

# Windows 10 Handout

## Intro

- What is Windows 10?
  - Windows 10 is the latest operating system offered by Microsoft. An operating system is the software that manages all the hardware and software on your computer. There are only a handful of other major consumer operating systems including Apple OS, iOS, Android, ChromeOS, and Linux.
- What is different from previous versions?
  - The jump from Windows 7 to Windows 8 was meant to create an operating system that look and worked the same across PCs, Windows tablets, and Windows phones, and thus has a more tablet-like presentation. Many people did not care for the drastic changes on the PC platform, and this led to Windows 8.1 and the expedited release of Windows 10. Windows 8.1 brought back much of the desktop look and functionality while features like the Start Menu and Settings retained the tablet look and feel (the full screen Start Menu from Windows 8 can be brought back at Settings > Personalization).
- With Windows 10, Microsoft continues to strive to be a cross-platform operating system by providing customizable functionality while also saving account information in the cloud. The cloud will synchronize various preferences and settings across devices, plus you can access your Edge bookmarks, Word documents, and personal reminders on any Windows 10 device when using your Microsoft account. Many of the applications that facilitate this, like Cortana and OneDrive, will require a Microsoft account to use, but you can still get basic functionality of Windows 10 without one.
  - Examples of a Microsoft account include usernames to: Office 365, Office Online, Bing Rewards, Xbox Live, Skype, Groove Music, and Outlook.com.
- Some standard and popular applications have been removed, like Minesweeper and Solitaire (which can now be found in the App Store), others have evolved, like Windows Explorer into File Explorer (used for browsing and organizing files), Internet Explorer into Edge (though Internet Explorer is still available), and the Start Menu Search into Cortana. Windows Media Player is still around, but no longer supports DVD playback... you will need to use another application to play DVDs. Most

Windows 10 laptops come with 3<sup>rd</sup> party software for playing DVDs, otherwise one could download a free application called VLC Player.

- Most of the standard applications and features are now highly customizable, like the Start Menu tiles or Quick Access folders in File Explorer.
  
- To upgrade or not to upgrade?
  - Since the end of 2016, consumer-level computers have only been shipped with Windows 10 installed, so if you are planning to buy a new computer, you will not have a choice (though you can still downgrade Windows 10 Pro to Windows 8.1 Pro or Windows 7 Pro).
  - Up until July 29, 2016, Windows 10 was a free upgrade, but that promotion is now over. For those that upgraded during the free promotion, there was a 31-day period where you could revert back to the old operating system in the Recovery options, but now, if you were to purchase and install a Windows 10 upgrade, that period has been cut down to 10 days (Settings > Update & Security > Recovery) without reinstalling Windows.
  - Official extended support for Windows 7 Home Premium ends in 2020 and Windows 8.1 ends in 2023, so if you are inclined to leave well-enough alone while planning to buy a PC before then, waiting might be the safest option.
  - If you are a gaming enthusiast, the latest version of DirectX 12 is only supported on Windows 10, giving access to the latest and greatest visual effects and performance enhancements, though not many games take advantage of it. Also, many Xbox One games are now Windows 10 compatible, and there is Gaming Mode to optimize game performance by minimizing background processing.
  - Many people run into issues upgrading to Windows 10 from Windows 7 or 8.1, including freezing, blue screens, and incompatibility issues with older hardware and software. Software and firmware updates may help resolve these issues, but are not always available (especially for older peripherals and software). People with fresh Windows 10 installs or computers purchased with Windows 10 already installed tend not to have these issues.
  
- So when can we expect Windows 11?
  - When Windows 10 first came out several years ago, people at Microsoft were saying it will be the last release of Windows, and that their intention was to rebrand Windows as a constantly evolving service.

- Instead of new Windows releases, expect “major” updates to Windows 10 once or twice a year. These will add or change various features of Windows.
    - There have been three major updates so far, dubbed The Anniversary Update, The Creators Update, and The Fall Creators Update.
    - Additions and changes introduced in the updates include:
      - New settings for Windows Update and Microsoft Edge.
      - Addition of 3D Paint and Mixed Reality Portal (for virtual reality apps).
      - Subtle changes to the Start Menu and Cortana functionality.
    - These updates often take upwards of 30 minutes and are required to maintain support for your copy of Windows.
      - You will be prompted before a major update, and can defer them for months.
  - While there are rumors of a cloud-based Windows in the works (similar to what Chromebooks use), it would not be a direct successor to Windows 10.
- Major Updates
    - Microsoft has claimed that Windows 10 will be the last version of Windows. Instead of releasing new versions, they plan to release major updates every six months or so (thus far in March and September, with update names like version 1703 and 1709).
    - These updates tend to be large, and take 30 minutes or more to complete. When you get a notification regarding the update, try to make sure your computer will be powered for the duration of the update.
    - Each major update makes minor changes to things like available options in settings and menu functionality, and usually adds an application or two.
      - The latest updated added “Mixed Reality Portal” which is for Microsoft’s entrance into virtual reality apps. Before that came “3D Paint.”

## **The Lock Screen**

- What you see after leaving your computer idle or locking it (ctl+alt+del > Lock).
- The new lock screen is similar to something you see on nearly all tablets and phones. Clicking on it will bring you to the login screen.
- It will have a scenic photograph and clock by default, but some things can be customized at Settings > Personalize > Lock Screen.

## The Login Screen

- What you should see after turning on your computer or switching users.
- The Login Screen works essentially the same as Windows 7, with a list of users in the lower left, and icons for Internet Connections, Ease of Access, and Power in the lower right.
  - To add users, go to Settings > Accounts > Family & other users.

## The Desktop

- Where your background and icons are located.
- The desktop should also seem familiar, as intended. Icons still open applications with a double-click, right-clicking an icon opens a similar menu as before, and right-clicking the wall-paper also still shows the same customization menu.
  - Right-click > Personalize is where we would go to change our desktop and Login Screen images, as well as customize the prevalent accent color. Personalization can also be found in Settings > Personalization.
  - Settings > Personalization > Themes > Themes settings takes us to the Windows 7 style personalization screen.
    - Right-click > Display settings takes us to where we can enlarge font size and change the resolution to make things easier to see.
    - Also, as before, `ctl+alt+del` brings up a menu screen for locking the computer, switching users, signing out, changing your password, and an improved Task Manager. The Internet Connections, Ease of Access, and Power icons from the Login Screen are also present.
      - Task Manager - where you can see what applications are currently running on your computer.
        - Clicking on “More details” will reveal a wealth of information regarding the current status of your computer. If your computer is running slowly or locks up, you can see what is using up your computer's resources and try to close a program from here.
        - While the task manager does not present anything that was not in Windows 7, it does bring a lot of the old stuff together, including the Performance Monitor, Startup Programs, and a more direct link to Services.

## Task Bar

- The strip below the desktop with icons, clock, and search field by default
- The task bar is an extremely customizable tool that includes the Start Menu, Cortana, the Task View, Quick Launch icons, opened application icons, and the Notification Area.
- Right-clicking the Task bar brings up a few customizations and functions, like shrinking Cortana, pulling up the Task Manager, or organizing your open windows. The Properties menu item brings up more Task Bar customizations including moving or hiding the Task Bar and changing the behavior of icons in the Notification Area.

## Start Menu

- Back by popular demand after missing in Windows 8. It is represented by the Windows icon in the lower-left.
- Right-clicking pulls up a menu of popular administrative applications as they were named in Windows 7.
  - The System information, Programs and Features (where you can see all programs installed on your PC), and Device Manager (where you can see everything attached to your PC), can be found here, as well as a link to the Shutdown options and Control Panel, the applications in which are all gradually being integrated into Settings.
- Left-clicking opens the Start Menu.
  - Starting on the far left is an icon of a person. Clicking on it displays the current user and brings up a menu to change account settings, switch user, logout, or lock the computer. This is followed by a gear to open Settings and a Power button for locking the computer, shutting down, or restarting.
  - To the right of these icons is a list of all the applications installed on the computer. Some applications might be listed within a folder.
    - Right-clicking an app will bring up a short menu with options to Pin/unpin the app to the tiles on the right, uninstall (most apps), or pin the app to the Task Bar under More. You can also drag the app across to wherever you'd like the tile to appear in the Start Menu, or shortcut to appear on the desktop.
  - On the right is a shrunken version of the Windows 8 Start Screen. When you pin an app to the Start Menu, a tile for that app is placed here. Click to open an app, click and hold to drag it somewhere else in the tile list or create a shortcut on the desktop.

- Right-clicking an app gives the option to Resize the tile, and under More, the option to turn off the animations (live tile) among the other option listed for the apps on the left.
- The tiles are separated into nameable groups. Click on the name field to name a group... you can see/create these fields as you drag a tile. Tiles can be arranged to create more groups.
- Under Settings > Personalization > Start, you have the option of bringing the full-screen Start Menu back from its Windows 8 grave.
- The Start Menu is resized by holding the cursor over the right or top edge and dragging.
- It is also worth noting that Windows 10 comes packaged with many useful but non-essential apps like Weather, Photos, and Mail. Be sure to check them out before searching for other similar apps on the store (or deciding to delete them).
- **Settings**
  - Most of what comes up in Settings is a reorganized view of most of the Control Panel, and is reminiscent of a tablet setup with it collection of toggle switches. A few of these will be highlighted later.
  - For those who want to try upgrading (though you will now have to pay for it), it is worth know about the recovery option in Settings > Update & Security > Recovery. If you are having performance issues but want to stick with Windows 10, try Resetting this PC. Below that is the option to revert back to your previous version (if it has been 10 or less days since upgrading).
  - Another function in the settings is the ability to add other accounts to the computer for multiple users. This is found in Settings > Accounts > Family & other users. Just click the + button to add their user account.

## Cortana/Search

- Microsoft describes Cortana as a digital personal assistant. It generally functions the same as Siri for Apple products, though the specifics of its functionality continues to change with every update.
  - Essentially, you ask Cortana a question, and it will use a Bing search on the Internet to answer it.
- The name comes from an old Microsoft game called Halo, and many of her canned responses make reference to the game.

- You must be connected to the Internet for Cortana to work, and you must be logged in with a Microsoft account to use it to use many of its functions, like setting appointments and reminders.
- Cortana has a few icons on the left side for configuring.
  - Home
    - This is where you can do a basic search of your computer or the web.
  - Notebook
    - This is where you can configure what Cortana knows about you.
  - Phone
    - This is where you can set up syncing with another device.
  - Settings
    - This where you can set a few Cortana-specific settings.
- According to my research, you must be at least 13 years old to use its account functions due to the Children's Online Privacy Protection Act.

## **File Explorer**

- This is the evolved form of Windows Explorer from Windows 7, and is similarly represented by the folder icon on the Task Bar. Clicking on File Explorer will open it in the Quick Access view by default.
- Once open, things should look like Windows Explorer, yet a little different. Pinned and frequently opened folders will be on the top, recently opened files on the bottom.
- Right-clicking on a folder will give us the same options as in Windows 7, with a few additions. Of note, are the menu items 'Pin to Quick Access' to add a folder to the Quick access folder and 'Pin to Start' to add a tile to the Start Menu.
- Like Office applications, File Explorer has a ribbon which can be shown and hidden with a small arrow in the upper-right corner. Most of the options under the File, Home, and View tabs were available to us in Windows 7 with small icons or right-clicking.
- Worth noting on the left, what was formerly "My Computer" is now "This PC." When you click on it, a "Computer" tab will appear in the ribbon with a few different options like mapping a network drive.
- Also worth mentioning on the right is OneDrive. This is cloud storage associated with a Microsoft account. You get 15 GB for free and can access it anywhere you have an Internet connection.

## **Task View**

- This icon is for organizing and arranging your workspace. Clicking it will tile all of your currently open Windows. Click on a Window to bring it to the forefront. Click the X above an application window to close the app.
- While in the Task View, you can also create and arrange desktops. In other words, you can create a desktop for work, another for recreation, and then use these desktops to group your open applications.
- Hovering over the desktop views at the bottom will toggle your desktop selection while giving you a view of your open applications. You can reorganize your open applications by dragging the application window to a different desktop. Clicking the X above the desktop view will kill the desktop and move the open applications to another desktop.

## **Store**

- The Store icon takes you to Microsoft's app store. It looks and behaves like other app stores (Google Play and Apple App Store).
- While many apps are free (usually with in-app purchases or ads), you'll still need to login with a Microsoft account to download anything.
- Making purchases will require associating a form of payment with your account.

## **Notification Area**

- This part of the Task Bar looks like that of Windows 7, and contains the clock, battery life, Network Connections, Sound, and Action Center by default.
- You can customize what you see here by going to Settings > Taskbar then clicking "Select which icons appear on the taskbar" or "Turn system icons on or off"
- If the Action Center get annoying with notifications, you can click on it, then click "Quiet Hours" to turn them off.

## **View Desktop (far right)**

- This is a little space on the far right of the Task Bar and was also in Windows 7. Clicking it minimizes/restores any open windows, revealing the desktop.

## Edge

- Edge is Microsoft's new web browser to replace Internet Explorer. It's faster, more streamlined, and has a few new options to look at. Internet Explorer 11 is still available within Edge under More if compatibility issues arise, and you can always download Chrome, as well.
- Like most browsers now, the address bar also serves as a search bar (uses Bing search by default, can be changed in More > Settings).
- You can now preview by hovering over tabs.
- If available, click the book for "Reading View." This is supposed to clear away ads and pop-ups on the page.
- Click the star to add a page to Favorites or the Reading List, access them again through "the hub," which is represented by the three lines.
  - The Reading List saves an offline version of the page and will sync it across your devices if logged in with a Microsoft account. In other words, you won't need an internet connection to access it again.
- Click the hub to view websites on your Favorites and Reading list. You can also view/delete your history and see your downloads here.
- Click the pen in the dashed rectangle to make a web note. Essentially you enter a mode where the webpage becomes a picture you can draw on, crop, and save. Click Exit at the far right to exit this mode.
- Next to the Web Note icon is the Share icon, which you may have noticed earlier in other applications. Clicking on this here, or anywhere, pulls up a list of apps available for sharing your media. Mail is the only available included app by default, and your shared file would be an attachment as an email.
- Under the More icon should be some familiar options like zooming and printing, as well as Settings.
- You can click "Pin this page to Start" to add it to the Start Menu tiles.
- In Settings are some common customization options, like setting your Start page or pages, as well as the new Theme setting for light and dark.
- In Advanced settings is where you can turn on the Home button and set a home page, as well as turn off the annoying password remember pop-ups and change your default search engine.
- You can clear your history under 'Clear browsing data.' There is no clearing the history on exit, but there is the InPrivate window option that will not save anything as you browse (similar to the Chrome's Incognito mode).