 4-29-2017)

The reddish (CSS hex format #C0392B) background of the testimonial row made using pure red for the hearts problematic. There wasn't really enough contrast between the pure red of the heart and the row background. The background also interacted with the initial ethical color borders which caused the *somewhat ethical* and *somewhat unethical* colors to be too similar.

Various different colors were tried for the row background but none would draw the user's eye as well as the initial reddish color. The solution was to use white for the heart color, which contrasts well with the reddish color, and adjusting the ethical color borders to be visible against most any background color. The final color chosen for the *somewhat unethical* is the CSS Named color, *darkred*.

Design Discussion: Ethical Level Selector

The current ethical level selector on the site is a simple HTML select tag, also known as a dropdown box. While commonly used and effective, dropdown boxes have some disadvantages, including being, "...hard to navigate, hide options by default, don't support hierarchies, and only enable selection not editing..." (Wroblewski).

One alternative user interface control is the "Range input type", otherwise known as a slider (Figure 18). It allows the user to select a value within a range using a marker, usually referred to as a "thumb." One potential problem with a slider is that it implies one can select any value along a continuum. This can be avoided by placing detents along the slider to mark the permissible values.



Figure 18 - Slider control from Word for Mac 2016

Two such sliders were mocked up with the first example (Figure 19) using a color gradient that matches the “traffic light” colors used for the borders displayed by the ethical control.

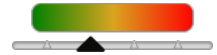


Figure 19 - Ethical level slider mockup using a color gradient

Another slider was mocked up using Emoji characters taken from the Smileys and People section of the Google Noto Emoji Font

(<https://www.google.com/get/noto/help/emoji/smileys-people.html>)



Figure 20 - Ethical level slider mockup using Google Noto Emoji characters

(Figure 20). Both slider mockups use small triangles to show detents and

a large black “thumb” to show the selection which, in this case, is the *somewhat ethical* level.

Both sliders avoid the use of words, and can impart a bit of whimsy to the page. However, while current browser support for plain sliders is good (<http://caniuse.com/-search=slider>), too much work would be needed to implement either mockup for the proof-of-concept site. However, either slider could be added as a future enhancement.

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