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Software Dev 1 Project 2: Steganography

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Professor Arias

For my assignment I plan on doing something called steganography. In Greek "stegano" means covered and "graphie" means writing. So, what steganography is, is the hiding of a secret message in your very own ordinary message. Thus, say I print out "Hello world how are you today", but in that same message I can encrypt a message saying, "Happy birthday to me." What steganography does is take cryptography a step further. The actual advantage of steganography over cryptography is that the secret message does not attract any attention whatsoever to itself. An ordinary person that doesn't know about it would not expect there to be a secret message. What I plan on doing is selecting a certain amount of dog pictures. Through these dog pictures, encrypting a hidden message ever so slightly that reads the breed of the dog that is printed into the image on the screen. Now I am not entirely sure how to do steganography. Though I was doing personal research and was unsure of what to do because I am very new to computer science and not sure of what is out there for me. I then was informed about steganography and something in my brain clicked. On the bright side I had been made aware that YouTube is chock full of information on this topic. This means that it will be tough considering it is a first-time project for me, though the output is beneficial because I am learning nifty skill that not many others know how to do. I learned that to do basic steganography you just have to change the coloring of a jpeg image to alter it ever so slightly. It's also kind of like hiding a specific symbol or a trademark in code, which would portray a watermark. You can even hide an image in another image. Previously I was looking at a picture of a tree and inside the image was a hidden picture of a cat. How amazing is that. So, for myself, like I said before either hide the dog breed name in the picture of a dog. Or, hide a picture of a dog in an everyday picture. The reasoning for this, is that the tree with the cat inspired me.