

CYSE 200T Write-Up: “Three Letters to Remember”

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Three Letters to Remember

Safety in today's digital age is of the utmost importance. The CIA triad, also known as Confidentiality, Integrity, and Availability came into existence to serve as a guide to help protect valuable digital information from cyber threats. It is a valuable tool that if use correctly, can help mitigate and lessen the risk of cyber-attacks.

What Exactly is the CIA Triad?

The CIA triad can be described as a guiding policy for organizations and companies to help protect and secure all their digital data, assets, and information. Now, more than ever, it is particularly important to safeguard who can access these things. Failure to do so, can cost an organization and a company massive financial damage. These measures should protect valuable information, such as proprietary information of businesses and personal or financial information of individual users (Henderson, 2019). The CIA triad is broken down into specific concepts:

1. Confidentiality
2. Integrity
3. Availability

Confidentiality is the concept of keeping data secure and private. Think of it as a way to ensure that sensitive information like a company's financial statement does not fall into the wrong hands. One of the most used methods to promote confidentiality is data encryption.

Encryption is a way of converting data so that only authorized people who have access to it can fully understand what it is. Integrity on the other hand, is the idea that any data within an organization or a company is accurate, unaltered, and free of any unauthorized changes. Lastly, Availability tackles the notion that any information within an organization or a company is accessible, and available when needed. Availability is a large issue in security because it can be attacked (Kidd, 2020).

The Difference between Authentication and Authorization

Two other key concepts that are closely related to the CIA triad are the concepts of Authentication and Authorization. Although both concepts sound so similar, they are different in a lot of ways. Authentication is the process of identifying and verifying someone is who they say they are. A good example of this would be an employee's unique username and password. By typing, and providing the correct username and password, a company's identification system would authenticate the identity of the employee. On the contrary, Authorization is the process of determining what level of access within a company or an organization a person has. A perfect example of this would be an employee trying to access another employee's profile. The employee can be authenticated to be a real person working for the company but is not authorized to access other employees' information because of his or her level of access within the company.

Conclusion

There is no fool proof solution when it comes to cyber threats, however the CIA triad currently presents the best way to protect an organization or a company's valuable data, assets

and, information from cyber-attacks. Whether it is boxing in the real world or in cyberspace,

“You have to protect yourself at all times.”

References

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