

SpotBugs Report

Produced using [SpotBugs](#)4.4.2.

Project: StudentManagement[StudentManagement.main]

Metrics

845 lines of code analyzed, in 24 classes, in 6 packages.

Metric	Total	Density*
High Priority Warnings		NaN
Medium Priority Warnings	19	22.49
Total Warnings	19	22.49

(* Defects per Thousand lines of non-commenting source statements)

Summary

Warning Type	Number
Malicious code vulnerability Warnings	18
Dodgy code Warnings	1
Total	19

Warnings

Click on each warning link to see a full description of the issue, and details of how to resolve it.

Malicious code vulnerability Warnings

Warning	Priority	Details
May expose internal representation by returning reference to mutable object	Medium	<div>com.ace.ucv.model.Catalog.getMaterii() may expose internal representation by returning Catalog.materii</div> <div>In file Catalog.java Catalog.java, line 12 12 In class com.ace.ucv.model.Catalog In method com.ace.ucv.model.Catalog.getMaterii() Field com.ace.ucv.model.Catalog.materii At Catalog.java:[line 12] At Catalog.java:[line 12]</div>
May expose internal representation by returning reference to mutable object	Medium	<div>com.ace.ucv.model.Catalog.getSituatii() may expose internal representation by returning Catalog.situatii</div> <div>In file Catalog.java Catalog.java, line 20 20 In class com.ace.ucv.model.Catalog In method com.ace.ucv.model.Catalog.getSituatii() Field com.ace.ucv.model.Catalog.situatii At Catalog.java:[line 20] At Catalog.java:[line 20]</div>
May expose internal	Medium	

representation by returning reference to mutable object		<p>com.ace.ucv.model.Situatie.getNote() may expose internal representation by returning Situatie.note</p> <p>In file Situatie.java Situatie.java, line 19 19 In class com.ace.ucv.model.Situatie In method com.ace.ucv.model.Situatie.getNote() Field com.ace.ucv.model.Situatie.note At Situatie.java:[line 19] At Situatie.java:[line 19]</p>
May expose internal representation by returning reference to mutable object	Medium	<p>com.ace.ucv.model.Situatie.getStudent() may expose internal representation by returning Situatie.student</p> <p>In file Situatie.java Situatie.java, line 11 11 In class com.ace.ucv.model.Situatie In method com.ace.ucv.model.Situatie.getStudent() Field com.ace.ucv.model.Situatie.student At Situatie.java:[line 11] At Situatie.java:[line 11]</p>
May expose internal representation by returning reference to mutable object	Medium	<p>com.ace.ucv.model.frame.EditareMaterieFrame.getMaterie() may expose internal representation by returning EditareMaterieFrame.materie</p> <p>In file EditareMaterieFrame.java EditareMaterieFrame.java, line 91 91 In class com.ace.ucv.model.frame.EditareMaterieFrame In method com.ace.ucv.model.frame.EditareMaterieFrame.getMaterie() Field com.ace.ucv.model.frame.EditareMaterieFrame.materie At EditareMaterieFrame.java:[line 91] At EditareMaterieFrame.java:[line 91]</p>
May expose internal representation by returning reference to mutable object	Medium	<p>com.ace.ucv.model.frame.EditareStudentiFrame.getStudent() may expose internal representation by returning EditareStudentiFrame.student</p> <p>In file EditareStudentiFrame.java EditareStudentiFrame.java, line 91 91 In class com.ace.ucv.model.frame.EditareStudentiFrame In method com.ace.ucv.model.frame.EditareStudentiFrame.getStudent() Field com.ace.ucv.model.frame.EditareStudentiFrame.student At EditareStudentiFrame.java:[line 91] At EditareStudentiFrame.java:[line 91]</p>
May expose internal representation by returning reference to mutable object	Medium	<p>com.ace.ucv.parser.ReadMaterieXMLFile.getMaterii() may expose internal representation by returning ReadMaterieXMLFile.materii</p> <p>In file ReadMaterieXMLFile.java ReadMaterieXMLFile.java, line 21 21 In class com.ace.ucv.parser.ReadMaterieXMLFile In method com.ace.ucv.parser.ReadMaterieXMLFile.getMaterii() Field com.ace.ucv.parser.ReadMaterieXMLFile.materii At ReadMaterieXMLFile.java:[line 21] At ReadMaterieXMLFile.java:[line 21]</p>
May expose internal representation by returning reference to mutable object	Medium	<p>com.ace.ucv.parser.ReadNotaXMLFile.getNote() may expose internal representation by returning ReadNotaXMLFile.note</p> <p>In file ReadNotaXMLFile.java ReadNotaXMLFile.java, line 19 19 In class com.ace.ucv.parser.ReadNotaXMLFile In method com.ace.ucv.parser.ReadNotaXMLFile.getNote() Field com.ace.ucv.parser.ReadNotaXMLFile.note At ReadNotaXMLFile.java:[line 19] At ReadNotaXMLFile.java:[line 19]</p>
May expose internal	Medium	

representation by returning reference to mutable object		<p>com.ace.ucv.parser.ReadStudentXMLFile.getStudenti() may expose internal representation by returning ReadStudentXMLFile.studenti</p> <p>In file ReadStudentXMLFile.java ReadStudentXMLFile.java, line 21 21 In class com.ace.ucv.parser.ReadStudentXMLFile In method com.ace.ucv.parser.ReadStudentXMLFile.getStudenti() Field com.ace.ucv.parser.ReadStudentXMLFile.studenti At ReadStudentXMLFile.java:[line 21] At ReadStudentXMLFile.java:[line 21]</p>
May expose internal representation by incorporating reference to mutable object	Medium	<p>com.ace.ucv.model.Catalog.setMaterii(List) may expose internal representation by storing an externally mutable object into Catalog.materii</p> <p>In file Catalog.java Catalog.java, line 16 16 In class com.ace.ucv.model.Catalog In method com.ace.ucv.model.Catalog.setMaterii(List) Field com.ace.ucv.model.Catalog.materii Local variable named materii At Catalog.java:[line 16] At Catalog.java:[line 16]</p>
May expose internal representation by incorporating reference to mutable object	Medium	<p>com.ace.ucv.model.Catalog.setSituatii(List) may expose internal representation by storing an externally mutable object into Catalog.situatii</p> <p>In file Catalog.java Catalog.java, line 24 24 In class com.ace.ucv.model.Catalog In method com.ace.ucv.model.Catalog.setSituatii(List) Field com.ace.ucv.model.Catalog.situatii Local variable named situatii At Catalog.java:[line 24] At Catalog.java:[line 24]</p>
May expose internal representation by incorporating reference to mutable object	Medium	<p>com.ace.ucv.model.Situatie.setNote(List) may expose internal representation by storing an externally mutable object into Situatie.note</p> <p>In file Situatie.java Situatie.java, line 23 23 In class com.ace.ucv.model.Situatie In method com.ace.ucv.model.Situatie.setNote(List) Field com.ace.ucv.model.Situatie.note Local variable named note At Situatie.java:[line 23] At Situatie.java:[line 23]</p>
May expose internal representation by incorporating reference to mutable object	Medium	<p>com.ace.ucv.model.Situatie.setStudent(Student) may expose internal representation by storing an externally mutable object into Situatie.student</p> <p>In file Situatie.java Situatie.java, line 15 15 In class com.ace.ucv.model.Situatie In method com.ace.ucv.model.Situatie.setStudent(Student) Field com.ace.ucv.model.Situatie.student Local variable named student At Situatie.java:[line 15] At Situatie.java:[line 15]</p>
May expose internal representation by incorporating reference to mutable object	Medium	<p>new com.ace.ucv.model.data.CatalogModel(Catalog) may expose internal representation by storing an externally mutable object into CatalogModel.catalog</p> <p>In file CatalogModel.java CatalogModel.java, line 16 16 In class com.ace.ucv.model.data.CatalogModel In method new com.ace.ucv.model.data.CatalogModel(Catalog) Field com.ace.ucv.model.data.CatalogModel.catalog</p>

		Local variable named catalog At CatalogModel.java:[line 16] At CatalogModel.java:[line 16]
May expose internal representation by incorporating reference to mutable object	Medium	<p>com.ace.ucv.model.data.EditareDataModel.setMaterii(List) may expose internal representation by storing an externally mutable object into EditareDataModel.materii</p> <p>In file EditareDataModel.java EditareDataModel.java, line 15 15 In class com.ace.ucv.model.data.EditareDataModel In method com.ace.ucv.model.data.EditareDataModel.setMaterii(List) Field com.ace.ucv.model.data.EditareDataModel.materii Local variable named materii At EditareDataModel.java:[line 15] At EditareDataModel.java:[line 15]</p>
May expose internal representation by incorporating reference to mutable object	Medium	<p>com.ace.ucv.model.data.EditareDataModel.setStudenti(List) may expose internal representation by storing an externally mutable object into EditareDataModel.studenti</p> <p>In file EditareDataModel.java EditareDataModel.java, line 20 20 In class com.ace.ucv.model.data.EditareDataModel In method com.ace.ucv.model.data.EditareDataModel.setStudenti(List) Field com.ace.ucv.model.data.EditareDataModel.studenti Local variable named studenti At EditareDataModel.java:[line 20] At EditareDataModel.java:[line 20]</p>
May expose internal representation by incorporating reference to mutable object	Medium	<p>com.ace.ucv.model.data.EditareModel.setMaterii(List) may expose internal representation by storing an externally mutable object into EditareModel.materii</p> <p>In file EditareModel.java EditareModel.java, line 15 15 In class com.ace.ucv.model.data.EditareModel In method com.ace.ucv.model.data.EditareModel.setMaterii(List) Field com.ace.ucv.model.data.EditareModel.materii Local variable named materii At EditareModel.java:[line 15] At EditareModel.java:[line 15]</p>
May expose internal representation by incorporating reference to mutable object	Medium	<p>com.ace.ucv.model.data.EditareModel.setStudenti(List) may expose internal representation by storing an externally mutable object into EditareModel.studenti</p> <p>In file EditareModel.java EditareModel.java, line 20 20 In class com.ace.ucv.model.data.EditareModel In method com.ace.ucv.model.data.EditareModel.setStudenti(List) Field com.ace.ucv.model.data.EditareModel.studenti Local variable named studenti At EditareModel.java:[line 20] At EditareModel.java:[line 20]</p>

Dodgy code Warnings

Warning	Priority	Details
Code contains a hard coded reference to an absolute pathname	Medium	<p>Hard coded reference to an absolute pathname in com.ace.ucv.controller.MainForm\$1.actionPerformed(ActionEvent)</p> <p>In file MainForm.java MainForm.java, line 65 65</p>

```
In class com.ace.ucv.controller.MainForm$1  
In method com.ace.ucv.controller.MainForm$1.actionPerformed(ActionEvent)  
File name D:\\Data\\StudentManagement\\src\\view\\Catalog.xml  
At MainForm.java:[line 65]  
At MainForm.java:[line 65]
```

Warning Types

Code contains a hard coded reference to an absolute pathname

This code constructs a File object using a hard coded to an absolute pathname (e.g., new
`File("/home/dannyc/workspace/j2ee/src/share/com/sun/enterprise/deployment");`

May expose internal representation by returning reference to mutable object

Returning a reference to a mutable object value stored in one of the object's fields exposes the internal representation of the object. If instances are accessed by untrusted code, and unchecked changes to the mutable object would compromise security or other important properties, you will need to do something different. Returning a new copy of the object is better approach in many situations.

May expose internal representation by incorporating reference to mutable object

This code stores a reference to an externally mutable object into the internal representation of the object. If instances are accessed by untrusted code, and unchecked changes to the mutable object would compromise security or other important properties, you will need to do something different. Storing a copy of the object is better approach in many situations.