# Assignment 4 27th/06/2016

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### Technologies Used:

RESTful web service:

Used as an interface for clients to access information and post information through to the database. Useful for multiple clients who are loosely coupled to the server to use. Accessed using Get and Post http requests then the response (either Boolean, String, or XML object) are returned to the client to display or as confirmation.

- Used in the Login to verify Username and password

- Used to display all listings, getting a list of product objects

-Used to display all own listings, getting a list of product objects

- Used to list a Product, posts product information

- Used to display both own and other User information, gets user object

- Used to display Product information, gets product object

JMS messaging:

Used for reliable asynchronous communication between loosely coupled systems. Used 2 queues/connection factories for 2 way communication between the client and server.

Client communicates sending and receiving JMS messages to/from a Message Driven EJB, the EJB processes the messages and sends back a confirmation messages to confirm if the process succeeded or failed. JMS message types used - Object, Map and String.

* Used to Register User, sends Array list Object with data to server, server replies with Map Object with the added user and display message.
* Used to Purchase a Product, client sends a Map object with Product Information and User Information, server updates both product and user while creating the purchase. Then replies with a String message to confirm sale.

### User Instructions:

* First you must login or register, by entering a username and corresponding password.
* Once you do so you will be able to view the Homage, which has general information about the site.
* You can then view “All Listings” which displays all other users’ products, you can click the “view” button to view additional information about that product and its seller. You will also have the option to buy the product if it is unsold.
* You can list a product clicking “Create a Listing” this displays a form which you can fill out to add your products information.
* You can view your own listings clicking the “My Listings” button, here you can view your listings and delete them if you want to. Your personal information will also be displayed.
* Lastly, you can logout, which brings you back to the login screen.