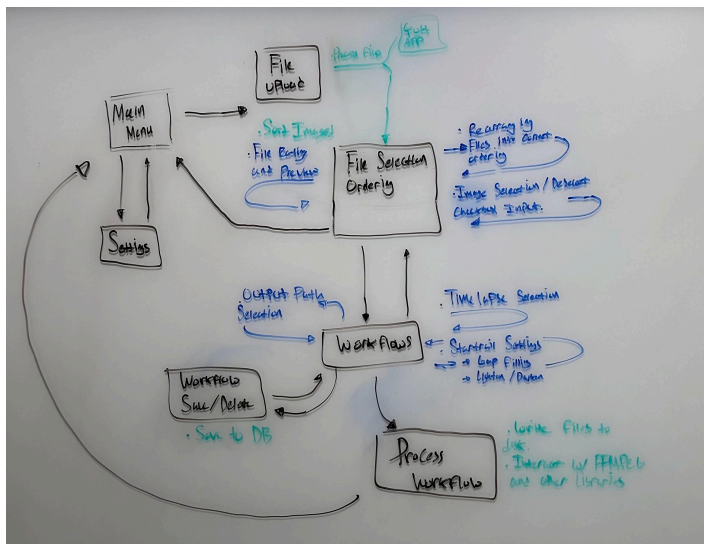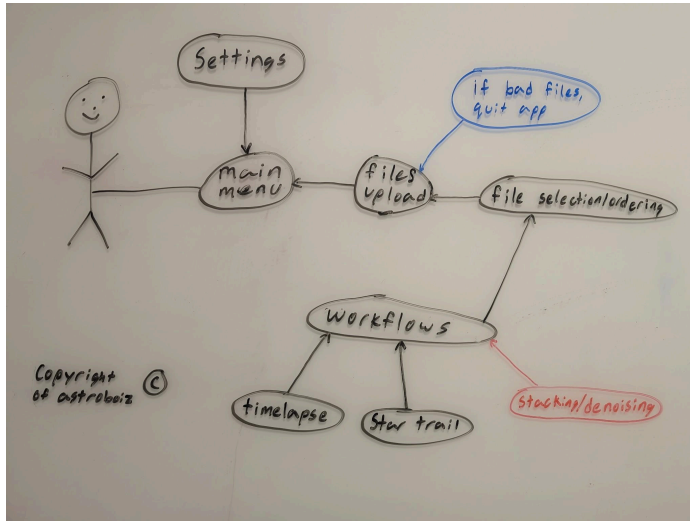1) The MVP for *Astropath* will be a streamlined, user-friendly astrophotography tool designed to simplify the creation of star trails and starlapses. By April 2024, our goal is to deliver an application that enables users to batch import TIFF images, quickly select and deselect images for processing, and apply automated processing modes like gap filling, lighten, and darken to produce clean star trail effects.

   Essential features will include a Lightroom-style interface for easy image selection, basic batch import functionality focused on TIFF files, and preset options for users to save and quickly access their preferred processing configurations. *Astropath* will also include a basic starlapse creation feature, allowing users to convert sequences of night-sky images into time-lapse videos. This version will emphasize efficient workflows for astrophotographers, allowing them to create polished visual effects with minimal manual intervention and without the need for additional tools.

   Expanding RAW file support (such as ARW) will be considered for future releases, with TIFF-focused workflows prioritized to ensure quality and timely delivery. The MVP will not include stacking, focusing instead on delivering an intuitive, reliable, and high-quality tool for astrophotography enthusiasts by our target date.

2) Diagrams:

3) Tasks:
- a) Use trello to create cards for each task
    - i) Recursive?
- b) Image import and initial processing
    - i) Make sure incoming files are the same type and dimensions.
- c) Doctor Process
    - i) Check for required dependencies on the user's system. (FFMPEG, ImageMagick, OpenCV?)
    - ii) If the user has appropriate permissions and OS, *TRY* to download dependencies.
- d) Selecting & De-selecting Images

        i)   Once selecting batch images for processing, a viewer will allow you to quickly select/deselect images for processing similar to Lightroom.

        ii)   Basically a way to select and deselect images to be included in the processing. (Lightroom Gallery)

e) .ARW File Support
        i)   Translate/Convert to TIFF

f) JPEG To TIFF Conversion

g) Star Trails
        i)   Creating Lighten/Darken features.
        ii)   Gap filling.

h) Starlapse
        i)   From the input frames, create a sequence of

i) Setup Project Structure
        i)   Wails backend
        ii)   Svelte/Bootstrap frontend
        iii)   Middle layer to communicate between the two processes.
        iv)   Sqlite/json for data storage

j) Implement Basic Workflow/Preset Functionality