Student name: *Stephen holland*

**Student Id:** 13210385

**Assignment description:** room booking service

**Eclipse File Name:**DatabaseTest

*My room booking service called smartroom has the following functionality:*

*Note: The website must be run from the controller.java inside eclipse. For my Ajax to work it will only work in chrome so* http://localhost:8080/DatabaseTest/Controller *is the link to start up in chrome.*

* • **Register an Account which is saved to a database by using register an account.**

Files used. Controller.java, Createaccount.jsp, Createsuccess.jsp, User.java (bean), Account.java (sql content).

How this works? When say inside index.jsp and you hit the link register an account which links to *roomEntry.jsp* .After filling out  the form On submit you call an *action=createaccount* to *controller.java*

Which gets info from the form such as requesting parameters and setting attributes. A database connecting is then established and a User bean object is called which does the setters and getters and some validation. Then the User. Validate () function is called, If a Boolean true is returned From User.java then the Account. Create method is called which does all our sql statement to our database zs\_cos1 table, and a new account is created and CreateSuccess.jsp is called. If false is returned due to an issue the user will be redirected and a error message will appear. Also another validation of password matching has to be true

* • **Log in to your registered account.**

Files used. Controller.java, Login.jsp, LoginSuccess.jsp, User.java (bean), Account.java.

How this works? When say inside index.jsp and you hit the link Login which links to Login.jsp

After filling out the form on submit you call an action=doLogin to *controller.java* which gets info from the form such as requesting parameters and setting attributes. .A database connecting is then established and a User bean object is called which does the setters and getters and some validation. Then the user. Validate () function is called, If a Boolean true is returned From User.java then the Account. Exists () method is called which does all our sql statement to our database and checks login and returns Boolean true if there is a match.

* • **If “admin” userName you can enter a room to be advertised on site.**

Files used. Controller.java, roomEntry.jsp, roomSuccess.jsp, Entrys.java (bean), Room.java (sql content).

How this works? When say inside index.jsp and you hit the Navigation ul roomEntry which links to roomEntry.jsp. After filling out the form (username must be “admin” or an error will appear) on submit you call an action=doCreateRoom to *controller.java* which gets info from the form such as requesting parameters and setting attributes. .A database connecting is then established and a Entry bean object is called which does the setters and getters and some validation . Then the Entry. Validate () function is called, If a Boolean true is returned From Entry.java then the Room. Create () method is called which does all our sql statement to our database zs\_roo1, and a new room is created and RoomSuccess.jsp is called. If false is returned due to an issue the user will be redirected and an error message will appear.

* • **Search for rooms advertised by location using Ajax.**

Files used.  ajaxform.jsp, ajax\_javascript.js, Search.java, EshopOrderServlet.java.

How this works? When say inside index.jsp and you hit the Navigation ul Bookroom which links to ajaxform.jsp. *Which has an html text field that is linked to our JavaScript ajax\_javasript.js file which will use the Search.java Servlet, which will look for a result in* zs\_roo1 table, *if there is a result from the sql statement a html table of that info will be displayed including a checkbox option.(needed for next functionality).*

* • **Add selected room to your cart.**

Files used.  Search.java, EshopOrderServlet.java.

How this works?   So know you can tick your preferred room choice you want to add to your cart and fill out an additional form containing your username and password and submit Order. This will then send that formation from your form and checkbox to EshopOrderServlet.java. Where it will be inserted into the zs\_ord1 table under that username you entered.

* • **Check what rooms are in your booking cart.**

Files used.  cart.jsp, EshopCartServlet.java

How this works? When say inside index.jsp and you hit the Navigation ul Booking-cart *which* links to cart.jsp. *Inside this when you hit “check your bookings” button the username that you are signed in as and is in your session will be submitted to the* EshopCartServlet.java where it will select statement for the roomname of all of that userNames that are in the zs\_ord1 table.

* • **Using session can see your username on each page.**

Files used.  Controller.java, *all* .jsp files

How this works? I have set up a httpSession in main controller.java file which then sets the Attribute for that session so it can be used inside any of the .jsp files by calling the session.getAttribute.

**Other Files used:**

Style.css            *used for styling main website*

SearchStyle.css    *used for styling the search part off website.*

Schemas.txt     *used for setting up sql content.*