

# BREAKING THE WALL OF TEXT

Designing A User-Friendly Template for Copyright Policies in  
Online Creative Communities

exploration by

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# PROCESS OVERVIEW

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# INTRODUCTION

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## BACKGROUND

Last year I attended a talk by a doctoral researcher at the HCI International 2015 Conference, who presented her work on the emerging topic of contract visualization - an approach that aims at making legal contracts clearer and more user-friendly with the help of better typography, layout design and information visualization. Her take-away message was that '*in many industries, contracts are important touchpoints with customers, but nowadays their potential is completely untapped: organisations seeking to be truly customer-centric should give information design serious consideration in order to transform contracts from necessary evils into clear, user-friendly interfaces.*' (Passera, 2015). This statement sparked my UX Designer's curiosity and provided inspiration for the research questions behind this study: **what changes to legal information design might convey complex information in a more logical and clear manner? Can a standardized layout help demystify the legal wall of text into a clear, simple design that uses visual cues to support comprehension?**

Legal information design presents a unique challenge to the framework of user-centered design. People usually do not like reading legal documents, as they are dull, exhaustive and difficult to understand for most. Everyone would agree that legal information is something important, but would gladly avoid reading a long text in legalese. For most, even after going through the effort of reading, the documents might still not be clear. Others are left with the doubt that they might have misunderstood something, and that will cause negative surprises in the future. However, in the eyes of their creators – the lawyers – contracts try to accurately describe which rights, obligations, permissions and prohibitions apply to the signatories, and make them binding under the law (Fryar, 1988). The problem with this traditional view is that it focusses only on the essence and precision of the rules, but not at all on the needs and abilities of the individuals tasked with understanding and acting upon such rules. It is then **crucial to see legal documents in a genre similar to instructions and user guides: this is because not only do the rules need to be fair and consistent, but they also must be logically and clearly delivered if we want readers to apply them in practice and be compliant.**

Traditionally, copyright was not an area of the law that held much relevance for the majority of people. However, the amount of agency that people have with technology has changed drastically, and so has the way that consumers interact with copyrighted material. Copyright is now relevant to anyone with an Internet connection and a "share" button (Fiesler, 2015). We have seen a significant cultural shift toward using previously existing content in new ways (Lessig, 2008). Consumers are not only producers but remixers - that is, not just creating from scratch but also making use of existing content. This is thanks to the digitization of nearly all media which makes manipulating it possible for anyone with common computer software, and to the wide dissemination of amateur content made possible by the Internet. However, just because the law is more relevant to more people does not mean it is more easily understandable. Technological advances have only exacerbated the same confusions that have always existed in applications of copyright law.

## PROBLEM DEFINITION

**In most online communities, copyright policies and explanations of applicable laws are hidden within rarely read Terms of Service agreements. Just as confusing if not more so than actual legal rules, online terms and conditions are notoriously long and incomprehensible** (Jensen & Potts, 2004; Luger, Moran, & Rodden, 2013; McDonald & Cranor, 2008). In the course of her dissertation research, Dr. Casey Fiesler has examined the complex relationship between the forces of regulation - law, norms, markets and architecture - and extrapolated a set of design and policy recommendations for online community designers to help better support current practices among content creators.

My research has stemmed from these recommendations, wherein I have tried to create a copyright policy web template that presents to consumers, in a user-friendly manner, all the information and tools needed to manage their rights on the organization's platform as well as learn more about respecting the rights of other creators. For the purposes of this project, I have used the copyright policy of the DeviantArt community as a prototypical example because it is one of the largest social networks on the web and a popular space for artists both amateur and professional to showcase their work.

## TARGET USERS

- The primary user group of this application consists of members of online creative communities of age 18+ years. These members could range from amateur to professional artists and also include general users of the internet who wish to explore/buy/share artwork on these online communities.
- This application can also be used by lawyers/legal professionals and software developers to customize the application as per their organization's policies.

## RELATED RESEARCH

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There are three main sources of research which I have drawn upon, as explained below:

### 1. Copyright Problems in Online Communities

In the large-scale content analysis of public conversations about copyright in different online communities, one clear theme that emerged was the prevalence of *problems* related to copyright expressed by creators in these conversations. The five major types were:

1. avoiding trouble
2. dealing with consequences
3. fear of infringement
4. dealing with infringement, and
5. incomplete information

The final category is an overarching problem, and the others focus on either the point of view of creators who are appropriating work, or the point of view of creators who are concerned about protecting their own work (Fiesler, Feuston, & Bruckman, 2014, 2015). I have used these categories as a framework to organize the copyright content - for a detailed explanation, please refer to the design section of this report.

## 2. A “Nutrition Label” for Privacy

This research addresses the present gap in the communication and understanding of privacy policies, by creating an information design that improves the visual presentation and comprehensibility of privacy policies. Drawing from nutrition, warning, and energy labeling, as well as from the effort towards creating a standardized banking privacy notification, the process for constructing and refining a label tuned to privacy is presented (P. Kelley, J. Bresee, L. Cranor, and R. Reeder, 2009).



**Figure 1** Example of Privacy Nutrition Label, formatted in the latest design being currently tested

Their user study methodology was particularly useful to me in understanding how a standard copyright policy compares with a restructured policy which employs visual solutions. Further details of the methodology, in terms of participants and task structure, are explained in the evaluation section.

### **3. Private Parts**

Private Parts is an open-sourced, customizable toolkit by the mobile security company Lookout to help developers implement visual, user-friendly privacy policies. The idea for this visual privacy policy came out of a collaboration with the National Telecommunications & Information Agency (NTIA), which wrote a code of conduct on mobile application transparency. Lookout adopted the code of conduct and updated its own privacy policy. They continually iterated to transform it into a beautifully designed product. The response from users was overwhelmingly positive, sparking the question: what if this new visual privacy policy format was shared so that other companies could transform their privacy policies too? (Velez, 2014).

Their code is open-sourced on the online project hosting platform, GitHub. In order to create a visual privacy policy with their code, it requires five steps and in less than an hour, they claim, developers can have a customized visual privacy policy format installed and running on any of their apps by tweaking a single JSON file in Lookout's toolkit. This plug-and-play toolkit was the inspiration behind my responsive visualization framework for copyright policies.

Lookout's framework for privacy policies is shown in Figure 2 below:



## Short Form Privacy Policy

A statement about your short form privacy policy. Be sure to include a link to your long form Privacy Policy.

### What do we collect?

 <b>Contacts</b> A statement describing what you collect in this category and why your product needs to collect it. Limit yourself to just a sentence or two.	 <b>Biometrics</b> A statement describing what you collect in this category and why your product needs to collect it. Limit yourself to just a sentence or two.	 <b>Health</b> A statement describing what you collect in this category and why your product needs to collect it. Limit yourself to just a sentence or two.
 <b>Phone / Text Logs</b> A statement describing what you collect in this category and why your product needs to collect it. Limit yourself to just a sentence or two.	 <b>Browser History</b> A statement describing what you collect in this category and why your product needs to collect it. Limit yourself to just a sentence or two.	 <b>Location</b> A statement describing what you collect in this category and why your product needs to collect it. Limit yourself to just a sentence or two.
 <b>Financial Info</b> A statement describing what you collect in this category and why your product needs to collect it. Limit yourself to just a sentence or two.	 <b>User Files</b> A statement describing what you collect in this category and why your product needs to collect it. Limit yourself to just a sentence or two.	

### Who do we share with?

 <b>✓ Carriers</b> A statement describing what user data you share with this group and why you might share that. Limit yourself to just a sentence or two.	 <b>✓ Government</b> A statement describing what user data you share with this group and why you might share that. Limit yourself to just a sentence or two.	 <b>✗ Data Resellers</b> We DON'T share your information with them.
 <b>✗ Data Analytics</b> We DON'T share your information with them.	 <b>✗ Systems &amp; Platforms</b> We DON'T share your information with them.	 <b>✗ Other Apps</b> We DON'T share your information with them.
 <b>✗ Social Networks</b> We DON'T share your information with them.	 <b>✗ Ad Networks</b> We DON'T share your information with them.	

This short form privacy policy was built with [Private Parts](#).

**Figure 2** A responsive visualization framework for privacy policies

## USER ANALYSIS

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### COGNITIVE LOAD THEORY

Cognitive Load Theory (CLT) can help us understand why people struggle so much in reading and understanding copyright policies. Developed by Sweller, while initially studying problem solving (Sweller, 1988), CLT postulates that learning happens best when information is presented in a way that takes into consideration human cognitive structures. Limited working memory capacity is one of the characteristic aspects of human cognition (Sweller, 1998): thus, comprehension and learning can be facilitated by presenting information in ways minimising working memory load.

**In order to understand written texts people form mental models (Johnson-Laird, 1983), mental representations based on the principles of causality, spatiality and temporality (Zwaan, 1995).** However, if working memory is overloaded in the first place we cannot form mental models, because information needs to be processed and integrated before being stored as knowledge in our long-term memory. In order to prevent overload, it is then useful to recognise different types of cognitive load (Chandler, 1991): *intrinsic load* is caused by the inherent difficulty and complexity of the subject matter, and it cannot be reduced; *extraneous load* is produced by the way in which content is presented, and can be reduced through design and instructional support; *germane load* is generated by information processing and integration into mental models, it can be affected by design and is not seen as a negative factor because schema formation supports learning. **The task of designers is to create information structures and displays that reduce extraneous load and eventually increase germane load.** Legal documents contain lots of special terms, concepts and information (intrinsic load), and presenting this content as a wall of legalese text overloads readers without legal expertise (extrinsic load) and neither does it help them to develop mental models to make sense of the meaning (germane load).

**In light of CLT, both information structure (how the content is ordered and organised) and information display (how it is visually presented) should play a key role in supporting comprehension and intellectual performance.** A meaningful information structure helps readers to preserve continuity, allowing the formation of a

useful and easy-to-process mental model. Visual information display further facilitates mental model creation by representing information structures and relationships more explicitly, so readers do not have to use cognitive resources to develop a mental model from scratch (Keller, 2005).

## DESIGN REQUIREMENTS

In light of CLT, I generated a list of design requirements to address the needs of my target users. The application I felt should have:

- Structured content with a glance-able summary of the sections to promote immersion in the text
- Visual cues (based on The Gestalt Principles of Visual Design) to assist readers in focussing on important items
- Responsiveness across platforms
- Customizability

## DESIGN & IMPLEMENTATION

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### RESTRUCTURING CONTENT

I began with restructuring the original content based on the areas of copyright problems in online communities, identified previously in related research:

1. Appropriation - avoiding trouble
2. Appropriation - dealing with consequences
3. Protection - dealing with infringement

I created two versions of the content, as explained below:

#### **1. Reorganized**

In this version I took the content as is and simply reorganized it into the three sections, using visual cues of colored and bold typeface, bullet points, etc.

**REORGANIZED (Word count: 1415)**

The availability of this document should not be construed as rendering legal or other professional advice, and this document is not a substitute for the advice of an attorney.

DeviantArt does not claim ownership rights in your Content. For the sole purpose of enabling us to make your Content available through the Service, you grant to DeviantArt a non-exclusive, royalty-free license to reproduce, distribute, re-format, store, prepare derivative works based on, and publicly display and perform your Content.

**"How do I get Copyright?"**

Under most national laws and international copyright treaties you receive a copyright automatically in any original work as you make it. Registration may be required to exercise some rights, like commencing a lawsuit. Copyright does NOT protect ideas. Copyright protects the expression of ideas or the ways in which an idea is materially placed or expressed in the work.

**Appropriation**

**Avoiding Trouble**

**"How can I avoid infringing on someone's Copyright?"**

Copyright infringement occurs when you do certain things with a creative work which someone else produced without first getting the proper permission.

Some examples of copyright infringement (this is only a partial listing) can include:

- Placing someone else's photograph or creative work online without proper permission.
- Using a creative work commercially without permission.
- Adapting someone else's creative work found in one medium to another medium, such as making a book into a movie or a photograph into a painting.
- Modifying or editing a creative work without proper permission.

The best way to avoid infringing on the rights of another creative person is to use your skill, talent and imagination to create your own completely original work. When we use the word "original" we don't mean that you must come up with an idea which hasn't been used before. When in reference to copyright "original" means that you created your work without referencing or deliberately copying anyone else's work during the process.

If you have used materials which are owned by other people or companies make certain that you have obtained proper permission or licensing for the use before you place your work online.

You can read more [here](#) and [here](#).

**"What are some of the Copyright cautions?"**

- In most cases it does not matter how much of the material you have used, whether it's a single frame, a few moments of audio, a short clip of video or any other sampling it's still considered to be protected by copyright and you still require the owner's permission for use.
- It doesn't matter how you obtained the material, it's still considered copyrighted.
- It doesn't matter whether or not you've credited the proper owner, it's still considered copyrighted and you still need permission.
- It doesn't matter if you are not selling it or making a profit, it's still considered copyrighted and you still need permission.
- It doesn't matter if you can't remember people using things without permission, it's still considered copyrighted and you still need permission.
- It doesn't matter if you've edited it a little bit or made a few alterations, if it's recognizable it's still considered copyrighted and you still need permission.
- Read licenses carefully to understand the type of permission they provide. For example, there are many versions of the Creative Commons - each giving different permissions.

**"What about Fair Use?"**

"Fair Use" is the notion that some public and private uses of copyrighted works should not require the permission of a copyright owner. These circumstances are very limited, complex to analyze under the law and require the help of expert advice from a lawyer. We recommend you talk to your own lawyer if you want to know more about fair use as it applies to the work you are doing. If it turns out that it isn't fair use, you may be liable for very serious money damages.

To learn more about fair use you can go [here](#), [here](#), [here](#), and [here](#).

**Dealing with consequences**

**"What happens when I submit infringing works?"**

Any copyright owner following the procedures in this Copyright Policy can require DeviantArt to remove or disable access to your account by a representative of DeviantArt. When we receive the proper notice we become aware that a submission to DeviantArt infringes upon the copyrights of another artist, creative person or company, we will immediately delete it. This is a legal requirement which we fulfill immediately; you will not receive an advanced warning and you will not be given an opportunity to "fix" it.

If you believe that one of your submissions was removed in error you may contact our helpdesk or otherwise file a counter notice ([link to qf](#)).

If you are found to repeatedly post infringing content, your account will be suspended and serious offenders will have their account banned and deactivated. We consider three

**"How can I file a Copyright infringement notification?"**

To file a DMCA takedown notice, you may use our form here. This form requires a DeviantArt account, which is available at no charge by signing up. Otherwise you may use the following method:

Written notice should be sent by mail or by PDF attached to an email to DeviantArt's designated agent as follows:

DMCA Complaints  
DeviantArt, Inc.  
attn: Daniel Sowers Jr  
7095 Hollywood Blvd #788  
Hollywood, CA 90028 Fax: 323.645.6001  
Email: violations@deviantart.com

Under Section 512(f) of the Copyright Act any person who knowingly materially misrepresents that material or activity is infringing may be subject to liability. Consult your legal counsel or see Section 512(c)(3) of 17 U.S.C. to clarify or confirm the requirements of the notice.

**"How can I send a Counter-Notification?"**

If you believe that one of your submissions was removed in error you may contact our helpdesk or otherwise file a counter notice.

If you want to send DeviantArt a counter notice, please review this information for instructions.

Under Section 512(f) of the Copyright Act, any person who knowingly materially misrepresents that material or activity was removed or disabled by mistake or misidentification may be subject to liability. Please consult the Terms of Service and DeviantArt's Grievance Policy in which we explain that you may be removed from the site if you are a repeat infringer or if you violate DeviantArt's policies.

**Figure 3** Reorganized content

## 2. Short Form

In this second version I included content from the Terms of Service page related to copyright policy and tried to simplify some of the legalese, while employing more visual clues than the previous version. The resultant word count of this version was 20% lesser than the reorganized version.

The next step was to consult legal experts in order to determine the veracity of this simplified content. I spoke with Dr. Casey Fiesler as well as Mr. Joshua S. Wattles,

Advisor in Chief for all legal matters at DeviantArt and had them review both of my versions. Some of the high points of their feedback were:

- ✓ Logical division of content
- ✓ FAQ style layout
- ✓ Good use of visual cues for improved readability
- ✗ Beware of oversimplification of text, especially in explaining the license terms
- ✗ Hidden content increases liability on the company, so interaction should be intuitive

**SHORT FORM (Word Count: 1125)**  
 Here's an overview of our copyright terms. For more details, read our [Copyright Policy](#).

**What type of license am I granting to DeviantArt?**

✓ Non-Exclusive  
 The user can also post/use this content elsewhere.

✓ Royalty-Free  
 The website does not have to pay the user royalties for their content.

✗ Worldwide  
 The license does not have any geographic restrictions as to where it is valid.

✗ Perpetual  
 The license does not expire.

✗ Transferable  
 The website is permitted to transfer this license or license the content to another party.

✗ Irrevocable  
 The user cannot terminate the license once agreed to.

**What can DeviantArt do with my content?**

✓ Reproduce  
 Produce a copy or representation of the original work.

✓ Distribute  
 Share copies of the original work.

✓ Re-format  
 Revise or represent the original work in another format.

✓ Store  
 Save original work for future use.

✓ Prepare Derivative Works  
 A new work that translates or transforms one or more original copyrighted works (e.g., a movie made from a comic book, a song written about a photograph, etc.).

✓ Display  
 To publicly show a copy of it, either directly or by means of a film, slide, television image, or any other device or process or, in the case of a motion picture or other audiovisual work, to show individual images non sequentially.

✓ Perform  
 To recite, render, play, dance, or act a work, either directly or by means of any device or process or, in the case of a motion picture or other audiovisual work, to show its images in any sequence or to make the sounds accompanying it audible.

✗ Commercial Use  
 ✗ Advertising

**How can I avoid infringing someone's Copyright?**  
 Copyright infringement occurs when you do certain things with a creative work which someone else produced without first getting the proper permission.

Some examples of copyright infringement (this is only a partial listing) can include:

✗ To produce copies or reproductions of the work and ✗ To sell those copies (including, typically, electronic copies)

✗ To create derivative works (works that adapt the original work)

✗ To perform or display the work publicly

✗ To transmit or display by radio or video.

**What about Fair Use?**  
 Fair use is the idea built into the copyright laws that in some cases even if the copyright belongs exclusively to the artist, other people should be able to refer to it and in some situations use it as long as the second use is "fair." What behavior is fair is very different depending on the person making that evaluation. It is not surprising then that "fair use" causes lots of arguments and confusion. Not every country allows fair use and each country's

laws are different. In the majority of countries copying is permitted when used for some teaching activities, criticism, or for reporting. Some countries interpret criticism broadly to permit parodies or satire. In many countries a secondary use of a copyrighted work or a copyrighted work without permission if it doesn't hurt the value of the original. A few countries, like the U.S. and Britain, take an even more expansive approach: if the new work "transforms" the original's meaning, aesthetic or purpose, it may be fair use even if the whole work is used.

**What happens when I submit infringing works?**  
 Any copyright owner following the procedures in this Copyright Policy can require DeviantArt to remove his or her copyrighted content in use by a member of DeviantArt. When through the proper notice we become aware that a submission to DeviantArt infringes upon the copyrights of another artist, creative person or company, we will immediately delete it. This is a legal requirement which we fulfill immediately; you will not receive an advanced warning and you will not be given an opportunity to "fix it".

If you believe that one of your submissions was removed in error you may contact our helpdesk or otherwise file a counter notice ([link to qs](#)).

If you are found to repeatedly post infringing content, your account will be suspended and serious offenders will have their account banned and deactivated. We consider three strikes as an indication of being a repeat infringer subject to ban. If you are found deliberately misrepresenting the copyrighted work of another as your own your account will be immediately banned and deactivated.

The copyright owner may also decide to sue you directly if you infringe his or her copyright in posting content to DeviantArt.

**What do I need to file a Copyright infringement notification?**  
 To file a copyright infringement notification with DeviantArt (also commonly known as a "DMCA takedown notice"), the copyright owner or an authorized agent acting on his or her behalf will need to send a written communication that includes substantially the following:

✓ A physical or electronic signature of the copyright owner

✓ Identification of the copyrighted work

✓ Identification of the material that is claimed to be infringing

✓ Information reasonably sufficient to permit the service provider to contact the complaining party

✓ A statement that the complaining party has a good faith belief that use of the material in the manner complained of is not authorized by the copyright owner, its agent, or the law.

✓ A statement that the information in the notification is accurate

**How can I file a Copyright infringement notification?**  
 To file a DMCA takedown notice, you may use [our form here](#). This form requires a DeviantArt account, which is available at no charge by signing up. Otherwise you may use the following method:

Written notice should be sent by mail or by PDF attached to an email to DeviantArt's designated agent as follows:

DMCA Complaints  
 DeviantArt, Inc.  
 attn: Daniel Sowers Jr  
 7095 Hollywood Blvd #788  
 Hollywood, CA 90028 Fax: 323.645.6001  
 Email: violations@deviantart.com  
 Under Section 512(f) of the Copyright Act any person who knowingly materially misrepresents that material or activity was removed or disabled by mistake or misidentification may be subject to liability. Please consult the [Terms of Service](#) and DeviantArt's [Acceptable Use Policy](#) in which we explain that you may be removed from the site if you are a repeat infringer or if you violate DeviantArt's policies.

**How can I send a Counter-Notification?**  
 If you believe that one of your submissions was removed in error you may contact our helpdesk or otherwise file a counter notice.

If you want to send DeviantArt a counter notice, please review [this information](#) for instructions.

Under Section 512(f) of the Copyright Act, any person who knowingly materially misrepresents that material or activity was removed or disabled by mistake or misidentification may be subject to liability. Please consult the [Terms of Service](#) and DeviantArt's [Acceptable Use Policy](#) in which we explain that you may be removed from the site if you are a repeat infringer or if you violate DeviantArt's policies.

**Figure 4 Short form content**

## WIREFRAMING

Now that I had an idea of how the content was to be structured, I created wireframes of the web prototype using the UI Design software, Sketch. I kept the break points of several platforms in mind so as to make the design responsive.

At this stage I had also begun thinking of the visual design of the prototype. I wanted each section to be an independent entity having content hierarchy to direct users' attention to the most important information. Google's Material Design visual language spoke perfectly to my needs and I therefore decided to present each section as an expandable card component. The colors would depend on the style guide of each individual company so I stuck to a monochromatic scheme with the standard blue convention for any clickable text.

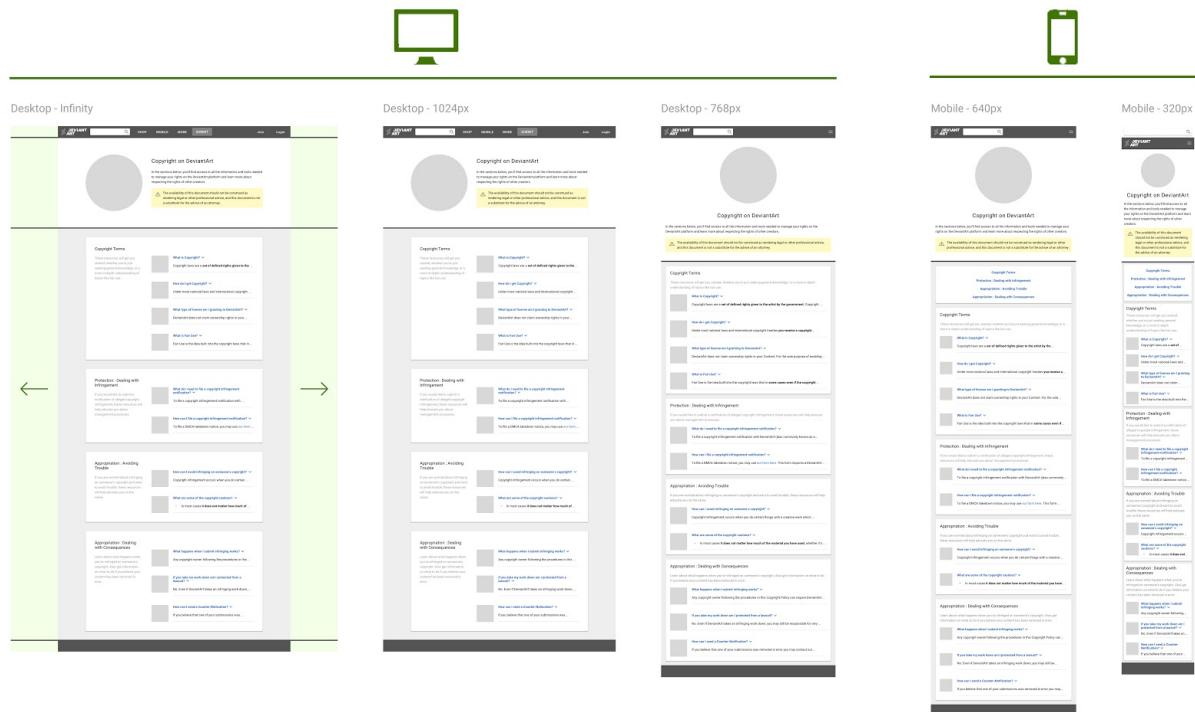
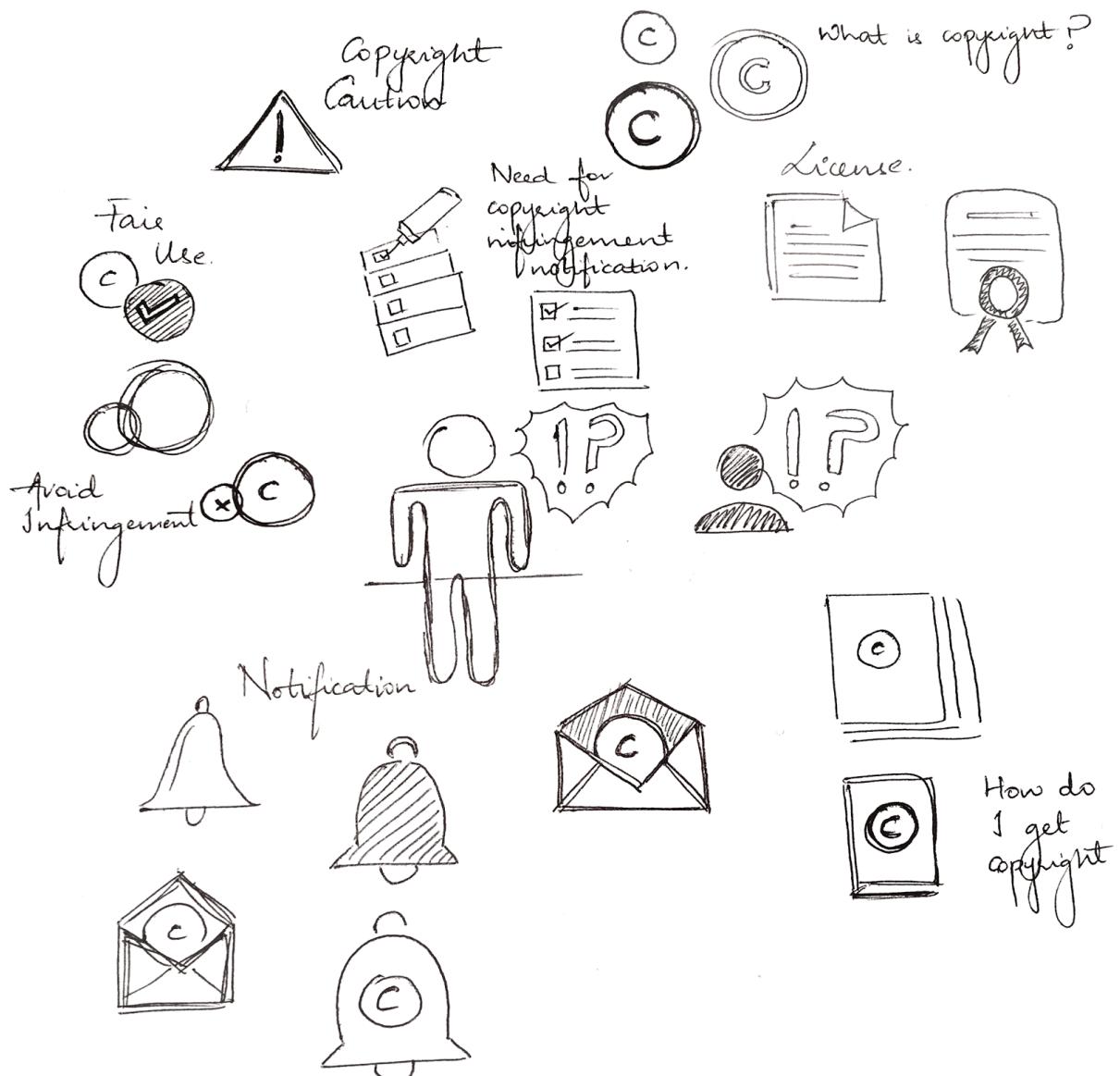


Figure 5 Wireframes of the web prototype

## ICON DESIGN

The next step was to design graphical icons for each of the questions. The need for icons can be understood in terms of Norman's concepts of affordances and signifiers; in

other words, what an artifact potentially allows users to do and what devices indicate when, how, where to use it (Norman, 2013). Affordances without signifiers might not improve usability and user experience. A better document structure can at best represent an affordance – as a logical structure *offers the functionality* of finding information smoothly – but visual design elements can be signifiers – as they also indicate *where* to search for a specific type of information and *how* to navigate the document. Keeping this in mind, I began sketching concepts for the icons.



**Figure 6** Concept sketches for the graphical icons

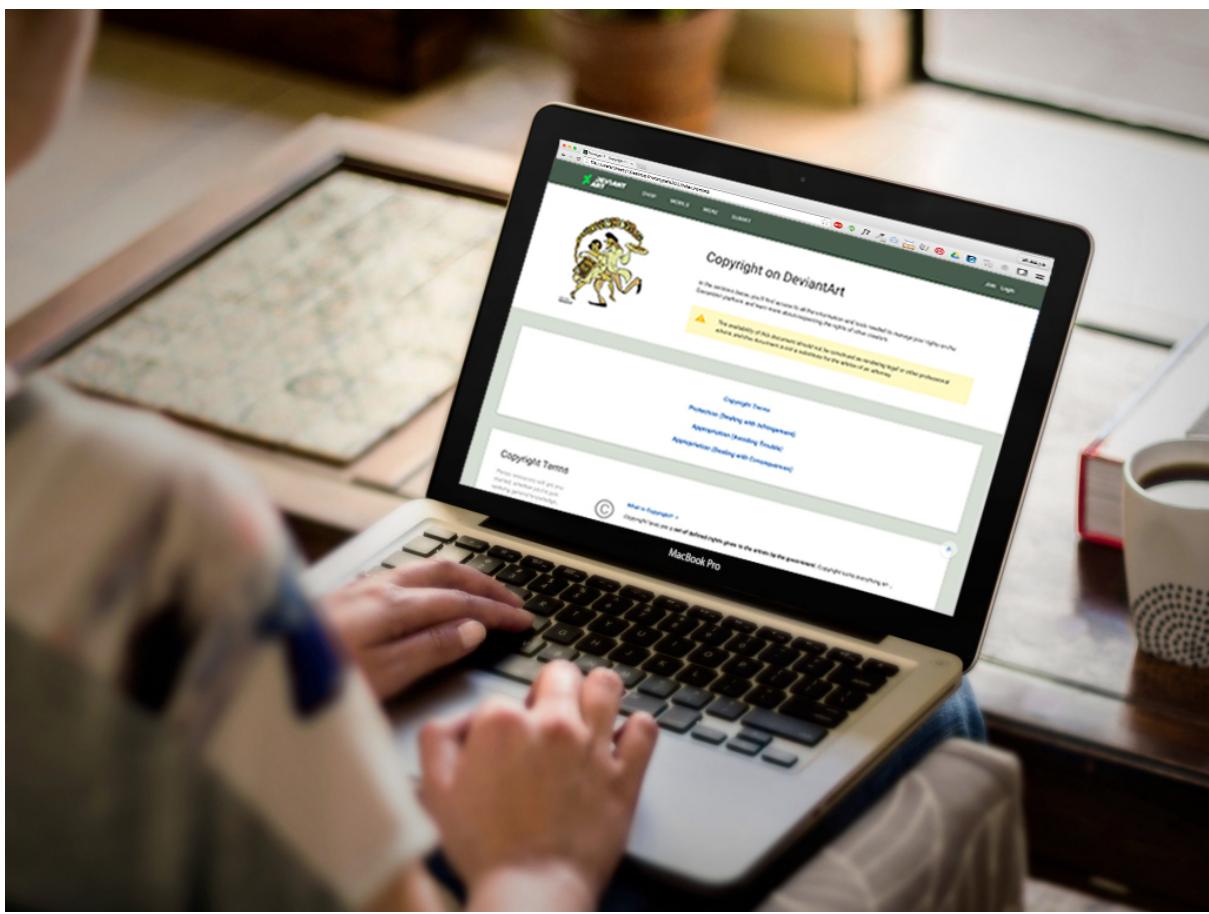
In continuing with Google's visual language I created icons that were flat and in gray scale, as shown in Figure 7 below.

-  **What is Copyright?**
-  **How do I get Copyright?**
-  **What type of license am I granting to DeviantArt?**
-  **What is Fair Use?**
-  **What do I need to file a copyright infringement notification?**
-  **How can I file a copyright infringement notification?**
-  **How can I avoid infringing on someone's copyright?**
-  **What are some of the copyright cautions?**
-  **What happens when I submit infringing works?**
-  **If you take my work down am I protected from a lawsuit?**
-  **How can I send a Counter-Notification?**

**Figure 7** Final icon designs

## PROTOTYPING

Once the wireframes and icons were ready, I created an interactive web application as a prototype. The application is run on the browser of any computer as a web application. An HTML5 page connected to a CSS3 style sheet displays the screen of the application. Javascript is used to build the interactions within the application. jQuery is used for building the transitions, when certain information dissolved and pertinent information is displayed instead. When a hyperlink for any question is pressed, information relevant to that particular question is displayed.

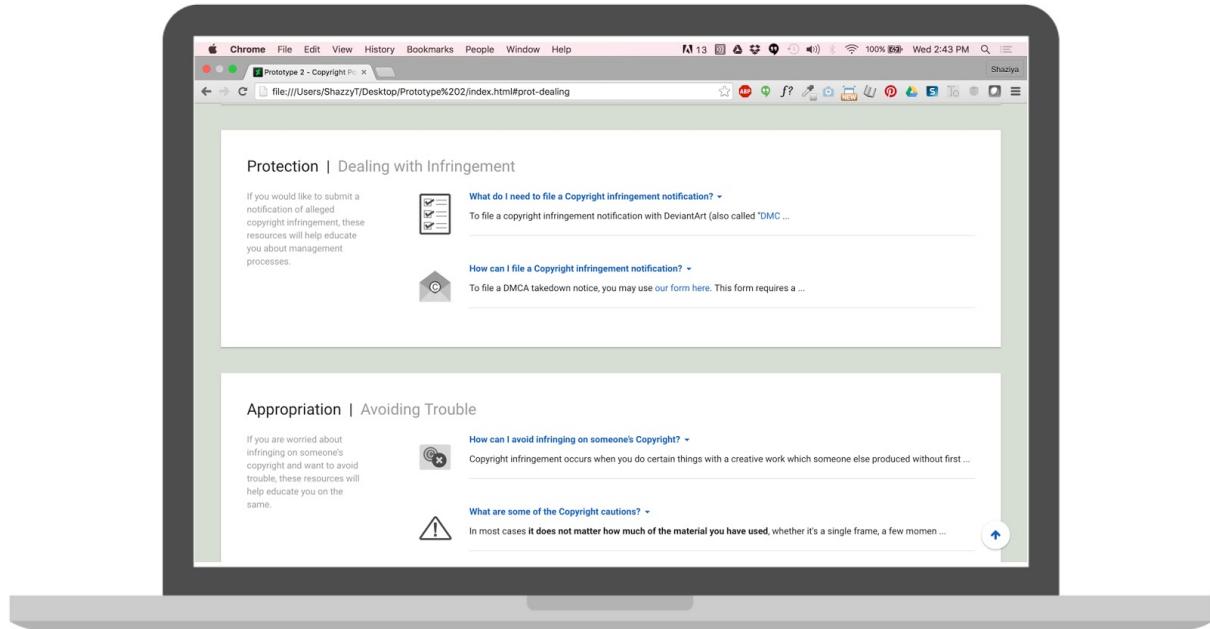


**Figure 8** Application being used on a MacBook Pro laptop

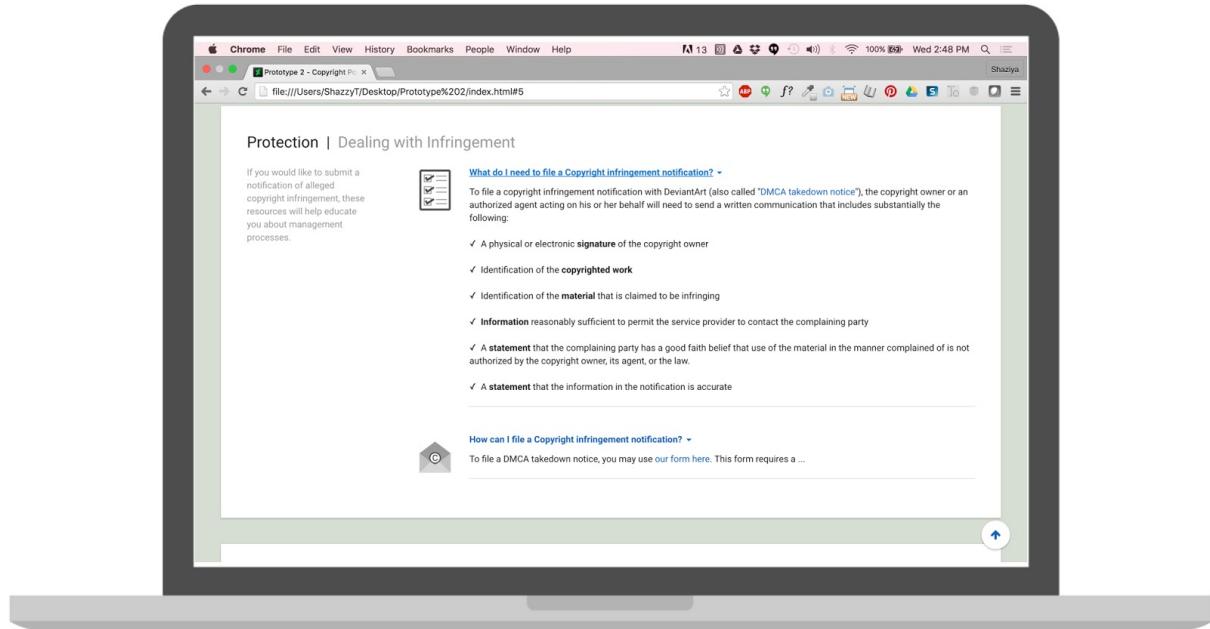
The application provides the copyright policy in the form of a single web page. Just below the header is an introductory panel which gives an overview of the policy and highlights key points. What follows next is each section in the form of card components, with a navigational card at the top that links to each section.

Each card section is comprised of information in a question-answer format with only limited characters visible. The interaction design allows for the visibility of the remaining

text to be toggled by clicking on the text/drop-down icon. One drawback of this feature is that it doesn't allow the user to search and find all the content if it is hidden. However, on the hand, by providing a snippet of information it reduces the extraneous cognitive load on the reader and also encourages agency with the application.

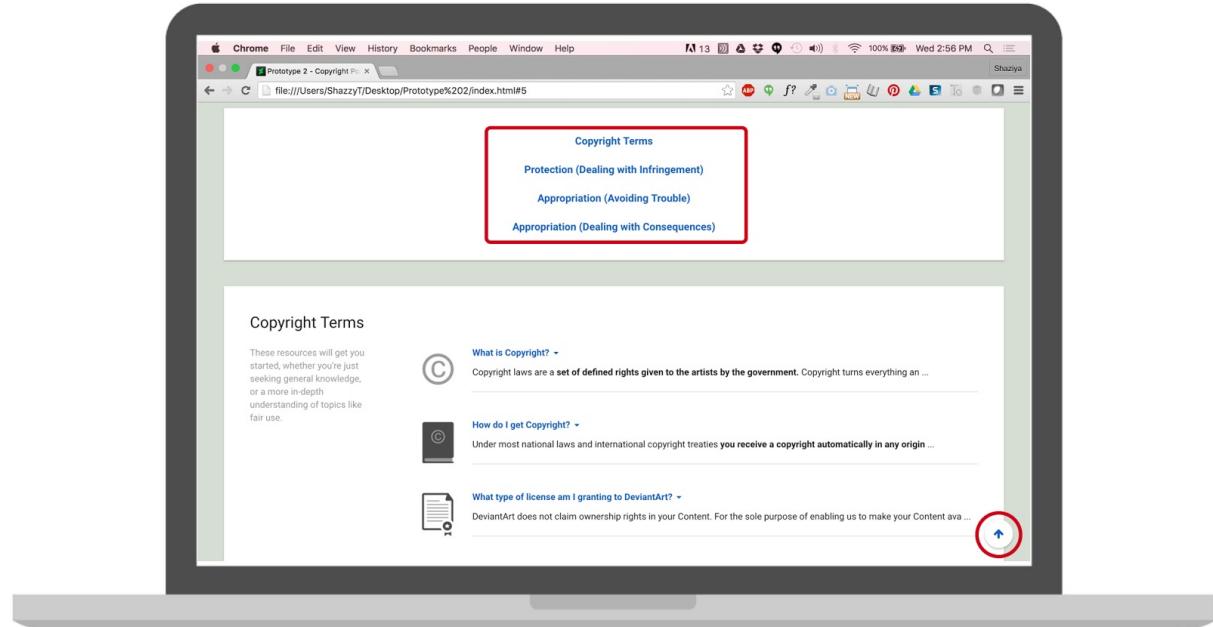


**Figure 9** Copyright sections presented as card components



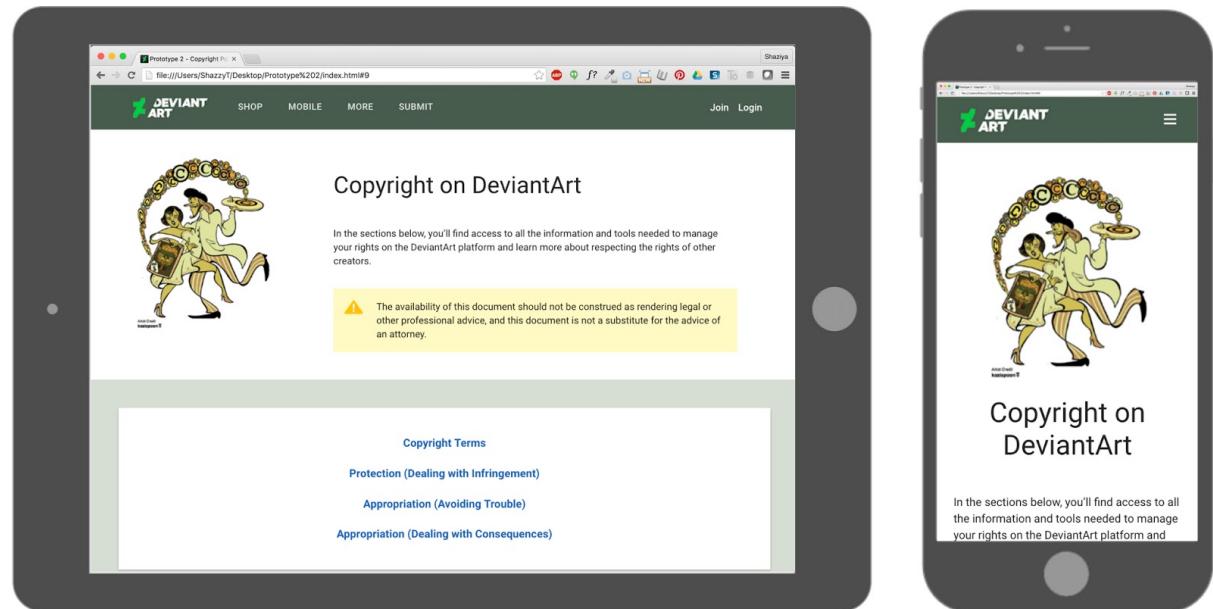
**Figure 10** Detailed answer which can be toggled on interaction with the text/drop-down icon

There are two navigational elements in the application, as shown in Figure 11 below.



**Figure 11** Navigational elements highlighted in red

The navigational element on top acts as a menu bar with links to each individual card component. The second navigation element is in the form of a floating action button with an upwards arrow symbol which allows users to scroll to the top of the web page.



**Figure 12** The application on a tablet and mobile device

While the primary intended platform for this application is a desktop or laptop computer, I've tried to design an enjoyable reading experience on tablet and mobile devices as well (as shown in Figure 12 above).

## EVALUATION

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### METHOD

The user study employed the **Rapid Iterative Testing and Evaluation method (RITE)** to evaluate the prototype. Implementing the RITE method involves many of the components of a traditional usability study, except changes are made to the prototype as soon as a usability issue is identified and a solution is clear (Medlock, 2002). Therefore, the prototype after the last participant will be different than the prototype introduced to the first participant. While the RITE method makes it difficult to illustrate statistical differences between two different prototypes (for which A/B testing would be better suited), in return it provides the ability to gather deeper usability understanding, since obstacles that could prevent user progression through a piece of software can be remedied.

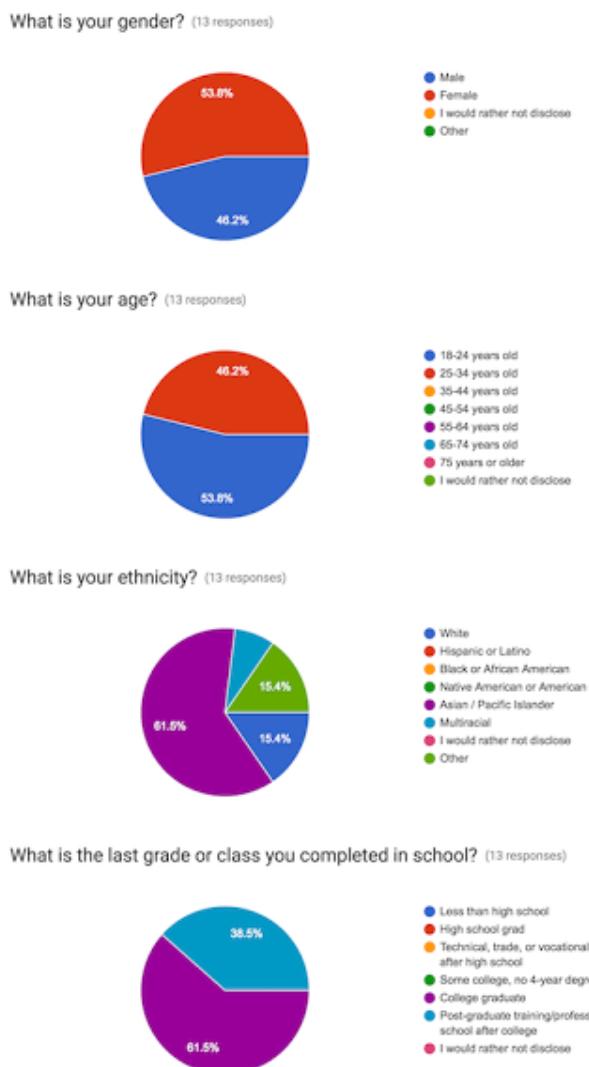
I performed a **12-participant laboratory user study** comparing DeviantArt's standard copyright policy with my restructured policy. I presented each policy as a web prototype without informing the participant which prototype was the current policy layout and which one was my exploration. I used a within-subjects design where participants were randomly assigned to first use either the standard or the restructured format. Each participant completed 23 questions relating to the policy format they were shown first and then the same 23 questions again with the other format, while following a think aloud protocol for which the participants were asked to vocalize his or her thoughts, feelings, and opinions while interacting with the application. The tasks are detailed below. I recorded accuracy for each participant along with observing their interactions with each of the prototypes.

I pilot tested the study with an individual recruited from my personal social network. After this pilot test I tweaked the wording of some of the questions to avoid ambiguity

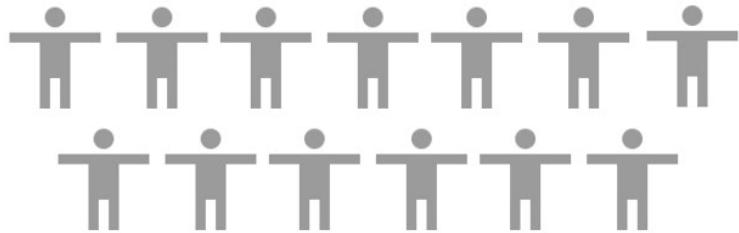
and also made few cosmetic changes to my prototype. I then began recruiting participants for the user study.

## PARTICIPANTS

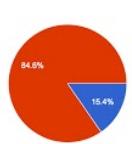
I initially began with the intention of focussing my participant recruitment to members of the DeviantArt community. These members could range from amateur, hobbyists to even professionals - thereby allowing for a full range of expertise with respect to content creation (specifically, digital artwork). However, for the scope of this project, I expanded my search to include the expertise of any and all types of content creators/digesters - primarily in the student demographic as shown below :



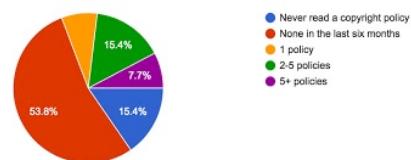
**Figure 13** Participant demographics



Have you ever had any training or coursework in copyright law? (13 responses)



The number of copyright policies I have read in the last 6 months is : (13 responses)



If you answered yes to the previous question, please explain your training or coursework in copyright law : (2 responses)

Class on copyright and other laws in college  
Dr. Ellen Zegut's Online Ethics course (undergrad)

Please check if you have ever created any of these types of creative media : (13 responses)



**Figure 14** Participants' copyright knowledge

## TASK STRUCTURE & ANALYSIS

The task structure can be understood in terms of comprehension (information-finding tasks), perception of comprehension (tasks with a range of Likert-scale responses) and also usability of the prototype.

The figure displays three screenshots of an evaluation form, each representing a different section of the task structure:

- Information finding Tasks:** This section contains several questions related to the user's interaction with the system, such as:
  - "The user interface you received gave you \_\_\_\_\_ information about the prototype you are evaluating."
  - "Our DevenirArt's website is based on your content?"
  - "If you wanted to change aspects of my website, what would you do to my copyright information?"
  - "Are the site links the same protocol?"
  - "Do you feel the website is well designed?"
  - "Is a copyright infringement violation different from a DMCA violation?"
- Perceptions Questionnaire:** This section consists of Likert-scale questions:
  - "I feel secure about sharing my creative content with DevenirArt after viewing their copyright practices"
  - "I feel that DevenirArt's copyright practices are explained thoroughly in the copyright policy I read"
  - "Finding information in DevenirArt's copyright policy was a pleasurable experience"
  - "I feel confident in my understanding of what I read of DevenirArt's copyright policy"
  - "It was hard to find information in DevenirArt's policy"
  - "If all copyright policies were presented just like this I would be more likely to read them"
- Usability Questionnaire:** This section includes Likert-scale questions about the user's experience with the prototype:
  - "I think that I could learn to use the prototype quickly"
  - "I think the prototype is easy to use"
  - "I think the prototype is very complex"
  - "I think the prototype has nice user interface"
  - "I think the website looks like the prototype was well designed"
  - "I thought there was too much unnecessary in the prototype"
  - "I feel that the prototype is user friendly"
  - "I feel that the prototype is suitable for use"
  - "I feel that the prototype is useful"
  - "I feel very confident using the prototype"
  - "I need to see a lot of things before I could get going with the prototype"

**Figure 15** Evaluation form with breakup of the tasks into 3 sections

The usability section of evaluations was achieved by direct observations as well as interview-style questions on the interaction design, some of which has been explained in the prototyping section.

The comprehension can be gauged in two phases :

**PHASE I** - Qualitative assessments were made by asking the participants to employ the think-aloud protocol while interacting with both the prototypes during the evaluation questionnaire. A high level summary of the feedback, which was used to iterate upon the design, is presented in the following direct quotations :



"The icons gave me a feeling of hospitality. Though to be honest I didn't really look at them, but I felt the site has really done their homework and is trying to make me feel comfortable"



"A control all button to expand/collapse content at once"

"The navigation links seem like a Google Ad!?"

"Prototype 1 is like a wall of text, even though there are headers."

**Figure 16** Qualitative feedback

I also did a comparative analysis of usability, as shown below :

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA
(strongly) Disagree	1	2	3	4	5	(strongly) Agree	PARTICIPANTS																			
I think that I would like to use this prototype frequently :)	3	4	1	1	1	5	3	2	4	4	4	4	1	4	5	1	3	5	4	1	3	4	5	4	1	3
I found the prototype unnecessarily complex :(	1	1	1	3	3	1	2	3	2	2	2	2	4	2	1	4	2	1	1	4	2	1	1	1	2	1
I thought the prototype was easy to use :)	5	4	5	3	4	5	4	3	4	5	5	5	1	4	5	1	5	4	5	2	4	5	5	5	2	4
I think that I would need the support of a technical person to be able to use this prototype :(	1	1	1	1	1	1	1	2	1	1	1	1	3	2	1	3	1	1	1	1	1	1	1	1	2	1
I found the various functions in this prototype were well integrated :)	4	5	4	3	3	5	5	2	5	4	4	4	5	4	5	1	3	4	5	3	5	5	5	4	4	5
I thought there was too much inconsistency in this prototype :(	1	1	1	1	2	1	2	2	2	2	2	2	2	1	2	3	1	1	1	4	2	1	1	1	2	1
I would imagine that most people would learn to use this prototype very quickly :)	5	5	4	5	2	5	4	4	5	5	5	5	2	4	4	5	5	5	5	2	5	5	5	5	2	3
I found the prototype very cumbersome to use :(	2	2	1	3	5	1	2	3	2	1	1	1	5	2	1	4	1	1	1	5	2	1	1	1	4	1
I felt very confident using the prototype :)	5	5	4	4	2	5	4	3	5	5	4	4	1	4	4	2	3	5	4	1	5	5	5	4	2	4
I needed to learn a lot of things before I could get going with this prototype :(	1	1	1	1	3	1	2	2	2	1	4	4	4	3	1	4	1	1	1	2	2	1	3	3	1	1
	95	97.5	87.5	72.5	50	105	82.5	60	90	95	85	85	35	80	97.5	35	87.5	100	100	37.5	87.5	102.5	100	92.5	55	90
	ORIGINAL   Avg. SUS = 67.88																									
	RESTRUCTURED   Avg. SUS = 94.03																									

Figure 17 SUS evaluation

**PHASE II** - Quantitative assessments using binary Yes/No responses, along with a deeper assessment of the ternary 'I Don't Know' response. The deeper assessment is tied to the 'Phase I' of qualitative assessments and hasn't yet been explored for the purposes of this project report.

## PRODUCTION

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A user-friendly visualization framework for copyright policies. This part of the project is a permanent WIP.

<https://github.com/shaziyat/breaking-the-wall-of-text>

## CONCLUSION

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### DISCUSSION & SCOPE FOR EXPANSION

Content curation on collaboration with legal experts.

Introduce a social aspect with inline commentary and discussion boards.

Extend the functionality to other consumer industries like online marketplaces.

This project wouldn't have been possible without the guidance of the following people.

My sincerest thanks to -

: Dr. Amy Bruckman

: Dr. Casey Fiesler

: Josh Wattles (DeviantArt)

: Faisal Animashaun (production help)

## REFERENCES

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Chandler, P. Sweller, J.: Cognitive Load Theory and the Format of Instruction. *Cognition Instruc.* 8(4), 293–332 (1991)

Fiesler, C. and Bruckman, A. Remixers' Understandings of Fair Use Online. In the Proceedings of the 2014 ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW). Baltimore, MD, 2014.

Fiesler, C., Feuston, J., and Bruckman, A. Understanding Copyright Law in Online Creative Communities. In the Proceedings of the 2015 ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW). Vancouver, BC, Canada, 2015.

Fiesler, C., Feuston, J., and Bruckman, A. "I am Not a Lawyer": Copyright Q&A in Online Creative Communities. In the Proceedings of the 18th ACM International Conference on Supporting Group Work (GROUP). Sanibel Island, FL, 2014.

Fiesler, C., Lampe, C., and Bruckman, A. Reality and Perception of Copyright Terms for Online Content Creation. In Proceedings of the 2016 ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW). San Francisco, CA, 2016.

Fiesler, C. The Chilling Tale of Copyright in Online Creative Communities, in XRDS: The ACM Student Magazine 19 (4), pp. 16-29, 2013.

Fryar, E.F.: Common-Law Due Process Rights in the Law of Contracts. *Tex. Law Rev.* 66, 1021-1070 (1988)

Jensen, C., & Potts, C. (2004). Privacy Policies as Decision-Making Tools : An Evaluation of Online Privacy Notices. In *Proceedings of the SIGCHI conference on Human Factors in Computing Systems (CHI 2004)*. Vienna, Austria.

Johnson-Laird, P.N.: Mental Models: Towards a Cognitive Science of Language, Inference, and Consciousness. Cambridge University Press, Cambridge (1983)

Keller, T., Grimm, M.: The Impact of Dimensionality and Color Coding of Information Visualizations on Knowledge Acquisition. In: Tergan, S.-O., Keller, T. (eds.) Knowledge and Information Visualization. LNCS, vol. 3426, pp. 167–182. Springer, Heidelberg (2005)

Lessig, L. (2006). *Code: And other Laws of Cyberspace, Version 2.0*. New York: Basic Books.

Lessig, L. (2008). *Remix: Making Art and Commerce Thrive in the Hybrid Economy*. New York: Penguin Group.

Luger, E., Moran, S., & Rodden, T. (2013). Consent for All: Revealing the Hidden Complexity of Terms and Conditions. In *Proceedings of the SIGCHI conference on Human Factors in Computing Systems (CHI 2013)*. Paris, France.

Mcdonald, A. M., & Cranor, L. F. (2008). The Cost of Reading Privacy Policies. *I/S: A Journal of Law and Policy for the Information Society*, 4, 543–565.

Medlock, M. C., Wixon D., Terrano, M., Romero R., Fulton B. (2002). "Using the RITE Method to improve products: a definition and a case study." Usability Professionals Association, Orlando FL July 2002.

Norman, D.A.: The Design of Everyday Things: Revised and Expanded Edition. Basic Books, New York (2013)

Passera, S. (2015). Beyond the Wall of Text: How Information Design Can Make Contracts User- Friendly. In: Marcus, A. (Ed.) Design, User Experience, and Usability: Users and Interactions, vol.9187. Lecture Notes in Computer Science. Cham: Springer International Publishing.

P. Kelley, J. Bresee, L. Cranor, and R. Reeder. A "Nutrition Label" for Privacy. SOUPS 2009

Sweller, J.: Cognitive Load During Problem Solving: Effects on Learning. *Cognitive Sci.* 12(2), 257–285 (1988)

Sweller, J., van Merriënboer, J.J.G., Paas, F.G.W.C.: Cognitive Architecture and Instructional Design. Ed. Psych. Rev. 10(3), 251–296 (1998)

Velez, R. (2014). Lookout Open Sourced Its “Private Parts,” You Should, Too. Retrieved from <https://blog.lookout.com/blog/2014/03/12/open-source-privacy-policy/>

Zwaan, R.A., Magliano J.P., Graesser, A.C.: Dimensions of Situation Model Construction in Narrative Comprehension. J. Exp. Psychol. Learn. 21(2), 386–397 (1995)

## APPENDICES

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### APPENDIX A - Demographic Survey

#### Demographic Survey

To collect standard information about our participants.

1. The code number you have been given is :

.....

2. What is your gender?

Mark only one oval.

- Male
- Female
- I would rather not disclose
- Other: .....

3. What is your age?

Mark only one oval.

- 18-24 years old
- 25-34 years old
- 35-44 years old
- 45-54 years old
- 55-64 years old
- 65-74 years old
- 75 years or older
- I would rather not disclose

4. What is your ethnicity?

Mark only one oval.

- White
- Hispanic or Latino
- Black or African American
- Native American or American Indian
- Asian / Pacific Islander
- Multiracial
- I would rather not disclose
- Other: .....

**5. What is the last grade or class you completed in school?**

*Mark only one oval.*

- Less than high school
- High school grad
- Technical, trade, or vocational school after high school
- Some college, no 4-year degree
- College graduate
- Post-graduate training/professional school after college
- I would rather not disclose

**6. Have you ever had any training or coursework in copyright law?**

*Mark only one oval.*

- Yes
- No

**7. If you answered yes to the previous question, please explain your training or coursework in copyright law :**

**8. The number of copyright policies I have read in the last 6 months is :**

*Mark only one oval.*

- Never read a copyright policy
- None in the last six months
- 1 policy
- 2-5 policies
- 5+ policies

**9. Please check if you have ever created any of these types of creative media :**

*Tick all that apply.*

- Original fiction writing
- Fan fiction writing
- Original music
- Music remix
- Original art
- Fan art or graphics remix
- Original video
- Remix video

## APPENDIX B - Evaluation Form

### Evaluation Form

To evaluate comprehension of copyright policy along with perception of comprehension and usability of prototype.

There are 3 sections to this form.

#### Information-finding Tasks

1. The code number you have been given is :

.....

2. The prototype you are evaluating is :

Mark only one oval.

- Prototype 1
- Prototype 2

3. If you publish content on DeviantArt, can you publish that content somewhere else?

Mark only one oval.

- Yes
- No
- I don't know

4. Can DeviantArt modify or transform your content?

Mark only one oval.

- Yes
- No
- I don't know

5. If you produce electronic copies of someone else's work and sell those copies is it an instance of copyright infringement?

Mark only one oval.

- Yes
- No
- I don't know

**6. Are fair use laws the same globally?**

*Mark only one oval.*

- Yes  
 No  
 I don't know

**7. If you submit infringing works to DeviantArt will you receive an advanced warning and will you be given an opportunity to 'fix it'?**

*Mark only one oval.*

- Yes  
 No  
 I don't know

**8. Do you file a counter notice when you believe that one of your submissions was removed in error?**

*Mark only one oval.*

- Yes  
 No  
 I don't know

**9. Is a copyright infringement notification different from a DMCA takedown notice?**

*Mark only one oval.*

- Yes  
 No  
 I don't know

## Perceptions Questionnaire

**10. I feel secure about sharing my creative content with DeviantArt after viewing their copyright practices**

*Mark only one oval.*

1      2      3      4      5

Strongly Agree      Strongly Disagree

**11. I feel that DeviantArt's copyright practices are explained thoroughly in the copyright policy I read**

*Mark only one oval.*

1      2      3      4      5

Strongly Agree      Strongly Disagree

**12. Finding information in DeviantArt's copyright policy was a pleasurable experience**  
Mark only one oval.

1      2      3      4      5

Strongly Agree      Strongly Disagree

**13. I feel confident in my understanding of what I read of DeviantArt's copyright policy**  
Mark only one oval.

1      2      3      4      5

Strongly Agree      Strongly Disagree

**14. It was hard to find information in DeviantArt's policy**  
Mark only one oval.

1      2      3      4      5

Strongly Agree      Strongly Disagree

**15. If all copyright policies looked just like this I would be more likely to read them**  
Mark only one oval.

1      2      3      4      5

Strongly Agree      Strongly Disagree

## Usability Questionnaire

**16. I think that I would like to use this prototype frequently**  
Mark only one oval.

1      2      3      4      5

Strongly Agree      Strongly Disagree

**17. I found the prototype unnecessarily complex**  
Mark only one oval.

1      2      3      4      5

Strongly Agree      Strongly Disagree

**18. I thought the prototype was easy to use**

*Mark only one oval.*

1      2      3      4      5

Strongly Agree      Strongly Disagree

**19. I think that I would need the support of a technical person to be able to use this prototype**

*Mark only one oval.*

1      2      3      4      5

Strongly Agree      Strongly Disagree

**20. I found the various functions in this prototype were well integrated**

*Mark only one oval.*

1      2      3      4      5

Strongly Agree      Strongly Disagree

**21. I thought there was too much inconsistency in this prototype**

*Mark only one oval.*

1      2      3      4      5

Strongly Agree      Strongly Disagree

**22. I would imagine that most people would learn to use this prototype very quickly**

*Mark only one oval.*

1      2      3      4      5

Strongly Agree      Strongly Disagree

**23. I found the prototype very cumbersome to use**

*Mark only one oval.*

1      2      3      4      5

Strongly Agree      Strongly Disagree

**24. I felt very confident using the prototype**

*Mark only one oval.*

1      2      3      4      5

Strongly Agree      Strongly Disagree

**25. I needed to learn a lot of things before I could get going with this prototype**

*Mark only one oval.*

1      2      3      4      5

Strongly Agree      Strongly Disagree

---

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## APPENDIX C - Consent Form (Waiver of Documentation of Consent)

### CONSENT DOCUMENT FOR ENROLLING PARTICIPANTS IN A RESEARCH STUDY

Georgia Institute of Technology

Project Title: Standardizing Copyright Policies: An accessible web design template for copyright policies in online creative communities

Investigators: *Dr. Amy Bruckman, Shaziya Tambawala*

Protocol and Consent Title: An accessible web design template for copyright policies in online creative communities

You are being asked to be a volunteer in a research study, which we are conducting for our project. We would like to interview you and observe you while you interact with a website template for copyright policies in online creative communities.

#### **Purpose:**

This study will help in developing a web template for copyright policies in online creative communities. The feedback received from the participants of this study will be used to improve the design, which in turn could be helpful to members of online creative communities in their comprehension of legal information.

#### **Exclusion/Inclusion Criteria:**

To be able to participate in this study, you must be over 18 years of age. You must also be able to speak English clearly.

#### **Procedures:**

If you decide to participate in this study, you will be asked to questions pertaining to your thoughts and experiences regarding copyright policies in online creative communities. You will then be asked to interact with website prototypes and perform representative tasks, while being observed by the researcher, following which you will be asked to give your feedback on their usability and effectiveness. The total duration of the study is estimated to not take more than 1 hour. You may stop participation or take a break in this study at any time for any reason. There may be follow up questions shared via email/survey that will be completely voluntary.

#### **Data Collection:**

We will be collecting questionnaires answers from the interviews, surveys and direct observations. Other than that, we will not be collecting any other information about you.

#### **Risks or Discomforts:**

We will take every measure to anonymize you in the study. We will store this consent form (which has your name on it) separately from the questionnaires. We will not put your name on the questionnaires. If you refer to things that are specific to you, we will substitute with more

generic references. However, even with these steps it is possible that you might be recognized. Further, we may write this up for publication, and use quotes within that publication. Again, while we will do everything we can to anonymize the quote, it is possible that if the publication is read by someone who knows you well they may guess that it was you.

Other than that, we anticipate that the risks are not greater than daily activities that involve using a web browser on a laptop computer.

**Benefits:**

You will benefit by being able to interact with website prototypes and provide feedback to improve its interface.

**Compensation to You:**

There will be no compensation provided to you for this study.

**Confidentiality:**

The following procedures will be followed to keep your personal information confidential in this study:

To protect your confidentiality, your name will not appear in any publications; a pseudonym (a fake name) will be used instead.

The data that is collected about you will be kept private to the extent allowed by law. To make sure that this research is being carried out in the proper way, the Georgia Institute of Technology IRB may review study records. The Office of Human Research Protections may also look at study records.

In the case of electronic communications and web-based consent, you should be aware, however, that the experiment is not being run from a "secure" https server of the kind typically used to handle credit card transactions, so there is a small possibility that responses could be viewed by unauthorized third parties (e.g., computer hackers).

**Costs to You:**

There are no costs to you, other than your time spent in this study.

**In Case of Injury/Harm:**

If you are injured as a result of being in this study, please contact Principal Investigator, Amy Bruckman Ph.D., at (404) 931-7078. Neither the Principal Investigator nor Georgia Institute of Technology has made provision for payment of costs associated with any injury resulting from participation in this study.

**Participant Rights:**

As a participant in this study you have the following rights:

- Your participation in this study is voluntary. You do not have to be in this study if you

don't want to be.

- You have the right to change your mind and leave the study at any time without giving any reason and without penalty.
- Any new information that may make you change your mind about being in this study will be given to you.
- You will be given a copy of this consent form to keep.
- You do not waive any of your legal rights by signing this consent form.

**Questions about the Study:**

If you have any questions about the study, you may contact Shaziya Tambawala via telephone (806) 470-4285 or by email at stambawala@gatech.edu

**Questions about Your Rights as a Research Participant:**

If you have any questions about your rights as a research participant, you may contact

Ms. Melanie Clark, Georgia Institute of Technology  
Office of Research Integrity Assurance, at (404) 894-6942.  
or  
Ms. Kelly Winn, Georgia Institute of Technology  
Office of Research Integrity Assurance, at (404) 385- 2175.

If you complete the surveys and participate in the interviews, it means that you have read -- or have had read to you -- the information contained in this letter and would like to be a volunteer in this research study.

Thank you,



03/15/2016

---

Signature of Person Obtaining Consent

---

Date

## APPENDIX D - IRB Approval



Protocol Number: H16117

Funding Agency: N/A

Review Type: Exempt, Category 2

Title: An accessible web design template for copyright policies in online creative communities

Number of Subjects: 10-20

March 15, 2016  
Amy Bruckman  
Interactive Computing  
0760

Dear Dr. Bruckman:

The Institutional Review Board (IRB) has carefully considered the referenced protocol. Your approval is effective as of **03/15/2016**. The proposed procedures are exempt from further review by the Georgia Tech Institutional Review Board.

*Minimal risk research qualified for exemption status under 45 CFR 46 101b. 2.  
Per 45CFR46.117(c) (2) this study qualifies for a waiver of documentation of consent for the remote interviews.*

Thank you for allowing us the opportunity to review your plans. If any complaints or other evidence of risk should occur, or if there is a significant change in the plans, the IRB must be notified.

If you have any questions concerning this approval or regulations governing human subject activities, please feel free to contact Dennis Folds, IRB Chair, at 404/407-7262, or me at 404 / 894-6944.

Sincerely,

A handwritten signature in black ink, appearing to read "Scott S. Katz".

Scott S. Katz, MS, CIP  
Compliance Officer  
Georgia Tech Office of Research Integrity Assurance

cc: Dr. Dennis Folds, IRB Chair