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ITAI 1378 Computer Vision

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Kingdom of Image Formats Challenge

Introduction

My assignment intends to make a menu where each item represents a different image format using creative, descriptive language. I am doing this to understand the fundamental concepts of image processing through an innovative project.

Activities Performed

1. I found a pre-made Word template of a menu online and downloaded it to my local drive.
2. Then, I read through online sources to educate me on image formats. The University of Michigan library offered great resources on this topic.
3. The next step involved creating a menu that featured four main image file types of this challenge and writing a fun description for each. I found a menu template on Microsoft Office Word.
4. I made a few changes to the design, such as removing unnecessary menu line items, and started working on my technical report.

Results Obtained

I created a menu and technical report to discuss the different image formats.

What Was Learned

- JPG is a lossy image file format, which means Joint Photographic Experts Group. This group was founded in the 1980s to create a standard for digital image compression. In 1992, they created a standard for lossy compression of digital images. Lossy means irreversible. During lossy compression, the image is made into a smaller file, resulting in an unnoticeable loss in quality. These types of images are used all over the web today.
- GIF stands for Graphic Interchange Format files. This type of compression is lossless, resulting in no loss in the file quality. These types of files allow transparency and animation. JPG and PNG files are better because they don't have the 256-indexed color limit that GIF files do.
- PNG stands for Portable Network Graphics files that, similar to GIF files, are lossless and have 16 million indexed color capabilities.
- BMP stands for Bitmap Image File. Created by Microsoft for Windows, this is a raster graphic file made to store images independent of the display. When compressed, this type of file results in a lossless image.
- TIFF stands for Tagged Image File Format. This type of file involves no compression; it is a lossless image file and loses no quality or information.

References

All About Images. n.d. 22 February 2025. <<https://guides.lib.umich.edu/c.php?g=282942&p=1885348>>.

Schenker, Marc. *What is the Difference Between JPG, PNG, BMP, and TIFF Images?* n.d. 22 February 2025. <<https://creativemarket.com/blog/difference-between-jpg-png-bmp-tiff-images>>.

MENU

Afternoon Tea

JPG Tea

Lossy compression tea with great medicinal benefits best suited for compressing audio, image, and video files along with when streaming media.

PNG Tea

Lossless compression tea that is a new improved version of GIF tea with 16 million flavor profiles, instead of just 256.

TIFFani Tea

Lossless image tea that involves no compressing in the steeping phase, resulting in no loss in quality of the TIFFani flavor. Quite large but you deserve it girl.

Bitmap Biscuits

Developed by the best tea masters of Microsoft for Windows, this image tea involves no compression in the steeping process. High quality tea but you must sit in the Window.

Full tea service

Entire menu is served