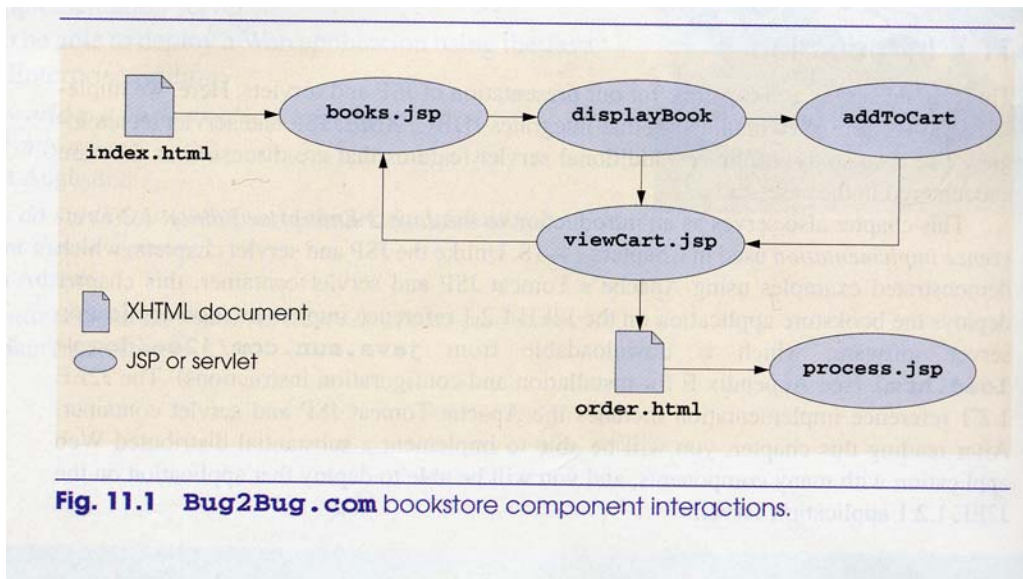


Deploying Bookstore Case Study (ch. 11) in IBM WebSphere Studio Application Developer 5.1.x

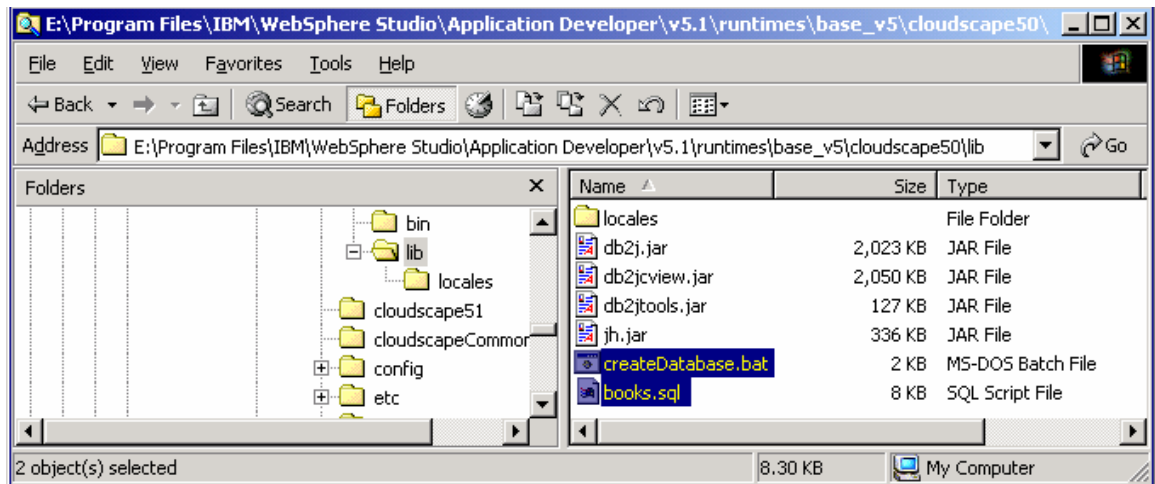


1. www.ibm.com
2. Cloudscape 5.0.x comes with WSAD or can you can a trail version
<http://www-306.ibm.com/software/data/cloudscape/>

In WSAD

E:\Program Files\IBM\WebSphere Studio\Application
Developer\v5.1\runtimes\base_v5\cloudscape50

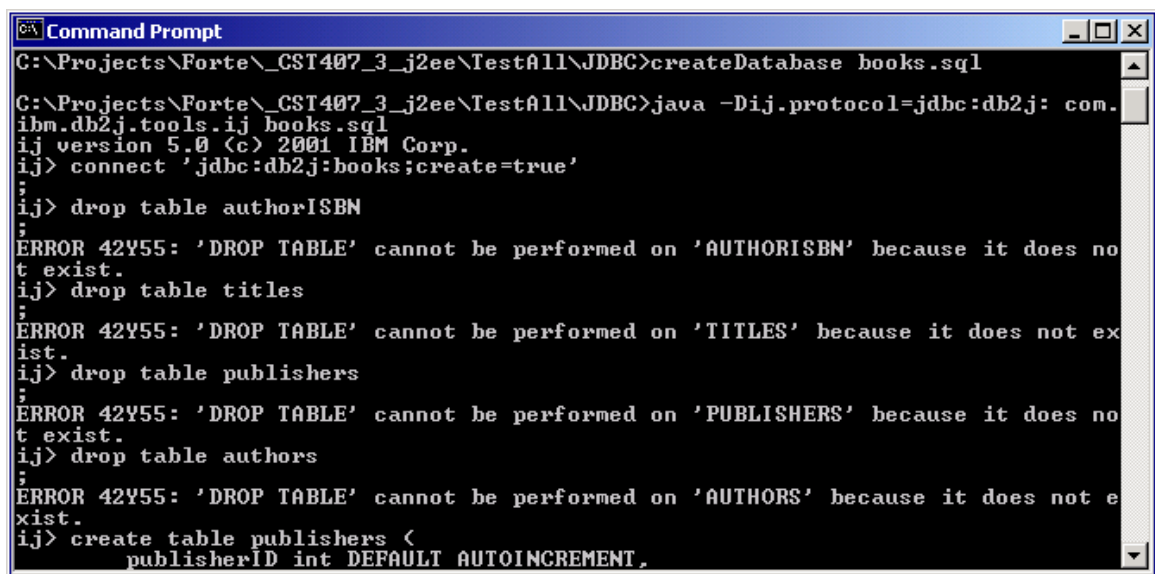
But it is better to install WSAD under just c:\IBM\WSAD (shorter classpath and no spaces)



- 4.
5. modify **books.sql** from chapter 8
first line connect 'jdbc:db2j:books;create=true'
- modify **createDatabase.bat** from chapter 8

```
java -Dij.protocol=jdbc:db2j: com.ibm.db2j.tools.ij %1
```

6. add to classpath
CLASSPATH=%CLASSPATH%;%DB2J_INSTALL%\lib\db2j.jar;%DB2J_INSTALL%\lib\db2jtools.jar;



7. Test Database connection fig.08_26 DisplayAuthors.java

```
// connect to database books and query database
try {

    // load database driver class
    // load database driver class
```

```

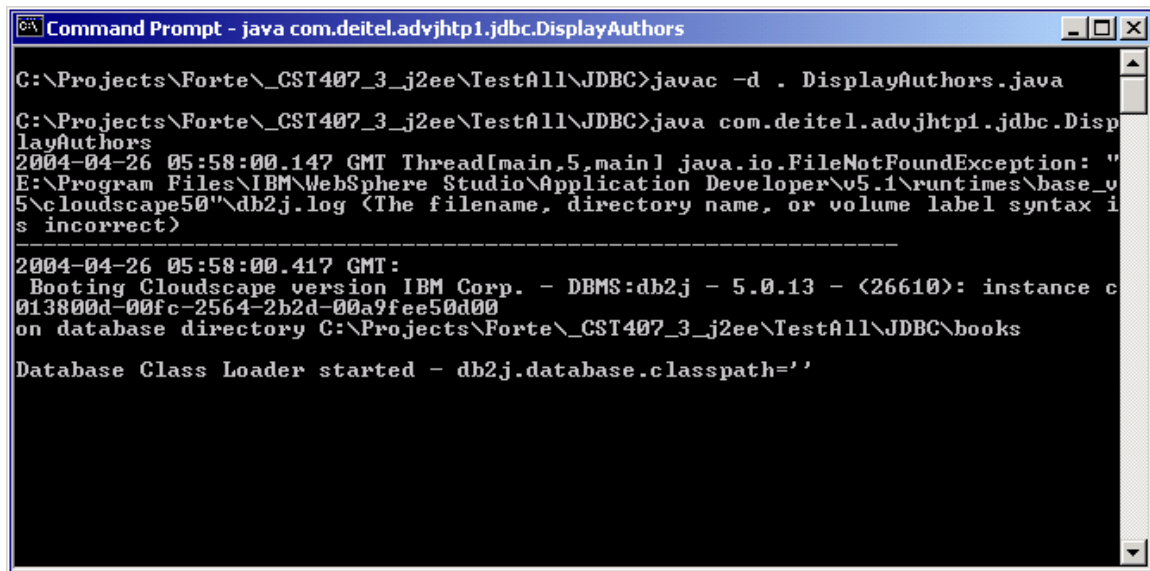
        System.setProperty("db2j.system.home", "\"E:\\Program
Files\\IBM\\WebSphere Studio\\Application
Developer\\v5.1\\runtimes\\base_v5\\cloudscape50\\");
        Class.forName("com.ibm.db2j.jdbc.DB2jDriver");
        Connection connection=
DriverManager.getConnection("jdbc:db2j:books;upgrade=true");
        // create Statement for querying database
        Statement statement = connection.createStatement();

        ResultSet resultSet =
            statement.executeQuery( "SELECT * FROM authors" );

        ...

```

C:\Projects\Forte_CST407_3_j2ee\TestAll\JDBC>javac -d . DisplayAuthors.java
C:\Projects\Forte_CST407_3_j2ee\TestAll\JDBC>java
com.deitel.advjhtp1.jdbc.DisplayAuthors



```

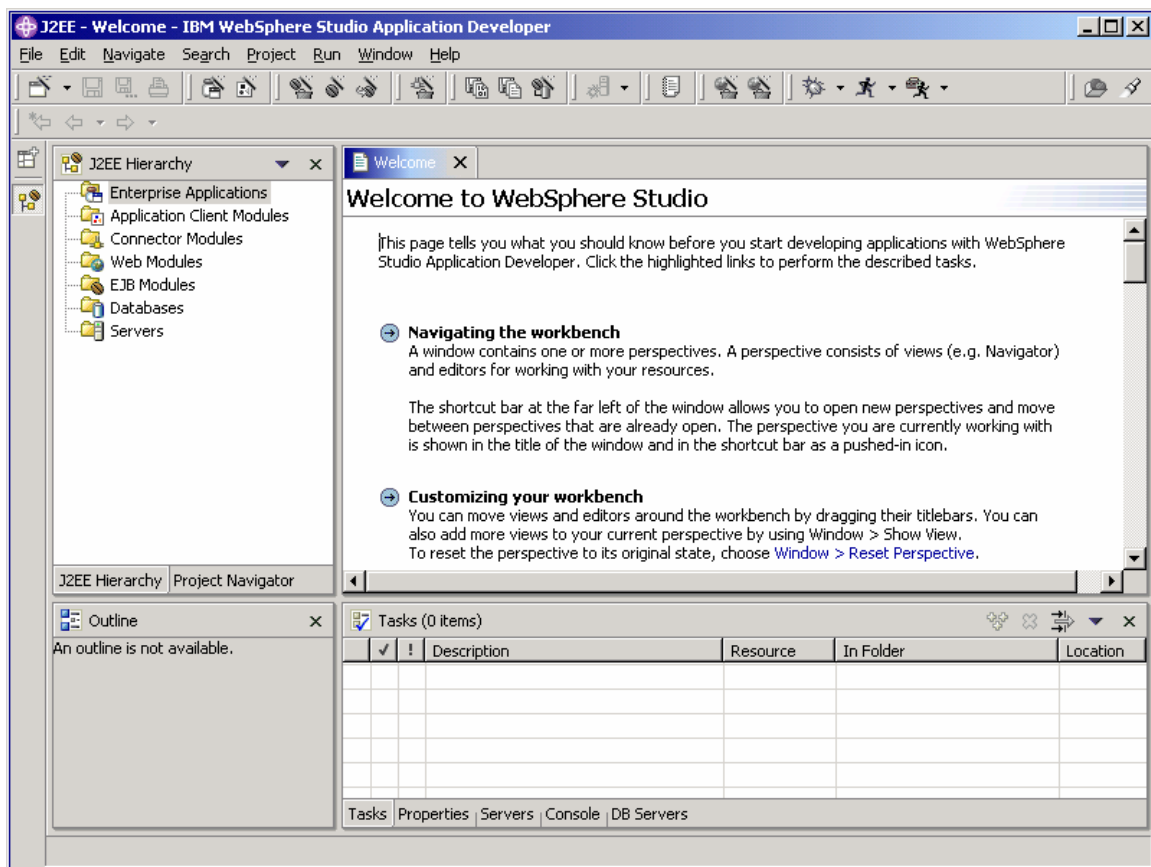
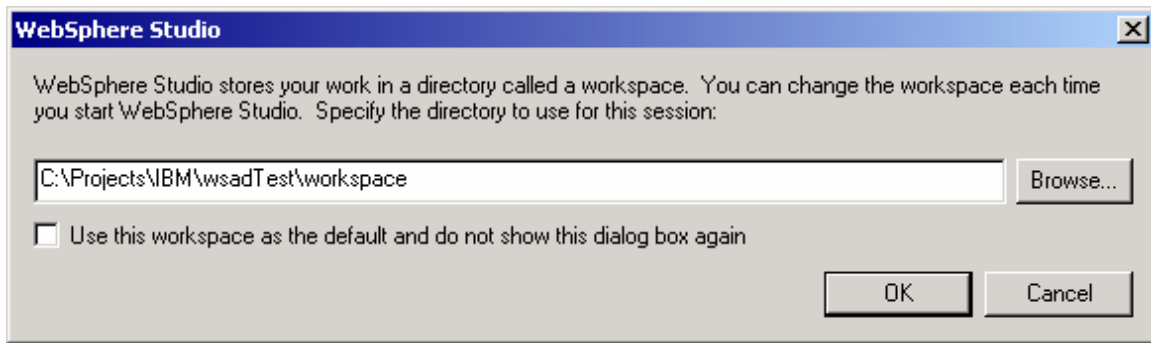
C:\Projects\Forte\_CST407_3_j2ee\TestAll\JDBC>javac -d . DisplayAuthors.java
C:\Projects\Forte\_CST407_3_j2ee\TestAll\JDBC>java com.deitel.advjhtp1.jdbc.DisplayAuthors
2004-04-26 05:58:00.147 GMT Thread[main,5,main] java.io.FileNotFoundException: "
E:\Program Files\IBM\WebSphere Studio\Application Developer\v5.1\runtimes\base_v
5\cloudscape50"\db2j.log (The filename, directory name, or volume label syntax i
s incorrect)

-----
2004-04-26 05:58:00.417 GMT:
  Booting Cloudscape version IBM Corp. - DBMS:db2j - 5.0.13 - (26610): instance c
013800d-00fc-2564-2b2d-00a9fee50d00
on database directory C:\Projects\Forte\_CST407_3_j2ee\TestAll\JDBC\books

Database Class Loader started - db2j.database.classpath=''

```

Authors Table of Books Database		
AUTHORID	FIRSTNAME	LASTNAME
1	Harvey	Deitel
2	Paul	Deitel
3	Tem	Nieto
4	Sean	Santry



File->New->Dynamic Web Project
Check advanced options

New Web Project

J2EE Settings Page

Set the Enterprise Application project settings, context root, and J2EE level.

EAR project:

booksEAR

New...

Context root:

booksWeb

J2EE level:

1.3

J2EE Level 1.3 includes a Servlet Specification level of 2.3 and a JSP Specification level of 1.2. Applications developed for this J2EE level typically target a WAS version 5.0 server.

< Back

Next >

Finish

Cancel

New Web Project

Dynamic Web Project

Specify a name and location for the new Web project.

Project name:

booksWeb

Project location:

C:\Projects\IBM\wsadTest\workspace\booksWeb

Browse...

☒ Configure advanced options

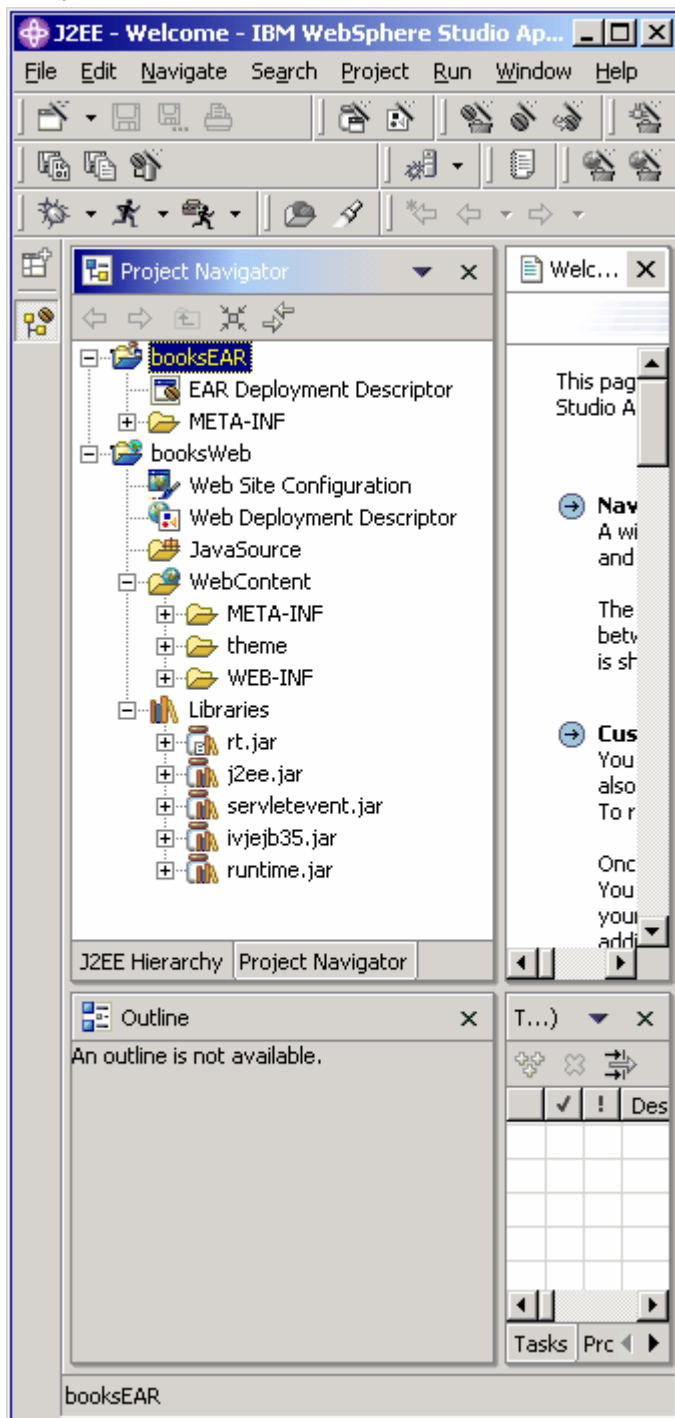
< Back

Next >

Finish

Cancel


Finish



New Java Package

Java Package

Create a Java package.



Creates folders corresponding to packages.

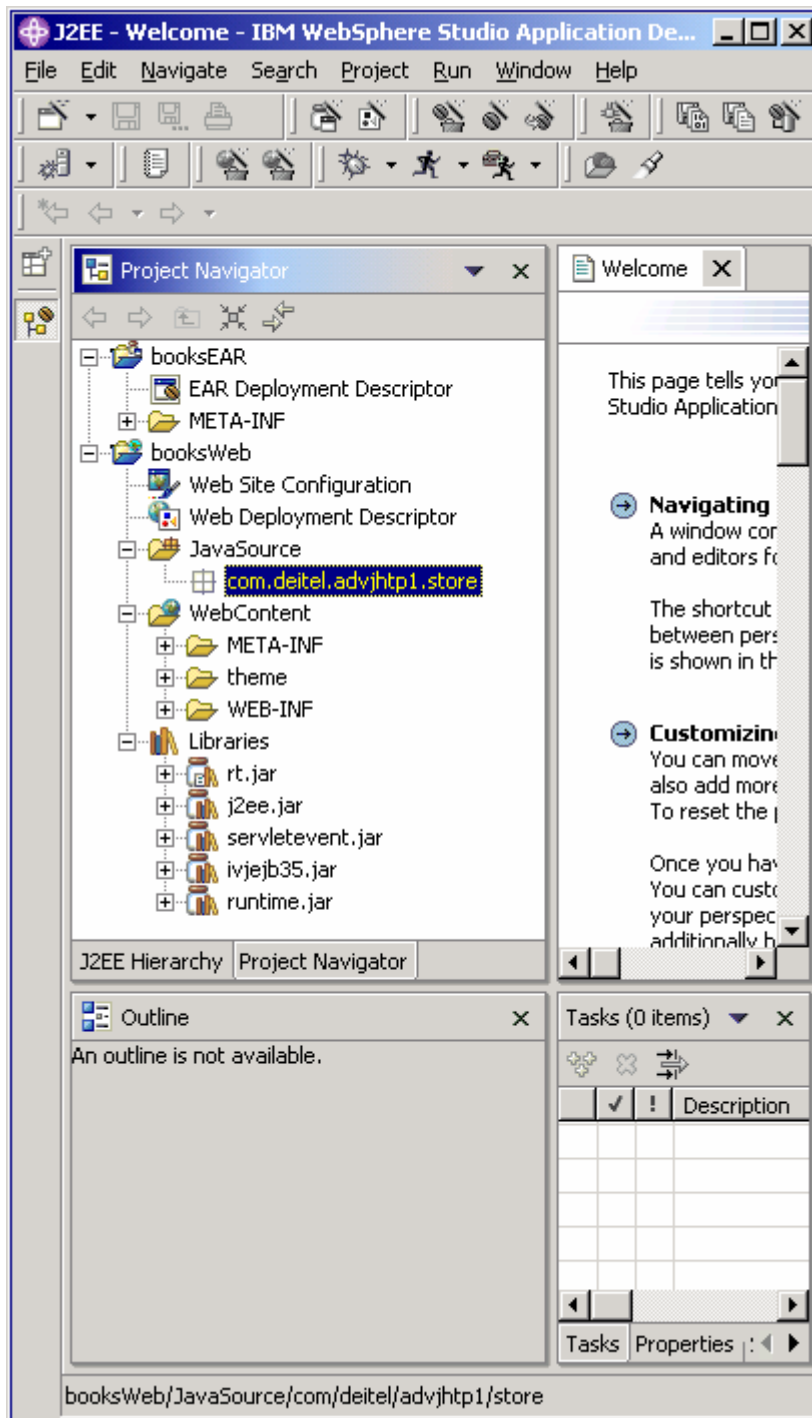
Source Folder: booksWeb/JavaSource

Browse...

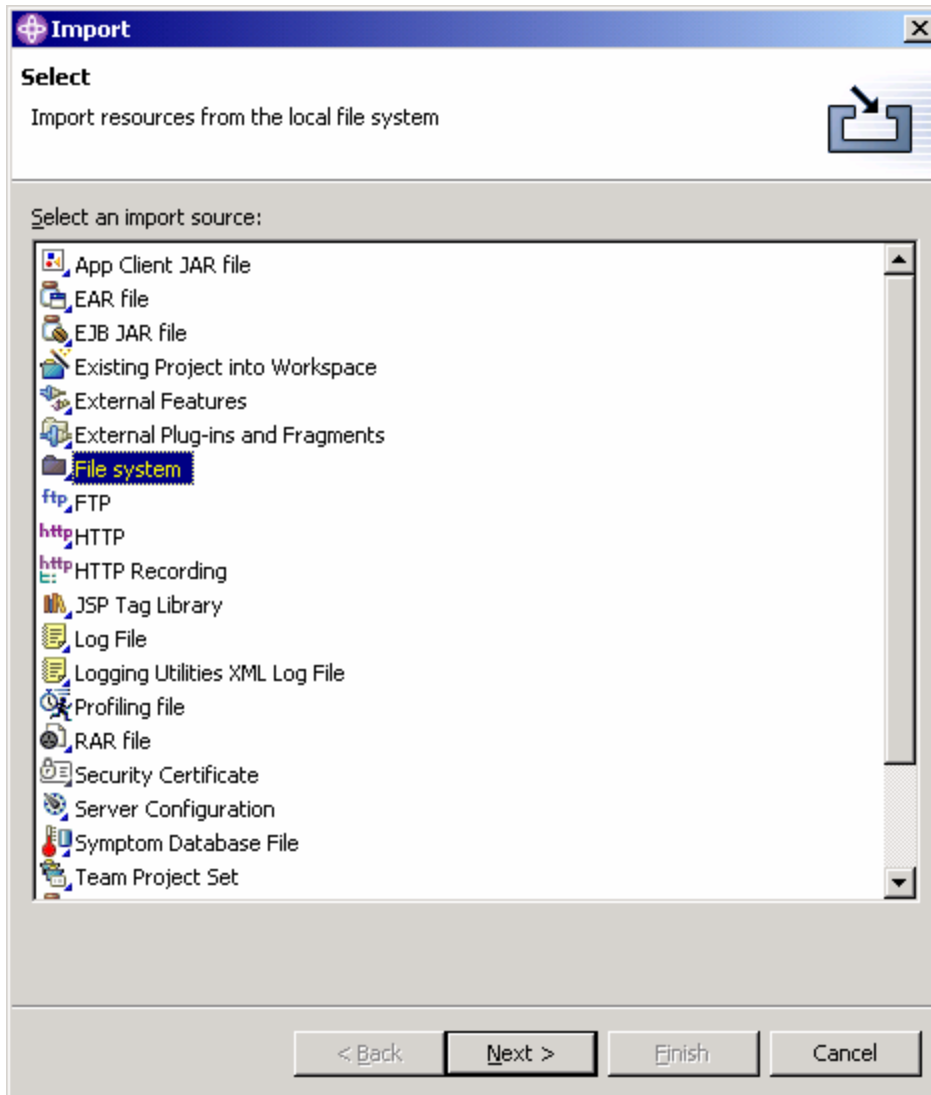
Name: com.deitel.advjhtp1.store

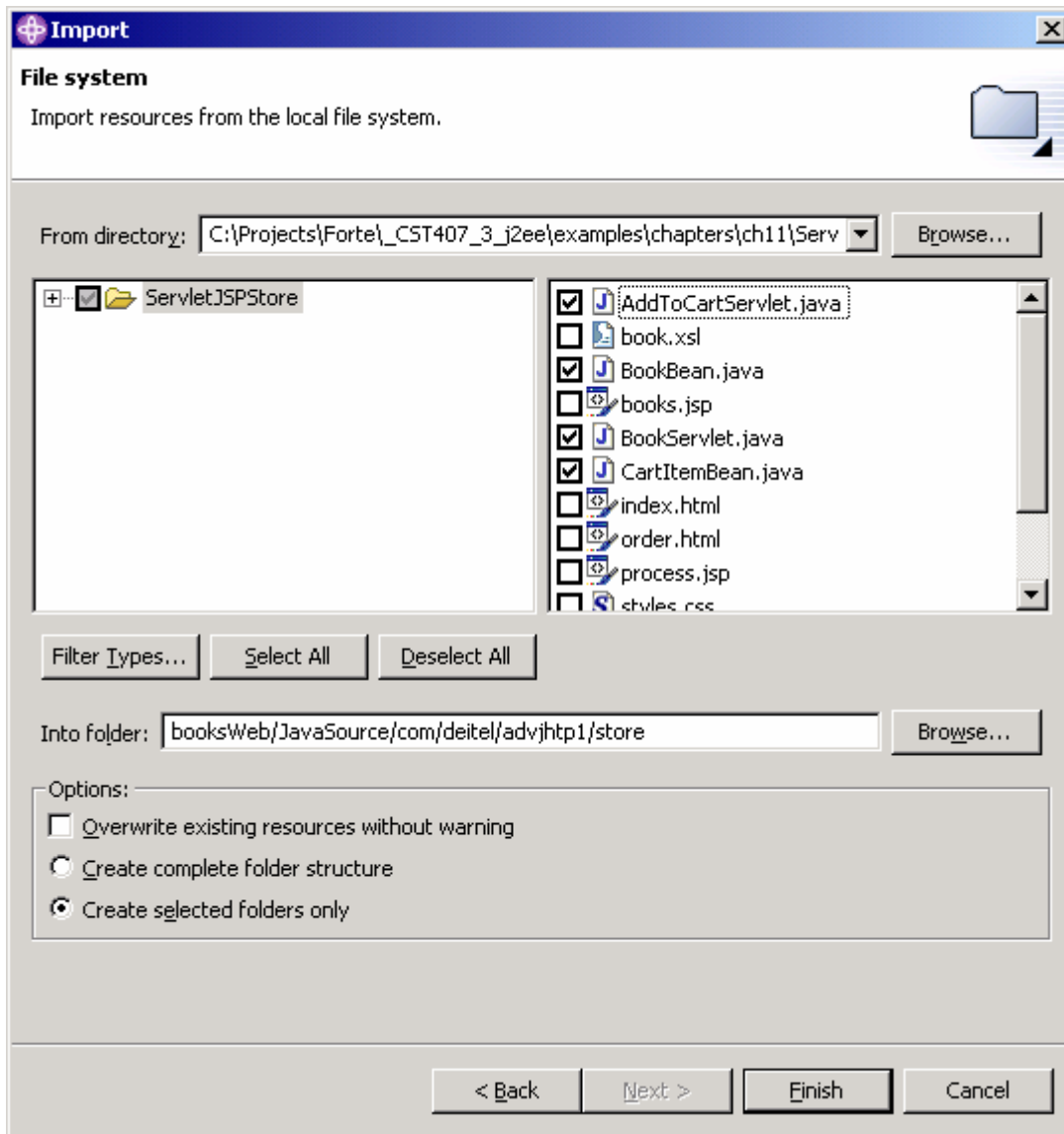
Finish

Cancel

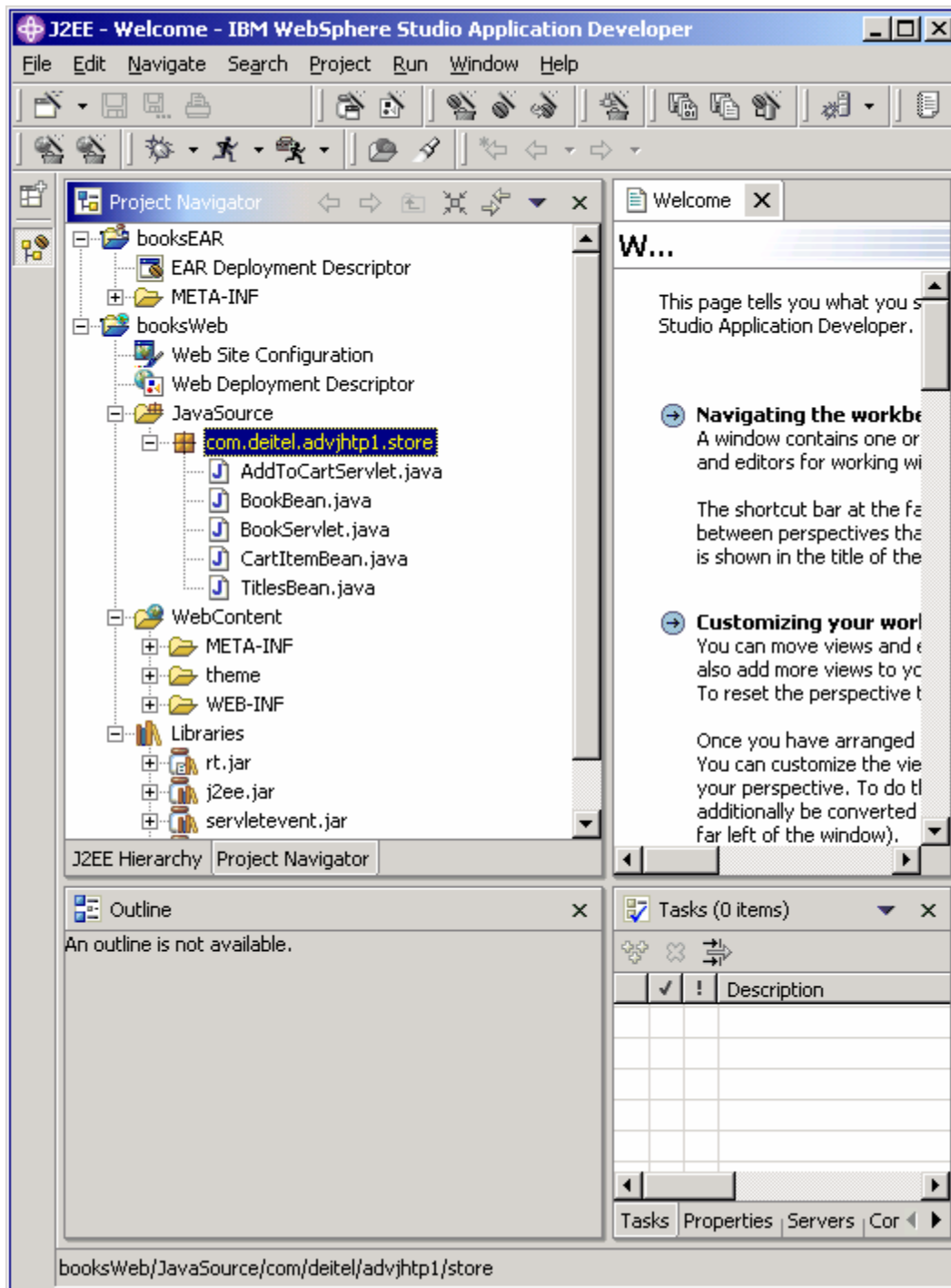


Select JavaSource Import file system

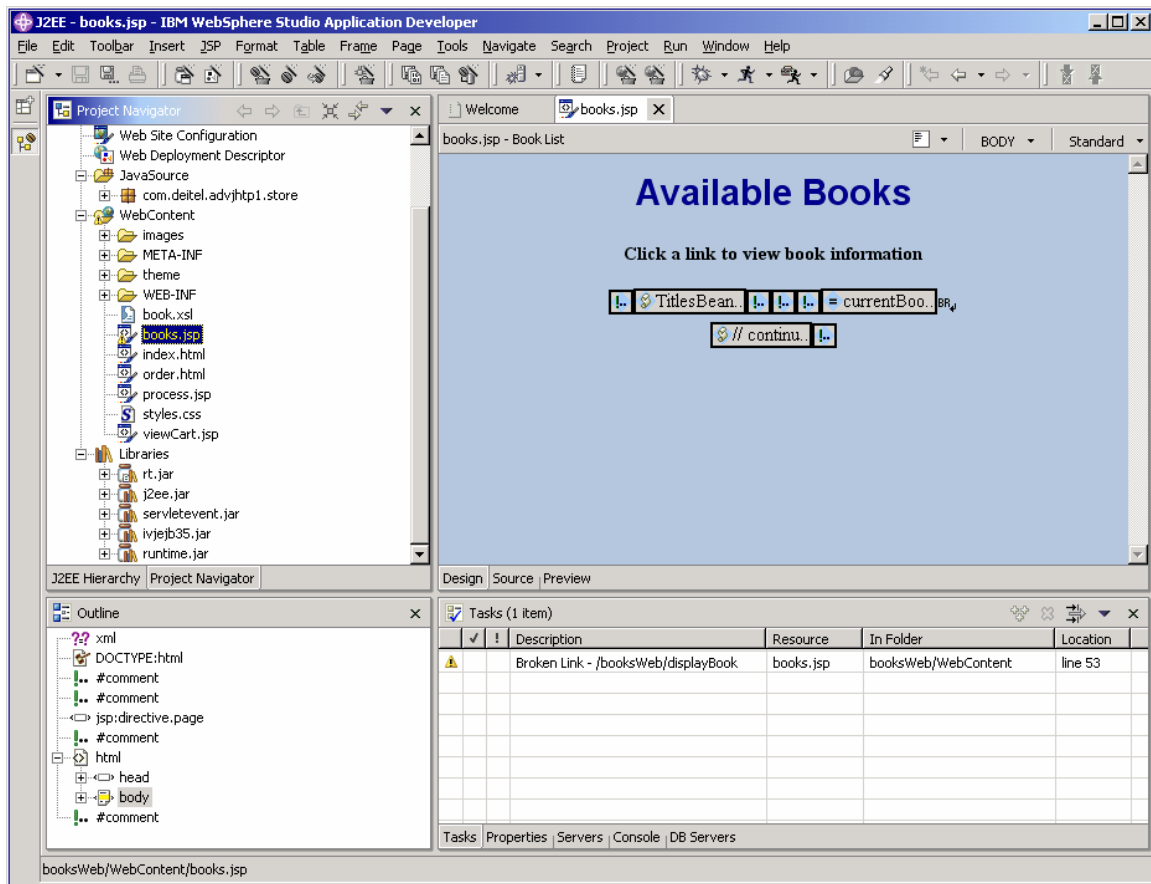


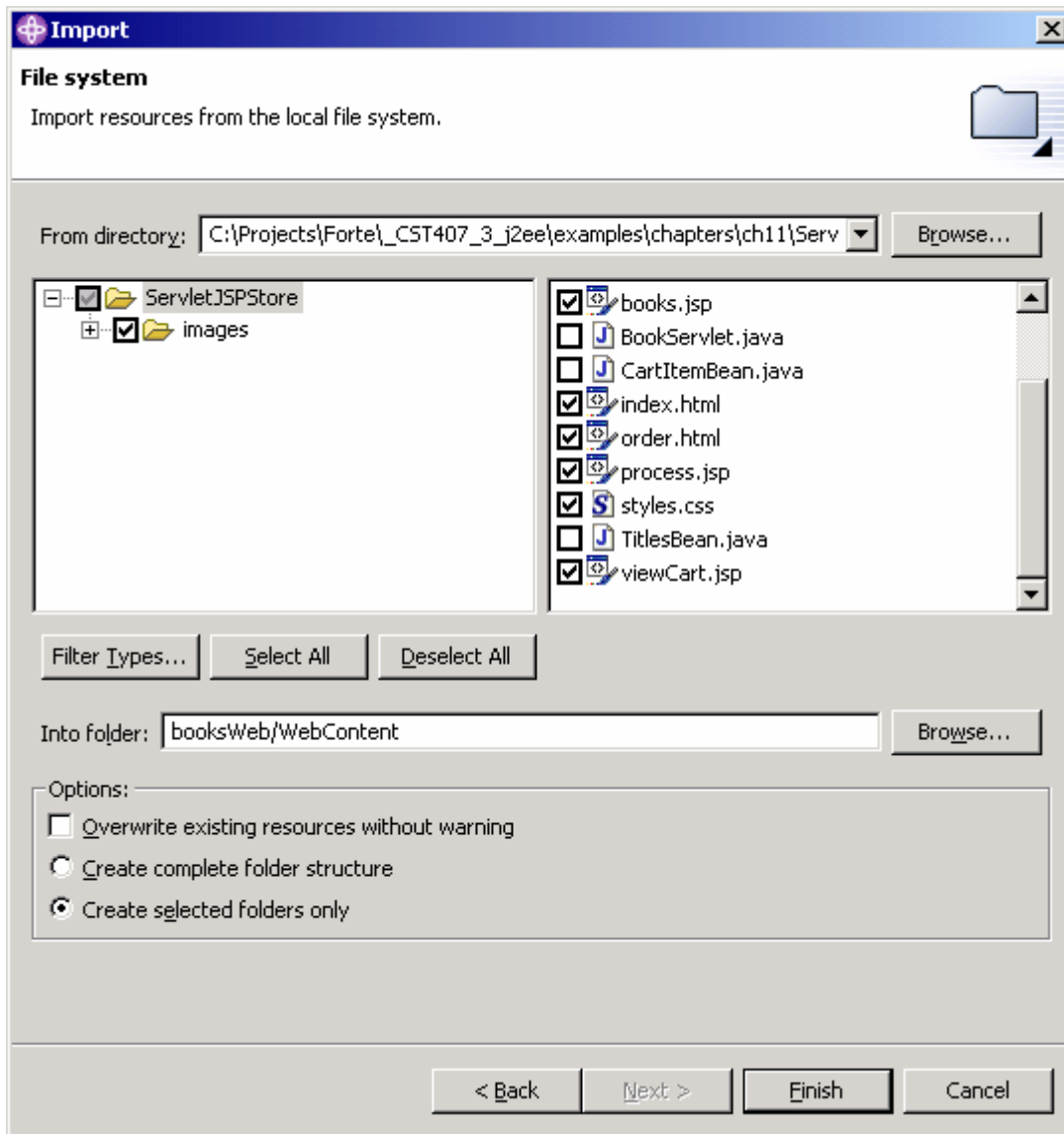


Select all .java

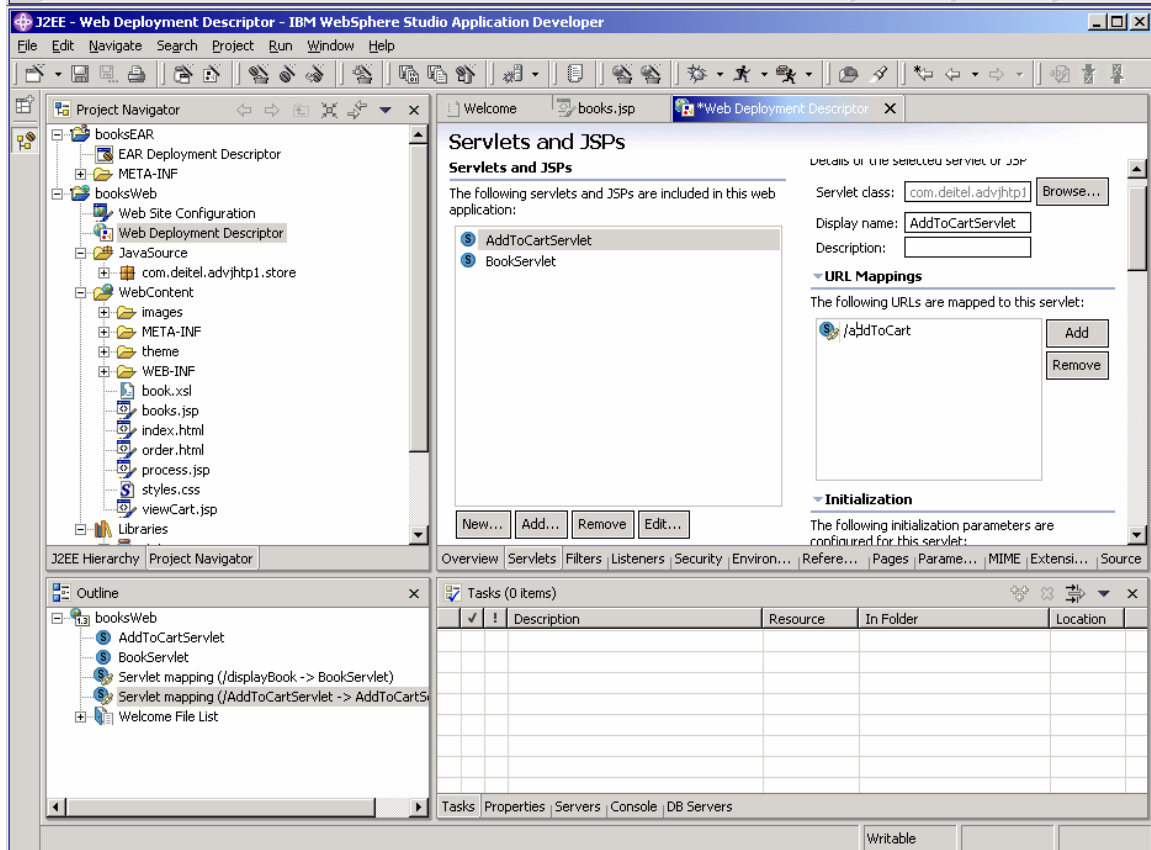
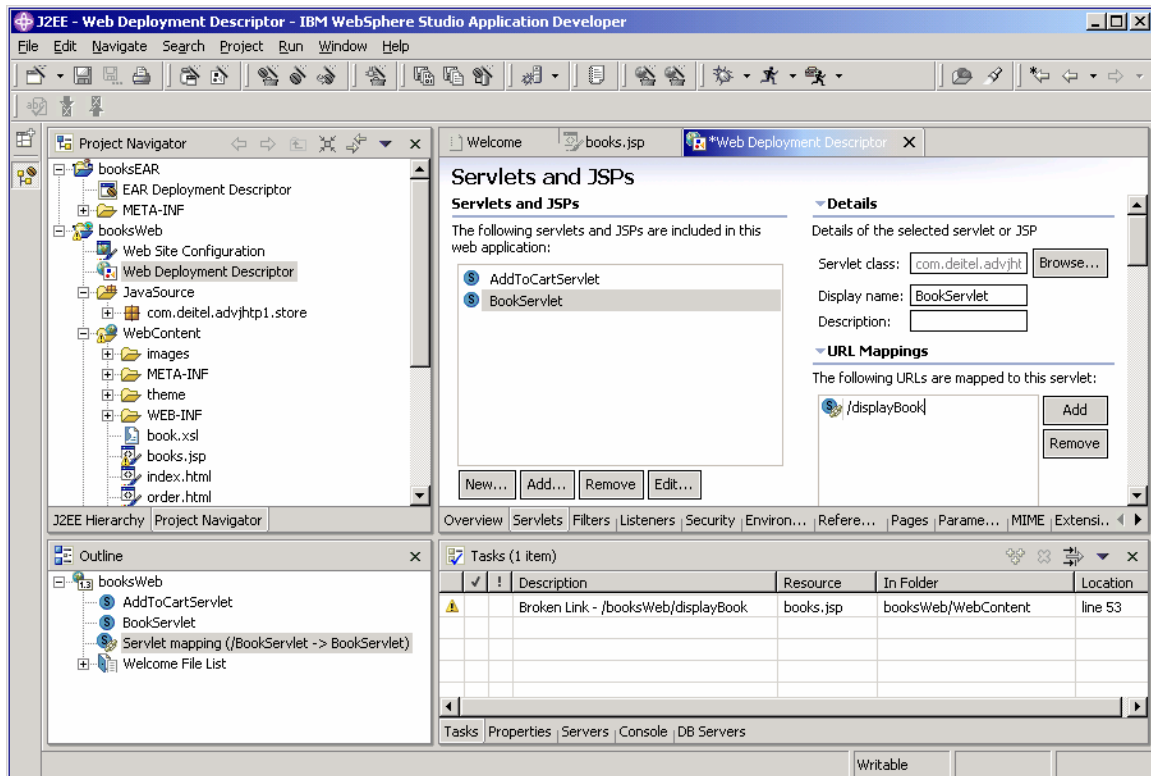


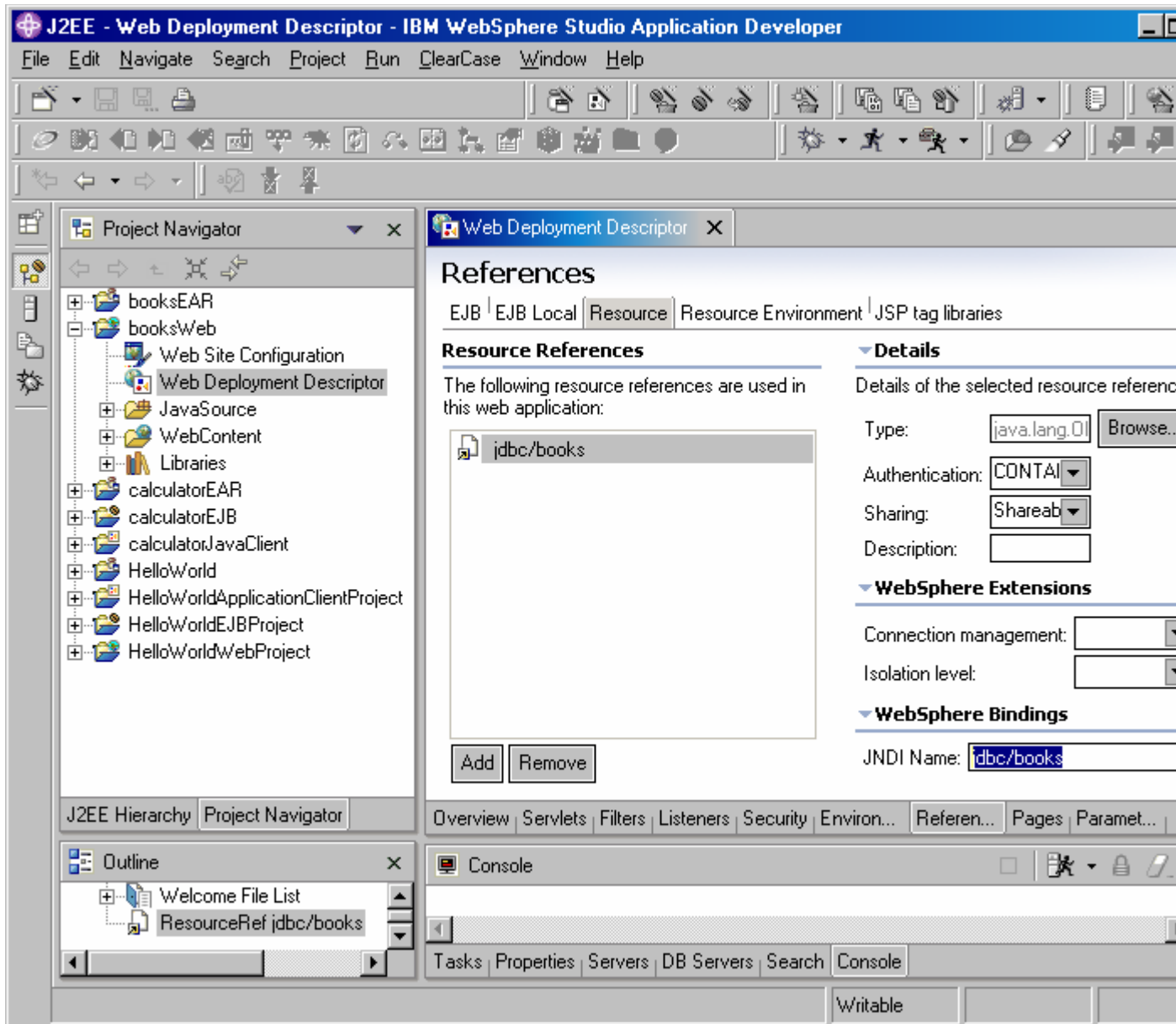
Select WebContent->import File System, select everything else





Modify Web Descriptor as shown







Save All

Select index.html and Run on Server

Server Selection

Server selection

Select which server to launch.



☐ Use an existing server

Server	Status
--------	--------

Status:

☒ Create a new server

Folder: Servers

Server type:

WebSphere version 5.0

Server

Test Environment

WebSphere v4.0 Server

Apache Tomcat version 4.1

Apache Tomcat version 4.0

Apache Tomcat version 3.2

Description: Runs J2EE projects out of the workspace on the local test environment.

☐ Set server as project default (do not prompt)

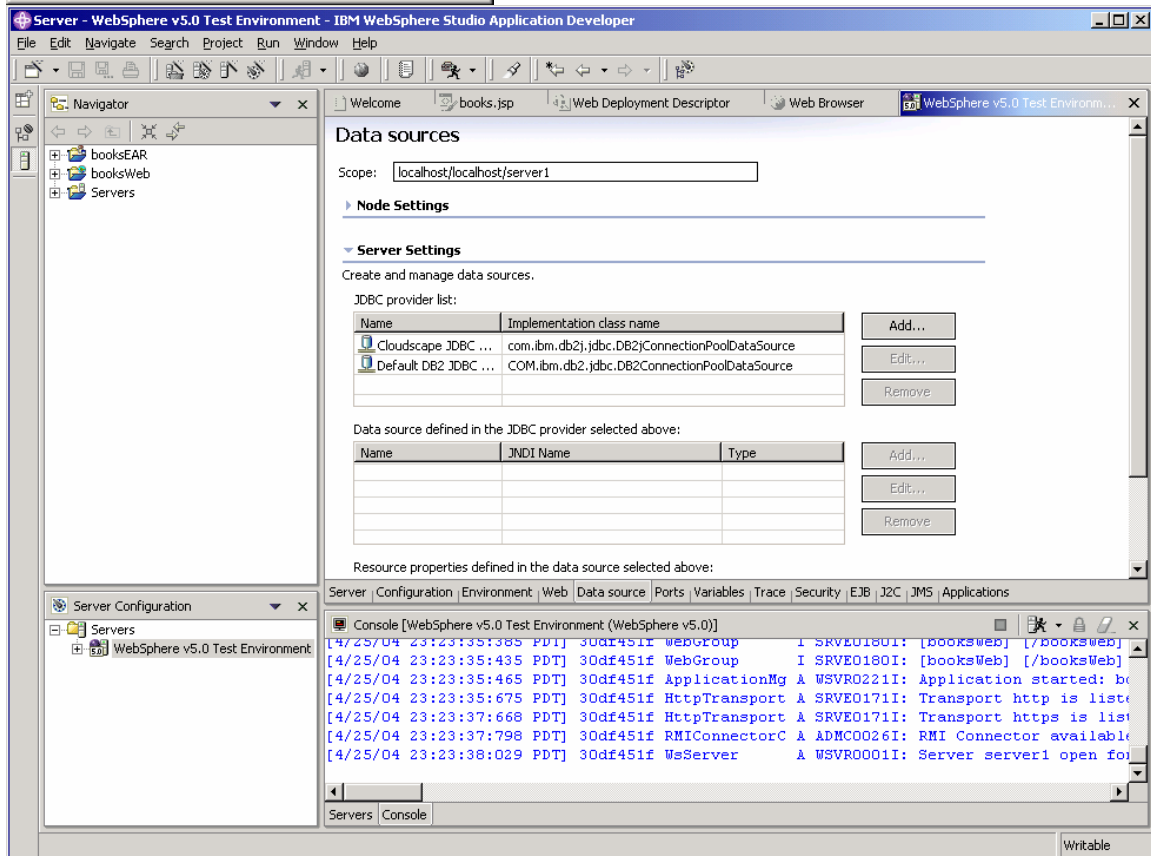
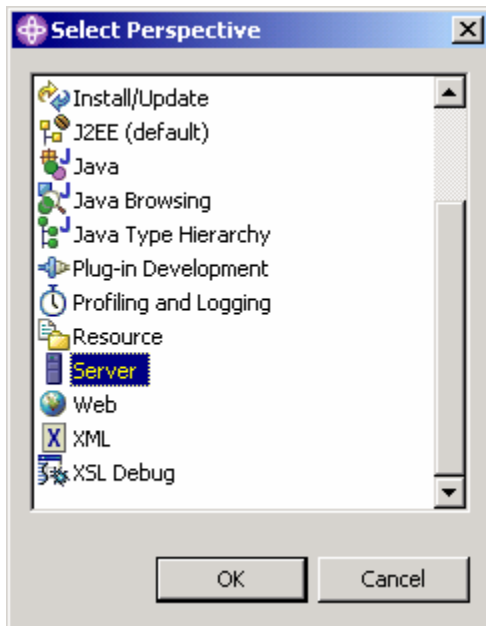
< Back

Next >

Finish

Cancel

Windows->




Select Cloudscape


Create a Data Source


Create a Data Source

Select the type of data source to create.



Select the type of JDBC provider:

 Cloudscape JDBC Provider

 Cloudscape JDBC Provider 5.0

Select the data source type:

☒ Version 5.0 data source


☐ Version 4.0 data source

< Back

Next >


Finish

Cancel

 **Modify Data Source**

Create a Data Source

Select the type of data source to create.



Name: *	books
JNDI name: *	jdbc/books
Description:	New JDBC Datasource
Category:	
Statement cache size:	10
Data source helper class name:	com.ibm.websphere.rsadapter.CloudscapeDataStoreHelper
Connection timeout:	1800
Maximum connections:	10
Minimum connections:	1
Reap time:	180
Unused timeout:	1800
Aged timeout:	0
Purge policy:	EntirePool
Component-managed authentication alias:	
Container-managed authentication alias:	

☒ Use this data source in container managed persistence (CMP)

* Required field.

< Back

Next >


Finish

Cancel






Create a Data Source

Create Resource Properties

Create the resource properties for this data source.



Resource Properties:

Name	Description
 databaseName	This is a required property. This property must be set and it identifies which da
 shutdownDatabase	If set to the string 'shutdown', this will cause the database to shutdown when a
 dataSourceName	Name for ConnectionPooledDataSource or XADataSource. Not used by the Data
 description	Description of the Data Source. Not used by the Data Source object. Used for i
 connectionAttributes	Connection attributes specific to Cloudscape. Please see Cloudscape document

Name:

databaseName

Type:

java.lang.String

Required:

Yes

Value:

C:\Projects\Forte_CST407_3_j2ee\TestAll\JDBC\books;upgrade=true

Description:

This is a required property. This property must be set and it identifies which database to access. For exam

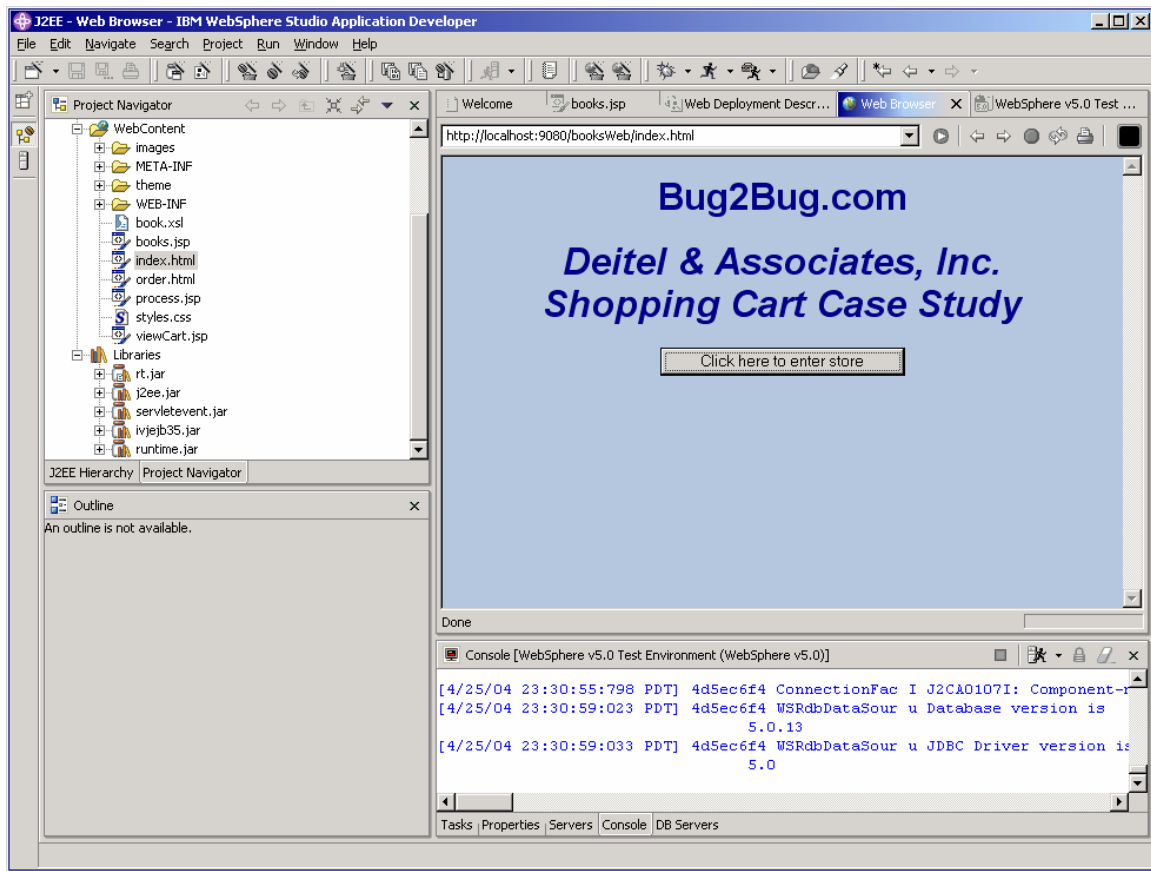
< Back

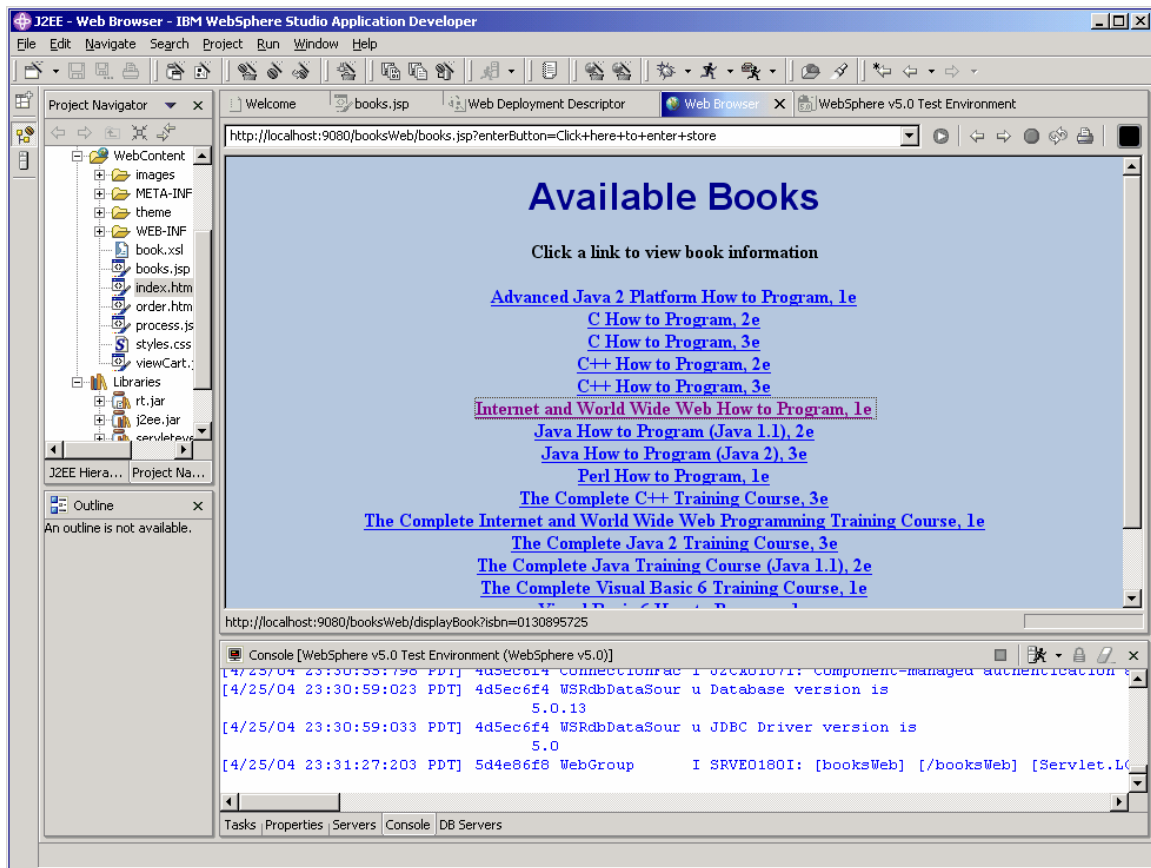
Next >

Finish

Cancel

Save All, Restart Server





J2EE - Web Browser - IBM WebSphere Studio Application Developer

File Edit Navigate Search Project Run Window Help

Project Navigator

- WebContent
 - images
 - META-INF
 - theme
 - WEB-INF
 - book.xsl
 - books.jsp
 - index.htm
 - order.htm
 - process.js
 - styles.css
 - viewCart.js
- Libraries
 - rt.jar
 - j2ee.jar
 - com.ibm.ws...

J2EE Hiera... Project Na...

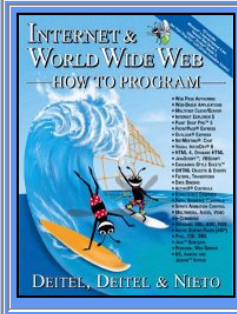
Outline

An outline is not available.

Welcome books.jsp Web Deployment Descriptor Web Browser WebSphere v5.0 Test Environment

http://localhost:9080/booksWeb/displayBook?isbn=0130161438

Internet and World Wide Web How to Program



Price:	\$69.95
ISBN #:	0130161438
Edition:	1
Copyright:	2000
Add to Cart	View Cart

Done

Console [WebSphere v5.0 Test Environment (WebSphere v5.0)]

```

[4/25/04 23:30:53:798 PDT] 4d5ec614 ConnectionFac 1 02C801071: Component-managed authentication
[4/25/04 23:30:59:023 PDT] 4d5ec6f4 WSRdbDataSour u Database version is
5.0.13
[4/25/04 23:30:59:033 PDT] 4d5ec6f4 WSRdbDataSour u JDBC Driver version is
5.0
[4/25/04 23:31:27:203 PDT] 5d4e86f8 WebGroup I SRVE0180I: [booksWeb] [/booksWeb] [Servlet.LC

```

Tasks Properties Servers Console DB Servers