Assignment 6

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| **Batch** | P9 |
| **Problem Statement** | To develop any distributed application using Messaging System in Publish-  Subscribe paradigm. |

**Code**

**Publisher.java**

**package** pubsub;

**import** javax.jms.\*;

**import** org.apache.activemq.ActiveMQConnection;

**import** org.apache.activemq.ActiveMQConnectionFactory;

**public** **class** Publisher {

**private** **static** String url = ActiveMQConnection.DEFAULT\_BROKER\_URL;

**public** **static** **void** main(String[] args) **throws** JMSException {

ConnectionFactory connectionFactory = **new** ActiveMQConnectionFactory(url);

Connection connection = connectionFactory.createConnection();

connection.start();

*// JMS messages are sent and received using a Session. We will*

*// create here a non-transactional session object. If you want*

*// to use transactions you should set the first parameter to 'true'*

Session session = connection.createSession(**false**, Session.AUTO\_ACKNOWLEDGE);

Topic topic = session.createTopic("India");

MessageProducer producer = session.createProducer(topic);

*// We will send a small text message saying 'Hello'*

TextMessage message = session.createTextMessage();

message.setText("Score is 200/5");

*// Here we are sending the message!*

producer.send(message);

System.out.println("Sent message '" + message.getText() + "'");

connection.close();

ConnectionFactory connectionFactory1 = **new** ActiveMQConnectionFactory(url);

Connection connection1 = connectionFactory1.createConnection();

connection1.start();

*// JMS messages are sent and received using a Session. We will*

*// create here a non-transactional session object. If you want*

*// to use transactions you should set the first parameter to 'true'*

Session session1 = connection1.createSession(**false**, Session.AUTO\_ACKNOWLEDGE);

Topic topic1 = session1.createTopic("Australia");

MessageProducer producer1 = session1.createProducer(topic1);

*// We will send a small text message saying 'Hello'*

TextMessage message1 = session1.createTextMessage();

message1.setText("Score is 190/6");

*// Here we are sending the message!*

producer1.send(message1);

System.out.println("Sent message '" + message1.getText() + "'");

connection1.close();

}

}

Subscriber.java

**package** pubsub;

**import** java.io.IOException;

**import** javax.jms.\*;

**import** org.apache.activemq.ActiveMQConnection;

**import** org.apache.activemq.ActiveMQConnectionFactory;

**public** **class** Subscriber {

*// URL of the JMS server*

**private** **static** String url = ActiveMQConnection.DEFAULT\_BROKER\_URL;

*// Name of the topic from which we will receive messages from = " CL9"*

**public** **static** **void** main(String[] args) **throws** JMSException {

*// Getting JMS connection from the server*

ConnectionFactory connectionFactory = **new** ActiveMQConnectionFactory(url);

Connection connection = connectionFactory.createConnection();

connection.start();

Session session = connection.createSession(**false**, Session.AUTO\_ACKNOWLEDGE);

Topic topic = session.createTopic("India");

MessageConsumer consumer = session.createConsumer(topic);

MessageListener listner = **new** MessageListener() {

**public** **void** onMessage(Message message) {

**try** {

**if** (message **instanceof** TextMessage) {

TextMessage textMessage = (TextMessage) message;

System.out.println("Received message: " + textMessage.getText() + "'");

}

} **catch** (JMSException e) {

System.out.println("Caught:" + e);

e.printStackTrace();

}

}

};

consumer.setMessageListener(listner);

**try** {

System.in.read();

} **catch** (IOException e) {

e.printStackTrace();

}

connection.close();

}

}

**Subscriber2.java**

**package** pubsub;

**import** java.io.IOException;

**import** javax.jms.\*;

**import** org.apache.activemq.ActiveMQConnection;

**import** org.apache.activemq.ActiveMQConnectionFactory;

**public** **class** Subscriber2 {

*// URL of the JMS server*

**private** **static** String url = ActiveMQConnection.DEFAULT\_BROKER\_URL;

*// Name of the topic from which we will receive messages from = " CL9"*

**public** **static** **void** main(String[] args) **throws** JMSException {

*// Getting JMS connection from the server*

ConnectionFactory connectionFactory = **new** ActiveMQConnectionFactory(url);

Connection connection = connectionFactory.createConnection();

connection.start();

Session session = connection.createSession(**false**, Session.AUTO\_ACKNOWLEDGE);

Topic topic = session.createTopic("Australia");

MessageConsumer consumer = session.createConsumer(topic);

MessageListener listner = **new** MessageListener() {

**public** **void** onMessage(Message message) {

**try** {

**if** (message **instanceof** TextMessage) {

TextMessage textMessage = (TextMessage) message;

System.out.println("Received message: " + textMessage.getText() + "'");

}

} **catch** (JMSException e) {

System.out.println("Caught:" + e);

e.printStackTrace();

}

}

};

consumer.setMessageListener(listner);

**try** {

System.in.read();

} **catch** (IOException e) {

e.printStackTrace();

}

connection.close();

}

}

**Output**



