

Individual Research Paper Guidance

Task: Based on your assigned individual topic (assigned topics begin on page 3 and can also be found in the spreadsheet uploaded in the Research Paper folder on Blackboard), write a paper that is a minimum of **6 full pages**. Your paper should detail the specifics of your assigned topic and you must use **four (4) sources** beyond the links provided for you. Your sources should complement your article topic.

Paper must be written using the following characteristics:

- 6 **FULL** pages, meaning page six should have no space left on it.
- **12-point font, Times New Roman, & Double-spaced, and in APA format.**
- **Submit the paper in Microsoft Word format.**

DO NOT ADD DOUBLE SPACES BETWEEN PARAGRAPHS OR TITLES BEFORE EACH SECTION IN AN ATTEMPT TO MAKE THE PAPER LONGER. THEY WILL BE DELETED.

- Proper grammar & correct spelling

Requirements: You must include a separate cover sheet and reference page for full credit. The cover sheet and reference sheet are not included in your page count. **(5 points)**

*******Papers that do not meet the minimum page requirement will automatically be deducted 20 points regardless of how many pages/lines short it is. *******

At a minimum, make sure **ALL** the following are addressed:

- Explain what the problem or problems are that are covered in the article. Is it a security flaw, bug, weakness, vulnerability, etc. **(10 points)?**
- A brief history of the issue, to include its intended targets and its residual victims. Discuss anyone that may be affected. **(10 points)**
- How long the security issue or issues that were exploited have been in existence. When was it discovered and by who? Is there a fix for it? Why or why not. **(10 points)**
- Explain what, if any, precautions could have been taken to prevent the compromise. If the security issue has not been exploited yet, describe how its exploitation can be prevented from happening. **(10 points)**
- Any other companies/organizations that have been, or could be, affected by the security exploit/flaw? (What companies/organizations and when) **(10 points)**
- Statistics on how many other times it has been used and provide at least two (2) real-world examples related to your topic. If the exact issue hasn't happened choose a similar issue. **(10 points)**
- What other options are available on the market to avoid the use of the compromised technology/device/operating system/etc. **(10 points)**

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- Be sure to address any and all security implications, as well as federal, state, or government issues that may apply and may have been violated. Also, address the industry it focuses on and why? (Medical, Finance, Home, IT, etc.) **(10 points)**
- Four (4) outside sources related to the article topic and at least 5 in-text citations. **(5 points)**

Submission: You will submit your assignment under the Individual Research Paper folder via the Individual Research Paper Turnitin link.

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Student Name:		Topic Area:	Starter Article:	Link:
		Hacking Patient Monitoring Systems	Hackers can attack patient monitoring systems to alter vital signs in real time	https://www.techrepublic.com/article/hackers-can-attack-patient-monitoring-systems-to-alter-vital-signs-in-real-time/
		Hacking CT Machines Damage to Patients	CT machines can now be hacked to boost radiation and cause 'severe damage' to patient	https://www.techrepublic.com/article/ct-machines-can-now-be-hacked-to-boost-radiation-and-cause-severe-damage-to-patient/
		ATM Machine Cash Hack	69% of ATMs can be hacked to spit cash in minutes	https://www.techrepublic.com/article/69-of-atms-can-be-hacked-to-spit-cash-in-minutes/
		Hacking Modern Cars	'Indefensible' hack could leave modern cars vulnerable to critical cybersecurity attack	https://www.techrepublic.com/article/indefensible-hack-could-leave-modern-cars-vulnerable-to-critical-cybersecurity-attack/
		Security Risk of Connected Cars	Why the connected car is one of this generation's biggest security risks	https://www.zdnet.com/article/why-the-connected-car-is-one-of-this-generations-biggest-security-risks/
		SEC database Hack	Hackers broke into an SEC database and made millions from inside information	https://www.cnbc.com/2019/01/15/international-stock-trading-scheme-hacked-into-sec-database-justice-dept-says.html
		SCADA Hacks	SCADA security: Bad app design could give hackers access to industrial control systems	https://www.zdnet.com/article/scada-security-bad-app-design-could-give-hackers-access-to-industrial-control-systems/
		Hacking Ships	Bad passwords and weak security are making ships an easy target for hackers	https://www.zdnet.com/article/bad-passwords-and-weak-security-are-making-ships-an-easy-target-for-hackers/
		US Missile System's Poor Cyber Security	US ballistic missile systems have very poor cyber-security	https://www.zdnet.com/article/us-ballistic-missile-systems-have-very-poor-cyber-security/
		Facebook Bug Exposed Photos	Facebook bug exposed private photos of 6.8 million users	https://www.zdnet.com/article/facebook-bug-exposed-private-photos-of-6-8-million-users/
		Hacking Risks with Online Gaming	Online Gaming May Put You at Risk of Being Hacked	https://www.nbcdfw.com/news/local/Online-Gaming-May-Put-You-at-Risk-of-Being-Hacked-468172433.html
		Nest Security Camera Hacks	Man claims hacker talked to him through his Nest security camera	https://www.digitaltrends.com/home/nest-security-camera-hacked-security-flaw/
		Pacemaker Cyber Security Concerns	FDA Recalls 465,000 Pacemakers Due to Cyber Security Concerns	https://www.inc.com/will-yakowicz/fda-warns-st-jude-pacemaker-vulnerable-to-hackers.html
		Meme Malware	New Malware Takes Commands From Memes Posted On Twitter	https://thehackernews.com/2018/12/malware-twitter-meme.html
		Smart Fridge Concerns	Your smart fridge may kill you: The dark side of IoT	https://www.infoworld.com/article/3176673/internet-of-things/your-smart-fridge-may-kill-you-the-dark-side-of-iot.html
		US Nuclear Power Plant's at Risk	Hackers breached a US nuclear power plant's network, and it could be a 'big danger'	https://www.businessinsider.com/nuclear-power-plant-breached-cyberattack-2017-6
		Protecting Baby Monitors	Protecting Baby Monitors From Hacking	https://staysafeonline.org/blog/protecting-baby-monitors-hacking/
		Hacking Voting Machines	Russia Targeted Election Systems in All 50 States	https://www.nytimes.com/2019/07/25/us/politics/russian-hacking-elections.html

See the Research Paper Topic Assignments Document for your assigned topic.

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See the Research Paper Topic Assignments Document for your assigned topic.		Sony Pictures Hack	Sony Pictures computer system hacked in online attack	https://www.bbc.com/news/technology-30189029
		ATM Skimmers Stealing Credit Card Data & PIN	New ATM Attack Uses Customer-Built Skimmers to Steal Credit Card Data and PINs	https://securityintelligence.com/news/new-atm-attack-uses-customer-built-skimmers-to-steal-credit-card-data-and-pins/
		Amazon Gift Card Scams	Amazon Gift Card Purchase Phishing Scam Email	https://www.hoax-slayer.net/amazon-gift-card-purchase-phishing-scam-email/
		Gas Pump Skimmers	Gas Pump Skimmer Sends Card Data Via Text	https://krebsonsecurity.com/2017/07/gas-pump-skimmer-sends-card-data-via-text/
		Nigerian Email Scams	Nigerian Email Scammers Are More Effective Than Ever	https://www.wired.com/story/nigerian-email-scammers-more-effective-than-ever/
		2016 Russian Election Interference	Russian Hacking Efforts Days Before the 2016 Election	https://theintercept.com/2017/06/05/top-secret-nsa-report-details-russian-hacking-effort-days-before-2016-election/
		Russia Hacks US Power Plants	Russia Hacks Into U.S. Power Plants, But Nuclear Reactors Should Be Impervious	https://www.forbes.com/sites/jamesconca/2018/03/16/russia-hacks-into-u-s-nuclear-power-plants/#7b1c0cdd57b9
		Leaks of Celebrity Photos	Hack leaks hundreds of nude celebrity photos	https://www.theverge.com/2014/9/1/6092089/nude-celebrity-hack
		DNA Website Hacks	Hack of DNA Website Exposes Data From 92 Million Accounts	https://www.bloomberg.com/news/articles/2018-06-05/hack-of-dna-website-exposes-data-from-92-million-user-accounts
		Social Media Journalists Hacked	Turkish ‘hacktivists’ take over social media accounts of US journalists	https://www.cnbc.com/2018/08/24/turkish-hacktivists-make-cyberattacks-on-us-journalists.html
		Hackers & Robots	Hackers expose frailty of robots	https://www.ft.com/content/2a587278-869f-11e8-9199-c2a4754b5a0e
		Equifax Breach	Equifax's Data Breach Costs Hit \$1.4 Billion	https://www.bankinfosecurity.com/equifaxs-data-breach-costs-hit-14-billion-a-12473
		Capital One Breach	Capital One Breach Shows a Bank Hacker Needs Just One Gap to Wreak Havoc	https://www.nytimes.com/2019/07/30/business/bank-hacks-capital-one.html
		Marketing and Data Breaches	How Marketers Cause Data Breaches	https://www.forbes.com/sites/kimberlywhitler/2017/06/18/how-marketers-cause-data-breaches/#149e5a785bf7
		Nigerian Email Ring Busted	The FBI's Nigerian email scam ring bust shows how the billion-dollar global fraud has evolved	https://qz.com/africa/1693540/fbi-bust-of-nigerian-email-fraud-shows-evolving-scam-tactics/
		Poor Cyber Security of Energy Grids	Poor cybersecurity could destabilize increasingly complex energy grids	https://www.zdnet.com/article/poor-cybersecurity-could-destabilise-increasingly-complex-energy-grids/
	Smart TV Cyber Threats	Smart TVs: The Cyberthreat Lurking in Your Living Room, Feds Warn	https://threatpost.com/smart-tvs-cyberthreat-living-room-feds/150713/	
	Robot Vacuum Spying	Your robot vacuum cleaner might be spying on you, sucker	https://www.theinquirer.net/inquirer/news/3036246/smart-home-robot-vacuum-cleaners-could-spy-on-you-thanks-to-security-flaw	