



UIA Lens

Group 16

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Planned Features and Tools

File: new, open, save, save as, properties, quit

Right Click: copy, paste, cut, rotate, resize, identify (if no cutout selected, default select entire layer)

Select: rectangular, freeform, polygonal, magic lasso

Filter: gaussian, sobel, binary, histogram

Tools: brush, eraser, bucket, dropper, (color, size, pattern, load image for custom pattern)

Shapes: textbox and various shapes

Undo and redo:

Zoom: in, out (zoom in on layer, does not resize image)

Layers: add, delete, rename, copy

Camera: live feed, capture image and save to new layer

Tools

OpenCV library

Flask web application

Extra features

Free rotation

Image layering

Magic marking (edge selection)

Live-camera option

Image matching (if time)

Undo, Redo

Bucket fill

Layers: add, delete, rename, copy

Load image to use for custom brush pattern

Implementation plan

Week 41: Plan software architecture / Create barebones web-app

Week 42: Feature implementation

Week 43: Start report

Week 44: Feature implementation

Week 45: Feature implementation and write report

Week 46: Finalize report / delivery

Week 47: Demonstration

Feature implementation plan

Create Flask app

Implement layers

File

Select

copy, paste, transformation

Tools (brush, dropper, eraser)

Filter

Shapes

Camera

Image Matching

Reference/Inspiration

<https://www.adobe.com/no/products/photoshop.html>