**The CIA Triad**

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Details

Having no association with the Central Intelligence Agency (CIA), the CIA Triad is an information security (InfoSec) protection platform that is designed to keep data secured. The CIA Triad is able to mitigate security risks through its three core principles, confidentially, integrity and availability. Confidentiality meaning that only users who have proper authorization are allowed to access and modify data. Integrity, all data should be modified and maintained accurately, no data should be incorrectly modified within the premisses of it either being an accident or a deviant act of intent. Availability, allowing authorized users to have access to data whenever needed. (Fruhlinger)

When working in the field of information security, all three of these principles continuously overlap and contradict one another, both from a moral standpoint as well as a legal stance. Thinking about all three of these principles as one is a great asset for the cyber information security field because it helps confer top priorities when implementing security measures. (Fruhlinger)

Protecting sensitive information is InfoSec's primary concern. Two ways by doing so are through authentication and authorization. Authentication is a process in which a system is used to determine whether a person is who they say they are. This technique may use things like biometrics, security tokens, and cryptographic keys. (Authentication and authorization flows) An example of this is typing a username and password to log into an email every day.

Authorization is a system that determines who may or may not access specific types of data. (Authentication and authorization flows) An example of this may be when logging into Facebook on an unknown computer, Facebook will notify you that you or someone else has logged into your account on an unknown device. It also tells you what type of device and where your account has been accessed. This gives you the authority to log them out and change your password if you personally do not recognize the device your Facebook account was logged in on.

However, one type of method we use on a day to day basis that uses both authentication and authorization is when we access blackboard. We are required to type our username and password to authenticate who we are. Once this is complete we then have to authorize this by confirming the log-in request through an app called duo push.

References

Fruhlinger, J. (n.d.). The CIA triad: Definition, components and examples. *Information Security Relies on Keeping Data Secure, Integral, and Available—but Tradeoffs Are Necessary in Real-world Scenarios.* Retrieved from https://www.csoonline.com/article/3519908/the-cia-triad-definition-components-and-examples.html

Auth0. (n.d.). Authentication and authorization flows. Retrieved February 07, 2021, from https://auth0.com/docs/flows