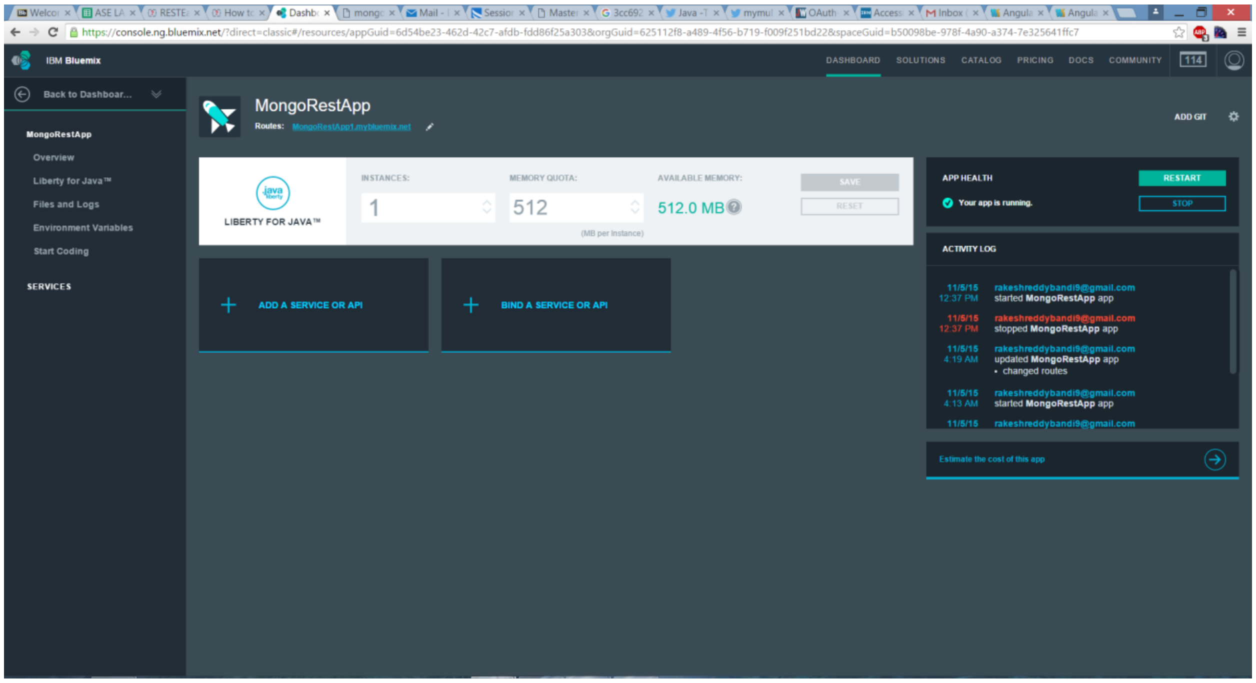
Lab Assignment 9 Documentation

1. Deployment in IBM Bluemix:

Deployed Mongo Rest services in IBM Bluemix



https://console.ng.bluemix.net/?direct=classic#/resources/appGuid=6d54be23-462d-42c7-afdb-fdd86f25a303&orgGuid=625112f8-a489-4f56-b719-f009f251bd22&spaceGuid=b50098be-978f-4a90-a374-7e325641ffc7

MongoRestApp

Routes: MongoRestApp1.mybluemix.net

LIBERTY FOR JAVA™

INSTANCES: 1

MEMORY QUOTA: 512 (MB per instance)

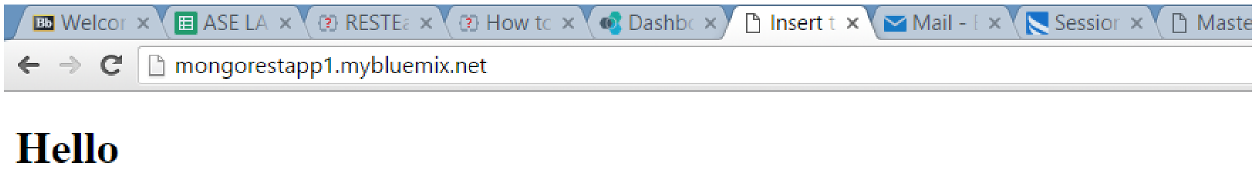
AVAILABLE MEMORY: 512.0 MB

APP HEALTH

Your app is running.

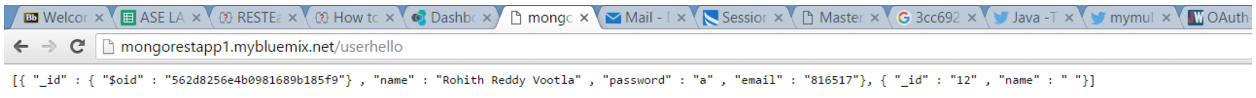
ACTIVITY LOG

```
11/5/15    rakeshreddybandi9@gmail.com
12:37 PM   started MongoRestApp app
11/5/15    rakeshreddybandi9@gmail.com
12:37 PM   stopped MongoRestApp app
11/5/15    rakeshreddybandi9@gmail.com
4:19 AM    updated MongoRestApp app
           • changed routes
11/5/15    rakeshreddybandi9@gmail.com
4:13 AM    started MongoRestApp app
11/5/15    rakeshreddybandi9@gmail.com
```



mongorestapp1.mybluemix.net

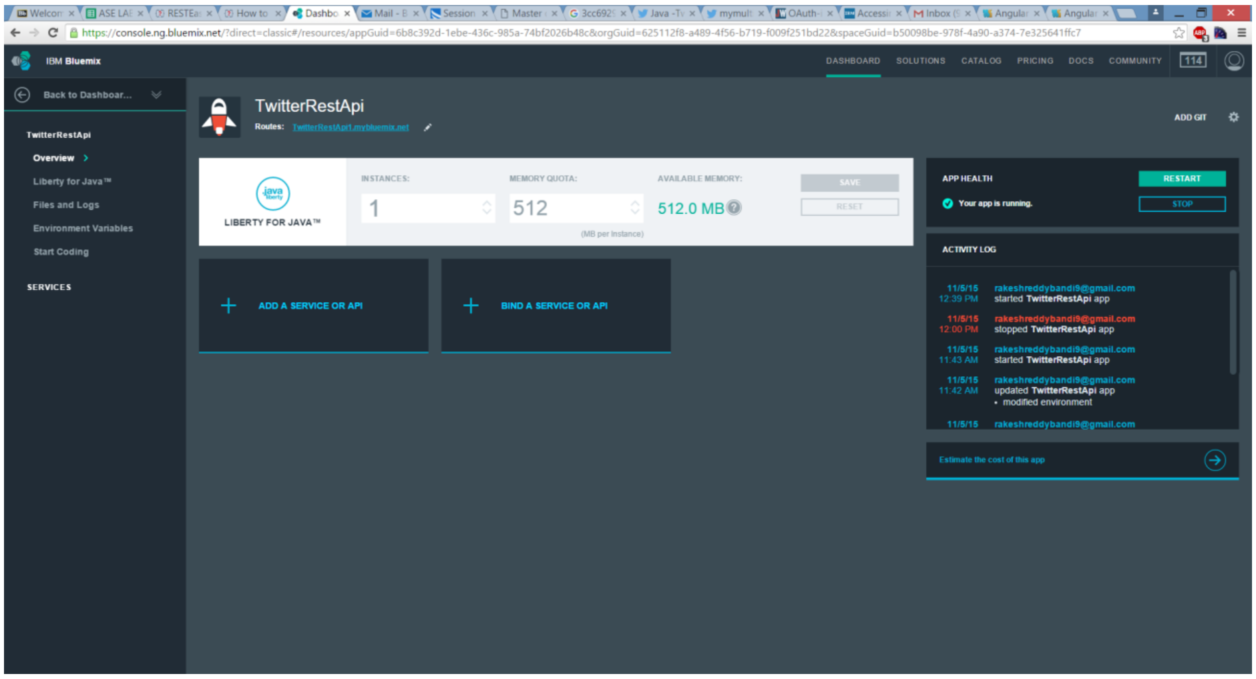
Hello



mongorestapp1.mybluemix.net/userhello

```
[{ "_id" : { "$oid" : "562d8256e4b0981689b185f9"} , "name" : "Rohith Reddy Vootla" , "password" : "a" , "email" : "816517"}, { "_id" : "12" , "name" : " "}]
```

2. Deployment Twitter Rest Services in IBM Bluemix:



https://console.ng.bluemix.net/?direct=classic#/resources/appGuid=6b8c392d-1ebe-436c-985a-74bf2026b48c&orgGuid=625112f8-a489-4f56-b719-f009f251bd22&spaceGuid=b50098be-978f-4a90-a374-7e325641ffc7

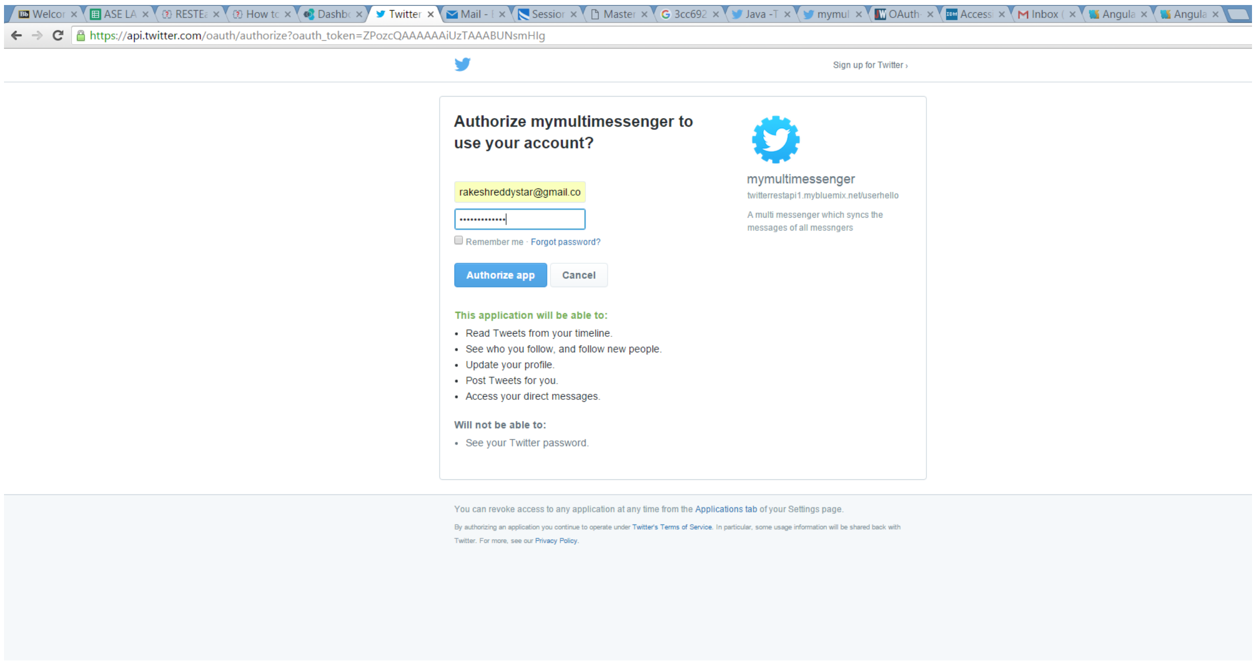
TwitterRestApi
Routes: TwitterRestApi1.mybluemix.net

INSTANCES: 1
MEMORY QUOTA: 512 (MB per instance)
AVAILABLE MEMORY: 512.0 MB

APP HEALTH
Your app is running.

ACTIVITY LOG

```
11/5/15    rakeshreddybandi9@gmail.com
12:39 PM   started TwitterRestApi app
11/5/15    rakeshreddybandi9@gmail.com
12:00 PM   stopped TwitterRestApi app
11/5/15    rakeshreddybandi9@gmail.com
11:43 AM   started TwitterRestApi app
11/5/15    rakeshreddybandi9@gmail.com
11:42 AM   updated TwitterRestApi app
           • modified environment
11/5/15    rakeshreddybandi9@gmail.com
```



https://api.twitter.com/oauth/authorize?oauth_token=ZPozcQAAAAAAiUzTAAABUNsmHIg

Sign up for Twitter ›

Authorize mymultimessenger to use your account?

rakeshreddystar@gmail.co

Remember me · Forgot password?

Authorize app | Cancel

mymultimessenger
twitterrestapi1.mybluemix.net/userhello
A multi messenger which syncs the messages of all messngers

This application will be able to:

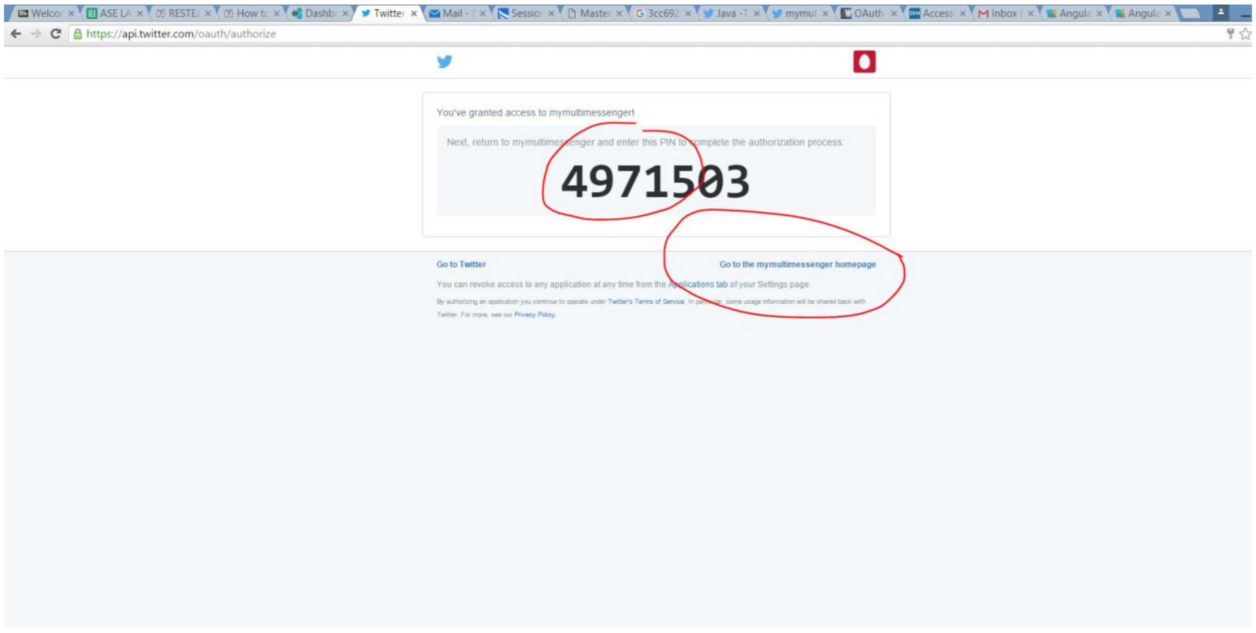
- Read Tweets from your timeline.
- See who you follow, and follow new people.
- Update your profile.
- Post Tweets for you.
- Access your direct messages.

Will not be able to:

- See your Twitter password.

You can revoke access to any application at any time from the Applications tab of your Settings page.

By authorizing an application you continue to operate under Twitter's Terms of Service. In particular, some usage information will be shared back with Twitter. For more, see our Privacy Policy.



https://api.twitter.com/oauth/authorize

You've granted access to mymultimessenger!

Next, return to mymultimessenger and enter this PIN to complete the authorization process:

4971503

Go to Twitter

Go to the mymultimessenger homepage

You can revoke access to any application at any time from the Applications tab of your Settings page.

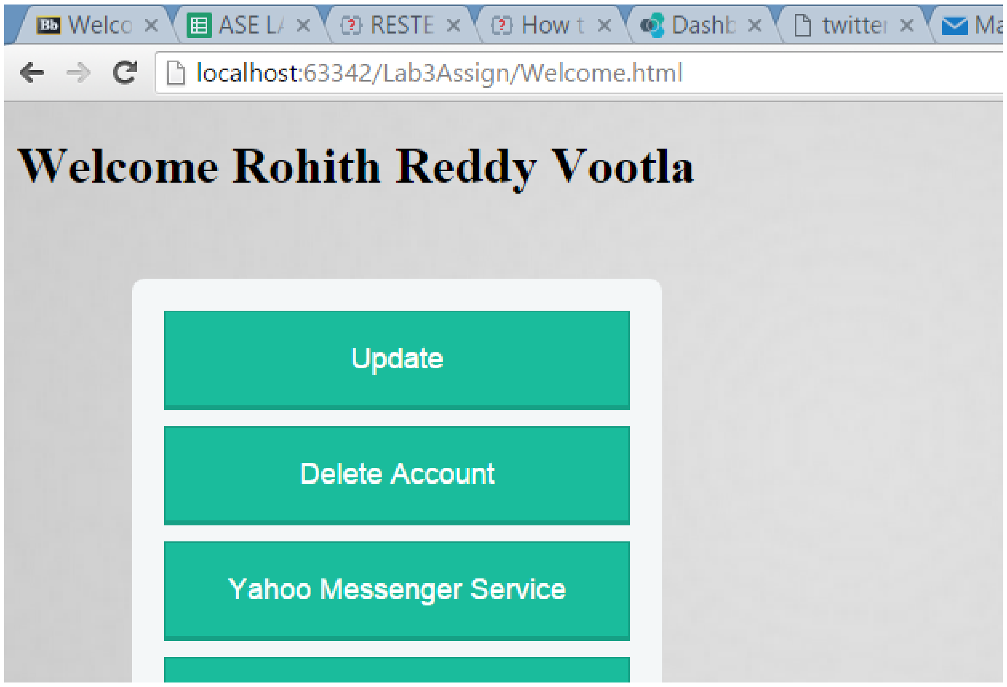
By authorizing an application you continue to operate under Twitter's Terms of Service. In particular, some usage information will be shared back with Twitter. For more, see our Privacy Policy.

Implementation of design patterns

For this lab assignment I implemented 3 design patterns

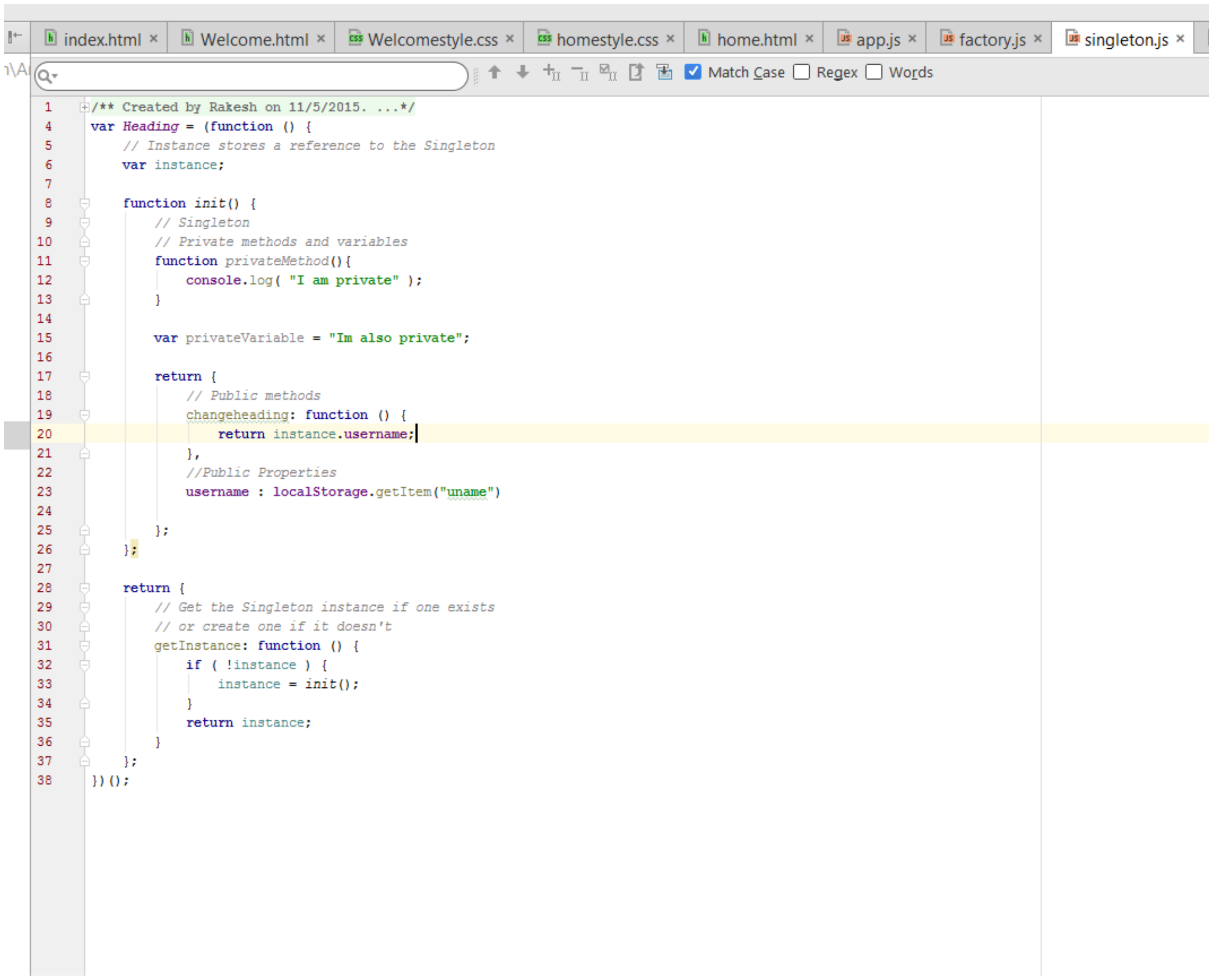
1. Singleton Design Pattern

I implemented Username Singleton service.



Welcome Rohith Reddy Vootla

Code snippets:

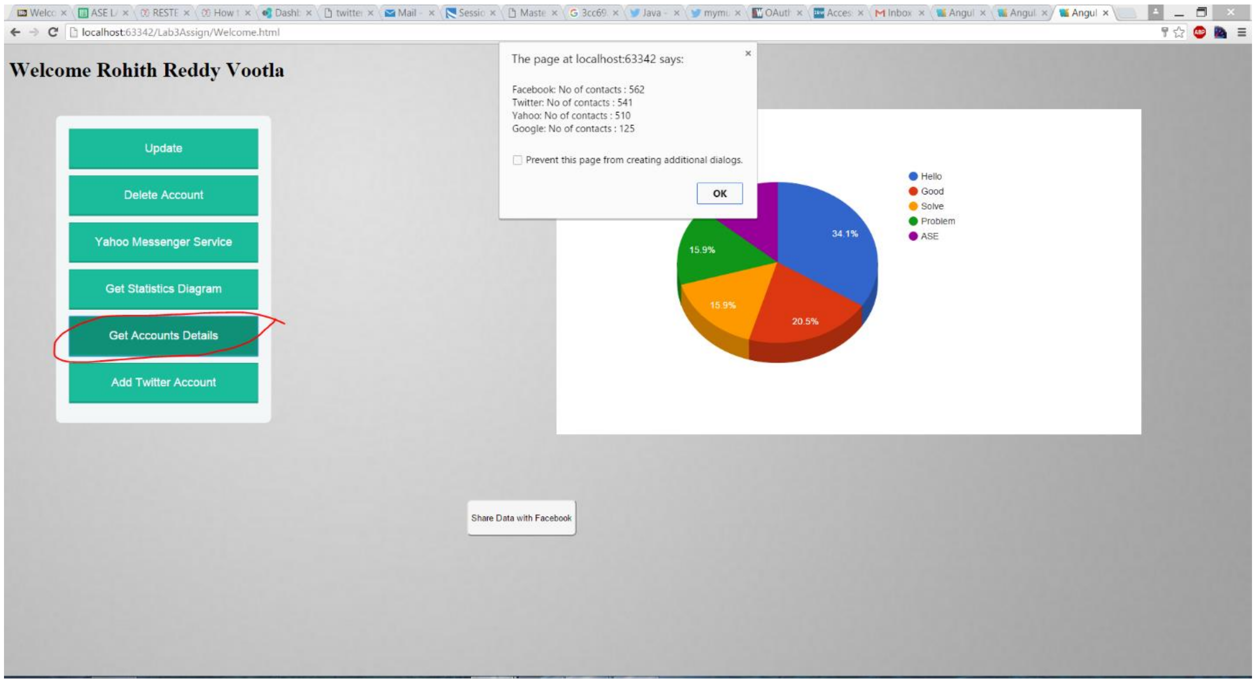


Match Case [✓] Regex [ ] Words [ ]

```
/** Created by Rakesh on 11/5/2015. ...*/
var Heading = (function () {
    // Instance stores a reference to the Singleton
    var instance;

    function init() {
        // Singleton
        // Private methods and variables
        function privateMethod(){
            console.log( "I am private" );
        }

        var privateVariable = "Im also private";

        return {
            // Public methods
            changeheading: function () {
                return instance.username;
            },
            //Public Properties
            username : localStorage.getItem("uname")

        };
    };

    return {
        // Get the Singleton instance if one exists
        // or create one if it doesn't
        getInstance: function () {
            if ( !instance ) {
                instance = init();
            }
            return instance;
        }
    };
})();
```

2. Factory Pattern

I implemented Factory pattern in Welcome page to show the contact details

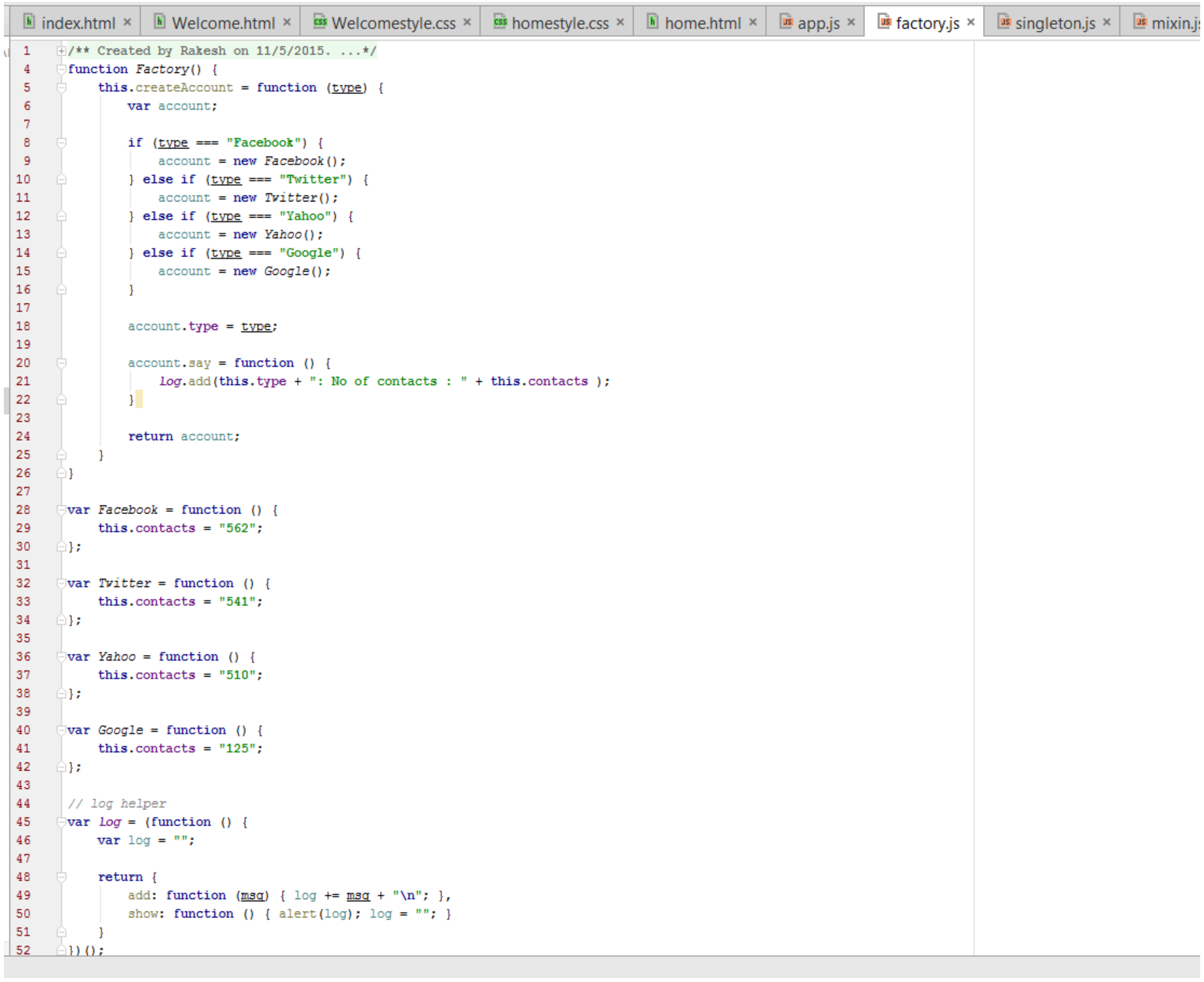


The page at localhost:63342 says:

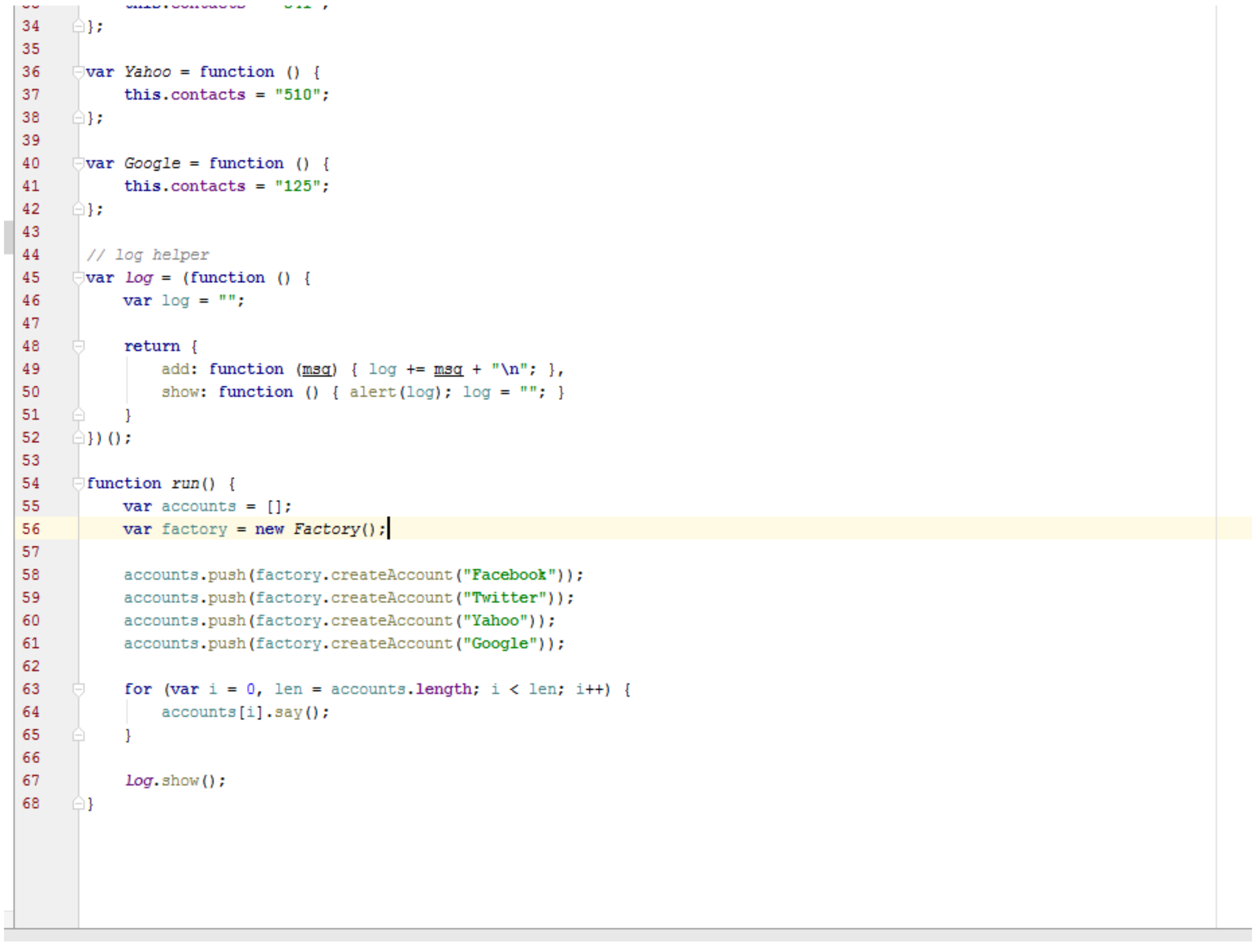
Facebook: No of contacts : 562
Twitter: No of contacts : 541
Yahoo: No of contacts : 510
Google: No of contacts : 125

Prevent this page from creating additional dialogs.

Code Snippet for Factory pattern



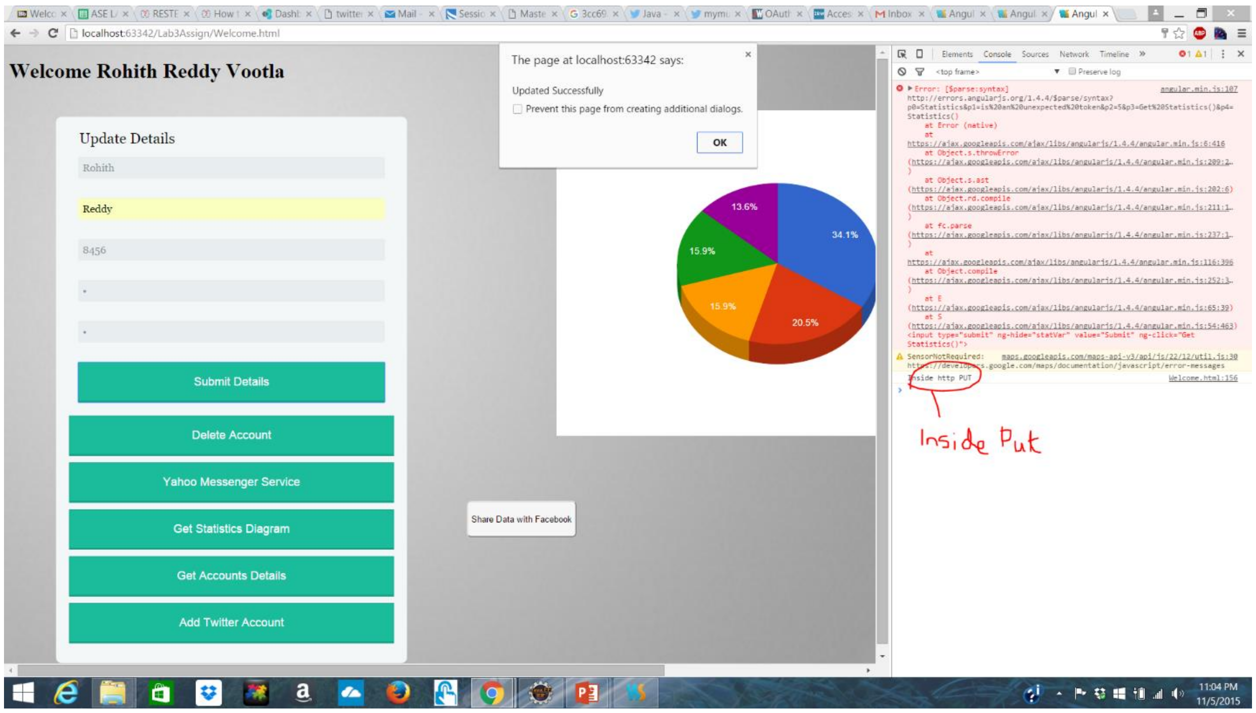
```
/** Created by Rakesh on 11/5/2015. ...*/
function Factory() {
    this.createAccount = function (type) {
        var account;

        if (type === "Facebook") {
            account = new Facebook();
        } else if (type === "Twitter") {
            account = new Twitter();
        } else if (type === "Yahoo") {
            account = new Yahoo();
        } else if (type === "Google") {
            account = new Google();
        }

        account.type = type;

        account.say = function () {
            log.add(this.type + ": No of contacts : " + this.contacts );
        }

        return account;
    }
}

var Facebook = function () {
    this.contacts = "562";
};

var Twitter = function () {
    this.contacts = "541";
};

var Yahoo = function () {
    this.contacts = "510";
};

var Google = function () {
    this.contacts = "125";
};

// log helper
var log = (function () {
    var log = "";

    return {
        add: function (msg) { log += msg + "\n"; },
        show: function () { alert(log); log = ""; }
    }
})();
```



```
};

var Yahoo = function () {
    this.contacts = "510";
};

var Google = function () {
    this.contacts = "125";
};

// log helper
var log = (function () {
    var log = "";

    return {
        add: function (msg) { log += msg + "\n"; },
        show: function () { alert(log); log = ""; }
    }
})();

function run() {
    var accounts = [];
    var factory = new Factory();

    accounts.push(factory.createAccount("Facebook"));
    accounts.push(factory.createAccount("Twitter"));
    accounts.push(factory.createAccount("Yahoo"));
    accounts.push(factory.createAccount("Google"));

    for (var i = 0, len = accounts.length; i < len; i++) {
        accounts[i].say();
    }

    log.show();
}
```

3.Mixin Pattern

To implement Mixin Pattern I used to inside keyword and used this method for CURD oprations



Welcome Rohith Reddy Vootla

Update Details

Rohith

Reddy

8456

The page at localhost:63342 says:

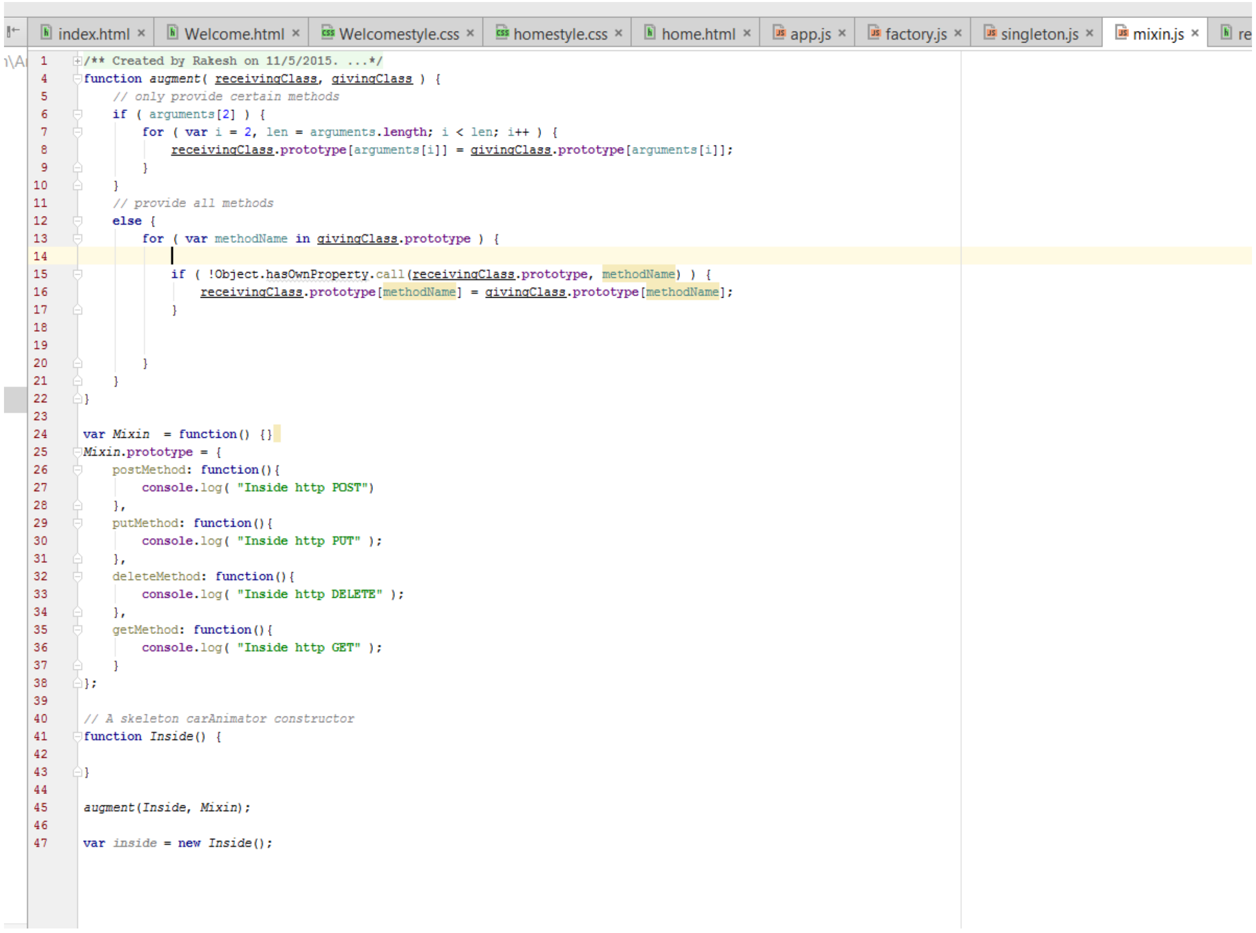
Updated Successfully

Prevent this page from creating additional dialogs.

```
Error: [$parse:syntax]                                                    angular.min.js:107
http://errors.angularjs.org/1.4.4/$parse/syntax?
p0=Statistics&p1=is%20an%20unexpected%20token&p2=5&p3=Get%20Statistics()&p4=
Statistics()
    at Error (native)
    at
https://ajax.googleapis.com/ajax/libs/angularjs/1.4.4/angular.min.js:6:416
    at Object.s.throwError
(https://ajax.googleapis.com/ajax/libs/angularjs/1.4.4/angular.min.js:209:2…
)
    at Object.s.ast
(https://ajax.googleapis.com/ajax/libs/angularjs/1.4.4/angular.min.js:202:6)
    at Object.rd.compile
(https://ajax.googleapis.com/ajax/libs/angularjs/1.4.4/angular.min.js:211:1…
)
    at fc.parse
(https://ajax.googleapis.com/ajax/libs/angularjs/1.4.4/angular.min.js:237:1…
)
    at
https://ajax.googleapis.com/ajax/libs/angularjs/1.4.4/angular.min.js:116:396
    at Object.compile
(https://ajax.googleapis.com/ajax/libs/angularjs/1.4.4/angular.min.js:252:3…
)
    at E
(https://ajax.googleapis.com/ajax/libs/angularjs/1.4.4/angular.min.js:65:39)
    at S
(https://ajax.googleapis.com/ajax/libs/angularjs/1.4.4/angular.min.js:54:463)
<input type="submit" ng-hide="statVar" value="Submit" ng-click="Get
Statistics()">
SensorNotRequired:   maps.googleapis.com/maps-api-v3/api/js/22/12/util.js:30
https://developers.google.com/maps/documentation/javascript/error-messages
Inside http PUT                                                       Welcome.html:156
```

Inside Put

Code snippet:



```javascript
/** Created by Rakesh on 11/5/2015. ...*/
function augment( receivingClass, givingClass ) {
    // only provide certain methods
    if ( arguments[2] ) {
        for ( var i = 2, len = arguments.length; i < len; i++ ) {
            receivingClass.prototype[arguments[i]] = givingClass.prototype[arguments[i]];
        }
    }
    // provide all methods
    else {
        for ( var methodName in givingClass.prototype ) {

            if ( !Object.hasOwnProperty.call(receivingClass.prototype, methodName) ) {
                receivingClass.prototype[methodName] = givingClass.prototype[methodName];
            }


        }
    }
}

var Mixin  = function() {}
Mixin.prototype = {
    postMethod: function(){
        console.log( "Inside http POST")
    },
    putMethod: function(){
        console.log( "Inside http PUT" );
    },
    deleteMethod: function(){
        console.log( "Inside http DELETE" );
    },
    getMethod: function(){
        console.log( "Inside http GET" );
    }
};

// A skeleton carAnimator constructor
function Inside() {

}

augment(Inside, Mixin);

var inside = new Inside();
```