



# Agenda

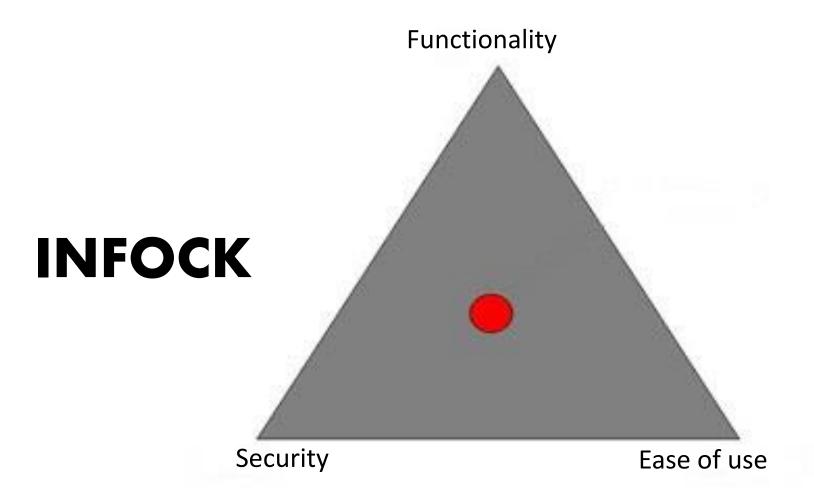
- Why Security is a serious issue?
- What is a vulnerability?
- Why It Occurs?
- Risk Ranking
- Recent Cyber Attacks
- Best Practices

## Security Is a Serious Issue?

- Technology has focused primarily on ease of use.
- Computer Infrastructure management is becoming more complex for the common man.
- Skill level required for Exploiting security weakness is constantly increasing.
- Direct impact of security breach on corporate asset base and goods will.
- Increased Network environment and network based application.



## Security Is Serious Issue?



<sup>•</sup> you can move the ball in either of the direction which will cause the intensity of the other two to decrease.

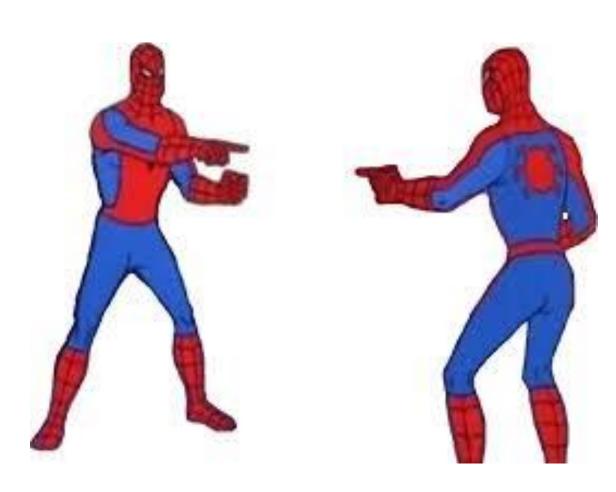
## What is a Vulnerability?

A vulnerability is a hole or a weakness in the application, which can be a design flaw or an implementation bug, that allows an attacker to cause harm to the stakeholders of an application.





## Source of Vulnerability?



Bad design

**Poor Conceptualization** 

Inept Programming(Lack of Input Validation, not closing the DB connection etc.)

**Bad Testing** 

## Risk Ranking

Critical	Vulnerabilities which fall under critical category are of highest risk level. Their impact and likelihood of occurrence both are high. If exploited they can cause severe damage to the application. This rating is given to flaws that could be easily exploited by a remote unauthenticated attacker and lead to system compromise without requiring user interaction.
High	The vulnerabilities under high category are considered to be of high risk level. Such vulnerability should be handled with high priority. Under specific conditions, these vulnerabilities can potentially make the system unusable and lead to serious security breaches. These vulnerabilities violate basic security design parameters and should be handled with the high priority.
Medium	Though the threat is not critical at the moment, it has the potential to become a High risk threat in the future under certain circumstances if not mitigated. Medium risk vulnerabilities require significant mitigation to lower the impact of the threat.
Low	The information found is useful to the attacker, but is not a threat in itself. Existing security controls are likely to be adequate or the risk is acceptable, but over the period this may give rise to more serious problems.
Informational	The data revealed is an additional piece of information and there are no serious security implications related to it. These are commonly accepted best practices for Web development. Items listed here are not vulnerabilities, but are indicators of overall site quality and site development security practices (or lack thereof).





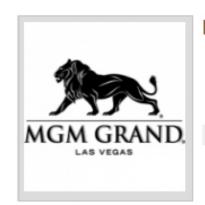
# Hackers Targeting Twitter



## Data Breach



# Hackers Attempt to Sell MGM Grand Data Dump for Cryptocurrency





MGM Resorts was hit by cybercriminals, first reported by ZDNet, who lifted personal and contact details for 10.6 million hotel gu...

Sold by NightLion - 1 sold since July 12, 2020 Vendor Level 1 Trust level 1

Unlimited items available for auto-dispatch

	Features	Features	
Product Class	Digital	Origin Country	World Wide
Quantity Left	Unlimited	Ships to	World Wide
Ends In	Never	Payment	Escrow



default - 1 day - USD + 0.00

Purchase price: USD 2,939.76



0.317874 BTC / 42.301184 XMR

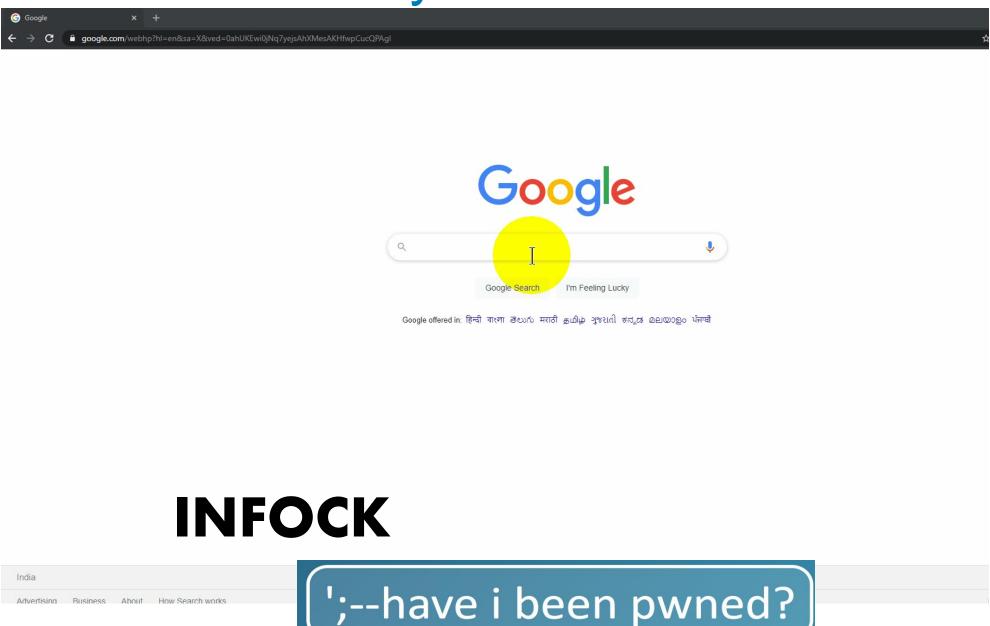


# Magellan Health (Ransomware Attack and Data Breach)

One of Fortune 500 companies, Magellan Health was struck by a ransomware attack and data breach in April 2020. The healthcare giant confirmed by stating that about 365,000 patients were affected in the sophisticated cyberattack.



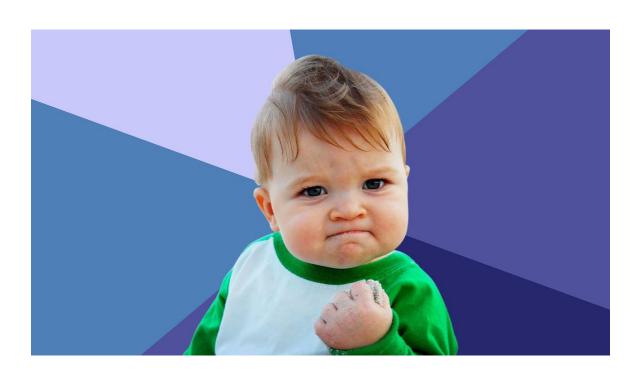
Quick Check Have you been Ever Hacked?



#### **Best Practices**

- Apply Defense in Depth
- Use a Positive Security Model
- Run with Least Privilege
- Avoid Security by Obscurity
- Detect Intrusion/waf etc.
- Don't Trust Infrastructure
- Don't Trust services
- Training against Social Engineering attacks





## References

- https://www.bbc.com/news/technology-53445090
- https://haveibeenpwned.com/
- https://www.wired.com/story/marriott-hacked-yes-again-2020/
- https://www.welivesecurity.com/2020/07/15/leaked-data-142million-mgm-hotel-guests-offered-sale
- https://healthitsecurity.com/news/magellan-health-data-breachvictim-tally-reaches-365k-patients
- https://haveibeenpwned.com/

