

## Scanning Workshop



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# Scanned Images and Born Digital Images

Scanners convert analog images into digital images for web pages and digital library collections in databases. Digital cameras output images that are digital from the start. This workshop will focus on two types of images: that are “born digital” from a digital camera or scanned and will be placed on the web. Images for the web must have a particular file format and size to be viewed in most browsers such as Internet Explorer and Firefox

## A. File formats

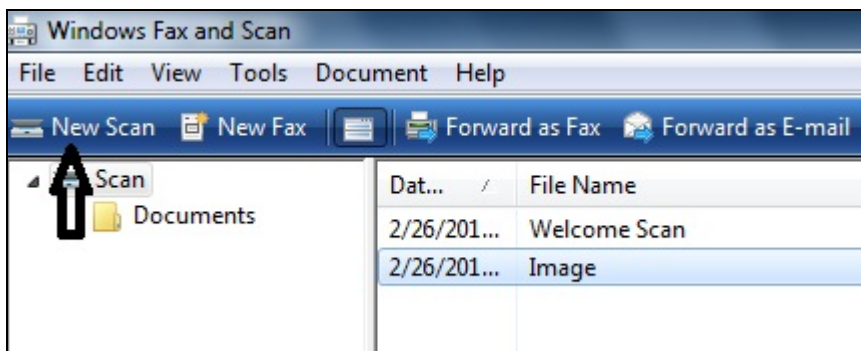
The two file formats that work well on the web are Gif (Graphics Interchange Format) and JPEG (Joint Photographic Experts Group). Here is a table giving details of the characteristics and uses of each format.

GIF	JPEG
Use for logos and graphics	Use for full color photos
Support animation	Does not support animation
Support 256 web colors	Supports 16.7 million colors in photos
Save as: <b>filename.gif</b>	Save as: <b>filename.jpg</b>

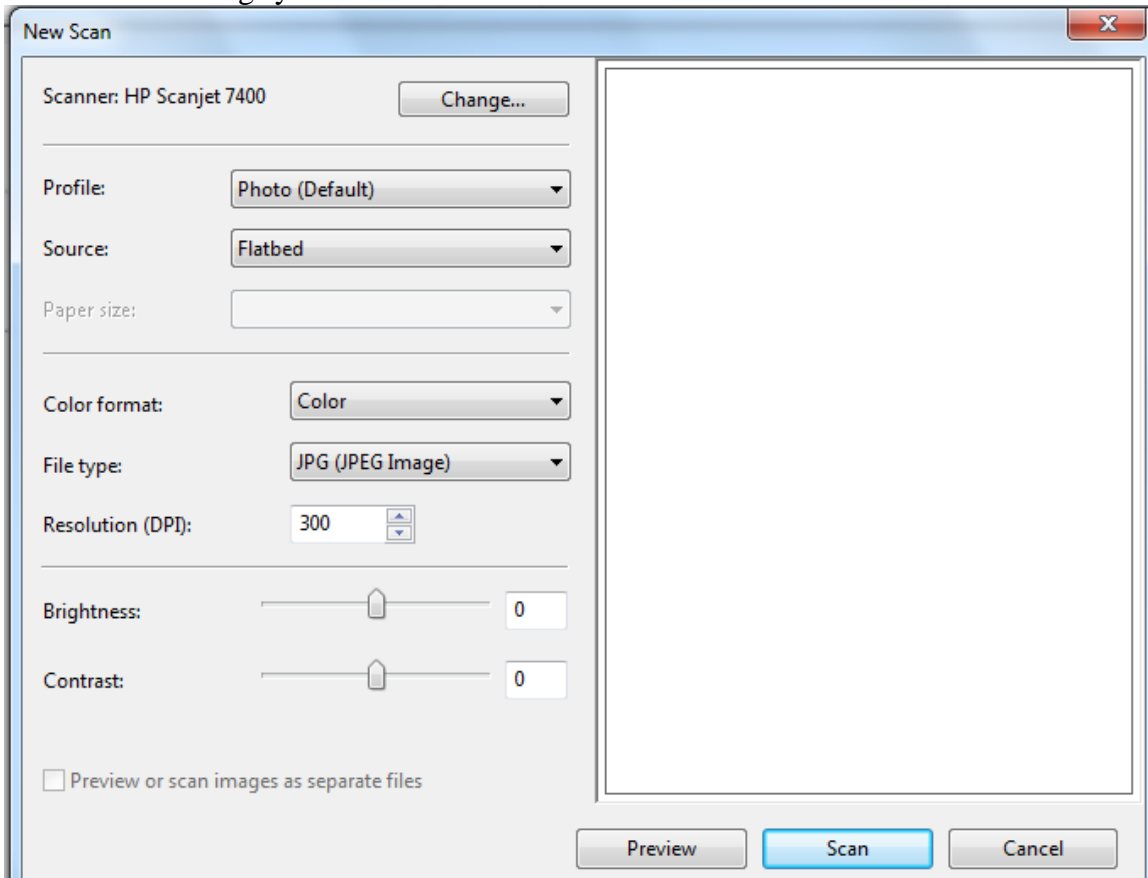
## B. Using the HP Scanjet 7400C Scanner

### Steps:

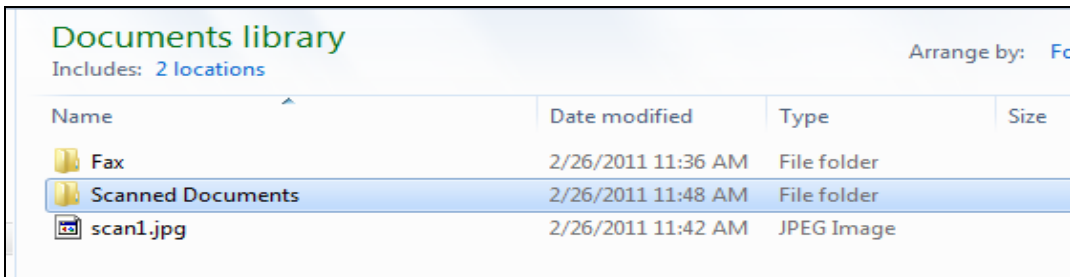
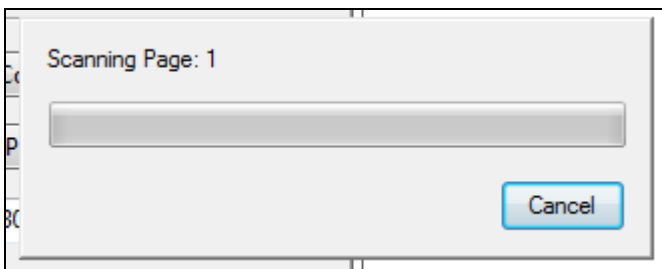
1. Go to Start>>Windows Fax and Scan
2. At the opening screen, select **New Scan**



3. Select the settings you want and then select Scan



4. Your image will be scanned to a folder in the “My documents” folder. Scanning takes enormous amounts of memory so it is best to scan to the My documents folder then work with you image in Photoshop then save it to your memory stick.

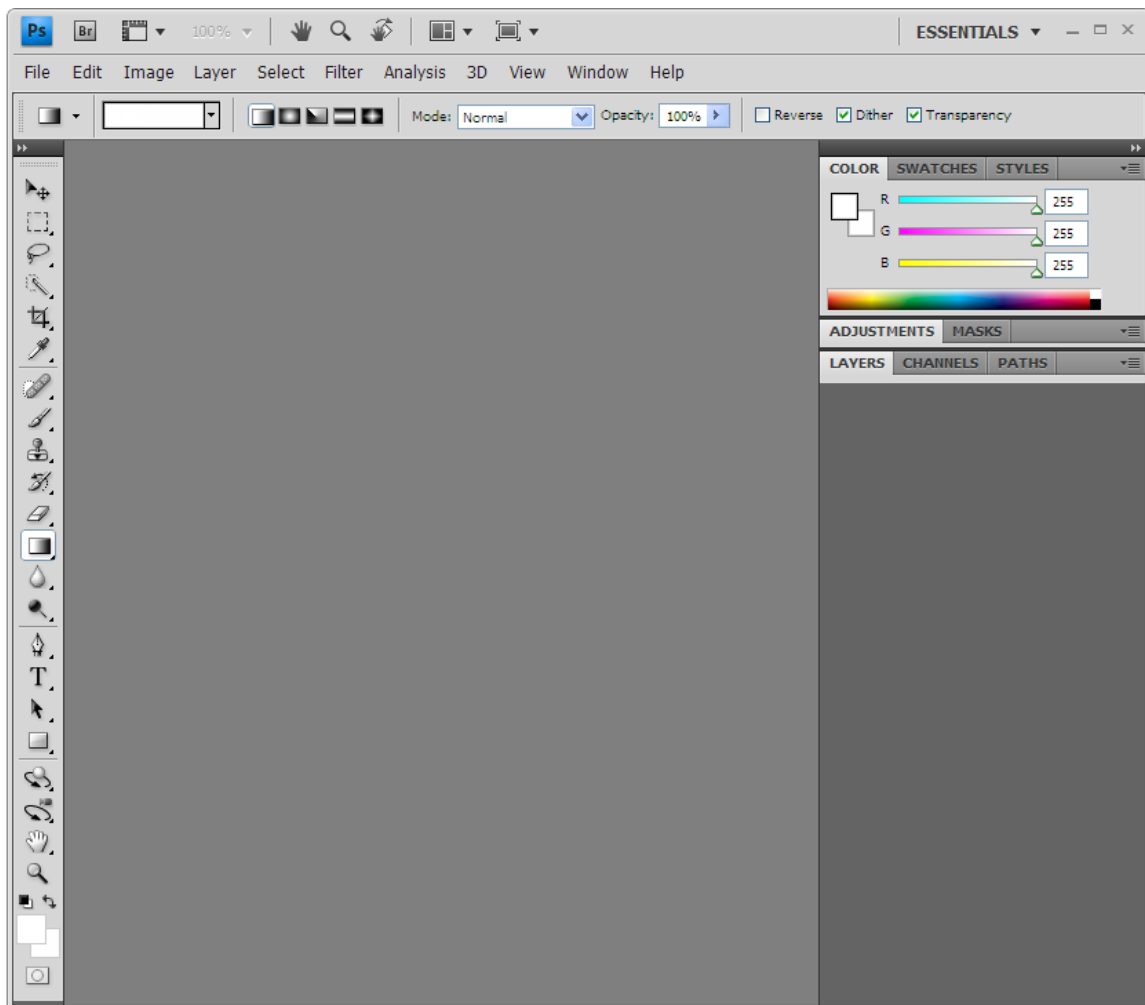


## C. Accessing Photoshop

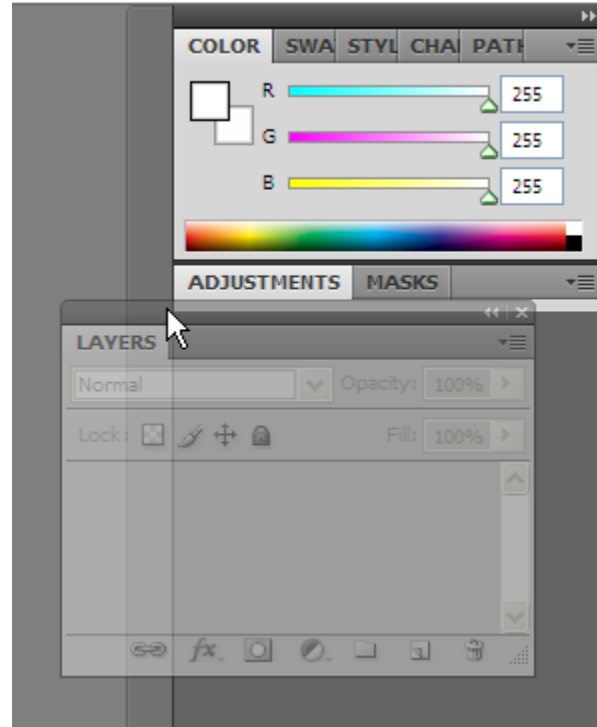
1. Go to **Start>>All Programs>>Adobe Web Premium CS5>>Adobe Photoshop CS5**

## D. Working with Panels

The Photoshop interface window opens with a main pane on which to work and several smaller panels around the screen which will provide you with tools to create and work on images.



✓ Left click and hold on the gray bar to move the panel around



You can dock and undock the panels this way. When you want to return the panel to the side slide the gray bar over the bar of another panel until it turns dark gray then let go of the mouse button.

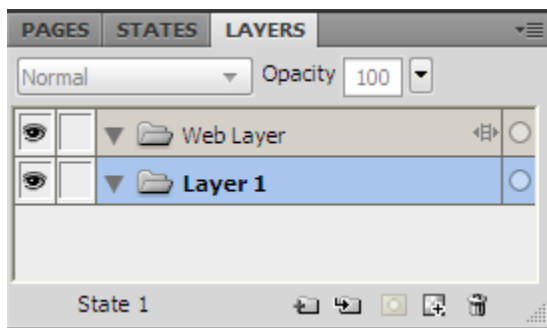
If you close a panel, you can reopen it by going to **Window** on the menu bar and clicking on the appropriate link.

### Exercise: opening and closing panels

Open the **Layers** panel.

Click on **Window>>Layers**

The Layers panel should appear.



Click on **Window>>Layers** and the window should close.

The most useful panels are:

1. **Tools panel** – add fill colors, text, lines, erase, clone your image.
2. **Colors panel** – select and change colors in your image.
3. **Properties panel** - select special effects for your image, such as feathering, or drop shadows.

Left click on the grabber to move the panel around

You can dock and undock the panels. If you close a panel, you can reopen it by going to **Window** on the menu bar and clicking on the appropriate link.

### **Exercise: Closing and opening panels**

Close the **Layers** panel.

Click on **Window>>Layers**.

The Layers panel should reappear.

The most useful panels are:

1. **Tools panel** – add fill colors, text, lines, erase, clone your image.
2. **Colors panel** – select and change colors in your image.
3. **Layers panel** - helps change elements without effecting the whole image. You can add people or items to an image from another image this way.

### **E. Cropping Images**

You should have an image on your floppy or hard drive you want to crop. Go to **File>>Open** and select the image.



Perhaps you want to cut out the lower area of the other building in this picture of Marist Hall.



1. Click the selection tool on the toolbar and left click and drag a selection box around the part you want to save.
2. Click on **Edit >>Crop document**

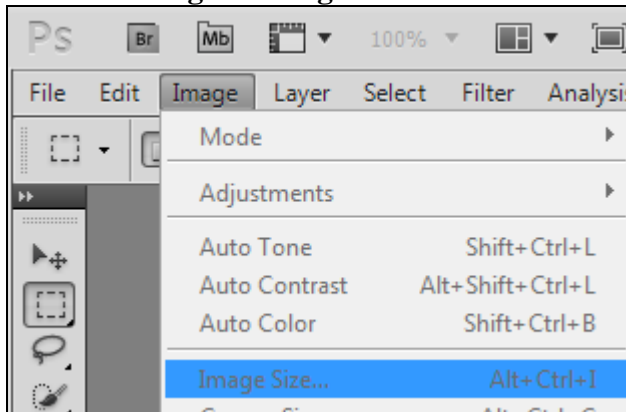
### **F. Resizing Images**

Sometimes images are too large to put on web pages. If they are very large, users will spend a long time waiting for the page to load on their computer. An image should be

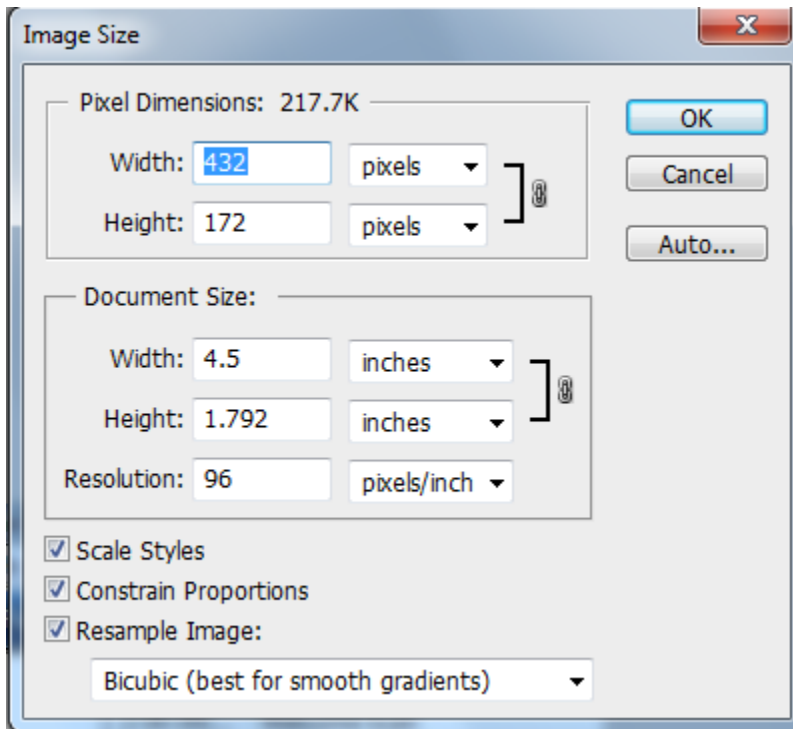
not much larger than 400 pixels in height and/or width. 100 pixels equal approx. one inch.

You can scale your image in Photoshop. With the image displayed in Photoshop:

1. Select **Image >>Image size**



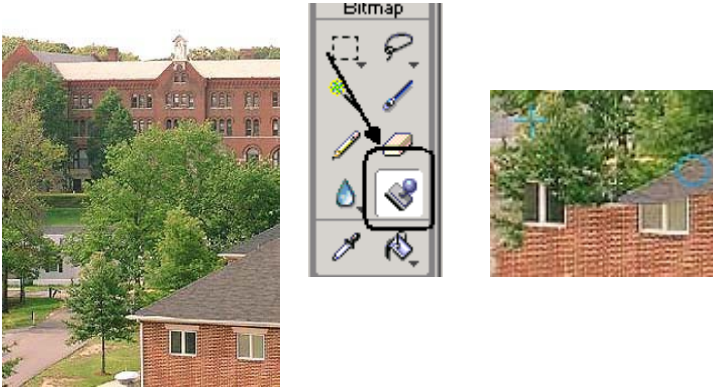
2. A window will open where you can select the width and height of the image. You will want to **Constrain Proportions** if you don't want to distort the image.



Always save a copy of the original image because compressing an image discards data and information about the image. Once an image is compressed, it cannot be enlarged again.

## G. Using the clone tool.

Many images have something in them that you do not want or you may want to add. The clone tool allows you to work with these additions or deletions.



1. Open your image
2. Select the Rubber Stamp tool.
3. Your cursor will change to a circle.
3. Press Alt and click on the area of the image you want to copy and it will change to a +
4. Put the **0** on part to be changed and move the mouse. It will fill in with the part where the + is.

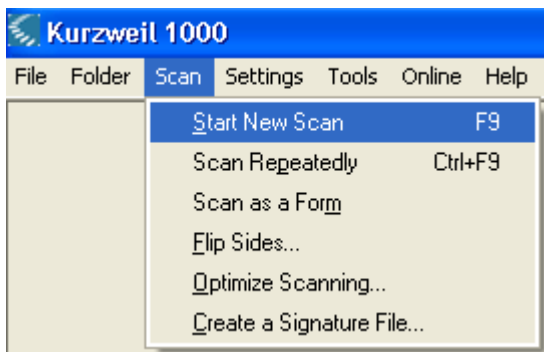
## Scanning Text

Text can be scanned as an image but then it cannot be edited. When you use Optical Character Recognition (OCR) scanned text can be edited for use in other documents such as MS Word documents.

The Kurzweil 1000 program, primarily intended for those with visual assistive needs can be used to scan documents for OCR purposes. SLIS has Kurzweil on the Assistive technologies workstation in the IC.

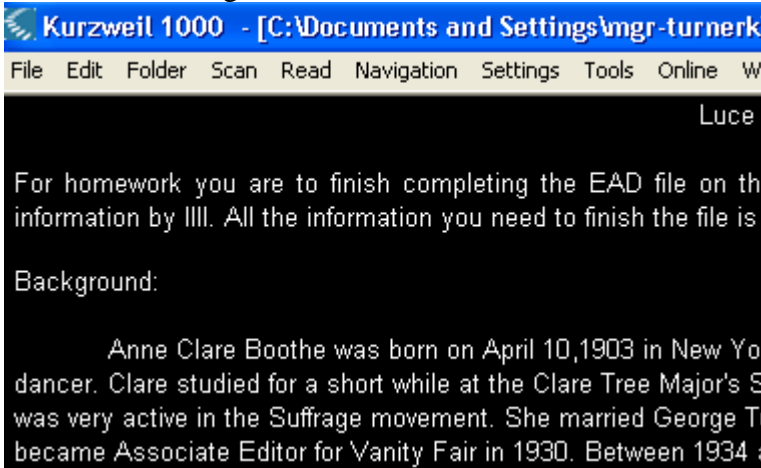
### Steps:

1. Select Start>>Programs>>Kurzweil 1000
2. Select **Scan** and **Start New Scan**.

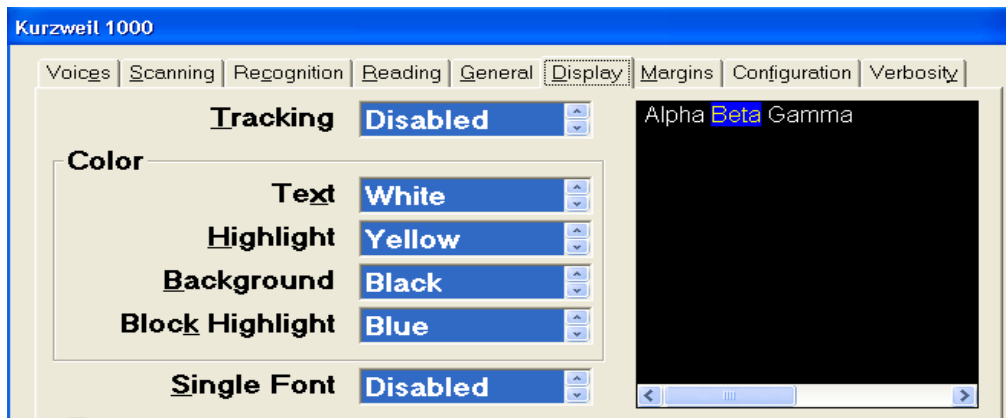




- Your text will appear in the window with a black background. You may change this setting.



- Select Settings>>Display and change the background and text colors.



- Saving your document- Select File>>Save as and then use the drop down to select MS Word for Windows. Select OK

