# Photo Metadata Organizer

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# Description

The Photograph Metadata Organizer (A.K.A. PhoMO) is a program that simplifies searching, indexing, and file structuring a photo library. PhoMO gathers the metadata from each photo input into its database and make it indexable by those values. It solves the issues of readability for large photo libraries that accumulate with regular photography.

# Features

- Manual metadata photo upload
- Search by date photo was taken
- User login roles for Admin and NormalUser for use or display

# Planning - User Stories

A user can register a new NormalUser account and begin searching the database for dates that interest them.

A user can register a new Admin account and begin adding their own photos to the database. Those photos will then have CRUD functionality.

# Planning - Database

There are three necessary tables for my project. The first is the UserLogin/UserRoles table that gives them register and login functionality. The next is the Photo database which includes all the metadata fields of Focal Length, ISO, ShutterSpeed, and the Foreign-keyed Dates. The last table, relating to that FK, is the Date table which establishes the one-to-many relationship between the Photo and Date.

# Technology Stack

- C#
- ASP.NET Core Application
- Visual Studio 2019
- Localhost SQL development database

# Demo

# What I Learned

- Learned how to edit .css through bootstrap
- Learned how to customize a one-to-many relationship between databases
- Learned how to work with database migrations in the package manager console

# What's Next

- Make the photos upload directly through a browse-files javascript extension, rather than manually upload.
  - Necessary to make the application actually speed the photo-sort process
- Build many-to-many relationships into database to make the photos also sortable by Focal Length, ISO, and Shutterspeed
- Create a filebuilder that uses conditional C# logic to hint for good local file structure given a library of photos.
- Would like to learn machine learning to automate photo-to-database process and speed process even further.
- User validation