Develop and deploy one of the following web applications:
1. Online pizza order application
2. Student information system for training & placement department
3. Leave management application
4. Blogging platform
5. Meeting room booking application
6. Exam cell automation application

AngularJS is a JavaScript framework. It can be added to an HTML page with a <script> tag.

AngularJS extends HTML attributes with Directives, and binds data to HTML with Expressions.

AngularJS extends HTML with ng-directives.

AngularJS starts automatically when the web page has loaded.

The ng-app directive tells AngularJS that the element is the "owner" of an AngularJS application.The ng-app directive defines an AngularJS application.

The `ng-model` directive you can bind the value of an input field to a variable created in AngularJS.The `ng-model` directive can also:

- Provide type validation for application data (number, email, required).
- Provide status for application data (invalid, dirty, touched, error).
- Provide CSS classes for HTML elements.
- Bind HTML elements to HTML forms.
- The binding goes both ways. If the user changes the value inside the input field, the AngularJS property will also change its value:

The ng-bind directive binds application data to the HTML view.

The ng-init directive initializes AngularJS application variables.

The `ng-repeat` directive actually clones HTML elements once for each item in a collection.

AngularJS expressions are written inside double braces: {{ expression }}.

AngularJS expressions can also be written inside a directive: `ng-bind="expression"`.

AngularJS modules define AngularJS applications.

AngularJS controllers control AngularJS applications

AngularJS Modules

An AngularJS module defines an application.

The module is a container for the different parts of an application.

The module is a container for the application controllers.

Controllers always belong to a module.

A module is created by using the AngularJS function `angular.module`

```
<script>

var app = angular.module("myApp", []);

</script>
```

The "myApp" parameter refers to an HTML element in which the application will run.

New directives are created by using the `.directive` function.

To invoke the new directive, make an HTML element with the same tag name as the new directive.

HTML View

The HTML container where the AngularJS application is displayed, is called the view.

AngularJS Controller

Applications in AngularJS are controlled by controllers.

AngularJS controllers control the data of AngularJS applications.

AngularJS controllers are regular JavaScript Objects.

```
<div ng-app="myApp" ng-controller="myCtrl">

First Name: <input type="text" ng-model="firstName"><br>

Last Name: <input type="text" ng-model="lastName"><br>

<br>

Full Name: {{firstName + " " + lastName}}

</div>

<script>

var app = angular.module('myApp', []);

app.controller('myCtrl', function($scope) {

  $scope.firstName = "John";

  $scope.lastName = "Doe";

});

</script>
```

The AngularJS application is defined by ng-app="myApp". The application runs inside the .

The ng-controller="myCtrl" attribute is an AngularJS directive. It defines a controller.

The myCtrl function is a JavaScript function.

AngularJS will invoke the controller with a $scope object.

In AngularJS, $scope is the application object (the owner of application variables and functions).

The controller creates two properties (variables) in the scope (firstName and lastName).

The ng-model directives bind the input fields to the controller properties (firstName and lastName).

AngularJS Scope

The scope is the binding part between the HTML (view) and the JavaScript (controller).

The scope is an object with the available properties and methods.

The scope is available for both the view and the controller.

All applications have a `$rootScope` which is the scope created on the HTML element that contains the `ng-app` directive.

The rootScope is available in the entire application.

If a variable has the same name in both the current scope and in the rootScope, the application uses the one in the current scope.

AngularJS Filters

Filters can be added to expressions by using the pipe character `|`, followed by a filter.AngularJS provides filters to transform data:

- `currency` Format a number to a currency format.
- `date` Format a date to a specified format.
- `filter` Select a subset of items from an array.
- `json` Format an object to a JSON string.
- `limitTo` Limits an array/string, into a specified number of elements/characters.
- `lowercase` Format a string to lower case.
- `number` Format a number to a string.
- `orderBy` Orders an array by an expression.
- `uppercase` Format a string to upper case.

```
<div ng-app="myApp" ng-controller="personCtrl">
```

```
<p>The name is {{ lastName | uppercase }}</p>

</div>
```

AngularJS Services

a service is a function, or object, that is available for, and limited to, your AngularJS application.

AngularJS has about 30 built-in services.

The `$http` service is one of the most common used services in AngularJS applications. The service makes a request to the server, and lets your application handle the response.

The `$timeout` service is AngularJS' version of the `window.setTimeout` function.