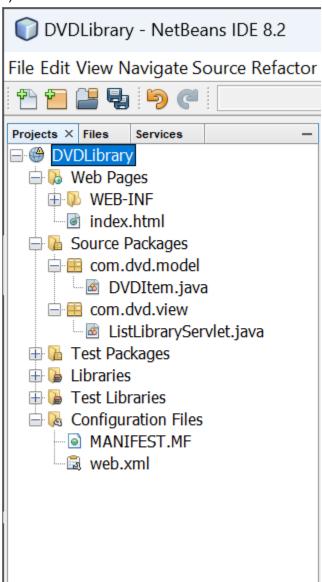
## **LAB 4 WEEK 3 - CSC584**

TASK 1: Create the DVDItem Model file:

a)



b) java class DVDItem:

```
🖻 DVDItem.java × 📵 index.html × 📵 MANIFEST.MF × 🖫 web.xml × 🕾 build-impl.xml × 🕮 ListLibraryServlet.java ×
Source History 👺 🖫 - 🖟 - 🔍 🗫 🐶 🖶 🖫 🔐 😤 🕒 🚉 🗐 🍏 🗎 🕮 🚅
 5 - */
    package com.dvd.model;
 6
 7 = import java.io.Serializable;
 9 🖵 /**
10
       * @author nasru
11
12
      public class DVDItem implements Serializable {
13
14
          private static final long serialVersionUID = 1L; // Unique identifier for serial
15
          // 1) d)
16
17
          String title;
18
          String year;
19
          String genre;
20
21
          // Constructors
          public DVDItem() {
22 🖃
23
          }
24
25
          // 1)e)
26 =
          public DVDItem(String title, String year, String genre) {
27
              this.title = title;
              this.year = year;
28
29
              this.genre = genre;
30
31
32
          // 1) f)
33
          // Getters and setters
34 -
          public String getTitle() {return this.title;}
35 =
          public String getYear() {return this.year;}
36 =
          public String getGenre() {return this.genre;}
37
 <u>₩</u> =
          public void setTitle() {this.title = title;}
 <u>-</u>
          public void setYear() {this.year = year;}
 <u>Q.</u>
          public void setGenre() {this.genre = genre;}
41
42
```

TASK 2: Write the ListLibraryServlet View Servlet:



b)

```
🖻 DVDItem.java 🗡 🗐 index.html 🗡 📵 MANIFEST.MF 🗡 🖫 web.xml 🗡 🕾 build-impl.xml 🗡 🖻 ListLibraryServlet.java
Source History | № 🖟 - 🔊 - 🔍 🗫 🗗 🖫 | 🖓 😓 🕾 | 🖭 💇 | ● 🗎 | 🕮 🚅
       package com.dvd.view;
  7
       // 2) b)
  8
    □ import java.util.List;
  9
 10
      import java.util.Iterator;
       import java.util.ArrayList;
 11
       import com.dvd.model.DVDItem;
 12
 13
 14
       import java.io.IOException;
 15
       import java.io.PrintWriter;
 16
       import javax.servlet.ServletException;
       import javax.servlet.http.HttpServlet;
 17
 18
       import javax.servlet.http.HttpServletRequest;
       import javax.servlet.http.HttpServletResponse;
 19
 20
```

c)

```
🖻 DVDItem.java × 📵 index.html × 📵 MANIFEST.MF × 🖫 web.xml × 🔁 build-impl.xml × 🗷 ListLibraryServlet.java ×
Source History | 👺 🔯 - 👼 - | 🔍 🐶 🚭 📮 | 🚱 😓 | 😉 💇 | ● 🔲 | 🕮 🚅
 25
       public class ListLibraryServlet extends HttpServlet {
 26
         protected void processRequest(HttpServletRequest request, HttpServletResponse response)
 27
                   throws ServletException, IOException {
 28
               response.setContentType("text/html;charset=UTF-8");
 29
               List dvds = new ArrayList();
 30
               dvds.add(new DVDItem("Aquaman","2019","Sci-Fi"));
 31
               dvds.add(new DVDItem("Robin Hood","2018","Action"));
               dvds.add(new DVDItem("The Grinch","2018","Comedy"));
 32
               response.setContentType("text/html");
 33
               PrintWriter out = response.getWriter();
```

```
🗟 DVDItem.java 🗡 🗟 index.html 🗡 🙆 MANIFEST.MF 🗡 🗒 web.xml 🗡 🕾 build-impl.xml 🗡 🗟 ListLibraryServlet.java
response.setContentType("text/html");
 33
 <u>Q.</u>
             PrintWriter out = response.getWriter();
 35
             out.println("<html>");
 36
 37
             out.println("<head>");
             out.println("<title>ListLibraryServlet</title>");
 38
             out.println("<body bgcolor='white'>");
 39
             out.println("<You currently have <b>" + dvds.size() +
 40
                    "</b> DVDs in your collection:<br>");
 41
 42
             out.println("");
 43
             out.println("");
 44
             out.println(" TITLE");
             out.println(" YEAR");
 45
             out.println(" GENRE");
 46
             out.println("");
 47
 48
 49
             Iterator it = dvds.iterator();
             while(it.hasNext()){
 50
                DVDItem item = (DVDItem) it.next();
 51
 52
                out.println("");
                out.println(" " + item.getTitle() + "");
 53
                out.println(" " + item.getYear() + "");
 54
                out.println(" " + item.getGenre() + "");
 55
 56
                out.println("");
 57
             }
             out.println("");
 58
             out.println("End of the list...");
 59
 60
             out.println("</body>");
 61
             out.println("</html>");
 62
             out.close();
 63
 64
 65
 66
    +
         HttpServlet methods. Click on the + sign on the left to edit the code.
 67
```

## 2. Configuring the Web Application

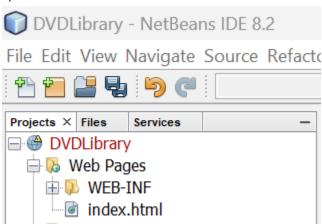
## TASK 1: Verify the Servlet configuration:

a)

ω,							
to	r Run Debug Pro		Vindow Help				
		D - 📆 - 🕦 -					
	Ճ DVDItem.java ×	index.html × ◎	MANIFEST.MF × 🗟 web.xml	× 🔠 build	-impl.xml ×	ListLibraryServl	et.java ×
	Source Gener	ral Servlets	Filters Pages References		Security History 🖺 Lis		braryServlet ~
4	Servlets						
E	ListLibraryServlet ->						
	Servlet Name: ListLibraryServlet				Startup Order:		
	Description:						
	Servlet Class:	com.dvd.view.ListL	w.ListLibraryServlet		Browse	Go to Source	
	◯ JSP File:		•		Browse	Go to Source	
	URL Pattern(s):						
	one racemoy.	Use comma (,) to separate multiple patterns.					
	Initialization Parameters:						
	Parameter Name		Parameter Value	D	escription		
	Add Edit	t Remove					
	Security Role References:						
1	Role Ref Name		Role Ref Link		escription		
1			Role Ref Link		Description		
	Add Edit Remove						
	Run As:						~
b)	)						
or	Run Debug Profil		ndow Help				
		- 🐘 - 🕩 -					
<u>&amp;</u>	DVDItem.java ×	index.html × 📵 MA	NIFEST.MF × 🗟 web.xml ×				
	Source General	l Servlets F	ilters Pages Referen	ces Secur	ity History	Servlet Filters	; ~
早	Servlet Filters						
7	Filter Mappings						
	Filter Name		Applies To		Dispatcher T		
	Add Edit	. Remove					

TASK 2: Create the Homepage:

a)

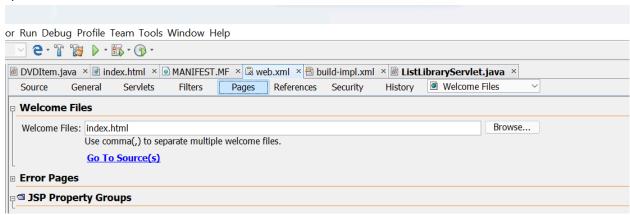


## b) and c)

or Run Debug Profile Team Tools Window Help

```
2 · T > > · B · · ·
🖻 DVDItem.java 🔻 📵 index.html 🔻 📵 MANIFEST.MF 🗡 🖫 web.xml 🗡 🕾 build-impl.xml 🗡 🛍 ListLibraryServlet.java
Source History | 👺 💀 - 🔊 - | 🔩 🗫 🖶 📮 | 🔗 😓 | 😉 💇 | ● 🗉
      <!DOCTYPE html>
 2 = <!--
     To change this license header, choose License Headers in Project Properties.
     To change this template file, choose Tools | Templates
     and open the template in the editor.
 6
 7
   - <html>
 8 =
          <head>
 9
              <title>TODO supply a title</title>
10
              <meta charset="UTF-8">
              <meta name="viewport" content="width=device-width, initial-scale=1.0">
11
12
          </head>
13 🖨
          <body>
              <h1>DVD Library Application</h1>
14
15
                  <l
16
                      <a href=' list library.view'>Display my DVD library</a>
17
18
                  19
          </body>
20
21
    L </html>
22
```





TASK 3: Deploy the web Application

