**DEPENDABILITY SYSTEM OF AN ELEVATOR**

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Discuss how you can develop a dependable elevator (lifts) management system. In developing a dependable elevator management system, we would make sure that the key dependability principles are covered such as availability, reliability, safety, security, repairability, maintainability, survivability, error tolerance and resilience. When developing it, according to (CCSU, n.d.), we would:

* Avoid the introduction of accidental errors when developing the system so that the system can be secure and protect itself from deliberate or accidental intrusion.
* Design Verification & Validation processes that are effective in discovering residual errors in the system, this will in turn make the system be able to tolerate errors that are a result of users’ input errors.
* Design systems to be fault tolerant so that they can continue in operation when faults occur and deliver the services they are meant to deliver hence making it a survivable system.
* Design the system to be able to deliver services when requested by the user at any time hence making the available.
* Include system capabilities to recognize and resist cyberattacks from malicious individuals and restore normal system service after a failure hence making the system resilient.
* Design the system to be able to deliver services and perform requests as specified by the user with no errors hence making the system reliable.
* Design the system to be able to be repaired in the event of a failure either from natural disasters or human malicious interventions.
* Design the system to be able to adapt to new requirements from the user hence making the system maintainable since there will probably be new developers to add on the new requirements to the system and if the system is maintainable, that will be advantageous.

# References

CCSU. (n.d.). *CS 410/510 - Software Engineering class notes*. Retrieved from CCSU: https://cs.ccsu.edu/~stan/classes/CS410/Notes16/10-SystemDependability.html#:~:text=Examples%3A%20nuclear%20systems%2C%20air%20traffic,dependable%2C%20safe%2C%20and%20secure.