## ADD LAYER as Smart Objects for Flexible Changes

A Smart Object layer is a special type of layer used for non-destructive editing. This type of layer gives you creative flexibility because the original pixel data of the image, or vector data in some cases, is preserved. You can edit a Smart Object layer and then change the adjustment you applied without altering the image quality. For example, when you transform or scale a regular image layer to reduce the size, some pixels are removed. If you then transform the layer back again, you lose image quality because your previous changes permanently altered the actual pixels.

However, if you open the same photograph as a Smart Object layer, or convert the layer to a Smart Object layer, you can scale the layer without any image data loss. You can open a document as a Smart Object, convert one or more layers in Photoshop to Smart Object layers, or move a Smart Object layer into another document, maintaining its quality as a Smart Object. You can also place an Illustrator or other vector file into a document as a Smart Object and maintain the vector's sharp edges or forms even when resizing.

Open an Image as a Smart Object

- 1. Click File.
- 2. Click Open As Smart Object. The Open dialog box appears.
- 3. Navigate to and click a file to open.
- 4. Click Open. The file opens as a Smart Object.

Convert an Open Image Layer to a Smart Object Layer

- 1. With an image already open, click Layer.
- 2. Click Smart Objects.
- 3. Click Convert to Smart Object.
- The layer is changed to a Smart Object layer and appears in the Layers panel with the Smart Object button. The layer is also renamed to Layer 0. Note: You can also click the Layers panel menu button () and select Convert to Smart Object.

# Apply Filter as Smart Filters for dynamic adjustments

Filters in Photoshop are used to add blur, reduce noise, sharpen, or style an image. When you apply a regular filter you permanently alter the pixels. By applying a Smart Filter instead, you can edit and change the settings of the filter at any time, even after the document has been saved and reopened. Any filter applied to a Smart Object layer becomes a Smart Filter. You can apply a Smart Filter to the entire Smart Object layer or to a selection on a Smart Object layer. You can remove or hide Smart Filters at any time. You can add multiple Smart Filters one on top of another and then change the order of the Smart Filters to change the resulting effect. You can also add a mask to a Smart Filter. You can then paint on the mask with black to hide or white to reveal different areas of the filter and create detailed edits on specific areas, all without altering the image data. Most Photoshop filters, with the exception of Liquify and Vanishing Point, can be applied as Smart Filters.

- 1. Open or convert an image as a Smart Object.
- 2. Click Filter.
- 3. Click a filter such as Radial Blur.
- 4. Click and drag the sliders and adjust any options in the dialog box that appears.
- 5. Click OK.

The Smart Filter appears below the Smart Object layer in the Layers panel.

- A layer mask is automatically applied to the Smart Filter.
- 6 Click the Brush tool and open the Brush picker.
- 7. Click the first soft-edge brush in the Brush picker.
- 8. Click and drag the Size slider to adjust the size. Click the Smart Filter layer mask thumbnail to select it. Click Default Colors icon to restore the default black and white foreground and background, making sure black is the foreground color.
- 9. Click in the image to paint with black to remove the filter from specific areas.

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- The painted areas appear black in the layer mask, and the filters are removed from those areas in the photo.
- 10. Double-click the filter name to reopen the dialog box and adjust the filter's settings and click OK.

## AUTOMATICALLY BLEND multiple images to get the best color

You can easily combine two or more separate photographs of the same subject and let Photoshop CS5 blend these to achieve a better image. You can combine images that do not have identical alignments and Photoshop can automatically align them. You can combine images photographed with different exposures, making some too light and others too dark, and Photoshop CS5 blends these to achieve better color and tone. The Auto-Align Layers command aligns layers based on similar content in different layers, such as corners and edges, and automatically generates the required masks.

The Auto-Blend Layers command helps you create composites of a scene from multiple images with over- or underexposed areas or even content differences. Auto-Blend Layers creates masks to each layer and to hide or show different areas from each image to create a better and seamless composite image. Using the Auto-Align and Auto-Blend Layers commands as in the following technique is an automated, easy-touse technique and is not the same as creating an HDR (High Dynamic Range) image.

- 1. Open multiple images to combine.
- 2. Click the Arrange Documents button and select a window layout so you can see all the images. Note: Only two images are shown in this task; however, you can use multiple images.
- 3. Shift+click and drag each image onto one image to make multiple layers on one document.
- 4. Close all the other open images.
- 5. Shift+click all the layers in the Layers panel.
- 6. Click Edit.
- 7. Click Auto-Align Layers.

### ITEC 475 LECTURE NOTES

- 8. Click an alignment option in the dialog box that appears.
- 9. Click OK.

Photoshop automatically aligns the layers based on the content.

- 10. Shift+click all the layers in the Layers panel.
- 11. Click Edit. Click Auto-Blend layers. Click Stack Images in the dialog box (changes to).
- 12. Click Seamless Tones and Colors in the dialog box (changes to). Click OK.

Photoshop automatically blends the layers.

- 13. Click the Crop tool.
- 17. Click and drag in the image to select the finished composite.
- 18. Click the Commit button to apply the crop.

Note: You can optionally click Layer and click Flatten Image to combine all the layers into one composite image.