# **Class Projects**

java.lang.Object Projects

public class Projects
extends java.lang.Object

## **Constructor Summary**

#### Constructors

**Constructor and Description** 

Projects()

## **Method Summary**

All Methods Instance Methods Concrete Methods	
Modifier and Type	Method and Description
Project	<pre>addContributorToProject(User user, Project project, java.lang.String contributorUsername) Adds a contributor to a project</pre>
boolean	<pre>addProject(User user, java.lang.String projectName, java.lang.String abstractText, java.lang.String ownerUsername) Adds a project to the database if the user trying is of type Faculty and has logged in.</pre>
Project	<pre>deleteContributorFromProject(User user, Project project,    java.lang.String contributorUsername) Removes a contributor from a project</pre>
boolean	<pre>deleteProject(User user, Project project) Deletes a project</pre>
Project	<pre>editProjectAbstract(User user, Project project, java.lang.String newAbstractText) Edits a project abstract text</pre>
Project	<pre>editProjectName(User user, Project project, java.lang.String newNam Edits a project name</pre>
Project	<pre>editProjectOwner(User user, Project project, java.lang.String newUsername) Edits a project's owner</pre>
java.util.ArrayList <java.lang.string></java.lang.string>	findKeywordsByProjectID(int projID) Finds all keywords associated with a given project ID number
Project	<pre>findProjectByID(java.lang.Integer projID) Returns a single project given the primary key projID</pre>
java.util.ArrayList <project></project>	<pre>findProjectsByContributor(java.lang.Integer contributorUserID) finds any projects in the database by a given contributor</pre>
java.util.ArrayList <project></project>	<pre>findProjectsByKeyword(java.lang.String keyword) finds all projects in the database that have a given keyword</pre>
java.util.ArrayList <project></project>	<pre>findProjectsByName(java.lang.String projectName) find all projects in database by a given name</pre>
java.util.ArrayList <project></project>	<pre>findProjectsByOwner(java.lang.Integer ownerID) Finds any projects in the database by the owner ID</pre>
private java.util.ArrayList <java.util.arraylist<java.lang.st< td=""><td>tring&gt;&gt; resultSetFormatter(java.sql.ResultSet rs) Formats a given result set into a 2D array list</td></java.util.arraylist<java.lang.st<>	tring>> resultSetFormatter(java.sql.ResultSet rs) Formats a given result set into a 2D array list

# Constructor Detail

Methods inherited from class java.lang.Object

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

Projects

public Projects()

### Method Detail

### resultSetFormatter

private java.util.ArrayList<java.lang.String>> resultSetFormatter(java.sql.ResultSet rs)

Formats a given result set into a 2D array list

Parameters:

rs - the result set to format

Returns

the 2D array list that has only strings

### findProjectsByName

public java.util.ArrayList<Project> findProjectsByName(java.lang.String projectName)

find all projects in database by a given name

Parameters:

projectName - the name of a project

Returns

a list of projects with a given name

#### findProjectsByOwner

public java.util.ArrayList<Project> findProjectsByOwner(java.lang.Integer ownerID)

Finds any projects in the database by the owner ID

Parameters:

 $\ensuremath{\mathsf{ownerID}}$  - the user ID of the owner to search for owned projects

Returns:

a list of projects owned by a given owner userID, or null if no results

## findProjectByID

public Project findProjectByID(java.lang.Integer projID)

Returns a single project given the primary key proj ${\rm ID}$ 

Parameters:

 $\operatorname{projID}$  - the unique key that links to a single project in the database

Returns:

a single project object or null if no results from db

### findProjectsByContributor

 $\verb|public java.util.ArrayList<| Project>| find Projects By Contributor (java.lang.Integer contributor User ID)| \\$ 

finds any projects in the database by a given contributor

Parameters:

 $\verb|contributorUserID| - \verb|the user ID| to get associated projects from \\$ 

Returns:

a list of projects

## findProjectsByKeyword

public java.util. ArrayList < Project > find Projects By Keyword (java.lang. String keyword)

finds all projects in the database that have a given keyword

Parameters:

```
keyword - the keyword to get all associated projects with {\bf Returns:} a list of projects or null if no results
```

```
findKeywordsByProjectID
```

```
public java.util.ArrayList<java.lang.String> findKeywordsByProjectID(int projID)
```

Finds all keywords associated with a given project ID number

Parameters:

projID - the projID of a project

Returns:

a list of keywords

#### addProject

Adds a project to the database if the user trying is of type Faculty and has logged in.

#### Parameters:

```
user - the user trying to add a project (must be of type "F" for faculty projectName - the name of the project abstractText - the content of the project ownerUsername - the owner's unique username Returns: true if the add was successful, false otherwise
```

#### editProjectName

Edits a project name

#### Parameters

```
user - the user trying to change a project
project - the project to change
newName - the new name
Returns:
```

#### Returns

the updated project

# editProjectAbstract

Edits a project abstract text

#### Parameters:

```
user - the user trying to change a project
project - the project to change
newAbstractText - the new abstract text
Returns:
the updated project
```

#### editProjectOwner

```
Edits a project's owner
```

#### Parameters:

user - the user trying to change a project

project - the project to change

newUsername - the new user to change to

#### Returns:

the updated project

#### deleteProject

public boolean deleteProject(User user,

Project project)

Deletes a project

#### Parameters:

user - the user trying to change a project

project - the project to change

Returns:

true if successful, false otherwise

#### addContributorToProject

public Project addContributorToProject(User user,

Project project,

java.lang.String contributorUsername)

Adds a contributor to a project

#### Parameters:

user - the user trying to add a contributor to their project

project - the project to add a contributor to

contributorUsername - the username of the contributor

# Returns:

the updated project

# delete Contributor From Project

public Project deleteContributorFromProject(User user,

Project project,

java.lang.String contributorUsername)

Removes a contributor from a project

### Parameters:

user - the user trying to remove a contributor from their project  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left$ 

project - the project to remove a contributor from

 ${\tt contributorUsername\ -\ the\ username\ of\ the\ contributor}$ 

#### Returns:

the updated project