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LIGHTROOM CLASSIC CC

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...it's all about you

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Introduction and Overview

Welcome to TeachUcomp, Inc.'s Lightroom Classic CC course. This class introduces the student to Adobe Lightroom Classic CC, one of the most popular photo management and editing software applications available. This class is designed to take a user with little to no knowledge of Photoshop Lightroom Classic CC through the skills necessary to master the use of the Photoshop Lightroom Classic CC application. To that end, it is also an excellent tutorial for those users who are already familiar with Lightroom Classic CC, but want to "fill-in" the gaps in their knowledge of the program.

Adobe Lightroom Classic CC is an excellent program to learn, as the skills, terms, and techniques that you learn and master in this application can also be used throughout the rest of the Adobe applications. For example, after learning this application, you will find it easier to learn an application like Adobe Photoshop or Adobe Illustrator.

This class starts by introducing the student to the Lightroom Classic CC environment. The first thing you learn is how to organize photos using Lightroom Modules and Catalogs. It then shows how to import photos from a variety of sources. After that, you examine Lightroom Collections, as well as the functioning of a variety of Lightroom Modules, such as the Library Module, The Map Module, The Develop Module, the Book Module, the Slideshow Module, the Print Module, and the Web Module.

The practice exercises for this course can be done using photos from your own collection. There are no supplementary exercise files provided (or necessary) to complete this course.

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CHAPTER 1-
Getting Acquainted with Lightroom Classic CC

1.1- Introduction to Lightroom Classic CC:

Adobe Lightroom Classic CC is a powerful software application for photographers of all skill levels. You can use Lightroom Classic CC to manage and edit photos in ways you might never have imagined. You can use also use Lightroom Classic CC to organize all of your photos on your desktop computer and share photos with others in a variety of ways. Additionally, Lightroom's powerful, "one-click" editing tools allow to you enhance photos with ease.

It's very important to understand that Adobe Lightroom Classic CC is not the same as Adobe Lightroom CC. Lightroom CC, which this course does not study, is a cloud-based subscription service and platform. Lightroom Classic CC, which this course examines, is a local application installed on your computer. With Lightroom Classic CC, your photos are stored locally. Lightroom Classic CC performs faster and includes more features than Lightroom CC.

1.2- The Lightroom Classic CC Environment:

When you first launch Lightroom Classic CC, you will see the main image display area in the center of the screen, with panels to the right and left. Along the bottom of the screen, you'll see the Filmstrip area. Before you import photos into Lightroom Classic CC, the Filmstrip area will appear blank. At the top left of the screen, you'll see the Menu Bar. At the top right of the screen, you'll see a group of "module" buttons labeled "Library," "Develop," "Map," "Book," "Slideshow," "Print," and "Web."

Lightroom Classic CC uses "modules" to organize its various tools. Each module provides tools used for a specific aspect of photographic workflow. For example, the Library module is used to import, organize, compare, and select photos. The Develop module is used to adjust color and tone, and otherwise creatively process photos. We'll learn more about the specifics of different modules as the course progresses. For now, it's important to understand that each module includes different panels and options related to a specific portion of workflow. By clicking the various module buttons at the top of the screen, you can easily move from one module to the next.
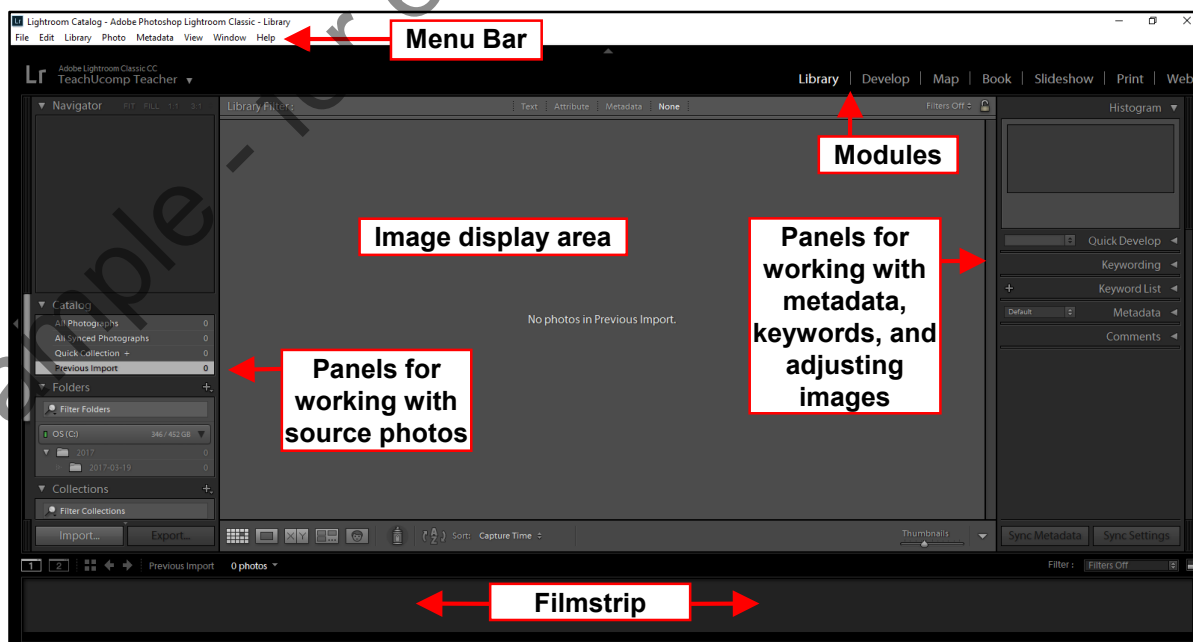
1.3- Modules in Lightroom Classic CC:

As we learned in the last lesson, Lightroom Classic CC uses "modules" to organize its various tools and features. Each module provides tools used for a specific aspect of photographic workflow. Let's look at a brief overview of Lightroom Classic CC's seven distinct modules.

The "Library" module is considered the "home base" of Lightroom Classic CC. The Library module provides many of Lightroom's primary organizational features. From within the Library module, you can manage, sort, compare, and rate the photos in your catalog.
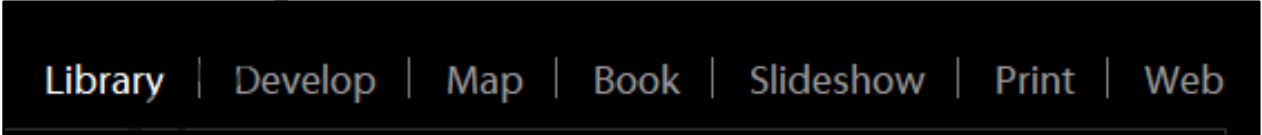
The "Develop" module allows you to make enhancements and adjustments to photos in your catalog. Using the Develop module, you can adjust the color and tonal scale of photos, remove red eye, crop photos, and make other appearance corrections. When you use Lightroom Classic CC to make adjustments to photos, the edits are "nondestructive." This means that editing a photo within Lightroom Classic CC does not alter the original file. Because of this, you can use Lightroom to experiment with photos and create different versions of photos without impacting your original image data.

The "Map" module shows you where your photos were captured, using a Google map. When you take a photograph, most modern cameras (including cell phone cameras) record GPS coordinates within each photo's metadata. Lightroom Classic CC's Map module uses GPS coordinates from a photo's metadata to plot the photo on the map. Even if your camera doesn't record GPS coordinates, you can add locations manually using the Map module. It's worth keeping in mind that you must be online in order to use the Map module.

The "Book" module provides tools for designing photographic books from the photos in your catalog. After designing a photo book using the Book module, you can save the book as an Adobe PDF, or you can save your work as individual JPEG files. You can even upload photo books directly to the on-demand print website Blurb.com, and then order high-quality printed versions of your creations.

The "Slideshow" module, as the name suggests, allows you to create slideshows from selected photos in your catalog. Using the Slideshow module, you can select from different layout templates, add transitions between slides, and choose playback options. You can even use the Slideshow module to add text to slides and modify existing layout templates, which allows for a high level of slideshow customization.

The "Print" module provides tools for printing photos and contact sheets from your printer. Using the Print module, you can select from a variety of preloaded page layout templates especially designed for printing. You can also modify templates, add text to your printed pages, and choose settings for print color management, resolution, and sharpening printed images.

Finally, Lightroom Classic CC includes a "Web" module. Using the Web module, you can create web photo galleries from the photos in your catalog. When you create a web photo gallery, thumbnail versions of images from the gallery link to larger versions of the photos. Like other Lightroom Classic CC modules, the Web module provides a variety of templates to choose from, as well as controls that let you customize templates. The Web module even allows you to specify settings for uploading a gallery to a web server.

In future chapters, we'll explore the functioning and features of each module in much greater detail. For now, it is important to understand that each module is designed to help you accomplish a different part of the photographic workflow process. Before learning the specific functions of each tool included with Lightroom Classic CC, it is very helpful to develop an overall understanding of where different tools can be found within the software platform

1.4- Managing Panels:

Lightroom Classic CC allows you to customize the way that panels are displayed onscreen. By managing panels, you can maximize the display area of your photos while keeping the features you need available. Although Lightroom's various panels contain different features and controls, all panels are managed in the same way.

To open or close any panel in Lightroom Classic CC, simply click the panel header. To open or close all of the panels in a panel group, hold down the "Ctrl" button on your keyboard while clicking the panel name.

You can also use "Solo mode" to open or close one panel at a time. Solo mode applies independently to each set of panels. In other words, you can set one panel to operate in Solo mode while all of the other panels operate normally. To set Solo mode for a panel, right-click the panel header and select "Solo mode" from the menu that appears. Alternatively, you can select Solo mode by holding the "Alt" button down while clicking on a panel header. Notice that the triangle on the left side of the panel header is solid when the panel is not in Solo mode. When in Solo mode, the triangle appears "dotted."

You can easily scroll through a group of panels in Lightroom Classic CC. To scroll through a group of panels, either drag the scroll bar on the side of the panel group or scroll using your mouse wheel.

You can toggle the display of an entire panel group to either show or hide the panel group. To do this, click the triangular "Show/Hide Panel Group" icon. The "Show/Hide Panel Group" icons appear on the edges of all four sides of the screen. Notice that the icons appear as solid triangles when the panel group is showing, and "dotted" triangles when the panel group is hidden.

You can also show or hide the panels on the right and left of the screen. This can be helpful when you want to increase the amount of screen space used to display a photo. To hide both side panels, select "Window| Panels| Toggle Side Panels" from the Menu Bar. Alternatively, you can show or hide the side panels by pressing the "Tab" key on your keyboard.

You can even hide all of Lightroom Classic CC's panels when you want to devote maximum screen space to photo display. Hiding all of the panels removes the side panels, the Filmstrip across the bottom of the screen, and the Module Picker at the top of the screen. To hide all panels, select "Window| Panels| Toggle All Panels" from the Menu Bar. Alternatively, you can show or hide all panels by holding down the "Shift" key on your keyboard while pressing the "Tab" key.

Lightroom Classic CC allows you to determine the default display of panel groups. To select a setting for automatically showing or hiding panels, right-click on the narrow outside edge of a panel group, between the scroll bar and the "Show/Hide Panel Group" icon. Next, select one of the four options displayed. If you choose "Auto Hide & Show," then the panel will be displayed as you move the pointer to the outside edge of the application window, and hidden again as you move the pointer away from the panel. Note that you may have to manually collapse each panel using the "Show/Hide Panel Group" icon after selecting "Auto Hide & Show" before the feature will function. If you choose "Auto Hide," the panel will be hidden as you move the pointer away from the panel. Note that, if you select this option, you will have to open the panel manually each time you want to access it. If you select "Manual," Lightroom Classic CC turns off all automatic show/hide behavior. If you select this setting, you will have to show and hide panels by clicking panel headers and the "Show/Hide Panel Group" icons. If you select "Sync With Opposite Panel," Lightroom Classic CC will apply the same hide/show behavior to the left and right panels, or to the top and bottom panels.

You can resize most of the panels in Lightroom Classic CC, although the top panel (containing the Module picker) cannot be resized. To resize the width of a panel group on the left or right of the screen, move your mouse pointer over the inside edge of the panel, closest to the photo display. When the pointer changes into a double-sided arrow, click and drag to make the panel wider or more narrow. When you have

1.4- Managing Panels- (cont'd.):

the panel size the way you like it, release the mouse button. You can expand the Filmstrip panel along the bottom of the screen in the same way, to increase or decrease the panel height.

If you don't use a panel very often, you can hide it from view to streamline your workspace. To remove a panel from view, right click any panel header within the panel group, and then click to uncheck the name of the panel you want to hide from the pop-up menu that appears. To restore a panel that has been hidden from view, simply right-click any panel header in the group, and then re-check the panel name. You'll notice that the pop-up menu also includes options to "Expand All" and "Collapse All" panels. You can use these commands to quickly show or hide all panel information with one click.

1.5- Using the Toolbar:

Lightroom Classic CC provides a toolbar along the bottom of the image display area, just above the Filmstrip panel. Depending on which view is active in the Library module, the toolbar displays different buttons and controls. You can show or hide the toolbar by selecting "View| Show/Hide Toolbar" from the Menu Bar. Alternatively, you can press your keyboard's "T" key to toggle the toolbar on or off. On the far right of the toolbar, you will see a triangular menu button. You can click this button to display the toolbar pop-up menu, which allows you to select buttons and controls to show in the toolbar. It's worth mentioning that some toolbar controls are only available in certain views. Let's take a brief look at some options provided by the toolbar pop-up menu. We'll study the functioning of each tool in future lessons.

The "View Modes" option modifies the toolbar so that you can click to select the "Grid View," "Loupe View," "Compare View," or "Survey View." Notice that, when you switch between the views, the available options within the toolbar pop-up menu change. Let's look at the toolbar options available in Grid view.

The "Painter" control allows you to quickly apply keywords and other attributes to photos. The Painter tool is only available in Grid view.

The "Sorting" control allows you to specify the sort direction or sorting criteria used to display photo thumbnails. The Sorting control is not available in Compare view.

The "Flagging" control displays a "Pick" or "Rejected" flag for selected photos, and allows you to assign or remove selected photos.

The "Rating" control allows you to assign and remove ratings for selected photos, and displays rating stars for selected photos within the toolbar.

The "Color Label" control displays color labels for selected photos in the toolbar, and lets you assign and remove color labels for selected photos.

The "Rotate" tool allows you to rotate selected photos clockwise or counterclockwise.

The "Navigate" tool allows you to select the next image or the previous image from the selected photo.

The "Slideshow" control plays an "impromptu" slideshow of photos.

The "Thumbnail Size" control allows you to set the size of photo thumbnails. The Thumbnail Size control is only available in Grid view.

As we've seen, other controls become available when you switch between views. For example, when you switch to Loupe view, new options appear in the toolbar pop-up menu: The "Zoom" tool; the "Draw Face Region" tool, and the "Grid Overlay" tool.

Some controls also become unavailable in certain views. For example, when you switch to Compare view, only the "Compare" control can be added to the toolbar display. In the coming chapters, we'll take a closer look at each view in Lightroom Classic CC, as well as examining the various tools and controls that can be used within each view.

1.6- File Formats Supported in Lightroom Classic CC:

Adobe Lightroom Classic CC allows you to import and work with photos in a variety of file formats. After reading data from a raw file format, Lightroom Classic CC processes and displays the data as a full-color photo. Lightroom is able to read the raw data from most cameras, in several different file formats. Let's take a quick look at the file formats supported in Lightroom Classic CC.

Digital Negative format (DNG) files are supported in Lightroom Classic CC. DNG files are Adobe Digital Negative Raw Image Files. This camera raw file format was developed by Adobe to both preserve the image data and also include more metadata than other RAW files. You can convert proprietary raw files to DNG files within Lightroom Classic CC.

Tagged-Image File Format (TIFF, TIF) files are supported in Lightroom Classic CC. The TIFF file format is used to exchange files between computer platforms and applications. Lightroom Classic CC can import 8-bit, 16-bit, and 32-bit TIFF images up to 65,000 pixels per side.

Joint Photographic Experts Group (JPEG) files are supported in Lightroom Classic CC. The JPEG format is very commonly used to display digital photos, because the file format retains all color information in an RGB image while compressing file size.

Photoshop Document (PSD) files are supported in Lightroom Classic CC. However, to work with a multi-layered Photoshop Document in Lightroom Classic CC, the file must first be saved in Photoshop with the "Maximize PSD and PSB File Compatibility" preference active. Lightroom Classic CC can import and save PSD files with a bit depth of 8 bits or 16 bits per channel. However, to work with 32-bit images in Lightroom Classic CC, you must save a file using the TIFF format.

CMYK files are supported in Lightroom Classic CC, but only to a limited degree. You can import CMYK files into Lightroom Classic CC, but adjustments and output are performed in the RGB color space.

Portable Network Graphics (PNG) files are supported in Lightroom Classic CC. The PNG format produces smooth background transparencies, and the format supports 24-bit images.

Lightroom Classic CC is able to import certain data from some video files, but only if specific codecs are installed. By installing more codecs, you may be able to extend Lightroom's ability to import some video file data. Refer to Adobe's website for more information. Some file formats are not supported in Lightroom Classic CC, including: Adobe Illustrator files; Nikon scanner NEF files; files with dimensions greater than 65,000 pixels per side; or files that are larger than 512 megapixels.

1.7- About Color Management:

Digital cameras, computers, and other electronic devices associated with photography are unable to accurately reproduce the full range of colors visible to the human eye. Instead, every digital device used in the photographic workflow operates within its own particular "color space." The color space of a device is the range of colors that the device can record, store, print, and so forth. In addition to having a specific color space, every such device describes color in one of two ways: Either additively, using the RGB color model; or subtractively, using the CMYK color model.

Unfortunately, the differences between color spaces and color models can cause digital images to look different, depending on how they are viewed. To reduce this issue, color management systems use "profiles" to reconcile color differences between different devices. A "profile" is a collection of settings that describe the color spaces of the camera and the image. In other words, color profiles provide a "common language" for color spaces, so that colors are translated more accurately between devices.

Lightroom Classic CC displays colors using "device-independent" color spaces, which greatly simplifies color management for users. In fact, as expressed by Adobe, "All you need to do before working

1.7- About Color Management- (cont'd.):

in Lightroom Classic CC is to calibrate your monitor." After calibrating the monitor and beginning to work with Lightroom Classic CC, a user can select the appropriate color profiles and settings. We'll learn more about calibrating monitors and installing color profiles in the next lesson.

Lightroom Classic CC uses the Adobe RGB color space as the principal way that colors are displayed. Adobe RGB includes most colors captured by digital cameras, as well as some additional printable colors. Lightroom Classic CC uses Adobe RGB in five broad ways: To display previews in the Library, Map, Book, Slideshow, Print, and Web modules; when printing in "Draft" mode; in uploaded web galleries and exported PDF slideshows; when sending most photo books to the "Blurb" website; and for photos uploaded to photo-sharing sites using the "Publish Services" panel.

When the Develop module is active, Lightroom Classic CC displays previews using the ProPhoto RGB color space by default. You can also use the "Soft Proofing" panel in the Develop module to preview the appearance of color under a variety of color-managed printing conditions.

When you use Lightroom Classic CC to export or print a photo, you can select a profile or color space that will determine how colors appear on the device to which you send the file. In other words, you can choose a customized color profile appropriate for the "outside" device when exporting or printing in Lightroom Classic CC. In the next lesson, we'll take a closer look at installing color profiles.

1.8- Calibrating a Monitor and Installing Color Profiles:

Adobe recommends that users calibrate their monitors before using Lightroom Classic CC, so that colors are displayed reliably and consistently. Calibrating a monitor simply means that you adjust the monitor to conform with a known specification. Once you calibrate your monitor, you have the option of saving settings as a color profile for your monitor.

In addition to recommending that you calibrate your monitor before working with Lightroom Classic CC, Adobe provides five general "best practices" to follow when calibrating a monitor. First, if you are calibrating a CRT monitor, be sure to turn the monitor on at least half an hour before you begin calibration. This gives the monitor time to warm up enough to produce a consistent output. Second, before beginning to calibrate any monitor, adjust the ambient lighting in the room so that it matches the lighting conditions under which you normally work. Third, be sure that your monitor is displaying as many colors as possible. Ideally, your monitor should display millions of colors (rather than thousands of colors), or 24-bit or higher. Fourth, set your monitor's desktop background to display neutral grays, rather than colorful patterns, before calibrating the monitor. Doing this will increase the accuracy with which you perceive colors during the calibration, leading to better results. Finally, Adobe recommends calibrating your monitor using third-party software and measuring devices, rather than relying on the human eye to measure colors. Using a measuring device (such as a colorimeter) in conjunction with software will create a more accurate color profile. For more information about calibrating your computer's monitor, refer to the calibration tools that came with your computer's operating system.

Once you have calibrated your monitor and started working in Lightroom Classic CC, you can install color profiles. Generic color profiles are often installed when a new device is added to a computer system. However, the accuracy of such color profiles is often unreliable. Lightroom Classic CC lets you install additional color profiles, in order to get the best results from your specific equipment. Color profiles can be downloaded from the web, purchased from a custom profile service, or created using color profiling equipment. To install a color profile using Windows, simply copy the profile to the following location: \Windows\system32\spool\drivers\color. Once the color profile has been copied, you must restart Lightroom Classic CC before the color profile will be accessible.

1.9- Help Features in Lightroom Classic CC:

Lightroom Classic CC offers a wide variety of help features that can be accessed through its desktop interface. You can access these features through the "Help" drop-down menu in the Menu Bar. Most of the help features listed in the "Help" drop-down menu connect to online resources from Adobe. Generally, when you select an item from the "Help" drop-down menu, your computer's default web browser will launch and display the related content. The commands in the "Help" drop-down menu also change, depending on which module is currently selected. Let's review the links provided by the "Help" drop-down menu.

If you select "What's New" from the "Help" drop-down menu, you will be redirected to the "New features summary" page for Lightroom Classic CC. This webpage provides information about newly-introduced features in Lightroom Classic CC, as well as recent "bug fixes."

If you select the "Lightroom Classic CC Help…" option, you will be redirected to the "Lightroom Classic CC Learn & Support" page. This webpage provides links to commonly-used "help" resources, such as the Lightroom Classic CC User Guide. This webpage also provides a search tool, so that you can quickly find answers to specific questions.

If you select the "Lightroom Classic CC Tutorial…" option from the "Help" drop-down menu, you will be redirected to the "Lightroom Classic CC tutorials" page. This webpage allows you to choose between "Beginner" and "Experienced" tutorials, and provides short video tutorials to help you accomplish specific tasks in Lightroom Classic CC.

The next few commands in the "Help" drop-down menu change, depending on the currently selected module. These commands are always module-specific help commands.

The "Help" drop-down menu in Lightroom Classic CC's Menu Bar also provides links that assist you with Plug-In extras, managing your account, signing out of your account, and installing updates. Additionally, the "Help" drop-down menu contains options for viewing system information within your computer, and proprietary information about the Lightroom Classic CC software.

ACTIONS-
Getting Acquainted with Lightroom Classic CC

THE LIGHTROOM CLASSIC CC ENVIRONMENT:

1. **To access different panels and options related to different aspects of photographic workflow,** switch between modules in Lightroom Classic CC.
2. **To switch between modules**, click the various module buttons at the top right of the screen.

MODULES IN LIGHTROOM CLASSIC CC:

1. **To access Lightroom Classic CC's primary organizational features (such as managing, sorting, and rating photos),** use the Library module.
2. **To make visual enhancements and adjustments to photos in your catalog,** use the Develop module.
3. **To view your photos displayed on a map showing where each photo was captured,** use the Map module.
4. **To design photographic books from the photos in your catalog,** use the Book module.
5. **To create slideshows from selected photos in your catalog,** use the Slideshow module.
6. **To access tools for printing photos and contact sheets from your printer,** use the Print module.
7. **To create web photo galleries from the photos in your catalog,** use the Web module.

MANAGING PANELS:

1. **To maximize the display area of photos onscreen while keeping the features you need available,** manage the display of panels within the Lightroom Classic CC interface.
2. **To open or close any panel in Lightroom Classic CC,** click the panel header.
3. **To open or close all of the panels in a panel group,** hold down the "Ctrl" button on your keyboard while clicking the panel name.
4. **To open or close one panel at a time,** use Solo mode.
5. **To set Solo mode for a panel,** right-click the panel header and select "Solo mode" from the menu that appears. Alternatively, you can select Solo mode by holding the "Alt" button down while clicking on a panel header.
6. **To scroll through a group of panels,** drag the scroll bar on the side of the panel group or use your scrolling mouse wheel.
7. **To toggle the display of an entire panel group to either show or hide the panel group,** click the triangular "Show/Hide Panel Group" icon.
8. **To hide both side panel groups,** select "Window| Panels| Toggle Side Panels" from the Menu Bar. Alternatively, you can show or hide the side panels by pressing the "Tab" key on your keyboard.
9. **To hide all panels when you want to devote maximum screen space to photo display,** select "Window| Panels| Toggle All Panels" from the Menu Bar. Alternatively, you can show or hide all panels by holding down the "Shift" key on your keyboard while pressing the "Tab" key.
10. **To select a setting for automatically showing or hiding panels,** right-click on the narrow outside edge of a panel group, and select one of the four options displayed.
11. **To have a panel displayed as you move the pointer to the outside edge of the application window, and hidden again as you move the pointer away from the panel,** choose "Auto Hide & Show."
12. **To have a panel be hidden as you move the pointer away from the panel,** choose "Auto Hide." **(cont'd.)**

MANAGING PANELS- (CONT'D.):

13. To turn off all automatic show/hide behavior related to panels, select "Manual."

14. To apply the same hide/show behavior to the left and right panels (or to the top and bottom panels), select "Sync With Opposite Panel."

15. To resize the width of a panel group on the left or right of the screen, move your mouse pointer over the inside edge of the panel, closest to the photo display.

16. Next, when the pointer changes into a double-sided arrow, click and drag to make the panel wider or more narrow.

17. To remove a panel from view, right-click any panel header within the panel group.

18. Next, click to uncheck the name of the panel you want to hide from the pop-up menu that appears.

19. To restore a panel that has been hidden from view, right-click any panel header in the group, and then re-check the panel name.

20. To quickly show or hide all panel information with one click, use the "Expand All" and "Collapse All" options from the pop-up menu.

USING THE TOOLBAR:

1. To show or hide the toolbar, select "View| Show/Hide Toolbar" from the Menu Bar. Alternatively, you can press your keyboard's "T" key to toggle the toolbar on or off.

2. To display the toolbar pop-up menu, click the triangular menu button on the far right of the toolbar.

3. To modify the toolbar so that you can click to select the "Grid View," "Loupe View," "Compare View," or "Survey View," select the "View Modes" option from the toolbar pop-up menu.

4. To quickly apply keywords and other attributes to photos, select the "Painter" control from the toolbar pop-up menu.

5. To specify the sort direction or sorting criteria used to display photo thumbnails, select the "Sorting" control from the toolbar pop-up menu.

6. To assign or remove selected photos, or to display a "Pick" or "Rejected" flag for selected photos, choose the "Flagging" option from the toolbar pop-up menu.

7. To assign and remove ratings for selected photos, and displays rating stars for selected photos within the toolbar, choose the "Rating" option from the toolbar pop-up menu.

8. To display color labels for selected photos in the toolbar, and assign and remove color labels for selected photos, choose the "Color Label" option from the toolbar pop-up menu.

9. To rotate selected photos clockwise or counterclockwise, select the "Rotate" tool from the toolbar pop-up menu.

10. To be able to select the next image or the previous image from the selected photo, choose the "Navigate" tool from the toolbar pop-up menu.

11. To play an impromptu slideshow of selected photos, choose the "Slideshow" command from the toolbar pop-up menu.

12. To set the size of photo thumbnails, select the "Thumbnail Size" control from the toolbar pop-up menu.

13. To display other available controls in the toolbar pop-up menu, switch between views.

FILE FORMATS SUPPORTED IN LIGHTROOM CLASSIC CC:

1. **To convert proprietary raw files to DNC files,** use the Lightroom Classic CC interface.
2. **To work with TIFF (TIF) files in Lightroom Classic CC,** import TIFF (TIF) files that are 65,000 pixels per side (or smaller). Lightroom Classic CC can import 8-bit, 16-bit, and 32-bit TIFF (TIF) images.
3. **To retain color information within an RBG image while compressing file size,** use the JPEG file format.
4. **To work with a multi-layered Photoshop Document (PSD) in Lightroom Classic CC**, save the file in Photoshop with the "Maximize PSD and PSB File Compatibility" preference active.
5. Next, import the saved PSD file into Lightroom. Lightroom Classic CC can import and save PSD files with a bit depth of 8 bits or 16 bits per channel. However, to work with 32-bit images in Lightroom Classic CC, you must save a file using the TIFF format.
6. **To work with CMYK files in Lightroom Classic CC,** be aware that adjustments and output are performed in the RGB color space.
7. **To produce images with smooth background transparencies,** work with Portable Network Graphics (PNG) files in Lightroom Classic CC.
8. **To attempt to extend Lightroom Classic CC's ability to import video file data,** refer to Adobe's website.
9. See Adobe's instructions for installing more codecs to import certain data from video files.

ABOUT COLOR MANAGEMENT:

1. **To achieve the most accurate and consistent color display,** calibrate your computer monitor before working with Lightroom Classic CC.
2. **To preview the appearance of a color under a variety of color-managed printing conditions,** use the "Soft Proofing" panel in the Develop module.

CALIBRATING A MONITOR AND INSTALLING COLOR PROFILES:

1. **To properly calibrate your monitor,** refer to the calibration tools that came with your computer's operating system.
2. **To properly calibrate a CRT monitor,** turn the monitor on at least thirty minutes before calibration.
3. **To achieve better visual results when calibrating a monitor,** adjust the ambient lighting in the room before calibration, so that it matches lighting conditions under which you normally work.
4. **To achieve optimal calibration results,** be sure that your monitor is displaying as many colors as possible.
5. **To increase the accuracy with which you perceive colors during a calibration,** set your monitor's desktop background to display neutral grays before beginning to calibrate a monitor.
6. **To achieve the best results possible,** calibrate your monitor using third-party software and measuring devices, rather than relying on the human eye to measure colors.
7. **To install a color profile using Windows,** copy the profile to the following location: \Windows\system32\spool\drivers\color.
8. After the color profile has been copied to the above location, you must restart Lightroom Classic CC before the color profile will be accessible.

ACTIONS-
Getting Acquainted with Lightroom Classic CC

HELP FEATURES IN LIGHTROOM CLASSIC CC:

1. **To access Lightroom Classic CC's help features,** use the "Help" drop-down menu in the Menu Bar.
2. **To see a summery of new features and updates for Lightroom Classic CC,** select "What's New" from the "Help" drop-down menu.
3. **To view the "Lightroom Classic CC Learn & Support" webpage,** select "Lightroom Classic CC Help…" from the "Help" drop-down menu.
4. **To visit the "Lightroom Classic CC Tutorials" webpage,** select "Lightroom Classic CC Tutorial…" from the "Help" drop-down menu.
5. **To access help files related to the currently selected module within Lightroom Classic CC,** select from the following module-specific help commands that appear in the "Help" drop-down menu.
6. **To find helpful information related to Plug-in extras, account management, installing updates, system information, and proprietary information about Lightroom Classic CC,** see the "Help" drop-down options in the Menu Bar.

EXERCISES-
GETTING ACQUAINTED WITH LIGHTROOM CLASSIC CC

Purpose:

1.   To be able to recognize, and navigate to, the different areas of Adobe Lightroom Classic CC

Exercises:

1.   Launch the Lightroom Classic CC application.
2.   Locate Lightroom Classic CC's Menu Bar.
3.   Locate Lightroom Classic CC's seven different modules.
4.   Locate the Filmstrip panel.
5.   Locate the panels on the left and right sides of the Lightroom interface.
6.   Click a panel header to open the panel.
7.   Click the same panel header again to close the panel.
8.   Hold down the "Ctrl" button on your keyboard while clicking a panel name to open all of the panels in a panel group.
9.   Hold down the "Ctrl" button on your keyboard while clicking the same panel name to close all of the panels in the panel group.
10.   Click the triangular "Show/Hide Panel Group" icon on the outside of a panel group to hide an entire panel group.
11.   Click the "Show/Hide Panel Group" icon again to show the panel group.
12.   Select "Window| Panels| Toggle Side Panels" from the Menu Bar to hide both side panel groups.
13.   Press the "Tab" key on your keyboard to show both side panel groups again.
14.   Select "Window| Panels| Toggle All Panels" from the Menu Bar to hide all panels from view.
15.   Hold down the "Shift" key on your keyboard while pressing the "Tab" key to show all panels again.
16.   Right-click any panel header within a panel group, and then, using the pop-up menu that appears, click to uncheck the name of a panel you want to hide from view.
17.   Right-click any panel header in the same group, and then, using the pop-up menu, click to re-check the name of the panel and show the panel within the panel group.
18.   Locate Lightroom Classic CC's toolbar.
19.   Select "View| Show/Hide Toolbar" from the Menu Bar to hide the toolbar.
20.   Press the "T" key on your keyboard to show the toolbar again.
21.   Click the triangular menu button on the far right of the toolbar to display the toolbar pop-up menu.
22.   Select the "View Modes" option from the toolbar pop-up menu to modify the toolbar so that you can click to select different views.
23.   Locate the "Help" drop-down menu in the Menu Bar.
24.   Select "Lightroom Classic CC Help…" from the "Help" drop-down menu to launch the "Lightroom Classic CC Learn & Support" webpage in your computer's web browser.
25.   Close the web browser to dismiss the webpage and return to Lightroom Classic CC.
26.   Close the Lightroom Classic CC application.