Assignment-1

Different types of cyber attacks

Cyber phishing-It means hacker can send fake messages containing malware to trap a person to reveal his personal information to him

SQL injection attacks- It is an attack that uses malicious SQL code for database manipulation to access information that is not displayed.

Malware attacks- it is a cyber attack where malware is injected in the system to steal the sensitive information.

Cyber defamation- it is a method to damage the reputation of the person.

DoS attack-it is an attack used to close a system making it inaccessible to its user.

DDoS attack- it is an attack in which attacker jams a server with lots of internet traffic to prevent it users from accessing the internet sites

Man in middle attack- it is an attack in which attacker sends and receives messages between two people who think that they are communicating directly with each other.

Assignment-2

Define monolithic and microservice architecture.

Monolithic architecture is a model of a software program which is built as a united unit that is self-contained and independent from other applications.

Monolithic architecture is a single, large computing network with one code base that combines all the business requirements together.

Microservice architecture: It manages by separating model into smaller processes that work on their own of each other and contribute to everything.

REST API and SOAP API

Representational State Transfer is an architectural style. I has no official standard.

REST APIs uses HTTP, JSON, URL, XML for data communication and transfer.

REST has SSL(Secure Socket Layer)and HTTPS for security.

Simple Object Access Protocol is a protocol which has an official standard.

It uses only HTTP and XML.

It uses SSL and WS security for security .

Assignment-3

Study different types of Manual testing and prepare small description about each manual testing types

Types of manual testing:

1. <u>Acceptance testing</u>: It is performed by the client or end user to ensure the software meets the requirements.
2. <u>Black box testing:</u> it analyze an application functionality from the end user perspective.
3. <u>Integration testing</u>: It is a process of testing an application with two or more individual components and find out the problem with interfaces and interactions between them.
4. <u>System testing</u>: it tests whole system at once after unit testing and integration testing all the components.
5. <u>Unit testing</u>: it means to test the small units of an application.
6. <u>White box testing</u>: it is used to analyze the internal structures, design, working of software.

Assignment-4

Create three branches locally dev, uat and prod and push them to remote repo. Track one.txt and two.txt files across all branches. Set up different reviewers for approving pull request for dev branch.