Abstract

This paper attempts to raise awareness of the importance of interchangeable electronic information. It describes a (fortunately as yet fictitious) universe where information is exchanged on colored bits of paper marked with fancy ink. The the several contradictory morals that arise in detailing this universe are sketched out in the hope of preventing such a world from coming to pass in our own all too real world of electronic documents.

Introduction

It's interesting to consider the question of interoperability in the world of electronic information and the ludicrous nature of the current day situation that users tolerate after contemplating the following (fortunately, as yet non-existent) fancy colored paper universe for a few minutes.

Welcome To Fancy Colored Paper Universe

The fancy colored paper universe is characterized by humans exchanging ideas by using fancy pieces of colored paper to intermediate information interchange. These colored pieces of paper are marked with various types of fluorescent ink to make them glow in curiously satisfying ways depending on the lighting conditions that prevail.

A Competitive Marketplace

Companies operating in the fancy paper universe have exploited the available physical properties of this universe to create proprietary solutions for information interchange that are *differentiated* and *feature rich* as compared to the competition. In doing so, these companies are motivated by the desire to capture increasing market share by locking in users to a particular solution. They therefore hit upon the marvelous idea of selling "custom spectacles" that when used to peruse their proprietary pieces of paper deliver *maximum* reader satisfaction.

Cementing Ones Dominant Market Position

These companies succeed beyond the wildest dreams of the marketing executives who dreamt up the idea of the fancy spectacles. These same executives then decide to link their fancy glasses, ink and paper combination to the light fixtures that are commonly installed in buildings; this leads to a thriving self-supporting monopoly. To read the most commonly used form of paper, you need the right glasses; you also need to install the right brand of lighting if you want to read anything. And if you want to read anything in the light you are likely to find most often, you had better use the right kind of paper and sport the right brand of glasses or else,

User Experience

Life for the inhabitants of the fancy paper universe, as can be guessed, is now quite complicated. Everyone has at least several desk drawers full of fancy custom glasses, each supposedly optimized for viewing a particular genre of colored paper. Not only does one need to have different brands of glasses; it's also important to never throw away an old pair —all too often, a new pair of glasses from a specific vendor may not always be able to view older pieces of paper produced for that same vendor's older glasses. Worse, people are finding themselves increasingly forced to install a particularly obnoxious and fail-prone form of lighting in their homes and offices.

In fact things have gotten so bad that when people want to interchange ideas, they first put them down on their favorite colored piece of paper (which they absolutely swear by and believe to be the best of breed solution) and then pick up the phone to ask the recipient if she has an appropriate pair of glasses to view their great creation. Often, not owning the exact pair of spectacles can cause the recipient to be able to see part or none of the information being conveyed. A serious mismatch in glasses can cause the reader to curl up and die in agony.

A Popular Revolution

A few renegades in this fancy paper universe rebel against this tyranny by using plain blue ink on white paper, but they are roundly condemned by the rest of their peers as "friends of flat ASCII who will never be able to express themselves!". In the meantime, the renegades have rediscovered an ancient art —that of marking up their information in a manner that can be processed by machines; such *marked up* documents can be automatically **projected** onto the various forms of colored paper floating around.

The Battle For Mind Share

Proponents of colored paper fight back initially by saying "but those angle brackets look like something that escaped from a hardware store —they will never be as pretty as our beautiful colored pieces of paper!". But the proponents of those plain old angle brackets persist; They weave a fancy web around their creation that comes to encompass the world!

One major proponent of colored paper who has pretty much won the battle over specialized glasses and lighting by shoving their own particular pair of horn-rimmed abominations down everyone's nose sees the writing on the wall (paper?). In a game struggle for survival, they decide to subvert the budding threat by claiming "do not worry —our colored paper can hold angle brackets too!". The subversion will come when users (too late) discover that the angle brackets on the colored paper though mostly standard do have a particular proprietary shade that causes it to curl up and die in a blue screen of death if one attempts to be so bold as to attempt to interoperate with renegades and other non-conforming types.

Conclusion

Exercise for the student; If you have read this far, it's left as an exercise to map the fancy paper, glasses and specialized lighting to today's (or fortunately yesterday's) world of electronic information.

References

This article was originally published on the Internet on the emacspeak mailing list and the original version can be found by searching for emacspeak fancy paper on search engines like *URL* http://www.google.com. It is being republished as a live evolving document on the Internet after the author received several private requests for a copy after mentioning it on mailing lists in an attempt to encourage the use of interchangeable document encodings.