**ISCG7425 – Enterprise Java Programming**

**RMI Programming Lab Session**

**Swing + RMI + Hibernate**

1. Use provided getting started code available on Moodle to setup RMI / Swing / Hibernate sample application
2. Create appropriate UI widgets to allow user to query the book database using the title, author, and genre fields
3. Create a button linked to an event handler to carry out the search operation
4. Display the results using a JTextArea. *Optional: try using a JTable with a TableModel to display the results.* Wrap / nest results in JScrollPane.
5. Create a new JPanel and associated widgets to allow a user to add new records to the database.
6. Use a JTabbedPane to allow a user to navigate from the search page to the new add record page. The backing code will need to use a new RMI proxy, which will in turn call hibernate controller code on the server to add a new record to the underlying database.
7. Create similar code to allow a user to update and delete a record. You will need to allow a user to select a specific record to update / delete so use an appropriate on screen control (simplest: JTextField, harder: JComboBox, hardest: JTable) and display the data before a user updates / deletes a record.

**Challenge Questions:**

* Implement UI using a JTable and allow a user to select records using a JTable
* <http://docs.oracle.com/javase/tutorial/uiswing/components/tabbedpane.html>
* <http://docs.oracle.com/javase/tutorial/uiswing/components/list.html>
* <http://docs.oracle.com/javase/tutorial/uiswing/components/scrollpane.html>
* <http://docs.oracle.com/javase/tutorial/uiswing/components/tree.html>
* <http://docs.oracle.com/javase/tutorial/uiswing/components/table.html>
* <http://docs.oracle.com/javase/tutorial/uiswing/components/table.html#data>