Interactive Photo Archive Website

Judson A. Hartley

Fort Hays State University

Course Number: INF651

Author Note

Email: j_hartley@mail.fhsu.edu or j@jahartley.com

Abstract

I run a computer at home that acts as my personal server. It is my data backup, family share drive, and my 24/7 host for a small range of software that I enjoy having at my fingertips. Over time, I have amassed a photo collection of all of my wife's and my photos, some of her surviving family photos from her youth, my families' photos and now a steadily increasing collection of photos of my kids as they grow up. Right now, the total sits at 21,943 photos over 60 folders, taking 228 GB of space. I have a project to digitally archive all my families' photos, and I bet that as time goes on this number will steadily increase. Although I understand my folder layout, there is almost no chance that my wife's or my family will be able to browse through them in a meaningful way. The goal then, is an interactive photo website, that has a few different ways of browsing the photos. As this is meant to be an archive, the main way to browse is via the date the photos are taken. For this project, I would like to implement searching by keyword and by person, along with a date range, as the base implementation.

Interactive Photo Archive Website

The following will outline my proposal for this website design. My personal goals are to make this site work well on both a normal size screen and a phone or tablet as well as having excellent user experience.

Website Functionality

My website should be as easy to use and as simple as possible, as I have my grandparents in mind among the users. My plan is to have a login page, and then a home screen that features a random picture. Initially, all my users are my family, so I don't plan on per user limited access at this time. The homepage will have a few main choices, consisting of pick a date, a person, or keywords. As most of my browsing is going to be date based, there will also be a separate area for newly added photos that keeps them separate until the date and other features can be verified. The main page area will be a vertical scrolling set of photos, sorted by date. If you scroll up, then it should add older pictures to the top, and down should add newer to the bottom.

Website Structure, Features, Pages & Content

List of pages:

1. Login page. Basic username and password login.
2. Home page. Landing page after login, will have a menu to the search and about pages, and a random photo.
3. Search page. This page will let users search for sets of photos, initially by date, and with by people and keywords is planned.
4. View photos page. Main scrolling content page, lets users scroll through the photos and click for full screen.
5. About page. Basic page information, and photo database statistics.

6. New photos page. This page will have all newly added photos so that the user can verify the photo's information before it is sorted in the database.

I have learned a few CSS tricks that should make the experience more seamless and fun to look at, and I am excited to implement them into this project. I have visited a few websites that have added photos to the top of a scrolling section if you scroll to the top, and I like the idea of searching for a date, and having the photos start there, and newer photos get added to the bottom as you scroll down, but if you want older, just scroll up and they will be added to the top.

Conclusion & Future Plans

This proposal is for a family photo archive so that family can view and search through the photos that I have archived. I have already worked on some backend, programmed in JavaScript, running on Node.js for extracting the photos EXIF data and other information that would be useful. I also plan on adding AI based facial recognition to make the sorting and identifying of photo subjects easier to work with. With the AI recognition, adding found faces boxes and name tags as a photo overlay should be possible to implement. I expect this project to continue long after this class as an ongoing personal project.