

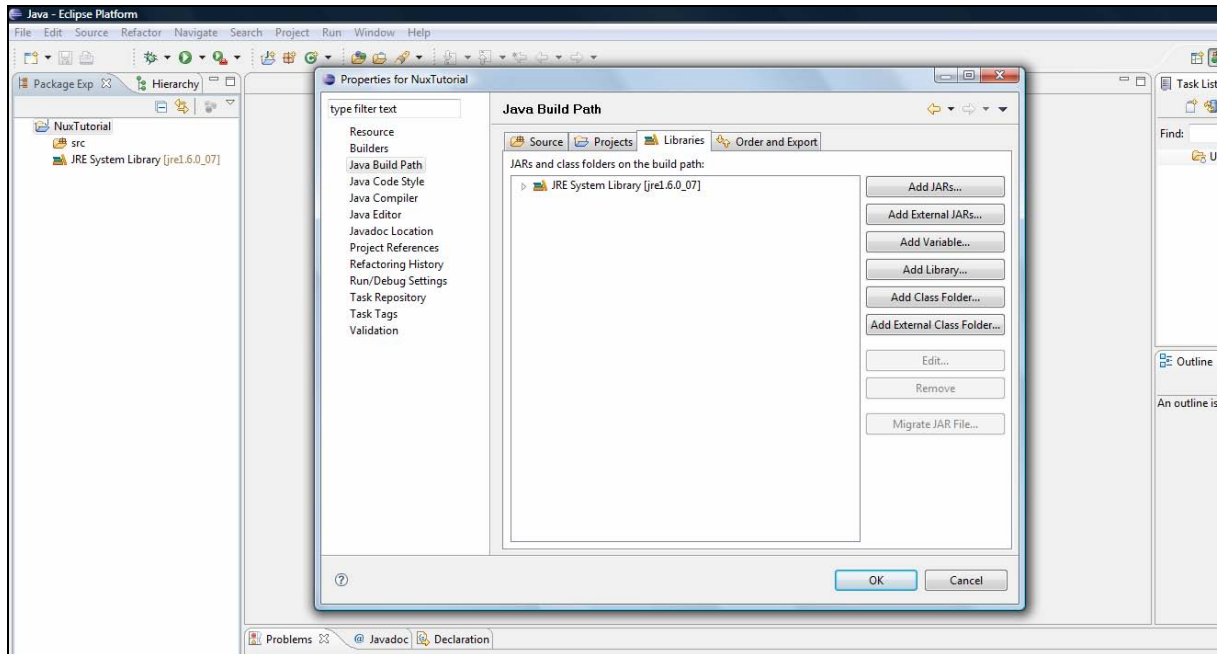
MIT OpenCourseWare  
<http://ocw.mit.edu>

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

For information about citing these materials or our Terms of Use, visit: <http://ocw.mit.edu/terms>.

## 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<sup>1</sup>.

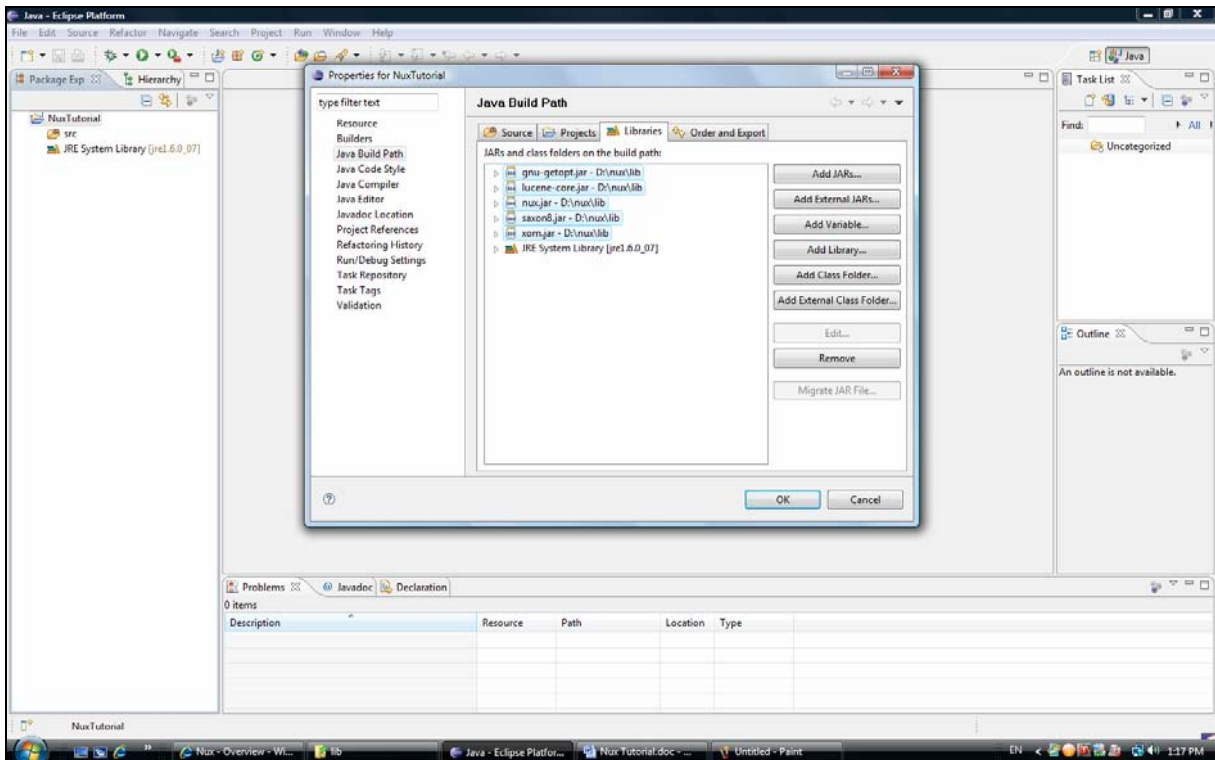


BSD license statement has added to the document, per <http://acs.lbl.gov/nux/license.html>

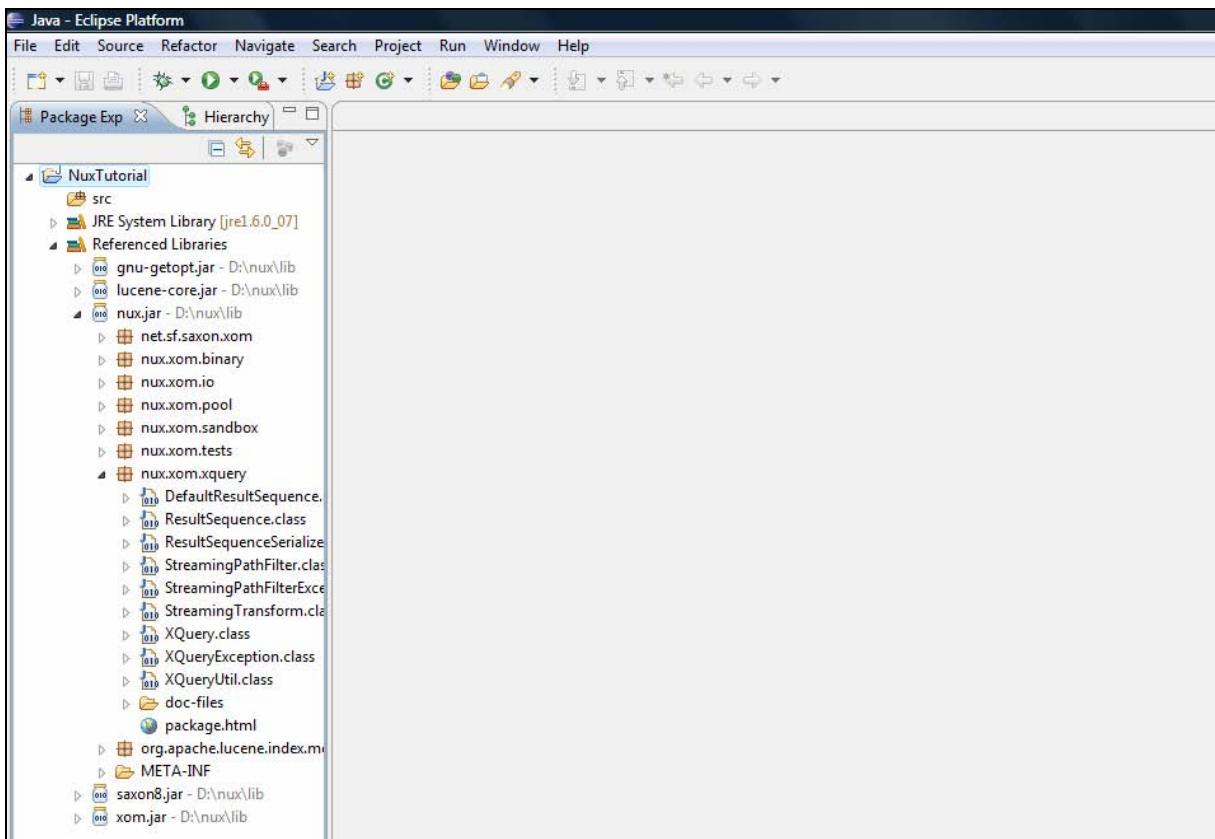
4. Click **Add External JARs** and add all jars in D:/nux/lib. Your build path should look like this:

---

<sup>1</sup> 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.

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

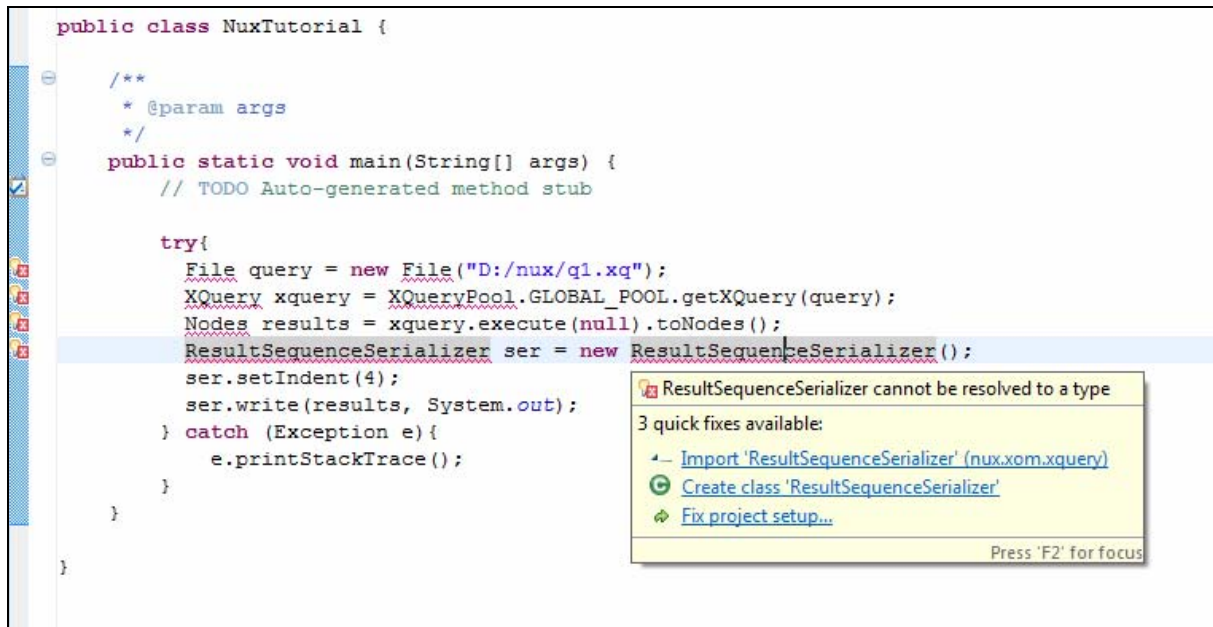
```

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();
        }
    }
}

```



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:

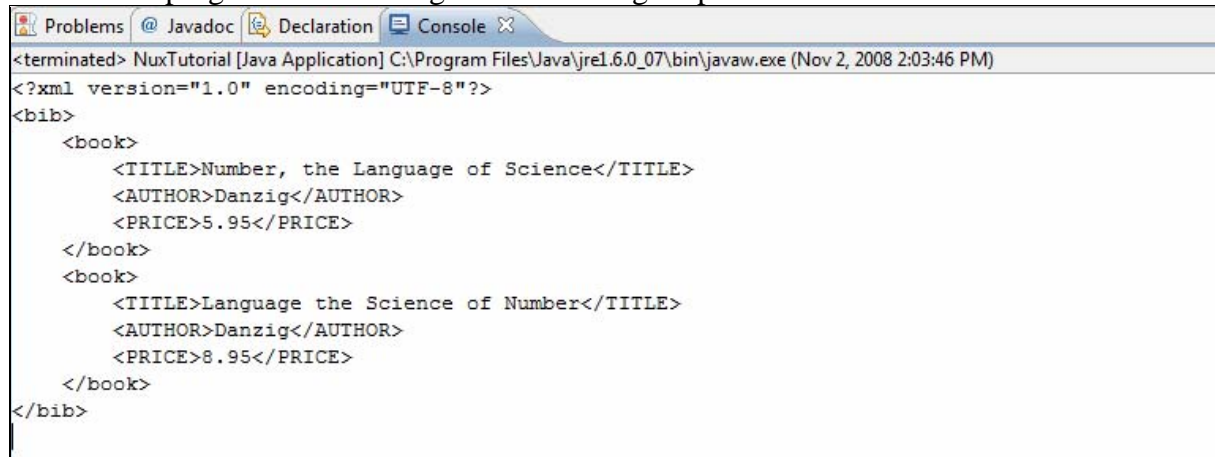
```

<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:



The screenshot shows a Java IDE console window with the following content:

```
<terminated> NuxTutorial [Java Application] C:\Program Files\Java\jre1.6.0_07\bin\javaw.exe (Nov 2, 2008 2:03:46 PM)  
<?xml version="1.0" encoding="UTF-8"?>  
<bib>  
  <book>  
    <TITLE>Number, the Language of Science</TITLE>  
    <AUTHOR>Danzig</AUTHOR>  
    <PRICE>5.95</PRICE>  
  </book>  
  <book>  
    <TITLE>Language the Science of Number</TITLE>  
    <AUTHOR>Danzig</AUTHOR>  
    <PRICE>8.95</PRICE>  
  </book>  
</bib>
```

## Copyright statement for Nux screenshots:

Nux software: Copyright (c) 2005, The Regents of the University of California, through Lawrence Berkeley National Laboratory (subject to receipt of any required approvals from the U.S. Dept. of Energy). All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- (1) Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- (2) Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- (3) Neither the name of the University of California, Lawrence Berkeley National Laboratory, U.S. Dept. of Energy nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

You are under no obligation whatsoever to provide any bug fixes, patches, or upgrades to the features, functionality or performance of the source code ("Enhancements") to anyone; however, if you choose to make your Enhancements available either publicly, or directly to Lawrence Berkeley National Laboratory, without imposing a separate written license agreement for such Enhancements, then you hereby grant the following license: a non-exclusive, royalty-free perpetual license to install, use, modify, prepare derivative works, incorporate into other computer software, distribute, and sublicense such enhancements or derivative works thereof, in binary and source code form.