

Image Search Plus

J²A



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Overview

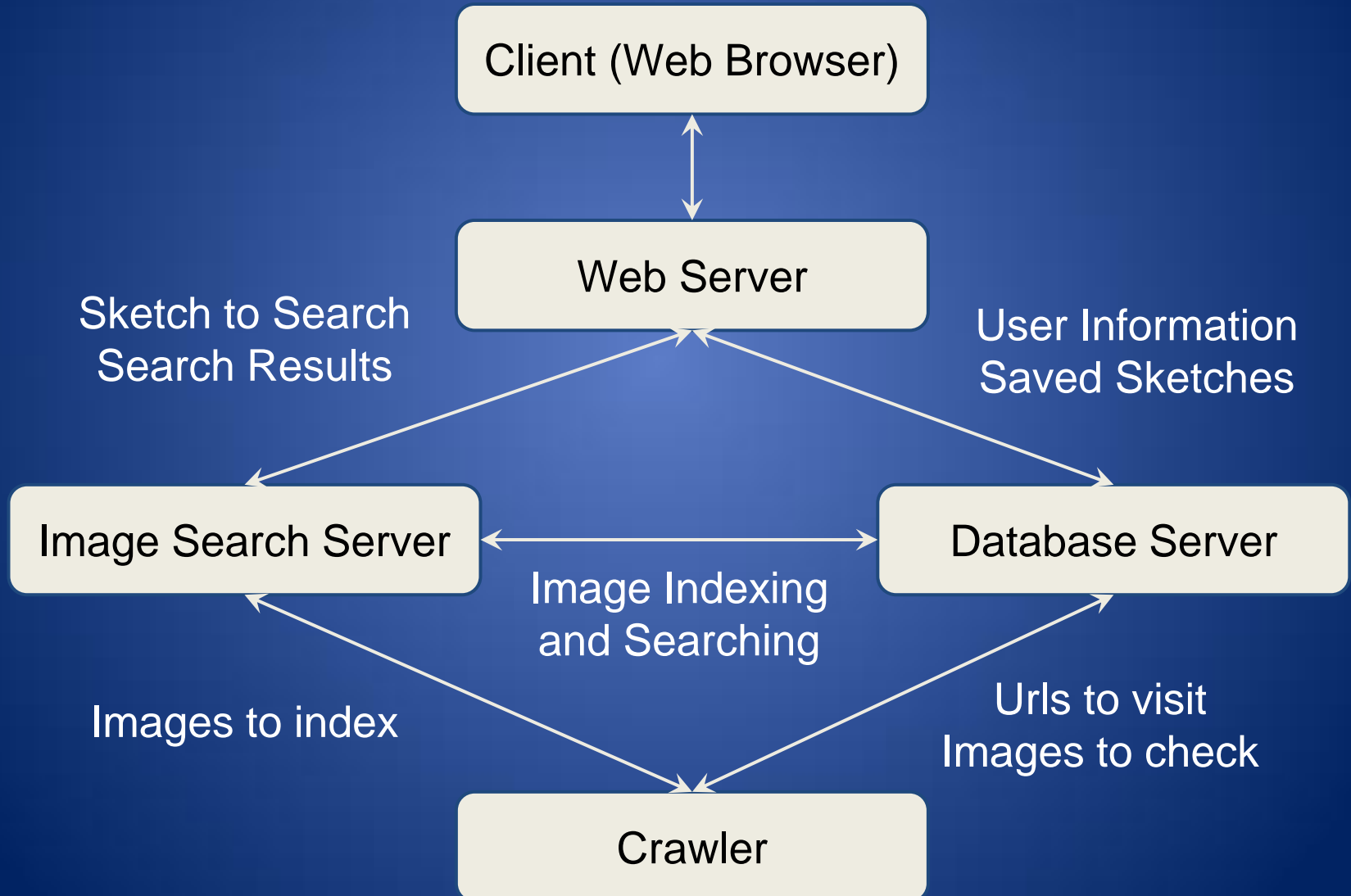
{ What is it?

Software Architecture

{ System Design

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Architecture



Overall Functionality

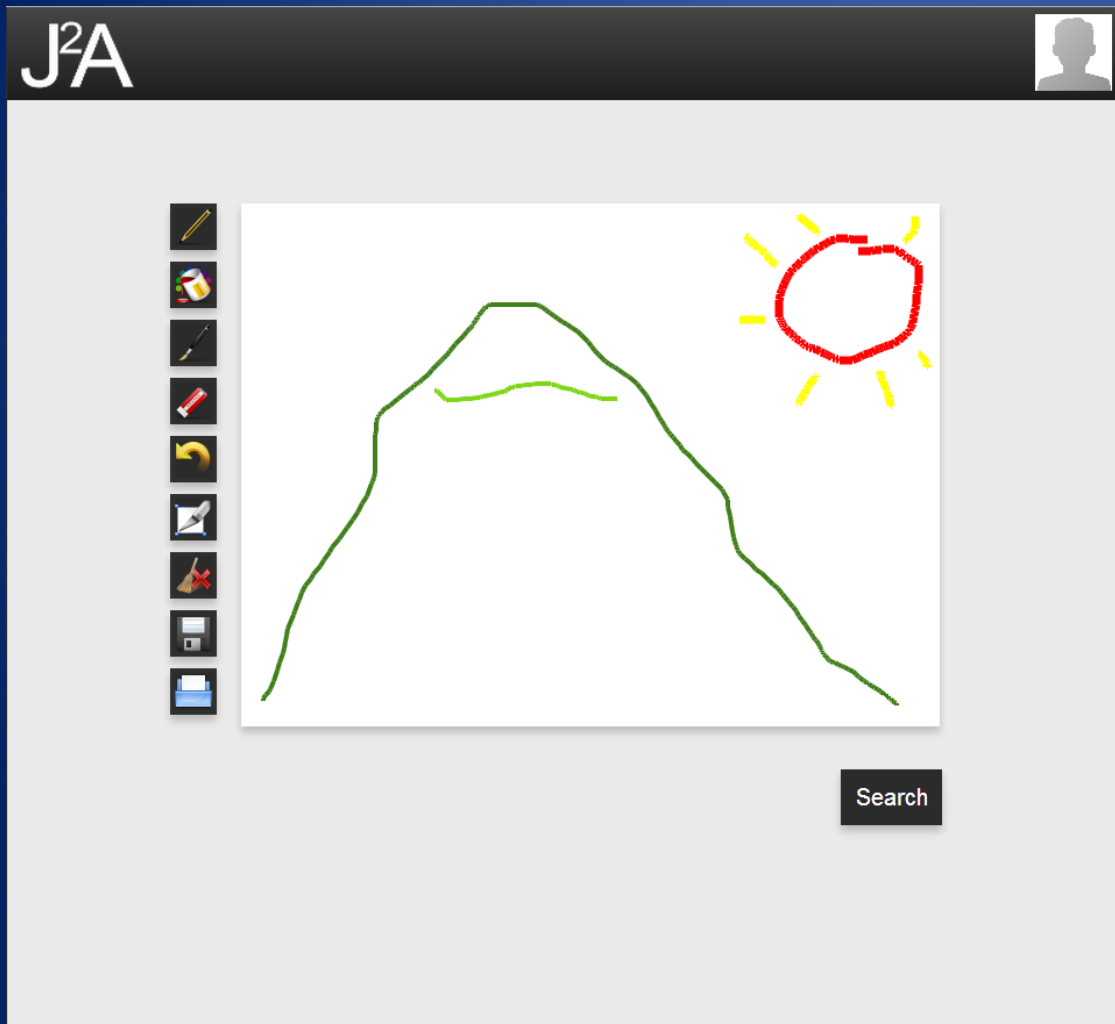


System Capabilities

Most Important Features

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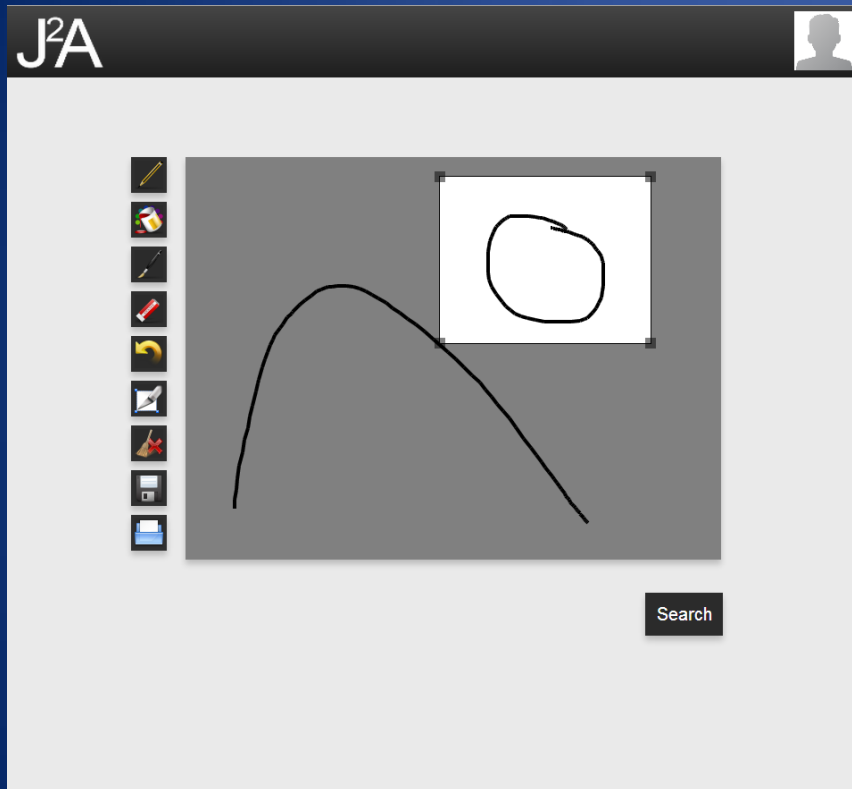
Sketchpad



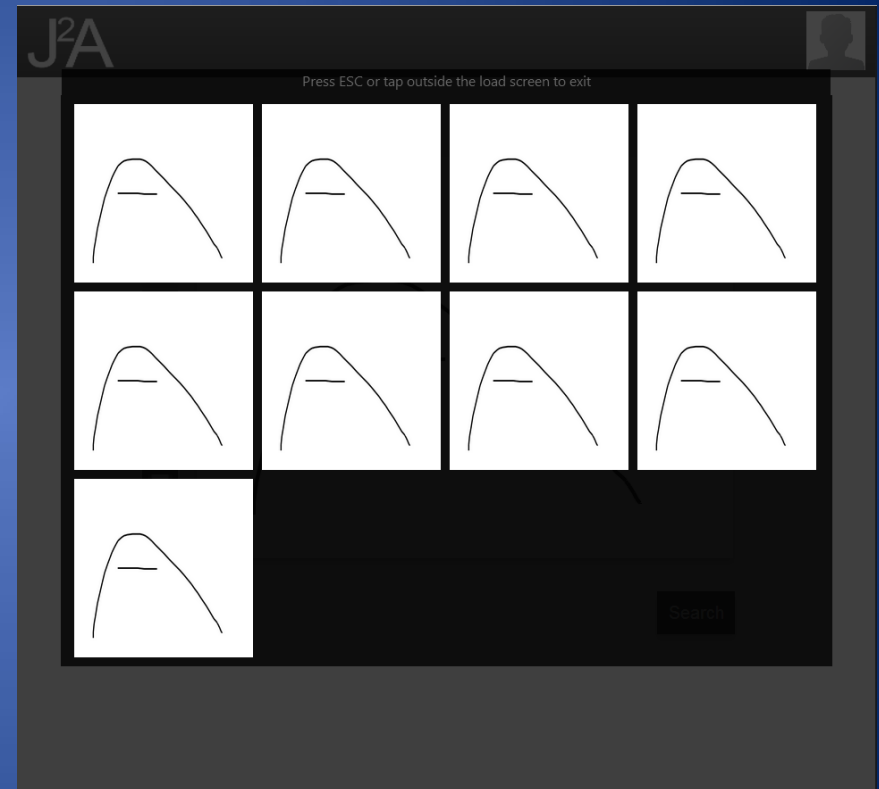
- Pen color
- Pen size
- Eraser
- Undo
- Crop
- Clear
- Save & Load

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Sketchpad (cont'd)



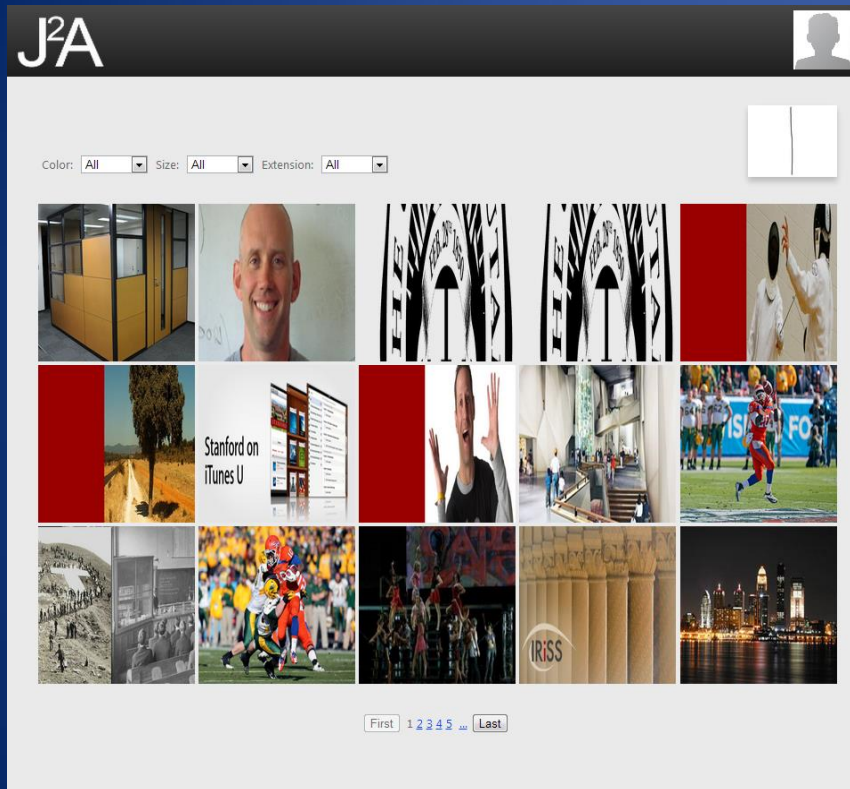
Crop



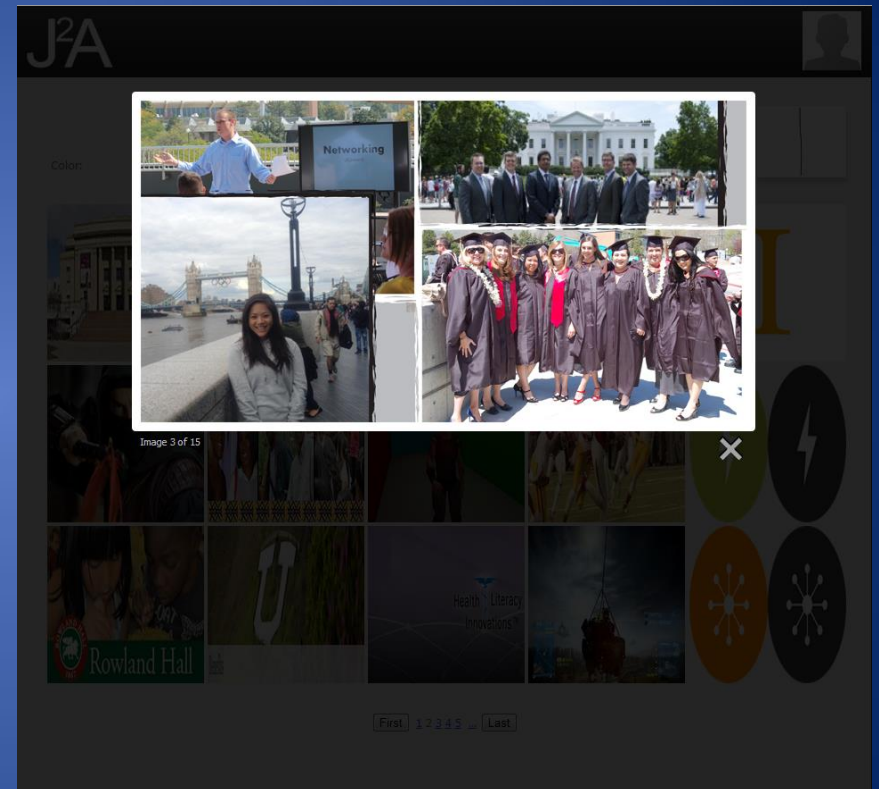
Load

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Website - Result



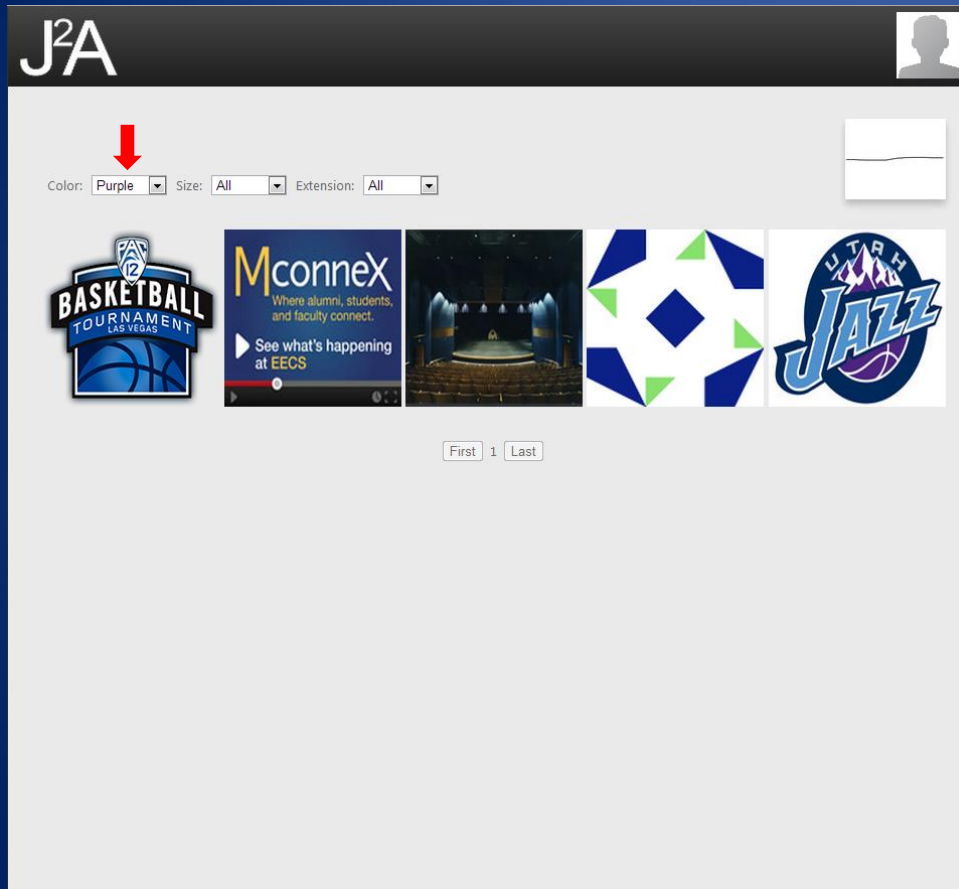
Result



Full-screen result

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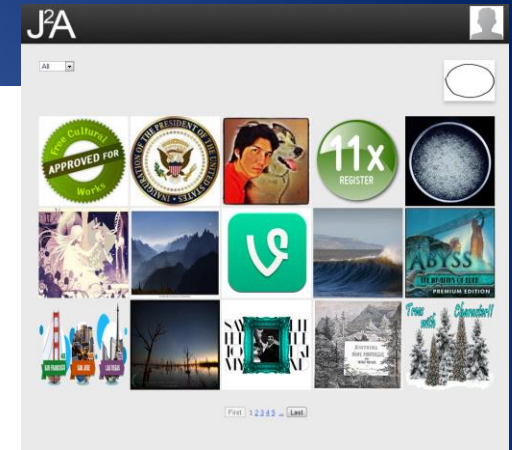
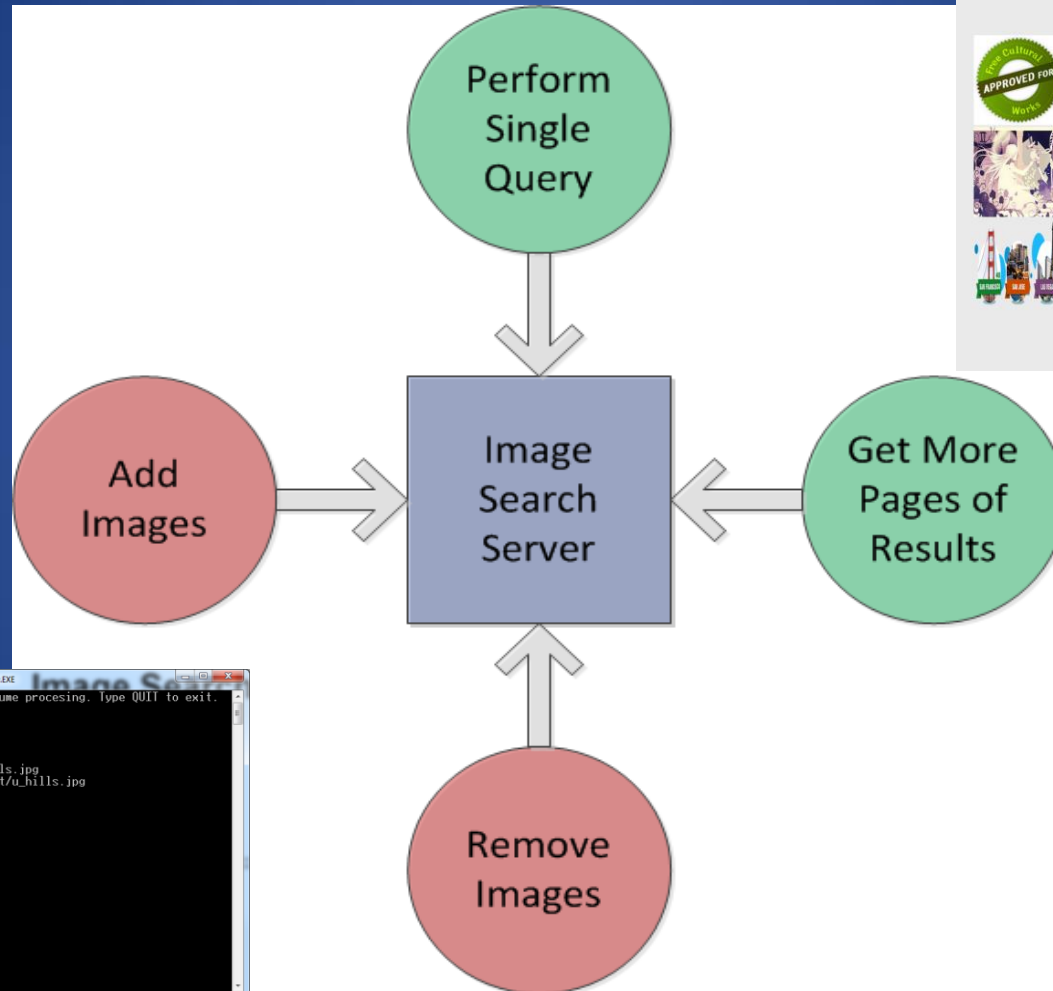
Website - Result (filter)



Filter by color, size, extension, etc.

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Image Search



```

C:\Users\Xantix\Desktop\3\Stone\SquaredA\Crawler\bin\Debug\Crawler.DLL
Type STOP to stop processing, type RUN to resume processing, type QUIT to exit.
http://eng.utah.edu/~berger/index.html
http://www.utah.edu/
http://people.utah.edu/uwho/basic.html
http://www.employment.utah.edu/
http://eng.utah.edu/~berger/iwo3.gif
http://www.utah.edu/images/banner/about/u_hills.jpg
Error: http://www.utah.edu/images/banner/about/u_hills.jpg
Error: http://eng.utah.edu/~berger/iag3.gif
http://www.techventures.utah.edu/

```

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Image Processing Tasks



Original Image



Color Histogram



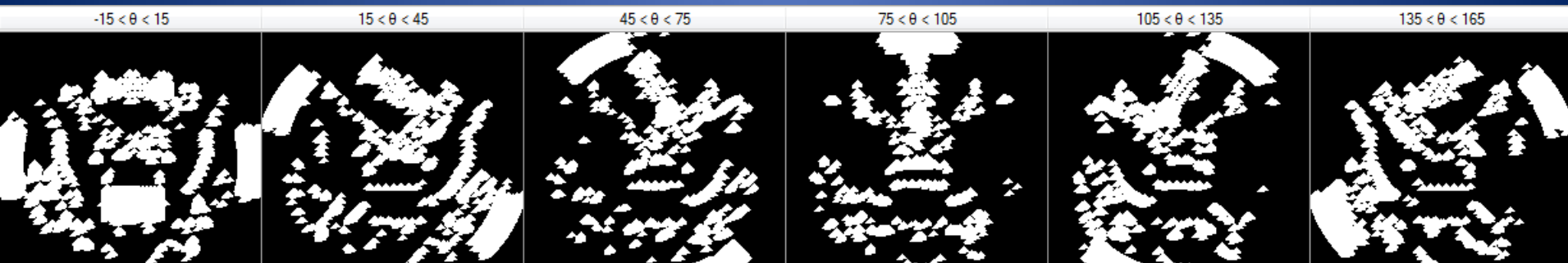
Desaturation



Tensor Gradients



Gaussian Blur



Sobel Edge Detection Separated by Channel and Expanded to Form Edgels

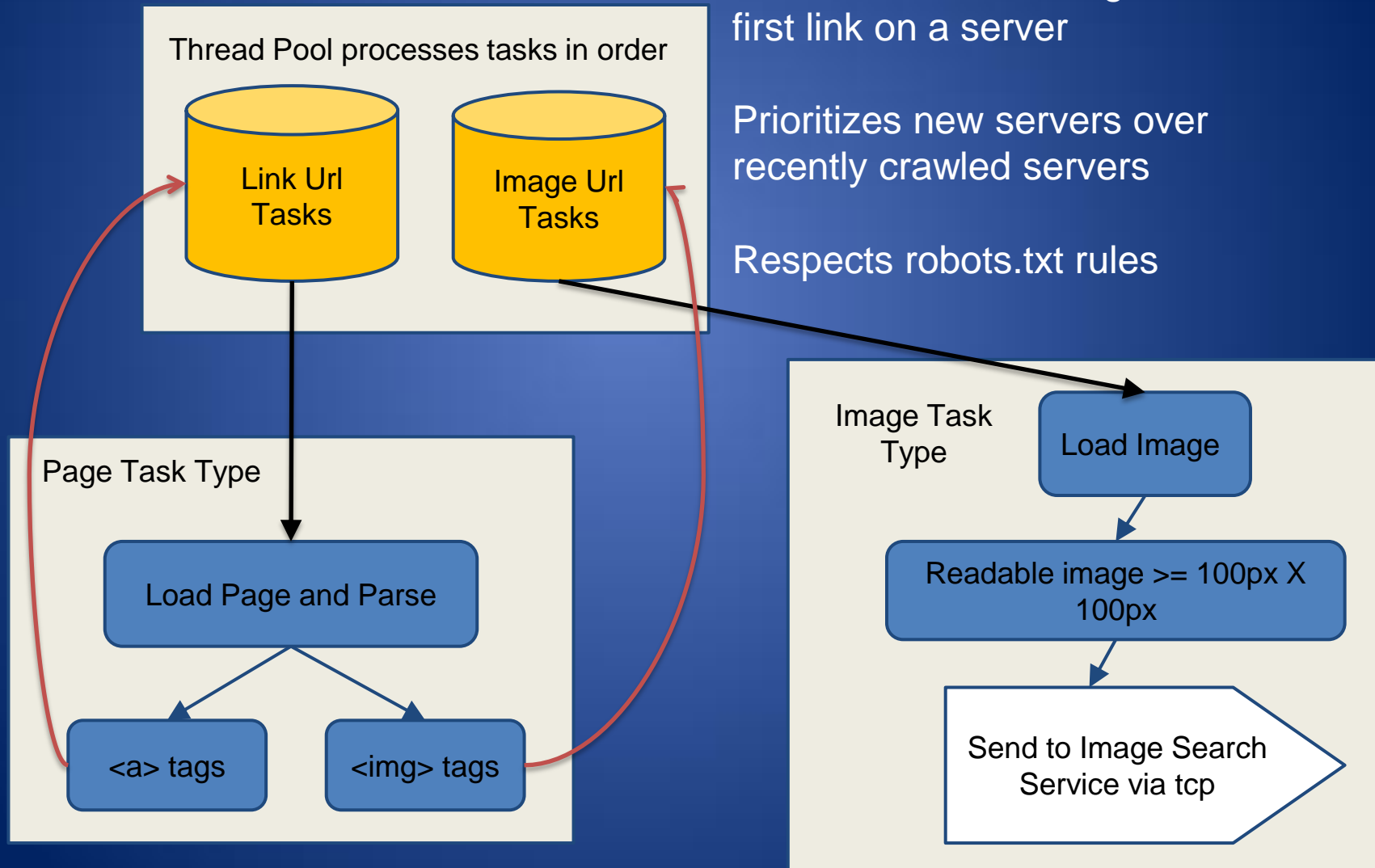
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Crawler

Prioritizes first 15 images over the first link on a server

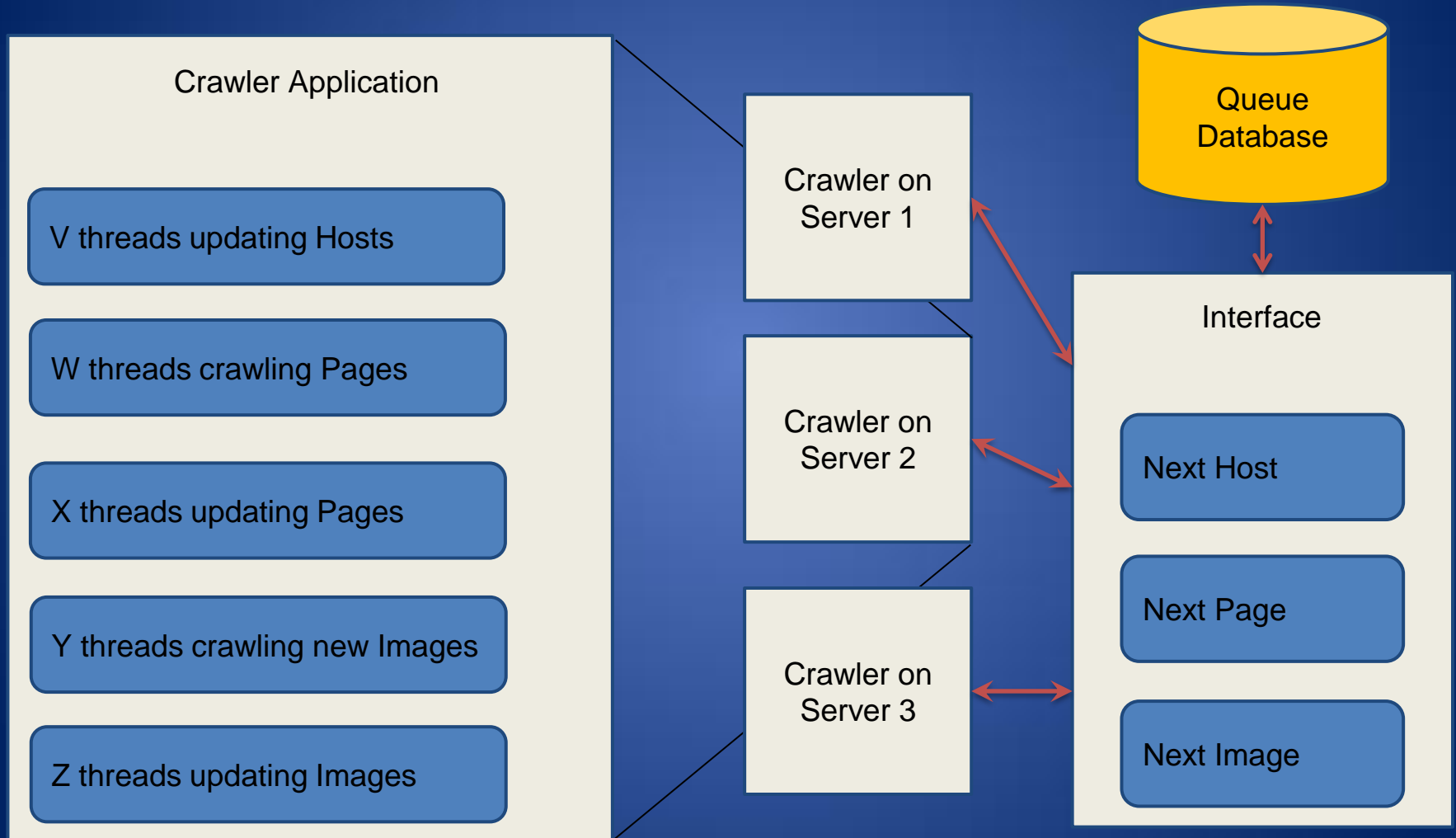
Prioritizes new servers over recently crawled servers

Respects robots.txt rules





Distributed Crawlers





Current Limitations

- Crawling nicely is slow
- Crawler doesn't get context
- Users can't flag images
- No keyword search
- Not compatible with Firefox

Questions

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