**Does the objects method have necessary null or empty check?**

Minor review: getHelpIndexPageURL catches the errors when initialize the URL with null.

Minor review: getLowerCaseSearchedWords do not check 'searchedText' null, but the upper method calls ensure the passing parameter be not null.

Minor review: searchInHelpDocuments do not check 'helpIndex', but the upper method calls has always give a new URL object.

**Does the object comparison have correct operators?**

Minor review: 'helpPage' and 'browserPage' comparison use '!=', but equal method comparsion required name resolution, need to check carefully current comparison logic fulfill the set operation.

**Are all GUI elements with action listeners?**

Correct: they bind with property change listener.

**For every object or array reference: Is the value certain to be non-null?**

Correct: 'history' list object is empty at the start, it always add non-null object at follow up operations.

**Is there any array access might cause index out of bounds?**

Major review: 'showPrevious' and 'showNext' may access the 'history' with less than 0 index, carefully check those two methods calls chain or they are no longer using.

**Are all resource released after use?**

Correct: Reader variable in 'parse' method of 'HelpDocument' is guaranteed to close with finally closure.

**Are all resource released operation surrounded by try catch block?**

Correct: Reader variable in 'parse' method of 'HelpDocument' is guaranteed to close with finally closure.

**Are all class attributes with proper Access Modifiers?**

Correct: all attributes are only manipulated by this class.

**Are all class attributes with appropriate get and set method?**

Major review: 'getView' method of 'helpView' should be private, since it is only used in 'displayView' method. For testing purpose, it could add a public 'getView' in a sub class of this class while writing the unit tests.

Minor review: the get method of 'browserPage' and 'helpPage' are used to return the object for other property change listener, no change been made to those two objects.

**Does the classes have reasonable constructor (initialize some unnecessary variables)?**

Correct: only one constructor in this class, all major attributes are initialized.

**Is a status of thread being cleared after throw an exception?**

Correct: no thread used in this class.

**Are there any description for a constructor and its parameters?**

Minor review: no description for the constructor and its parameter, those parameters are self-described and but involving some logic of initializing the attributes need to documented.

**Are there any description for a class?**

Correct: a simple description.

**Analysis from findbugs-3.0.1**

* Null check of controller at line 90 of value previously dereferenced in new com.eteks.sweethome3d.swing.HelpPane(UserPreferences, HelpController)[line:90]

A value is checked here to see whether it is null, but this value can't be null because it was previously dereferenced and if it were null a null pointer exception would have occurred at the earlier dereference. Essentially, this code and the previous dereference disagree as to whether this value is allowed to be null. Either the check is redundant or the previous dereference is erroneous.

* Invocation of java.net.URL.equals(Object), which blocks to do domain name resolution, in com.eteks.sweethome3d.viewcontroller.HelpController.showPage(URL)[line:275]

The equals and hashCode method of URL perform domain name resolution, this can result in a big performance hit.

* com.eteks.sweethome3d.viewcontroller.HelpController$HelpDocument.addReferencedDocument(String) is or uses a map or set of URLs, which can be a performance hog

This method or field is or uses a Map or Set of URLs. Since both the equals and hashCode method of URL perform domain name resolution, this can result in a big performance hit.

* com.eteks.sweethome3d.viewcontroller.HelpController$HelpDocument.getReferencedDocuments() is or uses a map or set of URLs, which can be a performance hog

This method or field is or uses a Map or Set of URLs. Since both the equals and hashCode method of URL perform domain name resolution, this can result in a big performance hit.