Tutorial 8

1. List THREE (3) possible actors that may be involved in a cloud computing attack

The **user** can be attacked by:

* **Service** - SSL certificate spoofing, attacks on browser caches, or phishing attacks.
* **Cloud infrastructure** - attacks that either originate at the cloud or spoofs to originate from cloud infrastructure

The **service** can be attacked by:

* **User** - buffer overflow, SQL injection, and privilege escalation are the common types of attacks.
* **Cloud infrastructure** the most serious line of attack. Limiting access to resources, privileged-related attacks, data distortion, injecting additional operation

The **cloud infrastructure** can be attacked by:

* **User** - targets the cloud control system
* **Service** - requesting an excessive amount of resources and causing the exhaustion of the resources

1. What is Privacy?

* The right of an individual, a group of individuals, or an organization to keep information of personal nature or proprietary information from being disclosed.

1. List FOUR (4) Fair Information Practices (FIP)

* Notice
* Choice
* Access
* Security

1. What is Trust? Explain TWO (2) conditions that must exist for Trust to develop.

* Assured reliance on the character, ability, strength, or truth of someone or something.
* Two **conditions** must exist for trust to develop:
* **Risk** - the perceived probability of loss; trust not necessary if there is no risk involved, if there is a certainty that an action can succeed.
* **Interdependence** - the interests of one entity cannot be archived without reliance on other entities.

1. List THREE (3) phases of Trust relationship.

* **Building phase**, when trust is formed.
* **Stability phase**, when trust exists.
* **Dissolution phase**, when trust declines.

1. Describe TWO (2) ways of determining Trust

* **Policies** - Policies reveal the conditions to obtain trust, and the actions when some of the conditions are met. Policies require the verification of credentials; credentials are issued by a trusted authority and describe the qualities of the entity using the credential.
* **Reputation** - Reputation is a quality attributed to an entity based on a relatively long history of interactions or possibly observations of the entity. Recommendations are based on trust decisions made by others and filtered through the perspective of the entity assessing the trust.

# Top Threats to Cloud Computing: **Egregious Eleven**

1. Data Breaches
2. Misconfiguration and inadequate change control
3. Lack of cloud security architecture and strategy
4. Insufficient identity, credential, access and key management
5. Account hijacking
6. Insider threat
7. Insecure interfaces and APIs
8. Weak control plane
9. Metastructure and applistructure failures
10. Limited cloud usage visibility
11. Abuse and nefarious use of cloud services