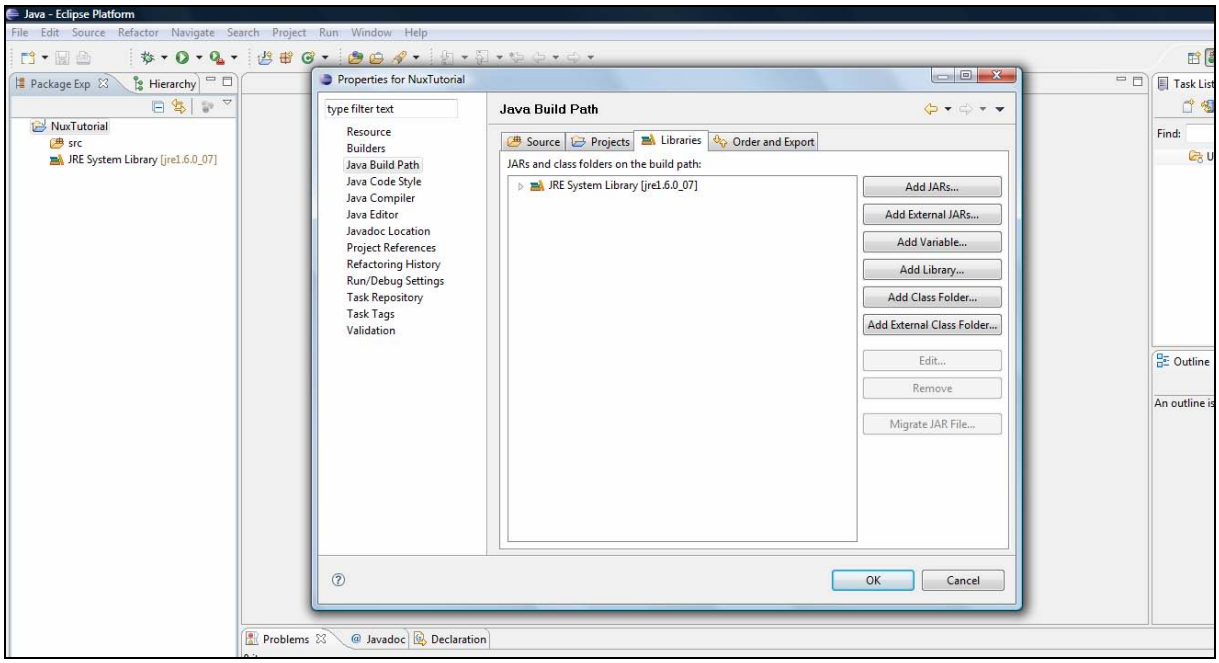
20.453J / 2.771J / HST.958J Biomedical Information Technology
Fall 2008

Nux Tutorial

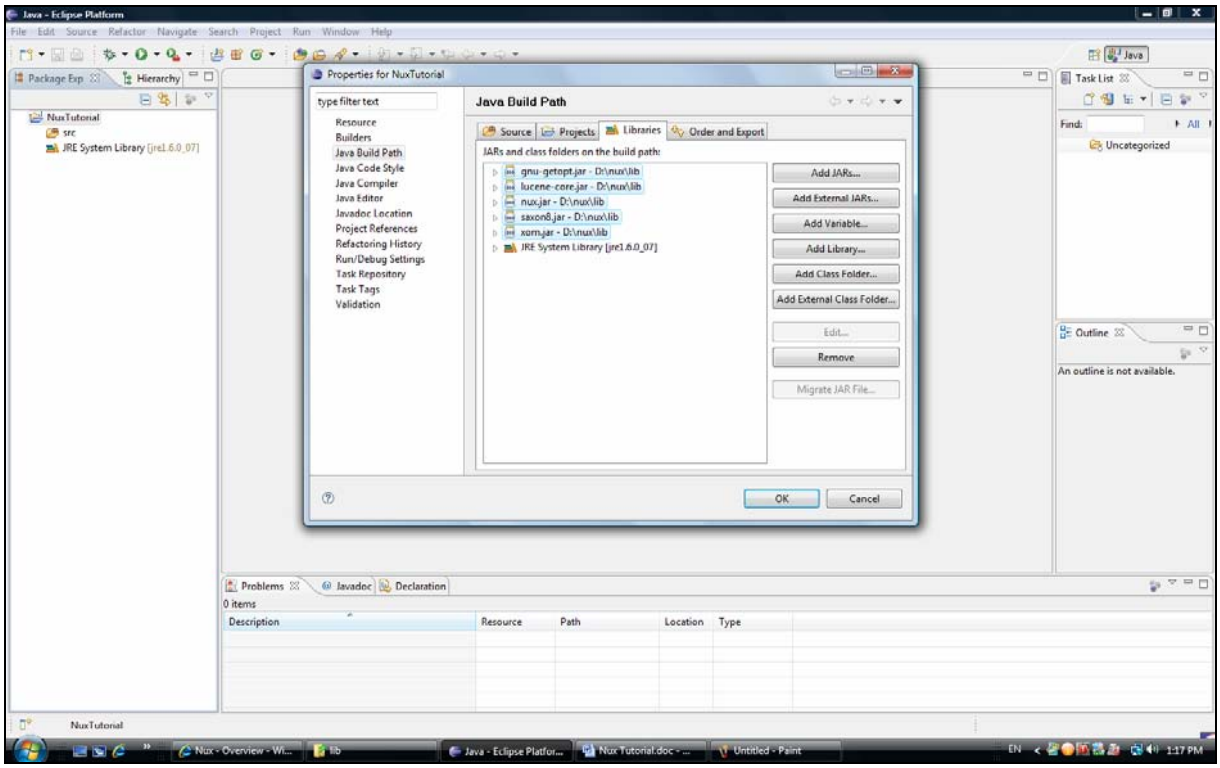
1. Download and extract nux-1.6.zip to D:/nux.
2. Open project properties window by selecting ***Properties*** from ***Project*** menu (*Menu->**Project**->**Properties***)
3. In ***Java Build Path***, go to the ***Libraries*** tab[1].



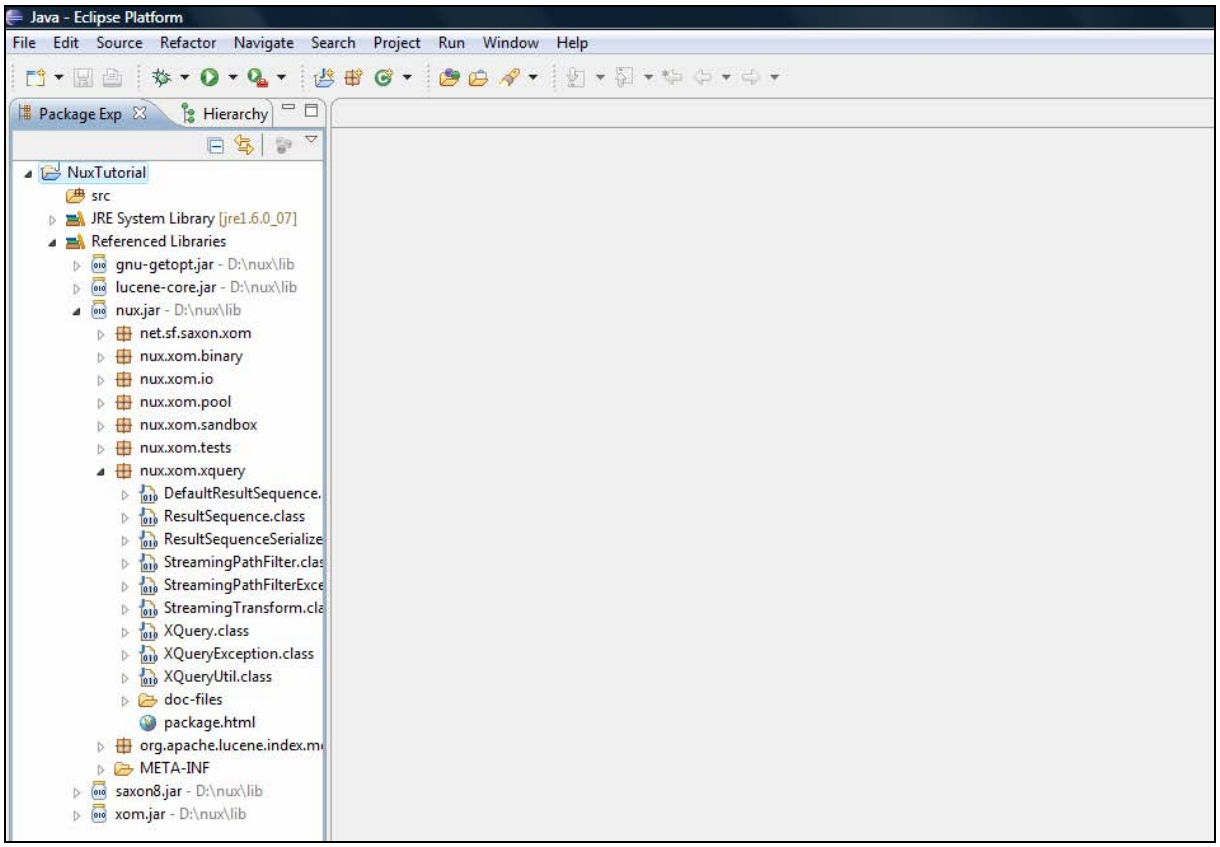
BSD license statement has added to the document, per http://acs.lbl.gov/nux/license.html

4. Click ***Add External JARs*** and add all jars in D:/nux/lib. Your build path should look like this:

[1] For screenshots copyright, see statement at the end of the document.



5. Expand ***Referenced Libraries*** in ***Package Explorer*** panel to see the classes and packages in the added Nux libraries.



6. Create NuxTutorial class and add the code shown below (adapted from official Nux tutorial). Note the errors.

```
public class NuxTutorial {

    /**
     * @param args
     */
    public static void main(String[] args) {
        // TODO Auto-generated method stub

        try{
          File query = new File("D:/nux/q1.xq");
          XQuery xquery = XQueryPool.GLOBAL_POOL.getXQuery(query);
          Nodes results = xquery.execute(null).toNodes();
          ResultSequenceSerializer ser = new ResultSequenceSerializer();
          ser.setIndent(4);
          ser.write(results, System.out);
        } catch (Exception e){
            e.printStackTrace();
        }
    }

}
```

ResultSequenceSerializer cannot be resolved to a type

3 quick fixes available:

- Import 'ResultSequenceSerializer' (nux.xom.xquery)
- Create class 'ResultSequenceSerializer'
- Fix project setup...

Press 'F2' for focus

7. Next, we determine which libraries to "import". Browse the **Referenced Libraries** packages to see where the classes are found. The class **ResultSequenceSerializer**, for example, is found in **nux.xom.xquery**.
8. After fixing all the "import" errors, you should get the following:

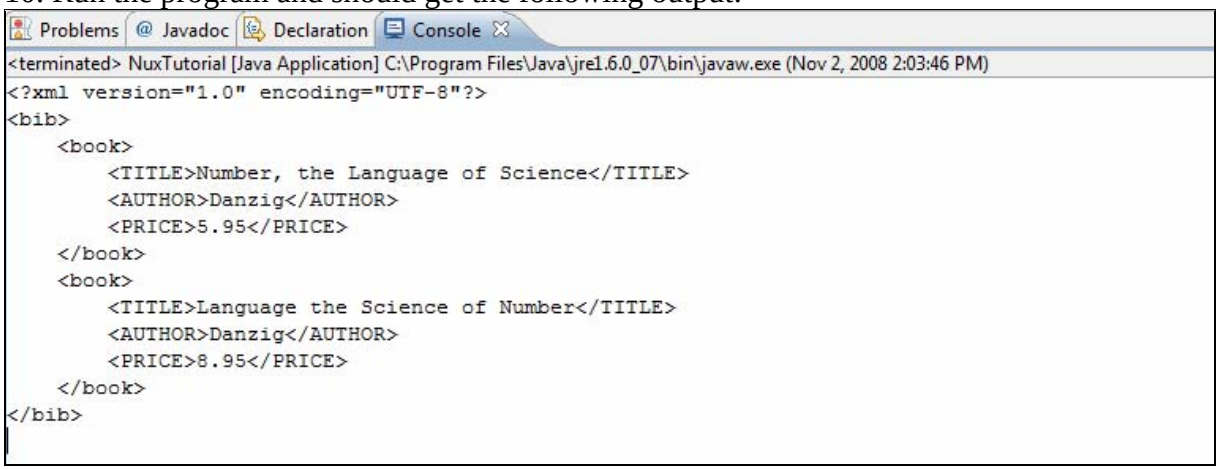
```
import java.io.*;
import nu.xom.*;
import nux.xom.pool.*;
import nux.xom.xquery.*;

public class NuxTutorial {

    /**
     * @param args
     */
    public static void main(String[] args) {
        // TODO Auto-generated method stub

        try{
          File query = new File("D:/nux/q1.xq");
          XQuery xquery = XQueryPool.GLOBAL_POOL.getXQuery(query);
          Nodes results = xquery.execute(null).toNodes();
          ResultSequenceSerializer ser = new ResultSequenceSerializer();
          ser.setIndent(4);
          ser.write(results, System.out);
        } catch (Exception e){
            e.printStackTrace();
        }
    }

}
```

9. Use a text editor to save this XQuery in D:/nux/q1.xq:

```
<bib>
    {
      for $b in doc("D:/nux/samples/data/books.xml")/BOOKLIST/BOOKS/ITEM
```

```
      where $b/AUTHOR = "Danzig"
      return
        <book>
          { $b/TITLE, $b/AUTHOR, $b/PRICE }
        </book>
    }
</bib>
```

10. Run the program and should get the following output:



Copyright statement for Nux screenshots: