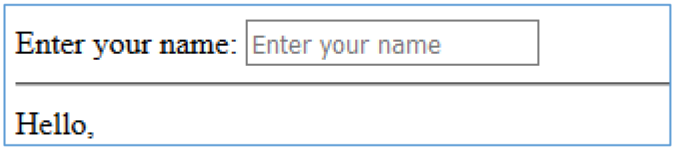
Understanding AngularJS and its Uses

Controllers, Expression, Sharing Data, and Two way Data Binding

A. Create the first AngularJS application.

1. Create a index.html then create a form as below:



Enter your name: Enter your name

Hello,

Fig 1. Form after creating

Code here:

```
<html>
    <head>
        <title>Lab01</title>
    </head>
    <body>
        Enter your name: <input type="text" placeholder="Enter your name" />
        <hr>
        Hello,
    </body>
</html>
```

2. Edit the code in index.html to include AngularJS framework.

Code here:

```
<html>
    <head>
        <title>Lab01</title>
        <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.7/angular.min.js"></script>
    </head>
    <body>
```

```
        Enter your name: <input type="text" placeholder="Enter your name" />
        <hr>
        Hello,
    </body>
</html>
```

3. Create a module an controller in the application to control all event in the scope of module.

Code here:

```
<html>
    <head>
        <title>Lab01</title>
        <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.7/angular.min.js"></script>
    </head>
    <body ng-app="myApp" ng-controller="myController">
        Enter your name: <input type="text" placeholder="Enter your name" />
        <hr>
        Hello,
    </body>
</html>
```

4. Create a model in application.

Code here:

```
<html>
    <head>
        <title>Lab01</title>
        <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.7/angular.min.js"></script>
    </head>
    <body ng-app="myApp" ng-controller="myController">
        Enter your name: <input type="text" placeholder="Enter your name" ng-model="fullname" />
        <hr>
        Hello,
    </body>
</html>
```

5. Create a variable to display name of user and place it on the view.

Code here:

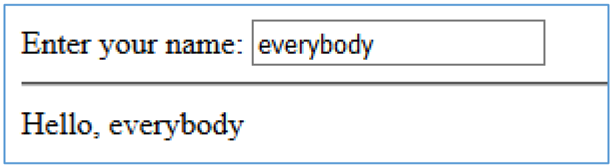
```
<html>
    <head>
        <title>Lab01</title>
        <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.7/angular.min.js"></script>
    </head>
    <body ng-app="myApp" ng-controller="myController">
        Enter your name: <input type="text" placeholder="Enter your name" ng-model="fullname" />
        <hr>
        Hello, {{fullname}}
    </body>
</html>
```

6. Create javascript code using angularJS to set event on the application.

Code here:

```
<html>
    <head>
        <title>Lab01</title>
        <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.7/angular.min.js"></script>
    </head>
    <body ng-app="myApp" ng-controller="myController">
        Enter your name: <input type="text" placeholder="Enter your name" ng-model="fullname" />
        <hr>
        Hello, {{fullname}}
    </body>
    <script>
        //Load module
        var app = angular.module("myApp",[]);
        //Add controller to app
        app.controller("myController", function($scope){
            //set value for model fullname and show it on view via
{{fullname}}
            $scope.fullname = "everybody"
        });
    </script>
</html>
```

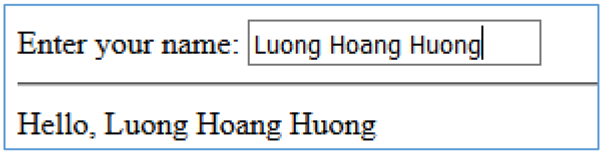
7. Run the index.html on browser, change value in textbox to see the result.



Enter your name: everybody

Hello, everybody

Fig 2. Form after loading.



Enter your name: Luong Hoang Huong

Hello, Luong Hoang Huong

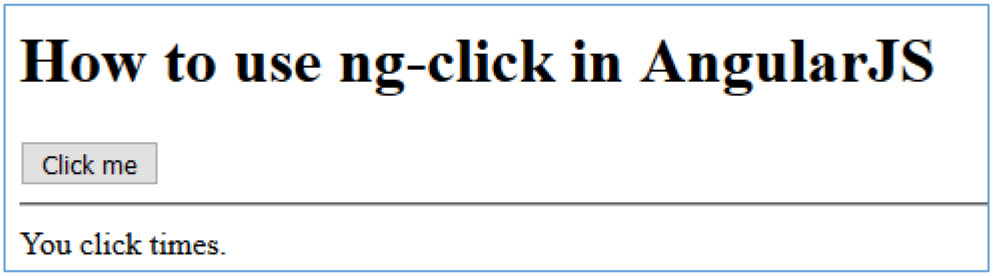
Fig 3. Form while changing the value in textbox.

Note: another source to do the same exercise 1.

```
<html>
    <head>
        <title>Lab01</title>
        <script
src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.7/angular.min.
js"></script>
    </head>
    <body ng-app="">
        Enter your name: <input type="text" placeholder="Enter your
name" ng-model="fullname" value="" />
        <hr>
        Hello, <span ng-bind="fullname"></span>
    </body>
</html>
```

B. Using click event in AngularJS

1. Create a index.html then create a view as below:



How to use ng-click in AngularJS

You click times.

Fig 4. UI for this exercise.

<u>Code here</u>:

```
<html>
    <head>
        <title>Lab01</title>
    </head>
    <body>
        <h1>How to use ng-click in AngularJS</h1>
        <input type="button" value="Click me" />
        <hr>
        You click  times.
    </body>
</html>
```

2. Edit index.html to add AngularJS framework and set module and controller for application.

<u>Code here</u>:

```
<html>
    <head>
        <title>Lab01</title>
        <script
src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.7/angular.min.
js"></script>
    </head>
    <body ng-app="myApp" ng-controller="myController">
        <h1>How to use ng-click in AngularJS</h1>
        <input type="button" value="Click me" />
        <hr>
```

```
          You click  times.
     </body>
</html>
```

3. Create a variable to store the number of times user click on the button. Then creating a ng-click event for button.

Code here:

```
<html>
     <head>
          <title>Lab01</title>
          <script
src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.7/angular.min.
js"></script>
     </head>
     <body ng-app="myApp" ng-controller="myController">
          <h1>How to use ng-click in AngularJS</h1>
          <input type="button" value="Click me" ng-click =
"countfunction()" />
          <hr>
          You click {{count}} times.
     </body>
</html>
```

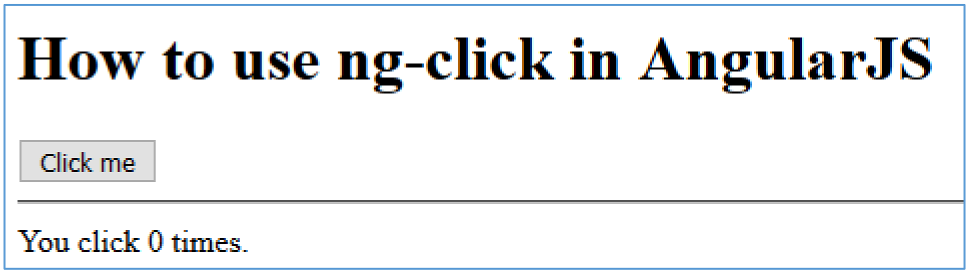
4. Write javascript code to process for the event.

Code here:

```
<html>
     <head>
          <title>Lab01</title>
          <script
src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.7/angular.min.
js"></script>
     </head>
     <body ng-app="myApp" ng-controller="myController">
          <h1>How to use ng-click in AngularJS</h1>
          <input type="button" value="Click me" ng-
click="countfunction()" />
          <hr>
          You click {{count}}  times.
```

```
    </body>
    <script>
        var app = angular.module("myApp", []);
        app.controller("myController",function($scope){
            //init value for count variable
            $scope.count=0;
            //create a function for ng-click event
            $scope.countfunction = function(){
                this.count++;
            };
        });
    </script>
</html>
```

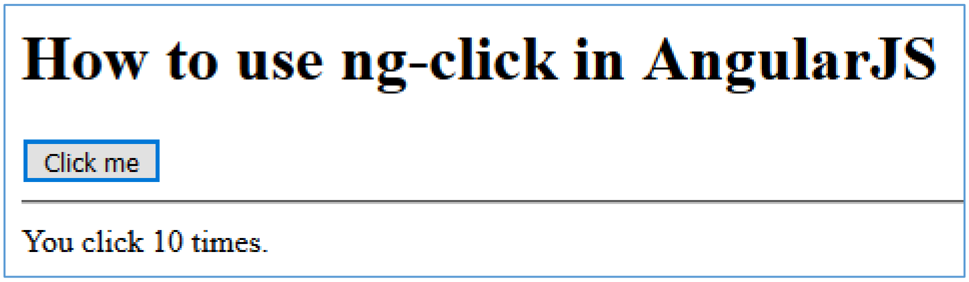
5. Run the index.html and see the result



How to use ng-click in AngularJS

You click 0 times.

Fig 5. Form after loading.



How to use ng-click in AngularJS

You click 10 times.

Fig 6. Result after clicking serveral times.