Maven Project Consolidation

This project would reorganize and consolidate some of the maven project hierarchy to reduce the number of maven projects neccessary to operate DSpace.

Benefits: Reduce the number of maven projects in DSpace "Core" from 39 to 19.

Example Repository: https://github.com/dspace/DSpace/tree/maven-project-consolidation

This project would consolidate:

- dspace-xmlui
  - dspace-xmlui-wing
    - src/main/java
  - dspace-xmlui-api
    - src/main/java
    - src/main/resources
- dspace-xmlui-webapp
  - src/main/resources
  - src/main/webapp

and it would reduce it down to

- dspace-xmlui
  - src/main/java
  - src/main/resources
  - src/main/webapp

We would utilize the current model found in dspace-swordv2 (http://scm.dspace.org/svn/repo/dspace/trunk/dspace/modules/swordv2)

dspace-swordv2

- src/main/java
- src/main/resources
- src/main/webapp

http://scm.dspace.org/svn/repo/dspace/trunk/dspace/modules/swordv2/pom.xml

How it works:

SWORDv2 uses skinny WARs and the generation of secondary artifacts (classes.jar) to create the proper artifacts needed for the overlay process.

```xml
<build>
  <plugins>
    <plugin>
      <groupId>org.apache.maven.plugins</groupId>
      <artifactId>maven-war-plugin</artifactId>
      <configuration>
        <attachClasses>true</attachClasses>
        <!-- In version 2.1-alpha-1, this was incorrectly named warSourceExcludes -->
        <packagingExcludes>WEB-INF/lib/*.jar</packagingExcludes>
        <warSourceExcludes>WEB-INF/lib/*.jar</warSourceExcludes>
        <webResources>
          <resource>
            <filtering>true</filtering>
            <directory>${basedir}/src/main/webapp</directory>
            <includes>
              <include>WEB-INF/web.xml</include>
            </includes>
          </resource>
        </webResources>
      </configuration>
      <executions>
        <execution>
          <phase>prepare-package</phase>
        </execution>
      </executions>
    </plugin>
  </plugins>
</build>
```
To produce this for DSpace XMLUI and other webapplications we would consolidate all the project directories in each case and create the same build process for them as well.

Then to add the dependencies into the overlay projects such as dspace/modules/swordv2, the dependencies just need to have the webapp.war and api.jar dependencies replaced with the following

```
<dependencies>
  <!-- DSpace Custom SWORDv2 Web application -->
  <dependency>
    <groupId>org.dspace</groupId>
    <artifactId>dspace-swordv2</artifactId>
    <type>war</type>
  </dependency>

  <!-- DSpace Implementation of SWORDv2 Provider -->
  <dependency>
    <groupId>org.dspace</groupId>
    <artifactId>dspace-swordv2</artifactId>
    <type>jar</type>
    <classifier>classes</classifier>
  </dependency>
</dependencies>
```

In this task we would want to retain svn history as effectively as possible, this means that we will want to probably do the following

- create dspace-xxx/src/main directories and commit them to svn
- copy/move individual "webapp", "java" and "resources" directories into the new src/main directory space.
- move all dependencies from dspace-xxxx-api/pom.xml into dspace-xxxx/pom.xml and commit
- move build and dependencies from dspace-xxxx-webapp/pom.xml into dspace-xxxx/pom.xml and commit
- remove dspace-xxxx-api and dspace-xxxx-webapp directories from SVN
- adjust all dspace/pom.xml and dspace/modules/yyyyy/pom.xml to use the appropriate dependencies afterward

A prototype branch of this work has been completed in SVN and is ready for testing purposes.