**Angular JS**

**Lab Sheet 11**

Angular, a front-end framework developed by Google, is built entirely on TypeScript, a subset of JavaScript.

Use any of the online coding tools that allow you to import Angular and run your code in the browser. Here are the 2 options:

<https://codesandbox.io/s/angular>

<https://stackblitz.com/edit/angular-practice-start?file=app%2Fapp.component.ts>

**Practice1: AngularJS Expressions, strings, arrays. objects**

<!DOCTYPE html>

<html>

<script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.9/angular.min.js"></script>

<body>

<div ng-app>

<p>Example expression: {{ 10 + 5 }}</p>

<div ng-app="" ng-init="firstName='Geo';lastName='Kumar'">

<p>The Complete name is: {{ firstName + " " + lastName }}</p>

</div>

<div ng-app="" ng-init="quantity=3;cost=100">

<p>Total amount rupees: <span ng-bind="quantity \* cost"></span></p>

</div>

<div ng-app="" ng-init="person={firstName:'Geo',lastName:'Kumar'}">

<p>The First name is {{ person.firstName }}</p>

</div>

<div ng-app="" ng-init="points=[11,25,13,12,130]">

<p>The second result is <span ng-bind="points[1]"></span></p>

</div>

</div>

</body>

</html>

**Practice2: AngularJS Modules**

<html>

<script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.9/angular.min.js"></script>

<body>

<!--// adding a controller-->

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

{{ firstName + " " + lastName }}

</div>

<script>

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

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

$scope.firstName = "Laya";

$scope.lastName = "babu";

});

</script>

</body>

</html>

**Practice3: AngularJS Directives**

<html>

<script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.9/angular.min.js"></script>

<body>

<div data-ng-app="" data-ng-init="quantity=9;price=125">

<h2>Cost Calculator</h2>

Quantity: <input type="number" ng-model="quantity">

Price: <input type="number" ng-model="price">

<p><b>Total in rupees:</b> {{quantity \* price}}</p>

</div>

</body>

</html>

**Practice4: ng-model**

<html>

<script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.9/angular.min.js"></script>

<body>

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

Name: <input ng-model="name">

</div>

<script>

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

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

$scope.name = "Laya babu";

});

</script>

<p>Use the ng-model directive to bind the value of the input field to a property made in the controller.</p>

</body>

</html>

**Practice5: two-way binding**

<html>

<script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.9/angular.min.js"></script>

<body>

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

Name: <input ng-model="firstname">

<h1>{{firstname}}</h1>

</div>

<script>

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

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

$scope.firstname = "John";

$scope.lastname = "Doe";

});

</script>

<p>Change the name inside the input field, and the model data will change automatically, and therefore also the header will change its value.</p>

</body>

</html>

**Practice6: AngularJS Controllers**

<html>

<script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.9/angular.min.js"></script>

<body>

<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>

</body>

</html>

**Demonstrates the fundamental architecture of Angular applications**

Students have to refer below links and understand flow of working of angular application and its components. Modules and directives.

<https://buddy.works/tutorials/building-a-web-app-with-angular-and-bootstrap>

<https://stackblitz.com/run?file=src%2Fapp%2Fhero-list.component.ts>