

Assignment

1) Different types of cyber attacks?

soln → Malware (click line - risky software)

→ Phishing (fraudulent communications)

→ Man-in-the-middle attack (two-party transaction)

→ Denial-of-service attack (unable to fulfill legitimate requests)

→ SQL injection (inserts malicious code into a server that uses MySQL)

→ Zero-day exploit (vulnerability announced before solution implemented)

→ DNS Tunneling

2) Define Monolithic and microservices?

soln * Monolithic Architecture:- It is a traditional model of a software program, which is built as a unified unit that is self-contained and independent from other applications

* Microservices Architecture:- A microservices architecture also simply known as microservices, is an architectural method that relies on a series of independently deployable services. These services have their own business logic and database with a specific goal.

ii) Difference between REST API & SOAP?

SOAP

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→ SOAP stands for Simple Object Access Protocol

→ It is a protocol, it follows a strict standard to allow communication between the client & server

→ It uses only XML for exchanging info in its msg format

→ It is difficult to implement and it requires more bandwidth

→ It cannot use REST since it is a protocol without any architectural pattern

REST API

→ REST stands for Representational State Transfer.

→ REST is an architectural style that doesn't follow any strict standard but follows six constraints: Uniform Interface, Client-server, stateless, cacheable, Layered System, Code on Demand

→ It is not restricted to XML can be - JSON, plaintext, XML etc.

→ Easy to implement & requires less bandwidth (smartphones)

→ It can use SOAP