

```

package main.java.com.wfdai.weatherforecastdai.main.KPI;

import main.java.com.wfdai.weatherforecastdai.main.GestorErros; import
org.eclipse.paho.client.mqttv3.IMqttDeliveryToken; import org.eclipse.paho.client.mqttv3.MqttCallback;
import org.eclipse.paho.client.mqttv3.MqttClient; import org.eclipse.paho.client.mqttv3.MqttException;
import org.eclipse.paho.client.mqttv3.MqttMessage;

/** * Recebe KPI's do broker @author daniel */ public class KPI implements
MqttCallback {

private String uptime, totalClients, activeClients, messages, subscriptions, receivedLoad5,

MqttClient client;
GestorErros erros = new GestorErros();

public KPI() {
}

/**
 * Recebe KPI's do Broker
 *
 * @throws java.lang.InterruptedException
 */
public void getKPI() throws InterruptedException {
    try {
        client = new MqttClient("tcp://127.0.0.1:9001", "javaServer");
        client.connect();
        client.setCallback(this);
        client.subscribe("$SYS/broker/#");
        Thread.sleep(9 * 1000);
        client.disconnect();

    } catch (MqttException e) {
        erros.putErro("GetKPI MQTT exception: " + e.getCause().toString());
    }
}

@Override
public void connectionLost(Throwable cause) {
    // TODO Auto-generated method stub
}

@Override
public void messageArrived(String topic, MqttMessage message)
    throws Exception {

```

```

        this.setKPI(message.toString(), topic);
    }

    @Override
    public void deliveryComplete(IMqttDeliveryToken token) {
        // TODO Auto-generated method stub
    }

    /**
     * Atribui KPI's a atributos do objeto do tipo KPI
     *
     * @param message Mensagem recebida do broker
     * @param topic Topico da mensagem do broker
     */
    public void setKPI(String message, String topic) {

        switch (topic) {
            case "$SYS/broker/uptime":
                this.setUptime(message);
                break;
            case "$SYS/broker/clients/total":
                this.setTotalClients(message);
                break;
            case "$SYS/broker/clients/active":
                this.setActiveClients(message);
                break;
            case "$SYS/broker/messages/stored":
                this.setMessages(message);
                break;
            case "$SYS/broker/subscriptions/count":
                this.setSubscriptions(message);
                break;
            case "$SYS/broker/load/messages/received/5min":
                this.setReceivedLoad5(message);
                break;
            case "$SYS/broker/load/messages/received/15min":
                this.setReceivedLoad15(message);
                break;
            case "$SYS/broker/load/bytes/sent/15min":
                this.setBytesSent15(message);
                break;
            default:
                break;
        }
    }
}

```

```

public String getUptime() {
    return uptime;
}

public void setUptime(String uptime) {
    this.uptime = uptime;
}

public String getTotalClients() {
    return totalClients;
}

public void setTotalClients(String totalClients) {
    this.totalClients = totalClients;
}

public String getActiveClients() {
    return activeClients;
}

public void setActiveClients(String activeClients) {
    this.activeClients = activeClients;
}

public String getMessages() {
    return messages;
}

public void setMessages(String messages) {
    this.messages = messages;
}

public String getSubscriptions() {
    return subscriptions;
}

public void setSubscriptions(String subscriptions) {
    this.subscriptions = subscriptions;
}

public String getReceivedLoad5() {
    return receivedLoad5;
}

public void setReceivedLoad5(String receivedLoad5) {

```

```
        this.receivedLoad5 = receivedLoad5;
    }

    public String getReceivedLoad15() {
        return receivedLoad15;
    }

    public void setReceivedLoad15(String receivedLoad15) {
        this.receivedLoad15 = receivedLoad15;
    }

    public String getBytesSent15() {
        return bytesSent15;
    }

    public void setBytesSent15(String bytesSent15) {
        this.bytesSent15 = bytesSent15;
    }
}
```