Daniel Kolodziej, ITMD 419, Final Project

DESCRIPTION:

The following application runs as a simple atm machine with login validation. The application starts with a login page that gives the user the ability to login with correct credentials or to sign up as a new user. Once the credentials are validated the user is brought to the main page which has the actual atm functionality. The atm displays to the user the initial and current balances. Its functionality includes depositing, withdrawal, and to check various interest accruals, as well as going back to the login page.

SOURCE CODE:

Index.html

<!DOCTYPE html>

<html ng-app="myApp" ng-controller="MainCtrl">

<head>

<link rel="stylesheet" href="style.css">

<script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.10/angular.min.js"></script>

<script src="script.js"></script>

</head>

<body ng-controller="MainCtrl">

<h1>Login Page</h1>

<!--form for user and pass-->

<form name="myForm" novalidate>

<p>User name:<br>

<input type="text" name="username" placeholder="admin" ng-model="username" required>

<!-- show, in red only when firstname input has been modified and invalid-->

<span style="color:red" ng-show="myForm.username.$dirty && myForm.username.$invalid">

<span ng-show="myForm.username.$error.required">user name is required.</span>

</span>

</p>

<p>Password:<br>

<input type="password" name="password" placeholder="admin" ng-model="password" required>

<!-- show, in red only when firstname input has been modified and invalid-->

<span style="color:red" ng-show="myForm.password.$dirty && myForm.password.$invalid">

<span ng-show="myForm.password.$error.required">password is required.</span>

</span>

</p>

<button type="submit" ng-click="login()">login</button><br><br><!--login2(username)-->

<button type="submit" ng-click="submit()">Sign up</button>

</form><br>

</body>

</html>

Main.html

<!DOCTYPE html>

<html>

<head>

<script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.10/angular.min.js" data-require="angular.js@4.0.0" data-semver="4.0.0"></script>

<script src="script.ts" data-require="angular.js@4.0.0" data-semver="4.0.0"></script>

<script src="system.config.js" data-require="angular.js@4.0.0" data-semver="4.0.0"></script>

<script src="tsconfig.json" data-require="angular.js@4.0.0" data-semver="4.0.0"></script>

<link href="style.css" rel="stylesheet" />

<script src="script.js"></script>

</head>

<body ng-app="myApp" ng-controller="MainCtrl">

<h1>D Bank's ATM machine</h1>

<!--HTML5 attribute required to specify that the input field must be filled out

$dirty The field has been modified

$invalid The field content is not valid

$valid The field content is valid

They are all properties of the input field, and are either true or false.-->

<!-- required in order to for values to be entered-->

<p>Initial Balance: {{bal}}<br></p>

<form name="myForm" novalidate>

<p>Make a Deposit:<br>

<input type="number" name="deposit" ng-model="deposit" required>

<input type="submit" value="Deposit" ng-click="depo(deposit)" ng-disabled="myForm.deposit.$invalid">

</p>

<p>Make a Withdrawal:<br>

<input type="number" name="withdraw" ng-model="withdraw" required>

<input type="submit" value="Withdraw" ng-click="withd(withdraw)" ng-disabled="myForm.withdraw.$invalid">

</p>

<p>Your Current Balance: {{newBal}}<br></p>

<p><label>Check Interest Accrual: <br><select ng-model="selectedItem" ng-options="x.name for x in items track by x.name"></select></label>

<input type="submit" value="Interest" ng-click="interest(selectedItem.value)">

Total: ${{result2}}

</p>

</form>

<p>

<input type="submit" value="Logout" ng-click="back()">

</p>

</body>

</html>

Script.js

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

//constant variable

const RATE = 0.03;

//global variable for starting balance

var bal = 100;

app.controller('MainCtrl', function

($scope) {

$scope.myusers = [

{username:'user1', password:'123123', initBal:0},

{username:'admin', password:'admin', initBal:100}];

$scope.selectedItem = {name: "1yr", value: 1};

//array value of three time periods

$scope.items = [

{name: "6mo", value: 0.5},

{name: "1yr", value: 1},

{name: "5yr", value: 5}

];

$scope.bal = bal;

$scope.newBal = 0;

$scope.newBal += bal;

//adds the user input to balance

$scope.depo=function(num1) {

$scope.result=$scope.newBal +parseInt(num1);

$scope.newBal = $scope.result;

};

//subtracts user input from balance

$scope.withd=function(num1) {

if (parseInt(num1) <= $scope.newBal){

$scope.result=$scope.newBal -parseInt(num1);

$scope.newBal = $scope.result;

} else {

alert("You cannot withdraw more than you have!");

}

};

//uses simple interest formula to calc the total result

$scope.interest=function(num1) {

$scope.result2=$scope.newBal \* (1 + (RATE \* num1));

};

//goes back to the login page

$scope.back = function(){

window.location = "index.html";

};

//acts as the sign up function, pushes to existing users array

$scope.submit = function(){

if($scope.username && $scope.password){

var user = $scope.username;

var pass = $scope.password;

alert("Welcome new user: " + user);

$scope.myusers.push({

username: user,

password: pass,

initBal: 100

});

window.location = "main.html";

} else {

alert("Invalid Login");

}

};

//checks user input whether matches correct credentials

$scope.login = function(){

var user = $scope.username;

$scope.curr = $scope.username;

if($scope.username == "admin" && $scope.password == "admin")

{

alert("Welcome existing user: " + user);

window.location = "main.html";

}

else {

alert("The information entered is not correct");

}

};

$scope.back = function(){

alert("Thanks for banking with us!");

window.location = "index.html";

};

});

Style.css

input.ng-invalid {

background-color: pink;

}

input.ng-valid {

background-color: lightgreen;

}

input.ng-pristine {

background-color: white;

}