

WEB TECHNOLOGIES

QUIZ 1:

ASP.NET

Q1: What is ASP .NET?

ASP.NET is a web development platform, which provides a programming model, a comprehensive software infrastructure and various services required to build up

robust web applications for PC, as well as mobile devices.

The ASP.NET application codes can be written in any of the following languages:

- C#
- Visual Basic.Net
- Jscript
- J#

Q2: What is the file extensions of web services?

asmx is the extension for Webservices in .net. asmx stands for Active Server Method Extended. .asmx-- An ASMX file serves as the end point for an ASP.NET Web service.

It is similar to an.ASPX file, but is used specifically for XML Web services.

Q3: List different type of cookies in ASP.NET?

Basically Cookies are one of the following 2 types:

Persistent Cookies: Persistent Cookies are Permanent Cookies stored as a text file in the hard disk of the computer.

Non-Persistent Cookies: Non-Persistent cookies are temporary. They are also called in-memory cookies and session-based cookies.

Q4: Which Data Types does RangeValidator control support?

The Range validator control Integer,String,Data.

Q5: List three major built in objects in ASP.NET?

The major built-in objects in ASP.NET are as follows:

- Application.
- Request.
- Response.
- Server.
- Session.
- Context.
- Trace.

Q6: How can we apply themes to an ASP.NET Application?

- Launch the ASPxThemeDeployer tool.
- If you already have a custom theme assembly, do the following. ...
- Specify the path to your site in the Site path box.
- Select the required products from the Products check box list.
- In the Themes check box list, select the required pre-packaged or custom theme.

Q7: What is Cross Page Posting?

Basically, cross-page posting means that you are posting form data to another page as opposed to posting form data back to the same page (as is the default in ASP.NET). By default, buttons and other controls that cause a post back on an ASP.NET Web page submit the page back to itself.

Q8: What is the difference between Web Config and machine config?

Web.config is the file for the local settings to be applied for a website which store configuration data in XML format. the settings of Machine.config file are applied to the whole asp.net applications on your server whereas the settings made in the Web.config file are applied to that particular web application only.

Q9: Can we have multiple web config files for an asp.net application?

you can have multiple web.config files in sub directories. Settings will be override automatically by asp.net. Yes you can have two web.config files in application. There are situations where your application is divided in to modules and for every module you need separate configuration

Q10: Which protocol is used to call a web service?

Simple Object Access Protocol The proxy takes the calls, wraps it in proper format and sends it as a SOAP request to the server. SOAP stands for Simple Object Access Protocol. This protocol is used for exchanging web service data.

Q11: what is the good practice to implement validations in aspx page?

Client-side validation is the best way to validate data of a web page. It reduces the network traffic and saves server resources.

Q12: what is caching?

Caching is a technique of storing frequently used data/information in memory, so that, when the same data/information is needed next time, it could be directly retrieved from the memory instead of being generated by the application. The ASP.NET runtime includes a key-value map of CLR objects called cache.

Q13: which validator control is used to make sure the values in two different controls matched?

- CompareValidator Control

The CompareValidator control compares a value in one control with a fixed value or a value in another control.

Q14: What are the different validators in ASP.NET?

ASP.NET validation controls validate the user input data to ensure that useless, unauthenticated, or contradictory data don't get stored.

ASP.NET provides the following validation controls:

- RequiredFieldValidator
- RangeValidator
- CompareValidator
- RegularExpressionValidator
- CustomValidator
- ValidationSummary

Q15: What is View State?

ViewState is a important client side state management technique. ViewState is used to store user data on page at the time of post back of web page.

ViewState does not hold the controls, it holds the values of controls. It does not restore the value to control after page post back

CodeIgniter

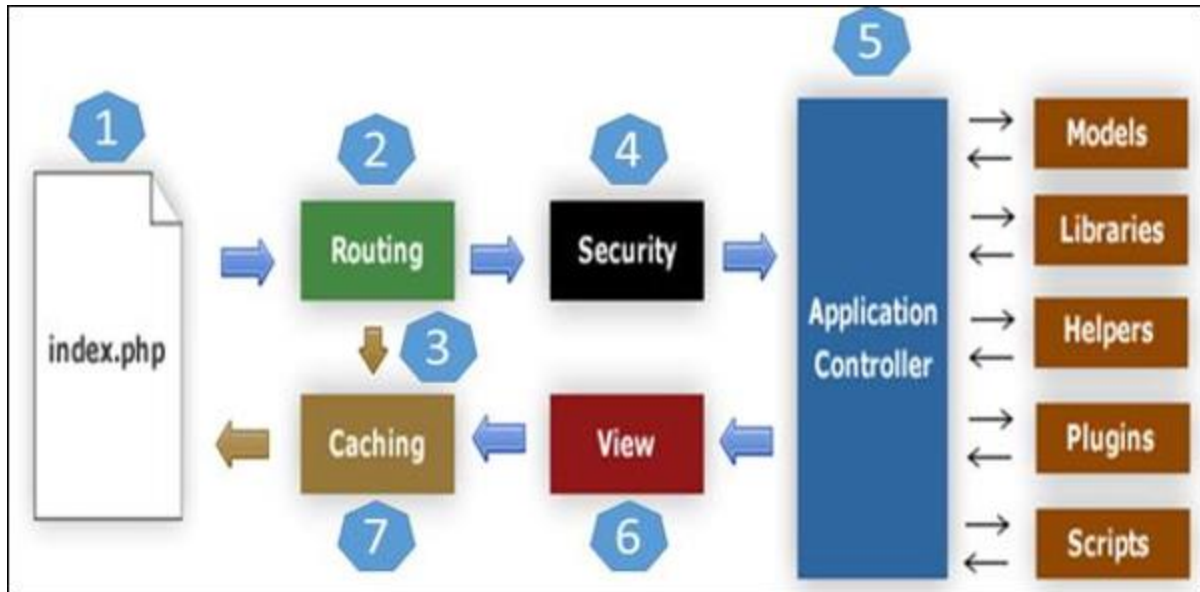
Q1: What is CodeIgniter?

CodeIgniter is a free, open-source, easy-to-use, object-oriented PHP web application framework, providing a ready-to-use library to use with your own PHP applications.

Q2: Explain the folder structure of codeigniter?

CodeIgniter Application Folder Structure. As its name suggests the application directory is main directory in CodeIgniter framework, this is the directory where you keep the entire application code that you are developing.

Q3: Draw codeigniter architecture diagram?



Q4: How can you add or load model in codeigniter?

in CodeIgniter Model are the PHP classes where all database related manipulation is done e.g. fetching records, insert, update, and delete records. Within this, all data processing logic is done. All model files are managed in `application/models` directory and they are load and access by the controller.

Q5: How can you load a view in codeigniter?

You can use PHP or HTML file to create the view and load it from the controller using `$this->load->view()` method. ...

Q6: What is the default controller in codeigniter?

CodeIgniter can be told to load a default controller when a URI is not present, as will be the case when only your site root URL is requested. To specify a default controller, open your `application/config/routes.php` file and set this variable: `$route['default_controller'] = 'Blog';`

Q7: How will you call a constructor of parent class?

In child class with this syntax we can call parent class constructor:

```
parent::__construct();
```

Q8: What is the basic codeigniter URL structure?

to do this, the web framework uses the URL structure `class/function/parameter`. This basic structure can be adapted as required. CodeIgniter provides the file `routes.php` in the `application/config/` index for this purpose. This contains an array called `$route` that enables developers to define their own routing criteria.

Q9: What is the default method name in codeigniter?

By default Controller always calls index method. If you want a different method, then write it in the Controller's file and specify its name while calling the function

Q10: What is a helper? How it can be loaded?

Each helper function performs one specific task, with no dependence on other functions.

CodeIgniter does not load Helper Files by default, so the first step in using a Helper is to load it. Once loaded, it becomes globally available in your controller and views.

Q11: What is codeigniter library? How will you load it?

The essential part of a CodeIgniter framework is its libraries. It provides a rich set of libraries, which indirectly increase the speed of developing an application. The system library is located at system/libraries.ou will load it using: `$this->load->library('flavors/chocolate');`

Q12: What is routing in codeigniter?

CodeIgniter provides facility through which you can set your own routing rules. ... There are three reserved routes in CodeIgniter. `$route['default_controller']` This route indicates which controller class should be loaded, if the URI contains no data, which will be the case when people load your root URL

Q13: Why is URL routes needs to be configured?

Routing matches the URL to the pre-defined routes. If no route match is found then, CodeIgniter throws a page not found an exception. HERE, Controller -is mapped to the controller name that should respond to the URL

Q14: What are the hooks in codeigniter?

Extending the Framework Core. CodeIgniter's Hooks feature provides a means to tap into and modify the inner workings of the framework without hacking the core files. When CodeIgniter runs it follows a specific execution process, diagramed in the Application Flow page.

Q15: How to enable codeigniter hook?

To enable Hook, go to application/config/config.php file and set it TRUE.

Larval

Q1. What is Laravel

Laravel is a free, open-source PHP web framework, created by Taylor Otwell and intended for the development of web applications following the model–view–controller architectural pattern and based on Symfony

Q2. What is the latest version of Laravel?

Laravel 5.8

Q3. How can we install Laravel by composer?

Once Composer is installed, download the 4.2 version of the Laravel framework and extract its contents into a directory on your server. Next, in the root of your Laravel application, run the `php composer.phar install` (or `composer install`) command to install all of the framework's dependencies.

Q4. What is middleware in Laravel?

It is a type of filtering mechanism. This chapter explains you the middleware mechanism in Laravel. Laravel includes a middleware that verifies whether the user of the application is authenticated or not.

Q5. What are the basic concepts in Laravel?

1. Artisan - A Command-Line Interface
2. Migrations & Seeding
3. Blade Template Engine
4. Middleware - HTTP middleware provide a convenient mechanism for filtering HTTP requests entering your application.
5. Eloquent ORM + Built-in Database Query Builder
6. Routing (RESTful routing)
7. Inbuilt packages - Authentication, Cashier, Scheduler, SSH, Socialite
8. Security
9. Unit Testing - Built-in unit testing and simply readable impressive syntax
10. Caching - Laravel provides an expressive, unified API for various caching backends

Q6. What is database migration and how to use it?

Migrations are like version control for your database, allowing your team to easily modify and share the application's database schema.

To create a migration, use the **make:migration** Artisan command:

php artisan make:migration create_users_table

Q7. What is service provider in Laravel?

In Laravel official documentation: Service providers are the central place of all Laravel application bootstrapping. Your own application, as well as all of Laravel's core services are bootstrapped via service providers

Q8. Which template engine Laravel use?

Blade is the simple, yet powerful templating engine provided with Laravel. Unlike other popular PHP templating engines, Blade does not restrict you from using plain PHP code in your views.

Q9. What is façade in Laravel and how to use it?

A Laravel facade is a class which provides a static-like interface to services inside the container.

In a Laravel application, to access a service directly from the container, we can use the **App::make()** method or the **app()** helper function.

```
App::make('some_service')->methodName();
```

Q10. How to make a helper file in Laravel?

Let's create a Helpers directory under app and create a Helper.php file. These are the following contents of the file.

```
<?php

if (!function_exists('human_file_size')) {
    /**
     * Returns a human readable file size
     *
     * @param integer $bytes
     * Bytes contains the size of the bytes to convert
     *
     * @param integer $decimals
     * Number of decimal places to be returned
     *
     * @return string a string in human readable format
     * */
    function human_file_size($bytes, $decimals = 2)
    {
        $sz = 'BKMGTPE';
        $factor = (int)floor((strlen($bytes) - 1) / 3);
        return sprintf("%.{$decimals}f", $bytes / pow(1024, $factor)) . $sz[$factor];
    }
}

if (!function_exists('in_arrayi')) {
    /**
     * Checks if a value exists in an array in a case-insensitive manner
     *
     * @param mixed $needle
     * The searched value
     *
     * @param $haystack
     * The array
     */
}
```

```

29  *
30  * @param bool $strict [optional]
31  * If set to true type of needle will also be matched
32  *
33  * @return bool true if needle is found in the array,
34  * false otherwise
35  */
36  function in_arrayi($needle, $haystack, $strict = false)
37  {
38      return in_array(strtolower($needle), array_map('strtolower', $haystack), $strict);
39  }
40
41
42
43
44
45
46

```

Q11. How can we use middleware in Laravel?

Step1. Create RoleMiddleware by executing the following command

```
php artisan make:middleware RoleMiddleware
```

Step2. Add the following code in the handle method of the newly created RoleMiddleware at

[app/Http/Middleware/RoleMiddleware.php](#).

Step3. Register the RoleMiddleware in [app\Http\Kernel.php](#)

Step4. Execute the following command to create TestController

```
php artisan make:controller TestController --plain
```

Step5. Copy the following lines of code to [app/Http/TestController.php](#) file.

```

<?php

namespace App\Http\Controllers;

use Illuminate\Http\Request;
use App\Http\Requests;
use App\Http\Controllers\Controller;

```



```
class TestController extends Controller {

    public function index() {

        echo "<br>Test Controller.";

    }

}
```

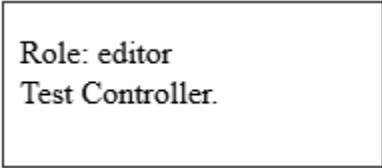
Step6. Add the following line of code in app/Http/routes.php file.

```
Route::get('role',[
    'middleware' => 'Role:editor',
    'uses' => 'TestController@index',
]);
```

Step7. Visit the following URL to test the Middleware with parameters

<http://localhost:8000/role>

Step8. The output will appear as shown in the following image.



```
Role: editor
Test Controller.
```

Q12. What is an artisan? Name some of its commands.

Artisan is the name of the command-line interface included with Laravel.

Command#	Description & Output
php artisan -version	<p>Check the current version of laravel installation?</p> <p>Output: Laravel Framework version 5.2.45</p>
php artisan down	<p>Put Laravel application in “maintenance mode”</p> <p>Output: Application is now in maintenance mode.</p>
php artisan env	<p>Display the environment laravel is running</p> <p>Output:</p>

	Current application environment: local
php artisan migrate	Run Database migrations This executes all the defined migrations and create database
php artisan serve	To start Laravel project. By default this hosts the application on localhost:8000 You can server with different hostname and port using "--hostname" and "--port" options respectively.
php artisan up	Bring UP the laravel application out of maintenance mode
php artisan auth:clear-resets	Flush the expired password tokens
php artisan cache:clear	Flush the application cache
php artisan cache:table	Create a migration for the cache database table

Q13. What is the service container in Laravel?

The Laravel service container is a powerful tool for managing class dependencies and performing dependency injection. Dependency injection is a fancy phrase that essentially means this: class dependencies are "injected" into the class via the constructor or, in some cases, "setter" methods.

Q14. How can we configure a mail in Laravel?

Step1. Create email

Step2. Copy SMTP details

Step3. Put SMTP details on laravel's config/mail.php

Q15. What is and Auth? How is it used?

Laravel's authentication facilities are made up of "guards" and "providers". Guards define how users are authenticated for each request.

Using Laravel Auth:

Step1. Invitations: DB Table and Model

Step2. Request Invitation

Step3. View Invitations from Administrator

Step4. Process Invitation Links

Q16. What is Package? Name some Laravel packages

A Laravel package is a set of reusable classes created to add extra functionality to a Laravel website.

Examples:

1. Spatie

2. Entrust
3. Socialite
4. Laravel Debugbar
5. Laravel User Verification

Q17. What is validation in Laravel and how it is used?

Validation is the most important aspect while designing an application. It validates the incoming data.

To use validator:

Step1. Defining the Routes

Step2. Creating the Controller

Step3. Writing the Validation Logic

Step4. Displaying the Validation Errors

Example:

```
$request->validate([

    'title' => 'required|unique:posts|max:255',

    'author.name' => 'required',

    'author.description' => 'required',

]);
```

Q18. How to get current route name?

The `Route::current()` method will return the route handling the current HTTP request, allowing you to inspect the full `Illuminate\Routing\Route` instance.

Q19. How to create model controller and migration in a single artisan command in Laravel?

```
php artisan make:model Todo -mcr
```

Q20. How to pass variables by controller to blade file?

```
return view('welcome')->with('name', 'San Juan Vacation');
```

Q21. How to pass custom table name in model?

```
class ChildModel extends Model
{
    protected $table = 'centers';
}
```

Q22. How to make custom validation rule in Laravel?

Upper case validation example:

```
public function IsUpperCase($attribute, $value)
{
    return strtoupper($value) === $value;
}
```

Q23. How to assign a variable value to all view files?

```
class BaseController extends Controller
{
    public function __construct()
    {
        //its just a dummy data object.
        $user = User::all();

        // Sharing is caring
        View::share('user', $user);
    }
}
```

Q24. How to use session in Laravel?

Step1. Retrieve Data

Step2. Store Data

Step3. Flash Data

Step4. Delete Data

Step5. Regenerate Session ID

Q25. What is soft delete in Laravel?

To mark a record in a database for deletion or to temporarily prevent it from being selected.

WordPress

Q1: What is WordPress:

WordPress is a free and open-source content management system based on PHP & MySQL. Features include a plugin architecture and a template system. It is most associated with blogging but supports other types of web content including more traditional mailing lists and forums, media galleries, and online stores.

Q2: Can u list any better cms than wordpress:

Drupal is better at handling huge amounts of data, which makes it more suited for many enterprise websites. Drupal's Views module lets you display different types of content in a more flexible manner than WordPress does. Like Joomla, Drupal gives you more control over user access and permissions.

Q3:limitations in wordpress

1:Earning Limitations

2: You Can not Upload Plugins

3: You Can not Upload Themes

Q4:rules to be followed while developing wp plugin:

- Rule 01: Have a Strategy.
- Rule 02: Use Consistent and Clear Coding Standards.
- Rule 03: Take Security Seriously.
- Rule 04: Access Web Services Intelligently.
- Rule 05: Internationalization.
- Rule 06: Load Only What You Need.
- Rule 07: Tidy Up After Yourself

Q5:difference btw posts and pages:

The major difference between WordPress posts and pages is that the WordPress post is a dynamic entity and WordPress page is a static entity. WordPress Posts is a dynamic entity that has a published/updated date and is displayed on the blogpage.

Q6:types of hooks and their functions :

actions and filters.

An Action in WordPress is a hook that is triggered at specific time when WordPress is running and lets you take an action. This can include things like creating a widget when WordPress is initializing or sending a Tweet when someone publishes a post.

A Filter in WordPress allows you get and modify WordPress data before it is sent to the database or the browser. Some examples of filters would include customizing how excerpts are displayed or adding some custom code to the end of a blog post.

Q7:template tags:

Template tags are used within your blog's [Templates](#) to display information dynamically or otherwise customize your blog, providing the tools to make it as individual and interesting as you are.

Types:

9 template files

- [wp-includes/general-template.php](#)
- [wp-includes/author-template.php](#)
- [wp-includes/bookmark-template.php](#)
- [wp-includes/category-template.php](#)
- [wp-includes/comment-template.php](#)
- [wp-includes/link-template.php](#)
- [wp-includes/post-template.php](#)
- [wp-includes/post-thumbnail-template.php](#)
- [wp-includes/nav-menu-template.php](#)

Q8:default table prefix:

In the wp-config.php file, a WordPress site owner can define a database table prefix. By default, the prefix is "wp_", but you'll need to check on the actual value and use it to define your database table name. This value is found in the \$wpdb->prefix variable.

Q9: way to pass object in wordpress:

This function invokes all functions attached to action hook \$tag. It is possible to create new action hooks by simply calling this function, specifying the name of the new hook using the \$tag parameter.

You can pass extra arguments to the hooks, much like you can with [apply_filters\(\)](#).

Q10:wordpress content stored:

All the data whether it is text , content, pages and images are stored in database. WordPress uses a MySQL database for storing data. As wordpress is a CMS ,it fetch all the content and image on theme or template but store the pages indatabase only.

Q11:plugin in wordpress:

A plugin is a piece of software containing a group of functions that can be added to a WordPress website. They can extend functionality or add new features to your WordPress websites. WordPress plugins are written in the PHP programming language and integrate seamlessly with WordPress.

- WPForms. ...
- MonsterInsights. ...
- Yoast SEO. ...
- Constant Contact. ...
- OptinMonster. ...
- Sucuri. ...
- UpdraftPlus. ...
- WP Rocket.

Q12:How safe is our website in wordpress

So in my point view websites with are based on WordPress are always safe. You can easily use them for any purpose. Wordpress is the #1 CMS (Content Management System) used today for Blogs and Websites worldwide. Due to thisWordPress Sites are bombarded by Hackers and Spam.

Q13: what should be done when website is hacked:

- Step 0 – Have a Professional Do it for You. ...
- Identify the Hack. ...
- Check with your Hosting Company. ...
- Restore from Backup. ...
- Malware Scanning and Removal. ...
- Check User Permissions. ...
- Change Your Secret Keys. ...
- Change Your Passwords AGAIN.

Q14:Current version of wordpress: WordPress 5.2 “Jaco”

Q15:positive aspect of wordpress:

- Easy installation and customization
- Large-scale themes
- User-friendly plugins
- Vibrant community.

QUIZ 2:

1. AngularJS is a client side , open-source JavaScript MVC framework to develop a dynamic web application.
2. Directives are markers on DOM elements (such as elements, attributes, css, and more). These can be used to create custom HTML tags that serve as new, custom widgets. AngularJS has built-in directives (ng-bind, ng-model, etc) to perform most of the task that developers have to do.
3. Expressions are used to bind application data to html. Expressions are written inside double braces like {{ expression }}. Expressions behave in same way as ng-bind directives. AngularJS application expressions are pure JavaScript expressions and outputs the data where they are used.
4. Scopes are objects that refer to the model. They act as glue between controller and view.
5. **Angularjs** is a Single Page Applications Framework. Single page application (**SPA**) is a web application that fits on a single page. All your code (JS, HTML, CSS) is retrieved with a single page load. And navigation between pages performed without refreshing the whole page
6. In order to implement routing the following main steps have to be implemented in your application in any specific order.
 - Reference to angular-route.js. This is a [JavaScript](#) file developed by Google that has all the functionality of routing. This needs to be placed in your application so that it can reference all of the main modules which are required for routing.
 - The next important step is to add a dependency to the ngRoute module from within your application. This dependency is required so that routing functionality can be used within the application. If this dependency is not added, then one will not be able to use routing within the angular.JS application.
 - Below is the general syntax of this statement. This is just a normal declaration of a module with the inclusion of the ngRoute keyword.
`var module = angular.module("sampleApp", ['ngRoute']);`
 - The next step would be to configure your \$routeProvider. This is required for providing the various routes in your application.
 - Below is the general syntax of this statement which is very self-explanatory. It just states that when the relevant path is chosen, use the route to display the given view to the user.
`when(path, route)`
 - Links to your route from within your HTML page. In your HTML page, you will add reference links to the various available routes in your application.
`Route 1
`
 - Finally would be the inclusion of the ng-view directive, which would normally be in a div tag. This would be used to inject the content of the view when the relevant route is chosen.
7. There are **four** different types of ways through which we can do data bindings in Angular 2 namely event binding, unidirectional binding (i.e. one way binding), bi-directional binding (i.e. two way binding), and the interpolation
8. **Apply** novalidate attribute in <form> tag. The novalidate attribute will disable the browser's default **validation**. Set the name attribute in <form> and other elements, which will be used to

obtain a reference of the elements. Now, set ng-required="true" on the input element of First Name.

9. Dependency Injection is a software design in which components are given their dependencies instead of hard coding them within the component. It relieves a component from locating the dependency and makes dependencies configurable. It also helps in making components reusable, maintainable and testable. AngularJS provides a supreme Dependency Injection mechanism. It provides following core components which can be injected into each other as dependencies.

- Value
- Factory
- Service
- Provider
- Constant

10. ng-repeat directive repeats html elements for each item in a collection.

11. The **model** in an MVC-based application is generally responsible for **modeling** the data used in the view and handling user interactions such as clicking on buttons, scrolling, or causing other changes in the view. In basic examples, **AngularJS** uses the \$scope object as the **model**. Controllers are JavaScript functions that are bound to a particular scope. They are the prime actors in AngularJS framework and carry functions to operate on data and decide which view is to be updated to show the updated model based data.

12. Filters select a subset of items from an array and return a new array. Filters are used to show filtered items from a list of items based on defined criteria.

13. AngularJS come with several built-in services. For example \$https: service is used to make XMLHttpRequests (Ajax calls). Services are singleton objects which are instantiated only once in app.

14. The **ng-dblclick** directive tells AngularJS what to do when an HTML element is double-clicked. The **ng-dblclick** directive from AngularJS will not override the element's original ondblclick event, both are executed .

Its syntax is:

```
<element ng-dblclick="expression"></element>
```

15. ng-disabled directive disables a given control. In below example, we've added ng-disabled attribute to a HTML button and pass it a model. Then we've attached the model to an checkbox and can see the variation.

```
<input type = "checkbox" ng-model = "enableDisableButton">Disable Button  
<button ng-disabled = "enableDisableButton">Click Me!</button>
```

16. Basically, the **difference** is that **state** is something like attributes in OOP : it's something local to a class (component), used to better describe it. **Props** are like parameters - they are passed to a component from the caller of a component (the parent) : as if you called a function with certain parameters.

- Props are immutable i.e. once set the props cannot be changed, while State is an observable object that is to be used to hold data that may change over time and to control the behavior after each change.
 - States can only be used in Class Components while Props don't have this limitation. While Props are set by the parent component, State is generally updated by event handlers.
17. **state** is something like attributes in OOP : it's something local to a class (component), used to better describe it. States can only be used in Class Components while Props don't have this limitation. While Props are set by the parent component, State is generally updated by event handlers.

18. You can do it like this

```
var FirstComponent = React.createClass({
  render: function() {
    return <div>FirstComponent</div>;
  }
});

var SecondComponent = React.createClass({
  render: function() {
    return <div>SecondComponent</div>;
  }
});

var MainComponent = React.createClass({
  render: function() {
    return <div>
      <FirstComponent />
      <SecondComponent />
    </div>;
  }
});
```

19. Using **render** props in **React** is a technique for efficiently re-using code. According to the **React** documentation, "a component with a **render** prop takes a **function** that returns a **React** element and calls it instead of implementing its own **render** logic."
20. Same as above
21. Here are some of the key **differences** between **Angular** and **React**. **Angular** is a complete framework while **React** is a JavaScript Library. **Angular** uses a two-directional data flow process where it updates the Real DOM directly while **React** updates only the Virtual DOM and is concerned with the one-directional data flow
22. Like the actual **DOM**, the **Virtual DOM** is a node tree that lists elements and their attributes and content as objects and properties. **React's** **render()** method creates a node tree from **React** components and updates this tree in response to mutations in the data model, caused by actions
23. **JSX** is a preprocessor step that adds XML syntax to JavaScript. You can definitely use **React** without **JSX** but **JSX** makes **React** a lot more elegant. Just like XML, **JSX** tags have a tag name, attributes, and children. If an attribute value is enclosed in quotes, the value is a string.
24. **Limitations of React Js**

- Learning curve. Being not full-featured framework it is required in-depth knowledge for integration user interface free library into MVC framework.
- View-orientedness is one of the cons of ReactJS. It should be found 'Model' and 'Controller' to resolve 'View' problem.
- Not using isomorphic approach to exploit application leads to search engines indexing problems.
- Lots of developers dislike JSX React's documentation, manuals are difficult for newcomers' understanding.
- React's large size library.

25. Following are the major advantages:

- Creating dynamic web application becomes easier
- Allow developers to reuse components
- React js is easy to learn.
- Enhancement of performance due to virtual DOM
- The development of Isomorphic apps
- Known to be SEO friendly
- The benefit of supporting JavaScript Library
- Support of handy tools
- Increase in community base
- Scope for testing the codes

26. Following are the features of the React Js.

- Optimization.
- flow of data in one way: **React.js** is designed in such a manner that it will only support data that is flowing downstream, in one flow.
- React Js performance:
React.js is said to be a great performer. This is one of the features that makes it much better than many great platforms out there today. The reason why it does so well is because it manages a virtual DOM and not watching and updating an actual DOM on the fly of a browser.

27. React is a javascript , UI library. It is a tool for building UI components.

28. C# is a general object-oriented programming (OOP) language for networking and Web development. C# is specified as a common language infrastructure (CLI) language.

29. A **constructor** is a special method of the class which gets automatically invoked whenever an instance of the class is created. Like methods, a **constructor** also contains the collection of instructions that are executed at the time of Object creation.

30. The **using statement** is used to work with an object in C# that implements the IDisposable interface.