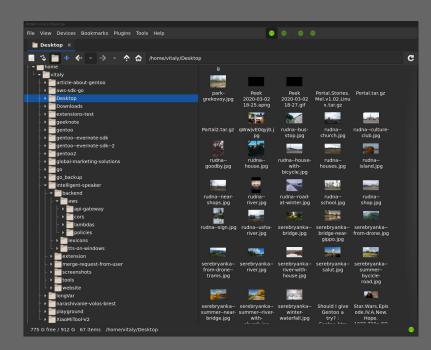
Created By: Matthew Pru Buck Harris Cody Sloan Connor Thorpen

PHOTO

Problem to Solve

- Photos take up a lot of space
- Hard to find specific photos
- Organizing photos efficiently can be difficult



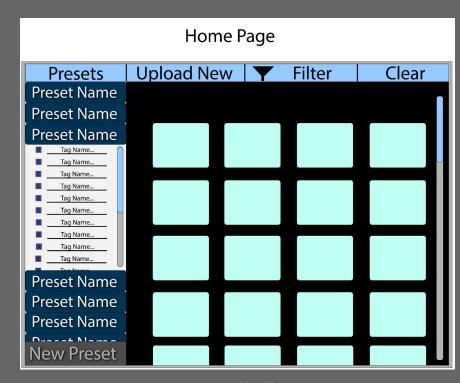
Our Idea

- Build an application to help organize large collections of photos
- Use a clean, interactive, and intuitive interface
- Implement basic features that are expected of other photo management apps
- Incorporate more advanced photo management features



Preliminary Planning

- Created a model for the app
- Decided on roles for group members
- Chose a technology stack



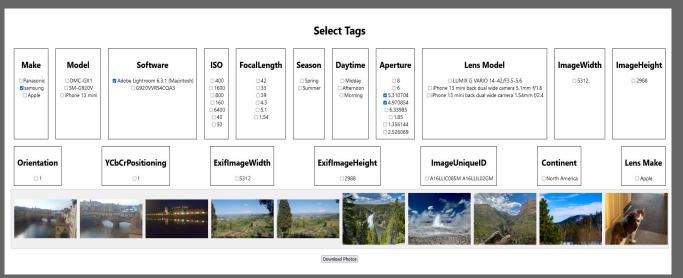
Prototype for landing page

Getting to Work

- We started by creating a skeleton of the project
- Then we worked on adding features to the display



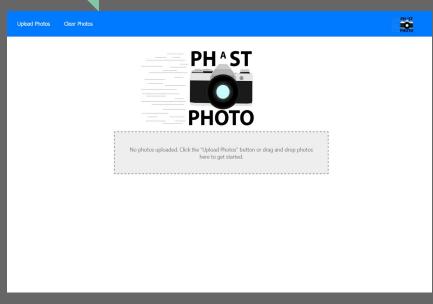
Early version of the home/upload page

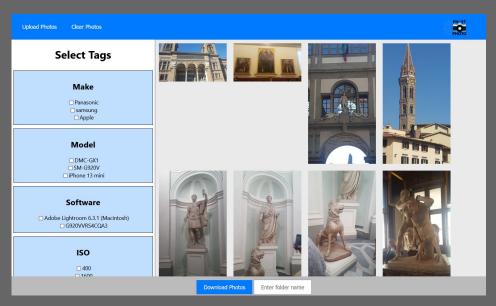


Early Challenges

- The individual roles didn't stick for long
- We lacked a sense of direction for the project
- Photos were too large to store in the database.
- Time management and work consistency

Restructuring

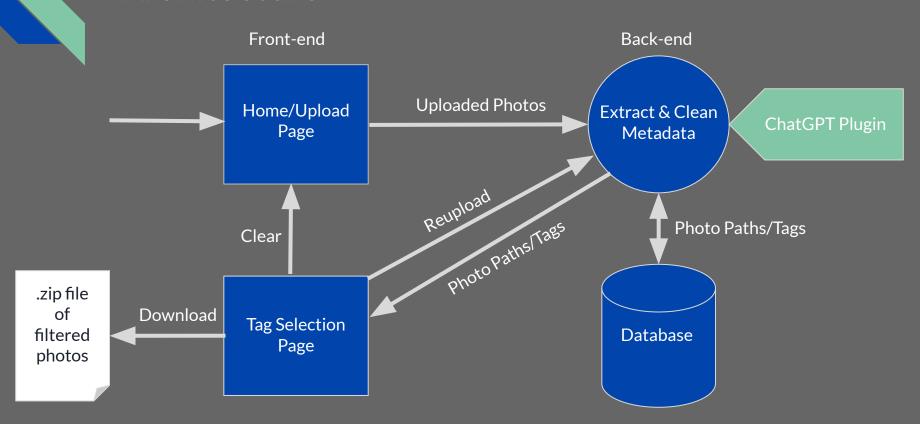




Restructured home/upload page

Restructured tag selection page

Architecture



Custom Logic and Extraneous Tags

```
☐ Make : Panasonic
            ☐ Model : DMC-GX1
             ☐ XResolution: 240
             ☐ YResolution: 240
             ☐ ResolutionUnit: 2
☐ Software: Adobe Lightroom 6.3.1 (Macintosh)
         ☐ ModifyDate : 1704017989
         ☐ ExposureTime : 0.0015625
               ☐ FNumber: 16
           ☐ ExposureProgram: 1
                 ☐ ISO: 400
      ☐ DateTimeOriginal: 1680023331
         ☐ CreateDate: 1680023331
            ☐ undefined : -07:00
       ☐ ShutterSpeedValue : 9.321928
             ☐ Aperture Value: 8
         ☐ ExposureCompensation: 0
       ☐ MaxApertureValue : 4.9765625
            ☐ MeteringMode : 2
              ☐ LightSource : 9
                ☐ Flash: 16
             ☐ FocalLength: 42
              ☐ ColorSpace : 1
☐ FocalPlaneXResolution : 2654.3352661132812
☐ FocalPlaneYResolution: 2654.3352661132812
        FocalPlaneResolutionUnit: 3
            ☐ SensingMethod: 2
            □ CustomRendered: 0
            ☐ ExposureMode: 1
             □ WhiteBalance : 1
```

```
☐ DigitalZoomRatio: 0
     ☐ FocalLengthIn35mmFormat: 84
         ☐ SceneCaptureType : 0
            ☐ GainControl: 2
             □ Contrast : 0
            ☐ Saturation: 0
            ☐ Sharpness: 0
     ☐ SerialNumber : F981209060079
☐ LensModel: LUMIX G VARIO 14-42/F3.5-5.6
   LensSerialNumber: 12GG42602211
       ☐ ModifyDate : 1704017988
         ☐ ExposureTime: 0.125
             ☐ FNumber: 8
         ☐ ExposureProgram : 2
              ☐ ISO : 1600
     ☐ DateTimeOriginal: 1682188677
        ☐ CreateDate: 1682188677
         ☐ ShutterSpeedValue: 3
           ☐ Aperture Value: 6
          ☐ MeterinaMode : 5
            ☐ LightSource: 0
          ☐ ExposureMode : 0
           ☐ WhiteBalance: 0
        ☐ ModifyDate : 1704017986
  □ FNumber: 6.3
              ☐ ISO: 800
     ☐ DateTimeOriginal: 1686598646
        ☐ CreateDate: 1686598646
```

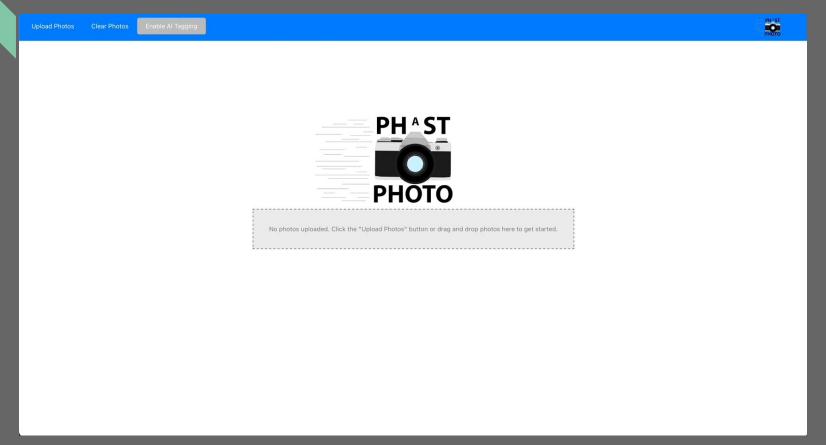
☐ ShutterSpeedValue: 5.906891

☐ ApertureValue: 5.310704

☐ ExposureTime: 0.004

```
☐ ExposureProgram: 8
               ☐ ISO : 160
     ☐ DateTimeOriginal: 1686682010
       ☐ CreateDate: 1686682010
     ☐ ShutterSpeedValue: 7.965784
     ☐ MaxApertureValue : 4.7421875
           ☐ FocalLength: 33
     ☐ FocalLengthIn35mmFormat: 66
            ☐ GainControl: 1
             ☐ Make : Apple
        ☐ Model: iPhone 13 mini
          ☐ GPSVersionID: 2200
          ☐ GPSLatitudeRef : N
        ☐ GPSLatitude : 44.714858
         ☐ GPSLongitudeRef : W
       ☐ GPSLongitude: -110.4973
          ☐ GPSAltitude: 2370.1
           ☐ GPSSpeedRef : K
             ☐ GPSSpeed: 0
        ☐ GPSImgDirectionRef : T
       ☐ GPSImgDirection: 232.53
         ☐ GPSDestBearingRef : T
 ☐ GPSDestBearing: 232.53456104944502
☐ GPSHPositioningError : 5.825138832452932
☐ ExposureTime : 0.00055555555555555
            ☐ FNumber: 1.6
               ☐ ISO : 50
     ☐ DateTimeOriginal: 1688904995
       ☐ CreateDate: 1688904995
     ☐ ShutterSpeedValue : 10.813781
        ☐ Aperture Value: 1.356144
  ☐ BrightnessValue: 8.829744774708539
```

Artificial Intelligence



Live Updates

Select Tags Make FUJIFILM Apple DJI Panasonic NORITSU KOKI Model X100V iPhone 13 mini FC3170 X-T4 X-T3 DMC-GX1 EZ Controller iPhone 7 iPhone 11 iPhone XS iPhone 6 iPhone 13 iPhone XR Software Digital Camera X100V Ver2.13

16.0 10.00.17.55

- Adobe Lightroom 6.5 (Macintosh) Adobe Lightroom 7.0 (Macintosh)
- Adobe Lightroom 6.4 (Macintosh)
- Adobe Lightroom 6.1 (Macintosh)
- Adobe Lightroom 5.5 (Macintosh)
- Adobe Lightroom 7.1.2 (Macintosh)













PH^ST PHOTO



























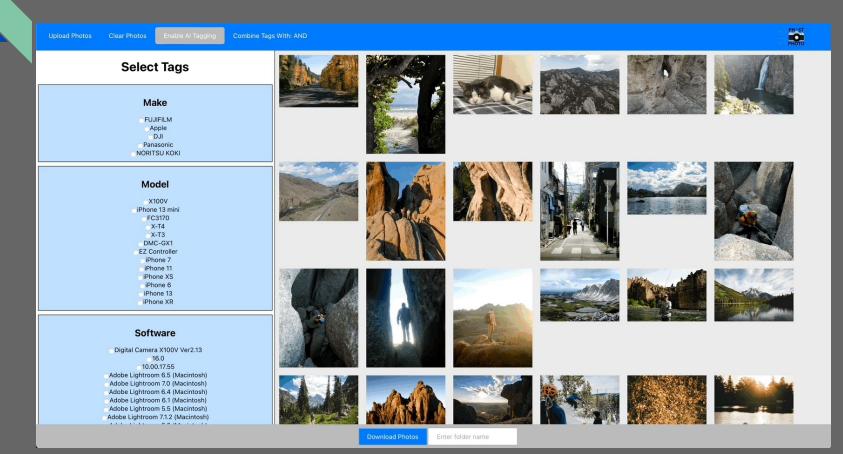








Boolean Search Parameters



What's Next?

- Login management system
- Persistent photo storage
- Ability to process more file types
- Manually select a photo and add a tag to it
- Cloud storage

Thank You

