Lab 2

Passwords & Windows Updates

Download this file from Blackboard under assignments. Save your Lab to your computer. When your assignment is complete, you must go online to Blackboard under Assignments and click on the link for this Lab’s Answers. Type in the answers to the questions in this document by the due date listed on your syllabus for full credit.

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| Overview | You work in the Information Technology department installing new computers and training new users in basic security aspects of the computer. You have been given the task of ensuring that Windows updates are downloaded and up to date. You also need to make sure that strong passwords are used by new employees on the computers in the office. |
| Complete this lab using an internet browser. | |
| Completion time | 75 minutes |

1. Computer operating systems use updates, patches and service packs to make changes to the operating system. Updates and patches are small software units that may fix a problem or enhance security in the operating system (or program). Service packs are a group of updates and patches that are installed together. After a length of time, there are so many updates and patches available that it becomes easier to package the updates and patches into a service pack and get the updates done at one time. Sometimes new features are added into the service packs too.
2. Use the internet to research windows updates, service packs, and patches.
3. In your research, find out how you can configure your computer (or the computer that you are using to complete this class) to run the updates automatically.
4. There are different options for updates depending on the operating system that you are using (Mac, Windows, Linux, Android, iOS…). Think about the way that your device updates. Most devices have options for handling the updates. Some of these options are listed below.
   * Automatic (download at specific time every day): - good option if you have a time during the day that you have low activity on your computer and you can afford it to download automatically. The computer needs to be on at the time selected or it may start running when you start up the computer & slow it down then. This is good for a person who will not pay attention to updates getting installed.
   * Download updates for me, but let me choose when to install them: - This gives you, the user, the control as to when the updates are installed. It is also good for troubleshooting because you will know when an update has been installed, so if it causes a problem, it will be easier to solve. You must be aware of your computer enough to actually get them installed.
   * Notify me but don't automatically download or install them: - this is similar to the previous item, but it will take longer for you to implement because you have to wait for the updates to download AND install.
   * Turn off Automatic Updates: - this is not a good option for a stand alone computer, but may be what is used in a business environment. Sometimes businesses have a server that will push the updates down to the computers on it's network so that all of the computers are not going out to install updates individually.
5. Read 2 of the 3 links below.

<http://www.microsoft.com/protect/yourself/password/create.mspx>

<http://www.securityfocus.com/infocus/1537>

<http://netsecurity.about.com/cs/generalsecurity/a/aa112103b.htm>

1. Answer the questions below.

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| **Question 1** (2 points) | What are 2 characteristics of a strong password? No Dictionary words and no Personal Information |

Update your personal passwords to make them more secure.

browser Security

Follow the steps for each exercise you can watch the video available on blackboard that corresponds to the lab. The OPTIONAL video will guide you in securing the internet explorer browser. It is not necessary to have a windows machine to complete this lab. It is a research assignment.

There is NOT a discussion board posting for this assignment.

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| Overview | You have learned about basic security aspects of the computer. You have been given the task of determining a level of security that is appropriate for your computer at home for internet browser. |
| Complete this lab using an XP or Vista or Win7 or Win 8 computer and with an internet browser. | |

1. Research Browser Security.
2. After researching this project, answer the questions below.

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| **Question 2** (2 points) | What are 2 security features of your favorite browser? Private Browsing and the ability to disable cookies |
| **Question 3** (4 points) | What is the browser that you consider to be the most secure (based on your research) and WHY? Chrome based on the fast turnaround of updates  Name a reason to still use a browser that you might consider to be less secure? To test the usability of your websites for your customers who do use those browsers |

1. OPTIONAL - Watch the video CSSIA\_SA\_IEBrowserHardening.avi. It is a demonstration of Hardening the Internet Explorer Browser. Use the video to help with your research below.
2. Now, search the internet for additional tips about hardening your browser. (You may search for tips on browsers other than the internet explorer). Some links are provided below, but you can search for your own.

<http://searchenterprisedesktop.techtarget.com/tip/0,289483,sid192_gci1241319,00.html>

<http://technet.microsoft.com/en-us/library/cc722654.aspx>

<http://gladiator-antivirus.com/forum/index.php?showtopic=75428>

1. Answer the question below.

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| **Question 4** (2 points) | What are 2 tips you could use to harden your browser? Install no script security addons and open your browser in private mode by default |

Make sure that you apply some of the knowledge you learned from your research in this lab to Harden your browser to make it more secure.

Backup Data & Antivirus

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| Overview | You have learned about basic security aspects of the computer. You have been given the task to create a backup plan for your files as a student AND to create a personal Information Security Plan. You will also ensure that the computer is protected from viruses by installing an antivirus program that is appropriate for your computer at home. |

You can watch the video Lab2\_Backup. It is a demonstration of Backing Up Data. Use the video to help you backing up data on your computer using Windows XP. NOTE: If you do not have a floppy diskette, you can select a different destination.

OPTIONAL – Windows XP – the video is the instruction set for running a backup using Windows XP. Run the video and follow the steps in the video.

OPTIONAL – Steps to Backup in Windows 7

* Click on **Start**, **Control Panel**, **System and Security**, **Backup and Restore**
* Click on **Set up backup**.
* Select the destination to save your backup to. (Possible options are CD/DVD drives, USB drives, or Floppy drives. You may need to plug in one of these devices or put in a blank writable CD/DVD)
* Click on **Next**.
* On the What do you want to back up page, click on **Let me choose**, then click on **Next**
* There are a few different types of backups to consider.
  + System backup – complete backup of Windows 7. This is meant to be restored completely so that you can run windows 7 again after the restore.
    - If you are interested in a system image, check the box that says **Include a system image of drives: System Reserved, (C:)** otherwise, uncheck this box
  + File/Folder backup – this is a partial backup of specific files and folders on the computer. It is meant to back up data on the computer. You can restore the specific files and folders, but if the operating system fails, you will have to reinstall it, then restore this data back to the computer. You can browse the C drive and **check** the specific folders that you want to backup.
* After checking what you would like to backup, click on **Next**
* Note the schedule for the backups. It defaults to Every Sunday at 7:00 PM. You want to schedule backups to run automatically at a time when you are not typically using your computer, but at a time when the computer is turned on. Optional: Click on **Change Schedule** to schedule a time and update the time/day/frequency.
* Click on **Save settings and run backup**. This will run the backup immediately and then schedule the next time for the backup utility to automatically run.

OPTIONAL – Steps to Backup in Windows Vista

* Click on **Start**, **Control Panel**, **System and Maintenance**, **Backup and Restore Center**
* There are a few different types of backups to consider.
  + Windows Complete PC backup – complete backup of Windows 7. This is meant to be restored completely so that you can run windows 7 again after the restore.
    - If you are interested in a system image, Click on the **Back up computer** in the Create a Windows Complete PC Backup section and follow the steps listed.
  + File/Folder backup – this is a partial backup of specific files and folders on the computer. It is meant to back up data on the computer. You can restore the specific files and folders, but if the operating system fails, you will have to reinstall it, then restore this data back to the computer. You can browse the C drive and **check** the specific folders that you want to backup. The following steps are to create backup copies of your files and folders
* In the top portion of the screen in the Back up files or your entire computer, click on **Back up files**.
* Select on a hard disk, CD, or DVD, and click on the down arrow below it to pick the exact location to save your backup to. (Possible options are CD/DVD drives, USB drives, or Floppy drives. You may need to plug in one of these devices or put in a blank writable CD/DVD)
* Click on **Next**.
* On the What file types do you want to back up, click the check box to the left of the type of files to backup.
  + NOTE: when you select **Music**, Windows Vista will automatically backup the files in the **Music** folder for the user. **C:\users\username\music** If you have music in a different location, it may not find the music and back it up. A problem with the windows Vista utility for backup is that it does not allow you to select specific files.
* After selecting the type of files to back up, click on **Next**
* Note the schedule for the backups. It defaults to Every Sunday at 7:00 PM. You want to schedule backups to run automatically at a time when you are not typically using your computer, but at a time when the computer is turned on. Optional: Click on **Change Schedule** to schedule a time and update the time/day/frequency.
* Click on **Save settings and start backup**. This will run the backup immediately and then schedule the next time for the backup utility to automatically run.

1. Go online to blackboard, under Assignments for this Lab, and answer the following questions.

Keep in mind that I expect your answers to be written as you would write them in a memo in a business setting. Do NOT use acronyms. Write in complete sentences. Spell correctly. Do NOT use all CAPS.

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| **Question 5** (4 points) | Devise a backup strategy for backing up your data for your homework in your classes here at Madison College.  In your answer, please (1) include the type of data you need to backup, (2) what you have to win or lose if your data becomes lost and you have not backed up the data, and (3) destination or place you will copy your data to. I need to back up many different types of data in my class folder structure that includes items such as databases, images, and html files and scripts. I could lose unsubmitted work if I didn’t back up my data, but I back up to my dropbox account as well as cloning my external hard drive to another drive at home. |

1. Search on the internet for Free antivirus software packages.
   * Before you download anything from the internet, you need to find out if it is safe to download. Here are some ways to determine if is from a trusted source. You can check Consumer Reports, look at reviews from trusted magazines, and/or see if your anti-virus or browser has marked it the website as a safe site.

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| **Question 6** (2 points) | Name 2 tips for avoiding viruses? Download only from sites you trust. Scan files before you open them. |

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| **Question 7** (4 points) | Create a Personal Information Security Plan.  In your answer, include security threats and actions that you currently take or are planning to take to protect your personal computer(s), home network, identity, and student files against these threats.  List at least **4** threats **and** actions you will take to reduce the risk of these threats.  I only access secure wireless networks with my devices that contain sensitive information (including my phone) to prevent anyone from discovering my information. I have a vault for my passwords so that they can be strong, unique, and not stolen by someone taking a written list. I have a separate vault for my personal information so that no one can mine the information they would need to steal my identity. I only visit trusted sites, and visit the Web of Trust website in cases where I am uncertain, but need to access a new site so that my browsing does not expose me to unnecessary risk. |

1. Go online to blackboard, under Assignments. Type in the answers to the questions above in the Lab2 Answers link.

## Submit assignment to blackboard

When your assignment is complete, you must submit your answers to the questions in Blackboard under Assignments. This must be completed by the due date listed on your syllabus for full credit.

After you have submitted, from inside blackboard, click on Tools, My Grades

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|  | Submitted, but not graded |
|  | NOT submitted. This shows that either your computer locked up or you lost connection to the internet OR you clicked on Save instead of Submit. Your instructor can clear this indicator if you email them. |