

Joy Weatherly

Dr. Tomita

User Interface Design 2

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Final Project Proposal

For my Final Project, I will be creating a website that teaches users what the fashion style techwear is. The website will also include a step-by-step guide that teaches users how to properly adhere to the techwear aesthetic. In order to ensure that my users learn from my website and are able to recall the information provided, I will be utilizing a number of User Interface Design laws and principles.

Intrinsic Cognitive Load is known as the amount of work that the **Working Memory**, otherwise known as the short-term memory, uses in order to handle essential content. In order to deal with my user's intrinsic cognitive load I plan to use the method known as **Chunking**, the process of breaking up larger pieces of information into smaller pieces of information that are easier to remember. By splitting my tutorial into separate steps that follow my users' **schema**, or mental structure, I will effectively apply chunking and deal with my users' intrinsic cognitive load. For example, I would split my tutorial into steps such as tops, bottoms, outerwear, etc as these pieces of information are already part of a users' schema of how an outfit is chunked.

The **Coherence Principle** states that users learn better when extraneous material, otherwise known as useless material, is removed. By keeping any extraneous material out of my project, I will succeed in reducing my users **Extraneous Cognitive Load** which is the amount of work the working memory has to use in order to handle

nonessential content. In order to adhere to the coherence principle and reduce extraneous cognitive load, I plan to only include definitions relating to techwear and its subgenres and making sure that my instructions are clear and to the point, keeping any useless information out of my site.

The Multimedia Principle expresses that using both words and pictures is better than words on their own. This principle goes together with **Germane Cognitive Load**, which is the amount of work that the working memory has to use in order to handle nonessential but useful content. While having both words and pictures might not be essential to a user's learning, it is helpful. By using pictures alongside with text that explains said picture, I will effectively apply the multimedia principle while enhancing my users' germane cognitive load.

Tesler's Law states that every application is always at least a bit complex and this complexity has to be dealt with. In order to take Tesler's Law into consideration, I plan to make my pages as simplistic and readable as possible in order to diminish the amount of complexity on my website.

Miller's Law states that the average person can hold seven, plus or minus two, pieces of information in their working memory. In order to apply Miller's Law to my website, I plan to keep my tutorial within the range of 5-9 steps, ensuring that I do not overload my users' working memory.

The Serial Position Effect emphasizes that people tend to remember the first and last objects in a series. In order to take advantage of the serial position effect, I plan to list all the steps in my tutorial at the beginning and end of the tutorial. This allows users to

recall the steps and helps them to begin committing the steps to their **Long Term Memory**.

The Spatial Contiguity Principle states that learning is easier when a picture and its corresponding text are close to one another. In order to apply this principle, the text related to my graphics images will either overlap the images or be right next to them. This ensures that my users know that the text and graphic belong together.

The Law of Proximity states that objects that are in close proximity to one another tend to be seen as a group. In order to take advantage of this law, I plan to keep the terms for my description of techwear and its subgenres close to their respective descriptions, making sure that each term and its definition is perceived as its own group.

The Von Restorff Effect expresses that within a group of objects that are similar, the object that is different is more easily remembered. In order to take the Von Restorff Effect into consideration, I plan to make the important words in my step descriptions stand out by making them a different color from the rest of the text.

The Zeigarnik Effect states that people remember tasks they have not completed better than tasks they have completed. To take advantage of this effect, I plan to have a progress bar at the bottom of my tutorial, letting users know what step they are currently on and how many steps they have left.

Fitt's Law states that the time to click on something is a result of the distance the object is from the cursor and the size of the object. In order to consider Fitt's Law, I plan on making any important buttons large.

Hick's Law states that the time a user takes to make a decision increases based on how many choices a user has to make and the complexity of those choices. To consider

Hick's Law, I plan to make the navigation options limited to a home button, a back and forward button, and buttons that take the user to the tutorial.

Jakob's Law states that users prefer your site to work like any other sites they normally use. I will adhere to Jakob's Law by having my navigation bar at the top and having the back and forward buttons on the sides of the page.

Signaling Principle states that people learn better when there are visual cues that highlight the more important information. I plan to follow this principle by having the terms I define have a larger text and be bolded. This will allow my users to know what term is being defined and make sure they can find the definition quickly.