

## Unit 4

Q1 What is multi-dimensional array in PHP? Explain with simple php code.  
 → It is an array of array. That means in the multidimensional array each element in the also be an array and each element in the sub-array can be again an array & so on.

```
<html>
<head>
<title>
  Array
</title>
</head>
<body>
<font size = 5%>
<?php
  $contact = array (
    array (
      "name" => "John"
      "email" => "John@gmail.com",
    ),
    array (
      "name" => "xyz"
      "email" => "xyz@gmail.com",
    ),
    array (
      "name" => "opq"
      "email" => "opq@gmail.com",
    )
  );
);
```

```

echo " email id of " $contact[0]["name"].
$contact[0]["email"];
echo "<br> email id of " $contact[1]["name"]
" is " $contact[1]["email"];
echo "<br> email id of " $contact[2]["name"]
" is " $contact[2]["email"];
$contact[2]["email"];
</font>
</body>
</html>

```

Q2 Write difference between client side Scripting and server side scripting.

- | Client side scripting                             | Server side scripting  |
|---|--|
| 1) Source code is visible for the user            | Source code is not visible to user because it output of server side in HTML page |
| 2) It usually depend on browser and it version    | It can be used and it does not depend on client.                                 |
| 3) It run on user the computer                    | It run on web browser.   |
| 4) These are many advantage link with this faster | The primary advantage is ability to highly response requirement                  |
| 5) It does not provide security for data          | 6) It provide more security for data.  |



Q3 Draw and explain how AJAX work with the help of suitable example

→ 1) Ajax uses the XMLHttpRequest object to communicate with the server.

Browser      Web server  
XMLHttpRequest      HTTP request      Business logic Implementation  
callback()      (PHP, Servlet etc.)

XML Data

data

Presentation

Data store

- 2) An important role is played by XMLHttpRequest object in AJAX processing
- 3) Request is sent by the user through UI and a JS call goes to XMLHttpRequest sent to the server
- 4) Data is retrieved from the database as per the requirement
- 5) Server send the data in the form of XML or JSON through XMLHttpRequest callback function.

Q4

Identify & explain step involved in connecting to MySQL with PHP.

A. Opening Database connection

PHP provide the method `mysql_connect()` to open a database connection  
`connection mysql_connect (server, user, password, new-link, direct-flag)`

B Closing Database connection

PHP provide `mysql_close()`  
`mysql_close (resource & link-identifier);`

C Creating a Database

PHP provide `mysql_query()` to create MySQL database

`bool mysql_query (sql, connection);`

D Selecting Database

PHP provide `mysql_select_db()`

`bool mysql_select_db (db-name, connection);`



# Unit 5

Q1

List and explain event supported by Angular JS in enrich form filling and validation

1. Textfield

2. checkbox

3. Radio Button

4. Select Box

1) Textfield

- i) `<input type="text" ng-model="first name">`
- ii) There will be property name first name in the application data.
- iii) The directive `ng-model` binds the input controller to application.

2) checkbox

- i) checkbox are used to give list of item where multi-selection is allowed
- ii) The checkbox has value either true or false
- iii) The value of checkbox can be used angular where in application

3) radio Button

- i) Radio button are also used to give list of item but where single selection allow
- ii) There are many different value of radio button with same `ng-model`.

#### 4) Select box

- i) Select box is used to give list of items
- ii) The ng-model directive can be applied to SelectBox & value of Selected option be used.

#### Q2 Write short Note on Node.js

- 1) Node.js is an open source cross platform js runtime environment for executing the Js code at service-side.
- 2) Node.js enable Js to be used for serverside scripting js to be used for server scripting runs script server-side to produce dynamic web pages content before the page is sent to the user web browser.
- 3) Node.js has become one of the foundation element of Javascript Everywhere.
- 4) js is the conventional filename extension for Javascript code the name Node.js
- 5) An event-driven architecture is provided by the Node.js which can implement asynchronous I/O.

#### Q3 List and explain different directive in Angular Js

- 1) ng-app
- 2) ng-init
- 3) ng-model
- 4) ng-model



## 1. ng-app directive

i) AngularJS application is starting with ng-app directive. The root element is defined by this directive.

ii) The application is initialized by ng-app directive when the web page is loaded.

`<div ng-app> ... </div>`

## 2. ng-init directive

i) The application data is the AngularJS is initially by directive.

ii) It assigns value to the application variable.

`<div ng-app="" ng-init="city='city'({--})">`

Q4

Identify & explain Different Data tags from struts 2 which are used to manipulate display on web application page.

i) Action tag

This tag enables developer to call action directly from a JSP page by specifying the action name & an optional namespace.

ii) The include tag

This include will be used to include JSP file into another JSP page.

iii) The Bean tag

These bean tag will allow you to format a date in a quick & easy way.

iv) The date tag

These bean tag instantiate a class that conforms to the Java in a quick & easy way.

v) The Param tag.

These param tag can be used to parameterize other tag, this tag has following two parameters.

1. name (string).

2. Value (Object)

vi) The Property tag.

These property tag is used to get the property of value, which will default to the top of the stack if name is specified.



# Assignment

## Unit 6

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Q1

Draw & Explain main component of EJB Architecture.

→ There are 4 EJB Component.

- i) EJB Server
- ii) EJB Container
- iii) EJB Client
- iv) Enterprise Beans

EJB Server

EJB container

Enterprise  
Java Bean

Enterprise inform  
ation System.

Client

Enterprise  
Java Bean

Relational Data  
base legacy app  
lication ERP  
System.

Client Tier

Middle Tier

Backend Tier

i. EJB Server

i) The main functionality of EJB server is to provide execute environment for EJB container.

ii) EJB server provide the system service such as load balancing, device accessing & multiprocessing for the container.

## 2. EJB Container

- i) The EJB container is an interface is between EJB & low-level, platform-specific functional which support the Bean the EJB Server.
- ii) Container uses the standard interfaces defines in the EJB specification to make the required service available to beans.

## 3. EJB Client

- i) Using the proxy object the Client interact with beans. This communication is usually based J2OP & proxy object which use are the CORBA stub.

## 4. Enterprise Beans

- i) Home interface
- ii) Remote interface
- iii) EJB Class
- iv) Deployment Descriptor.

## Q.2. Write Short Note On Spring.

- i) The spring framework is an application framework & inversion of control container for the Java platform.
- ii) The framework core feature can be used by any Java application but there are extension for building web application on



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 top of the Java EE platform.

iii) For enterprise Java now a day Spring is considered as max popular framework.

iv) Spring Framework is used to develop the application which have high performance, testability & reusability.

v) It facilitate easier development of J2 EE.

Q.3. Write short note on Bootstrap.

→ i) Bootstrap is a famous framework which is based on HTML, CSS & Javascript. It is used to develop responsive & mobile friendly website.

ii) Bootstrap is a front end framework which facilitate the faster & easiest development of website.

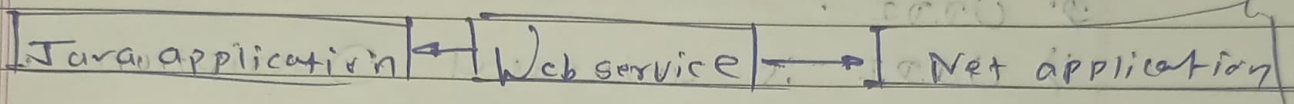
iii) It provide HTML, CSS based designed template which are used for various web related component like button, form, image, etc.

iv) It was developed by mark otto & Jacob Thornton at Twitter.

v) Bootstrap support responsive web design. This means the layout of web pages adjust dynamically, taking into account the characteristics of device.

Q.4. What are web service? List & discuss component of web service.

→ i) A web service is a surface component which is developed to perform specific task regarding communication between 2 platform.



ii) It is a software component which is available on internet, The standard tml messaging is used by web service for the communication.

iii) It is not dependent on any system Since the communication is done

iv) It is modular, dynamic, distributed & self contained software component.

• There 3 component of web service.

i) SOAP.

i) SOAP stand for Simple object Access protocol.

ii) It is XML-based protocol which is used to access the web service.

iii) It is W3C recommendation for communication between various type of application.



2) WSDL :

- i) WSDL is web service Description language
- ii) It was developed by Microsoft & IBM
- iii) It is used for information exchange in decentralized & distributed environment

3) UDDI :

- i) UDDI is universal Description Discovery & Integration.
- ii) It is specification which is used in the distributed registry of web service.
- iii) It take help of WSDL for describing interface to web services.