

Class Library

java.lang.Object

Library

```
public class Library
extends Object
```

A class to represent a library and all the available resources.

Version:

1.0

Author:

Ailidh

Constructor Summary

Constructors

Constructor	Description
Library (String name)	Constructor for objects of class Library.

Method Summary

All Methods	Instance Methods	Concrete Methods
Modifier and Type	Method	Description
void	addNewResource (Resource resourceToAdd)	Add a resource to the library catalogue.
void	availableBooks ()	Print a list of all available resources.
void	editTitle (String oldTitle, String newTitle)	Edit the title of a resource in the library.
void	findAuthor (String authorToFind)	Search the library for resources matching the given author.
void	findIsbn (String isbnToFind)	Search the library for resources matching the given ISBN.

<code>messageToMembersHoldingBooks(),</code>		
void	<code>lendingBook(Resource bookToLend, LibraryMember memberTakingBook)</code>	A method to simulate a library member borrowing a book.
int	<code>libraryCatalogueSize()</code>	Get the size of the library catalogue.
void	<code>listElectronicResources()</code>	List the electronic resources held in the library.
void	<code>listPhysicalResources()</code>	List the physical resources held in the library.
void	<code>messageToMembersHoldingBooks(String message)</code>	A method to simulate sending a message to all members who currently hold resources.
void	<code>printDetails()</code>	Print the details of the library.
void	<code>removeResource(Resource resourceToRemove)</code>	Remove a resource from the library.
void	<code>removeResourceByIndex(int index)</code>	Remove a resource from the library using its index position.
boolean	<code>resourceAvailableInLibrary(Resource resourceToCheck)</code>	Check if the library contains a resource.
void	<code>returningBook(Resource bookToReturn, boolean newDamageToAdd, String damageDescription)</code>	A method to simulate a library member returning a resource.
void	<code>setLibraryName(String newName)</code>	Set the name of the library.

Methods inherited from class `java.lang.Object`

`clone, equals, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait`

Constructor Detail

Library

`public Library(String name)`

Constructor for objects of class Library.

[PACKAGE](#) [CLASS](#) [TREE](#) [INDEX](#) [HELP](#)[ALL CLASSES](#)SEARCH: [SUMMARY: NESTED](#) | [FIELD](#) | [CONSTR](#) | [METHOD](#) [DETAIL: FIELD](#) | [CONSTR](#) | [METHOD](#)

Method Detail

setLibraryName

```
public void setLibraryName(String newName)
```

Set the name of the library.

Parameters:

newName - The name of the library.

getLibraryname

```
public String getLibraryname()
```

Get the name of the library.

Returns:

The library name.

getResources

```
public ArrayList getResources()
```

printDetails

```
public void printDetails()
```

Print the details of the library.

resourceAvailableInLibrary

```
public boolean resourceAvailableInLibrary(Resource resourceToCheck)
```

Check if the library contains a resource.

Parameters:

[PACKAGE](#) [CLASS](#) [TREE](#) [INDEX](#) [HELP](#)[ALL CLASSES](#)SEARCH: [SUMMARY: NESTED](#) | [FIELD](#) | [CONSTR](#) | [METHOD](#) [DETAIL: FIELD](#) | [CONSTR](#) | [METHOD](#)**editTitle**

```
public void editTitle(String oldTitle, String newTitle)
```

Edit the title of a resource in the library.

Parameters:

oldTitle - The existing title of the resource.

newTitle - The new title of the resource.

findResource

```
public Resource findResource(Resource resourceToFind)
```

Find a resource within the library.

Parameters:

resourceToFind - The resource to find.

findIsbn

```
public void findIsbn(String isbnToFind)
```

Search the library for resources matching the given ISBN.

Parameters:

isbnToFind - The ISBN to search for.

findAuthor

```
public void findAuthor(String authorToFind)
```

Search the library for resources matching the given author.

Parameters:

authorToFind - The author to search for.

removeResource

```
public void removeResource(Resource resourceToRemove)
```

[PACKAGE](#) [CLASS](#) [TREE](#) [INDEX](#) [HELP](#)[ALL CLASSES](#)SEARCH: SUMMARY: [NESTED](#) | [FIELD](#) | [CONSTR](#) | [METHOD](#) [DETAIL: FIELD](#) | [CONSTR](#) | [METHOD](#)**removeResourceByIndex**

```
public void removeResourceByIndex(int index)
```

Remove a resource from the library using its index position.

Parameters:

index - The index position to remove from the library.

availableBooks

```
public void availableBooks()
```

Print a list of all available resources.

libraryCatalogueSize

```
public int libraryCatalogueSize()
```

Get the size of the library catalogue.

Returns:

The size of the catalogue, being all resources currently contained within it.

addNewResource

```
public void addNewResource(Resource resourceToAdd)
```

Add a resource to the library catalogue.

Parameters:

resourceToAdd - The resource to add to the catalogue.

lendingBook

```
public void lendingBook(Resource bookToLend, LibraryMember memberTakingBook)
```

A method to simulate a library member borrowing a book.

[PACKAGE](#) [CLASS](#) [TREE](#) [INDEX](#) [HELP](#)[ALL CLASSES](#)SEARCH: [SUMMARY: NESTED | FIELD | CONSTR | METHOD](#) [DETAIL: FIELD | CONSTR | METHOD](#)**returningBook**

```
public void returningBook(Resource bookToReturn, boolean newDamageToAdd,
String damageDescription)
```

A method to simulate a library member returning a resource.

Parameters:

bookToReturn - The resource the library member wants to return.

newDamageToAdd - True if the resource is physical and is damaged, otherwise false.

damageDescription - The damage to record, if relevant.

messageToMembersHoldingBooks

```
public void messageToMembersHoldingBooks(String message)
```

A method to simulate sending a message to all members who currently hold resources.

Parameters:

message - The message to send to the relevant members.

listPhysicalResources

```
public void listPhysicalResources()
```

List the physical resources held in the library.

listElectronicResources

```
public void listElectronicResources()
```

List the electronic resources held in the library.

[PACKAGE](#) [CLASS](#) [TREE](#) [INDEX](#) [HELP](#)[ALL CLASSES](#)[SUMMARY: NESTED | FIELD | CONSTR | METHOD](#) [DETAIL: FIELD | CONSTR | METHOD](#)

