The DSpace Course - Look and Feel Customisation

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http://hdl.handle.net/10673/74

Downloaded from DSpace Repository, DSpace Institution's institutional repository
The DSpace Course

Module - Look & Feel Customisation
Module Objectives

By the end of this module you will:

- Understand the different user interfaces to the DSpace software
- Understand the different levels of customisation that can be done to the DSpace interface
- Have customised the JSPUI interface of DSpace
There are two interfaces to DSpace 1.5

- The JSPUI (Java Server Pages)
- The XMLUI (Manakin Framework)
The JSPUI is the standard interface for DSpace allowing fast creation of dynamic web content.

The JSPUI interface is implemented using:
- Java Servlets which handle the business logic
- JavaServer Pages (JSPs) which produce the HTML

The source code for the JSP webapp is located either:

[dspace-src]\dspace-jspui\dspace-jspui-webapp\src\main\webapp
If the full source was downloaded

[dspace-src]\dspace\target\dspace-[version].dir\webapps\dspace-jspui-webapp\nIf the default release was downloaded after the first build
- Edited JSPs should be placed in
  
  ```
  [dspace-src]/dspace/modules/jspui/src/main/webapp/
  ```

- Files placed in this directory will overwrite the original JSPs
- This will ensure when upgrading DSpace local changes are not overwritten
- Using the same path as the original

<table>
<thead>
<tr>
<th>DSpace default</th>
<th>Locally-modified version</th>
</tr>
</thead>
<tbody>
<tr>
<td>[jsp.dir]/community-list.jsp</td>
<td>[dspace-src]/dspace/modules/jspui/src/main/webapp/community-list.jsp</td>
</tr>
</tbody>
</table>
Customising the Stylesheet

- Fonts, colours and formatting in DSpace can be easily changed using the stylesheet.

- When editing the stylesheet copy the local version to:

  [dspace-src]/dspace/modules/jspui/src/main/webapp/styles.css.jsp
Tags within the stylesheet relate to various elements in the JSPUI. By changing these tags, fonts, colours and formatting can be modified.

Once this file has been modified, DSpace will need to be re-packaged:

```
cd [dspace-src]/dspace
mvn package
```

Then DSpace will need to be redeployed:

```
cd [dspace-src]/dspace/target/[version]/dspace-[version].build.dir
ant -Dconfig=[dspace]/config/dspace.cfg update
```

So let's see an example on the DSpace LiveCD.
- Page elements for the basic layout are located in `layout/*.jsp`
Customising a JSP

- More advanced customisation can be done by editing the JSPs
- Editing layout/header-default.jsp to modify the DSpace logo

- Once this file has been modified DSpace will need to be re-packaged
  
  cd [dspace-src]\dspace
  mvn package

- Then DSpace will need to be redeployed
  
  cd [dspace-src]\dspace\target\[version]\dspace-[version].build.dir
  ant -Dconfig=[dspace]\config\dspace.cfg update

- So let's see an example on the DSpace LiveCD
Simple Customisation to the JSPUI involves:
- Basic changes to the page elements
- Changes to the stylesheet

Advantages:
- Quick to implement
- Simple to complete (only a basic understanding of CSS/HTML is required)

Disadvantages:
- Only very basic changes to the look and feel can be completed
- DSpace look & feel does not vary greatly from the ‘out of the box’ installation
Advanced Customisation to the JSPUI involves:
- JSPUI Interface - Editing Java Server Pages (JSPs) etc...
- Changes to the stylesheet

Advantages:
- Advanced changes to the look and feel can be achieved
- DSpace can be branded to match the organisational corporate scheme

Disadvantages:
- Changes can be time consuming
- Changes require knowledge of additional programming languages (Java/Java Server)
JSP UI Examples

(Advanced Customisation of the JSP Interface)
Welcome to YorkSpace, York University’s digital repository of research. Explore the site by clicking on Enter Site to browse collections, or search the entire site with the search box below.
XMLUI is a new front end for DSpace

Based on Apache Cocoon Framework

Why? Four Design Goals

- allowing each community and collection represented in DSpace to maintain a distinct look and feel.
- to increase support for internationalization in DSpace
- to separate the business logic from stylistic controls, increasing ease of adaptability.
- to provide an alternative interface to the current JSP based implementation, requiring no changes to the core of DSpace (including the database), while specifically enabling both user interfaces to operate simultaneously.

Additional Information on Manakin can be found at:

- http://di.tamu.edu/projects/xmlui
XML UI Examples

(Advanced Customisation of the XML Interface)
Advanced Customisation - XMLUI

Texas A&M Repository

The Geologic Atlas of the United States is a set of 227 folios published by the U.S. Geological Survey between 1894 and 1945. Each folio includes both topographic and geologic maps for each quad represented in that folio, as well as description of the basic and economic geology of the area. The Geologic Atlas collection is maintained by Map and GIS Collections and Services within the TAMU Libraries.

The repository interface with integrated Yahoo! Maps was developed by the Digital Initiatives -- Research & Technology group within the TAMU Libraries using the Fireshot interface framework on top of the DSpace digital repository software.
Practical: DSpace Customisation

- Try customising the following using the guide in the workbook:
  
  - DSpace Stylesheet
  - DSpace JSPs
These slides have been produced by:

- Stuart Lewis & Chris Yates
- Repository Support Project
  - http://www.rsp.ac.uk/
- Part of the RepositoryNet
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  - http://www.jisc.ac.uk/