Q. What is mean by Client?

Ans: Client is a system or software who send request to server

Most commonly used Client software is Browser

Q. What is mean by Server?

Ans: Server is a system or software who serve the request sent by

Client and after processing it send response to client

Examples of Servers: Apache Tomcat, WebLogic, Glassfish etc

Q. Software Architecture types

1) 1 tier Architecture

2) 2 tier Architecture

3) 3 tier Architecture

Every application is generally divided into 3 part or 3 layers

1) Presentation Layer (GUI -Graphical User Interface Layer)

Technologies are used at Presentation Layer are

HTML, CSS, JavaScript, Bootstrap, ReactJS

2) Business Layer/Application Layer: This is server-side component

In Business layer we write business logic by using programming languages like .net, java, python

3) Database layer/Data Access Layer: This is also server-side component

This layer stores the data which is processed by Application

1-tier Architecture

One-tier architecture has all the layers such as Presentation, Business,

Data Access layers in a single software package.

Examples MP3 player, MS Office come under the one-tier application

All standalone or Desktop application comes under one-tier architecture

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2 -tier Architecture

The client system handles both Presentation and Application layers

and the Server system handles the Database layer.

It is also known as a client-server application

3-tier Architecture

In 3-tier architecture presentation layer is present on client system

Application or Business Layer present on Application Server (Like WebLogic) and Database Layer is present on Database Server (Oracle, MS SQL Server)

Q. What is mean by API?

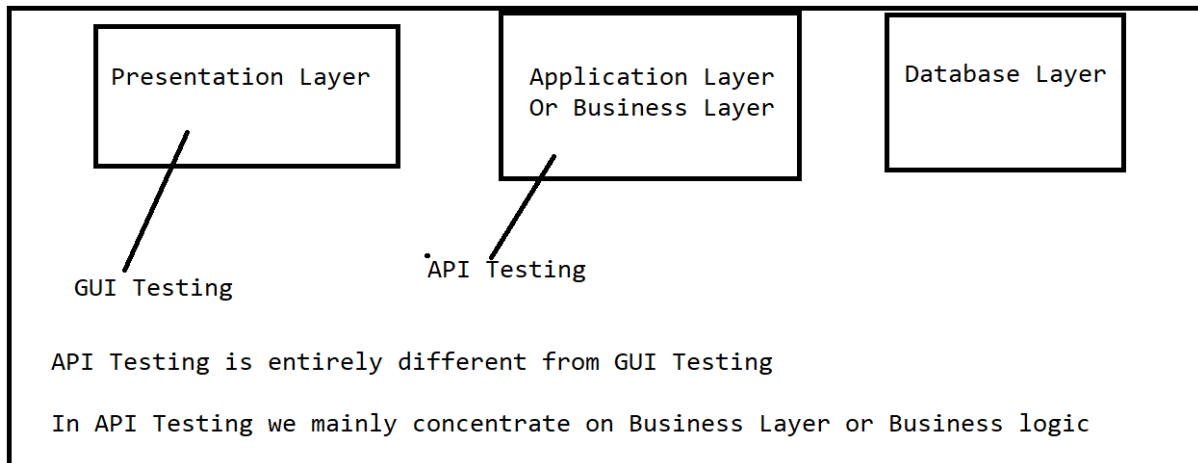-> API stands for Application Programming Interface.

-> API acts as bridge between two components

-> API enables communication and data exchange between two

   separate system

-> based on customer requirement the software or application is

   developed is nothing but API

Q. What is mean by API Testing?

Ans: Testing only business functionality is nothing but API Testing

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   │  │                  │   │                  │   │              │  │
   │  │ Presentation Layer│  │ Application Layer │  │Database Layer │  │
   │  │                  │   │ Or Business Layer │  │              │  │
   │  │                  │   │                  │   │              │  │
   │  └──────────────────┘   └──────────────────┘   └──────────────┘  │
   │                                                                   │
   │      GUI Testing            API Testing                           │
   │                                                                   │
   │   API Testing is entirely different from GUI Testing              │
   │                                                                   │
   │   In API Testing we mainly concentrate on Business Layer or Business logic │
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Q. Difference between Unit Testing and API Testing

1) Unit testing is performed by developer but API Testing is performed

   by tester

2) In Unit Testing, separate functionality is tested but In API testing

   end to end testing is performed

3) In Unit Testing developer can access code but in API testing tester cannot access source code.

4) In Unit Testing only limited functionality is tested but in API

   Testing all functionality are tested.

5) in Unit Testing scope is limited but in API testing scope is broad

6) Usually, Unit testing is performed before **check in** the code changes

   but API testing is performed after build created.

Webservices#

Q. What is mean by webservice?

Ans: The service which is present on web is called as webservice.

But Everything present on Web is not considered as webservice.

Q. What is difference between webservice and Web Application?

1) Web Application is meant for human consumption but webservice is meant for code consumption.

Q. What is main advantage of webservice?

Ans: The main advantage of webservice is interoperability.

interoperability means two different applications having

different platform and different development language

can also communicate.

Q. Different types of Webservices?

Ans: There are two types of Webservices

1) SOAP (Simple Object Access Protocol) webservice

2) REST (Representational State Transfer) webservice