I. The PhotoShop CC Interface

- The **Image Window** displays the currently open file(s).

- The **Tool Palette** contains numerous tools for drawing and other image-related tasks.

- The **Menu Bar** displays editing options for whichever tool is currently selected on the Tool Palette.

- Additional tools and utilities (Layers, History, etc.) are organized into **Panels** that can be hidden or revealed using the ‘Window’ menu. Currently open Panels can be maximized or minimized within the PhotoShop interface.
II. Creating a Meme Image

Open the ‘Einstein’ image. We’ll use this file to create a ‘meme image’ using the Text tool. Notice the “T” icon on the Tool Palette – this is the Text tool. Click to select it:

Once you've selected the Text tool, click anywhere on the image to begin typing. Drag to select the text you type and use the Menu Bar to change fonts, size, justification, color, etc.

Switch to the Pointer tool and drag on the text to re-position. To further edit your text, simply select the Text tool again and click directly on the text to edit.
II. Layers: Meme continued

Notice your Layers panel (click the button on the panel to reveal, or choose Windows > Layers – when you added your text, a new layer was automatically created:

Layers are one of PhotoShop’s most powerful features. They enable you to create and manage different parts of an image separately – in the case of the current image, we have two parts: the background (picture of Einstein) and the text layer.

Not only can we continually change the text layer until we’re happy with it, we can hide it (click its eye icon in the Layers panel) or even delete it altogether without affecting the image’s background.

Whatever we do to a layer is self-contained and does not alter other layers. By clicking on a Layer in the panel, we are selecting it in order to edit or perform some action on it.

We can invoke a layer’s Blending Options by either double-clicking the right side of it in the Layers panel, or by choosing Layers > Blending Options. A dialog appears in which there are numerous editing functions for the currently selected layer. We can
use this dialog to make items on a layer blend or stand out more effectively. In the case of our meme picture, we can apply a drop shadow to make our text layer to give it better definition and a 3-D feel.

As you work, notice the **History** panel (access the same as you do Layers):

The **History** panel keeps track of all the edits you perform to the current document. You can move back and forth through different editing phases of a file by clicking on an edit.

History keeps track of edits while a document is currently open – once you close a file, its history is cleared.

Practice making other memes with some different photos, seeing what you can create ...
Finally, it’s important to understand how to save documents in PhotoShop. You can open the **Save As** dialog by choosing **File > Save As**:

The default file format in PhotoShop is ‘PSD’ (PhotoShop Document). When you save a file in this format, it saves all your layers so that you can come back later and resume editing. It’s generally a good idea to save a PSD of all your PhotoShop projects.

You can also use **File > Save As** to save a document in a format such as JPG or PNG. Formats such as those are used for sharing or distributing images with others, on the Web, printing, etc. When you save documents in these formats, your layers are discarded (or ‘flattened’) – so, it’s important to distinguish between the different file formats.

### III. Color Correction

Among PhotoShop’s many features is the ability to color-correct photos. Color Correction entails balancing or enhancing certain colors. Often, when we take a picture the colors aren’t exactly balanced – or, we may want to enhance certain hues or colors to give an image a particular look. Let’s do a few exercises to practice.

Bear in mind that PhotoShop’s tools are not a substitute for taking a good photo – no amount of processing can make up for overexposed, underexposed, etc., pictures. Taking a good picture is the best start of any color correction process.

Open the ‘child’ photo – notice the excess of reds and oranges (or, earth tones). Choose **Image > Adjustments** and select **Color Balance**.
This opens a dialog in which you can adjust the RGB (Red Green Blue) balance in the image.
Practice moving the sliders and notice how the image is affected (you can drag to move the dialog window if necessary).

When it comes to color correction, less is more. It’s often small differences that add up to big ones. In the case of the ‘child’ image, we want to cool it off by adding some blue and reducing the red content, while retaining some skin tone.

Use the ‘Preview’ checkbox to compare the original with your changes.

Lastly, try the *Brightness and Contrast* image adjustment tool if you think the image could use a little light or shadow tweak.

When you've practiced enough to make the child photo more presentable, open the ‘chili’ file and try your hand at color correcting it using *Image > Adjustments > Color Balance*. This image needs similar work in reducing earth tones, but not at the expense of a healthy color on the food, as well as the green color of the bowl. In addition to working with the default *Midtones*, try adjusting the *Shadows* and *Highlights* as well (selectable using the buttons under the sliders).
**IV. More Color Correction**

Let’s try a few exercises in stylistic color correction. Open the ‘bwPortrait’ photo. Then, choose *Image > Adjustments > Photo Filter.*

The *Photo Filter* enables you to overlay a preset or custom color on a photo. The slider in the dialog can be used to add more or less of the filter. Experiment with some different looks.

For our next exercise, open ‘Cathedral’ and ‘Chicago.’ Notice that with two files open at once, you can switch between them by clicking on their tab in the Image Window. Choose ‘Cathedral’ and then choose *Image > Adjustments > Hue/ Saturation.*

We can use *Hue/Saturation* to add a color hue to a photo, determine how much is applied, and then raise or lower the lightness level. Try your hand with ‘Cathedral.’
One of the cool things *Hue/Saturation* can be used for is to give an image a combined black and white/color look – in the Cathedral example above, the picture has a marine hue with the saturation set to low. Try it out with ‘Chicago,’ and you’ll find the image composition is the opposite of ‘Cathedral’ – instead of the subject taking up most of the space, ‘Chicago’ is mostly sky -- so, *Hue/Saturation* affects that area of the image more prominently than the city skyline.

Finally, try out *Hue/Saturation* on ‘Cupcakes.’ Here, the image is a close-up shot of a plate of cupcakes, so the colors and saturation take on yet another behavior due to the image and color content. See how vibrant you can get the image to look without over-doing it.

**Technique Suggestion:** it’s often a good idea when using Photoshop to duplicate the layer you’re working on, in case you want to start over. You can easily do this by activating the hidden menu on the Layers panel and choosing ‘Duplicate layer.’ The currently selected layer is duplicated – can hide the original using the layer’s eye icon and work from the duplicate.

**Technique Suggestion:** when making multiple edits to a layer using *Image > Adjustments*, a good option can be to use an **Adjustment Layer**. The option is accessible from the Layers menu, and it contains all of the same tools as *Image > Adjustments*. The difference is that the adjustment will reside on its own layer, instead of being directly applied to a layer. The trade-off is that the PSD file be bigger – but it saves you from committing permanent adjustments to an image, having multiple duplicate layers, etc., over separate editing sessions on a document.
IV. Photo Manipulation

Selection Techniques - Open the ‘Taco Dinosaur’ file. We want to change the color of the background and the dinosaur, which will involve making a selection. Since everything is on the same layer, we need a tool that will ‘select’ specific parts of the image while not affecting others.

The Marquee tool is too angular, and while we could try the Magic Wand, Quick Select or Magnetic Lasso tools, they will prove cumbersome in this particular case due to some of our image content. We need **Select > Color Range**.

What **Select > Color Range** allows us to do is make selections in a document based upon color. When we choose it, a dialog appears that enables us to select colors in a document by simply clicking in an area, and then setting a ‘fuzziness’ to determine how extensive we want the selection to be.

Choose **Select > Color Range** and then click the purple background of the image (move the dialog out of the way if necessary). Set your Fuzziness to the maximum 200 value and click OK. You should see a selection activate around the purple areas of the image (aka ‘marching ants’).
With your selection activated, choose Layer > New Fill Layer > Solid Color.’ A dialog will appear to create a new layer – click ‘OK.’

A new layer is created in your Layers panel, and a color picker automatically appears onscreen. Click to choose a color and move the slider to move to different color areas. Notice that as you click, the image background color changes. Click OK when finished.

The nice thing about fill layers is that you can go back and change the color as many times as necessary – simply click on the color tile on the layer (technically it’s an image mask).

Repeat the Select > Color Range process to change the color of the dinosaur.

Combined Images – open the ‘Chicago’ image. Then, choose File > Place Embedded and select the ‘bwPortrait’ file. It’s placed atop the Chicago image, and notice there is a bounding box around it. This is called a Free Transform selection.
What we want to do is cover the Chicago image with the image we just placed. While holding down the Shift key, drag a corner handle to enlarge the bwPortrait just enough so it covers Chicago (holding down Shift enlarges proportionally). Release shift and press ‘Enter’ when done – the Free Transform selection should disappear. Use the Pointer tool to center if necessary.

Go to your Layers panel and make sure the bwPortrait layer is selected. Notice an option labeled ‘Opacity’ with a number next to it. Click the number and a slider is revealed. Drag on it to lower the layer’s opacity value to around 23%.

In your image window, you’ll notice the Chicago picture is once again visible, with the portrait superimposed on top of it.

Next, apply what you learned about Text layers by placing one or more pieces of text in the image to create a mock-up of a movie ad. For example:
Remove and Replace: Open the ‘keyboard’ file. What we are going to do is replace the text on the key – one way we can do this is by using the Patch tool.

The Patch tool is located in the same group on the Tool Palette as the Spot Healing Brush and Healing Brush.

A carat in the lower right of a button on the Tool palette indicates there are several tools hidden as a group. To reveal them, click and hold the tool’s button.

Once you’re chosen the Patch tool, go to the image window. Click and drag to draw a selection around the ‘Delete’ text. ‘Marching Ants’ should activate around the text. Click inside the selection and drag to the area just beneath so that it’s replaced with blank space.

So, what just happened? When we made a selection with the Patch tool, we defined an area to replace; by dragging the selected area to another part of the image, we replaced it with a clone of the area we dragged it to. So, essentially we did a ‘sample and replace.’

Using the Text tool, type and format new text on the key – something fun! Try lowering Opacity to make the text blend better. Finally, by pressing CTRL + T, you can activate a Free Transform selection that you can use to skew the text to make it fit the key more convincingly.
**Image Mask** – open the 'berries file. We are going to create a classic style of *Layer Mask*.

For this final exercise, we’re going to paint on a black and white image to colorize certain areas.

To begin, duplicate the background layer in the Layers panel. Next, using the ‘background copy’ layer, choose *Image > Adjustments > Black and White*. Click OK to use the default values, and the layer should turn black and white.

Next, notice the row of buttons along the bottom of the Layers panel. Locate the one that looks like a rectangle with a circle in the middle – this is used to create a **layer mask**. Click it, and your background copy layer will acquire a new white icon in the Layers panel (pictured below):
Notice that you can independently choose each tile icon in the ‘background copy’ layer. Make sure the layer mask tile (the solid white one) is chosen. Then, on your Tool palette, located and choose the **Brush** tool:

The Brush tool works much as you’d expect – you click and drag to paint on an image. The foreground color, set on the bottom of the Tool palette, is used by default as the painting color.

First, click the foreground color and set it to black. Next, use the Menu bar to set a brush size of 300 or so.

Finally, slowly begin to paint over the prominent berry in the image – it should begin turning red as you paint over it. Try making both front berries red.

So, what just happened?

With layer masks, the general rule is that **white conceals** and **black reveals**. When we created the mask on the background copy layer, we created the conditions in which we could paint black over it and reveal portions of the original layer underneath (which is still in color).

So, technically speaking we did not color the black and white layer, but only **revealed** what was underneath it – that is, an identical layer that was still in color.