

Remove Duplicate Code From Constructors Refactoring

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Chapter 1

Namespace Index

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Chapter 2

Class Index

2.1 Class List

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3.1 File List

Here is a list of all files with brief descriptions:

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Chapter 4

Namespace Documentation

4.1 Package edu

Packages

- package [illinois](#)

4.2 Package edu.illinois

Packages

- package [canistelCassabanana](#)

4.3 Package edu.illinois.canistelCassabanana

Packages

- package [utility](#)
- package [visitors](#)

Classes

- class [Activator](#)
- class [RemoveDuplicateCodeInConstructorsAction](#)
- class [RemoveDuplicateCodeInConstructorsConstants](#)
- class [RemoveDuplicateCodeInConstructorsDescriptor](#)
- class [RemoveDuplicateCodeInConstructorsInputPage](#)
- class [RemoveDuplicateCodeInConstructorsRefactoring](#)
- class [RemoveDuplicateCodeInConstructorsWizard](#)

4.4 Package edu.illinois.canistelCassabanana.utility

Classes

- class [Utility](#)

4.5 Package edu.illinois.canistelCassabanana.visitors

Classes

- class [AssignmentExpressionVisitor](#)
- class [ConstructorDeclarationVisitor](#)
- class [ConstructorInvocationVisitor](#)
- class [FieldVariableVisitor](#)
- class [MethodDeclarationVisitor](#)
- class [NameBindingVisitor](#)
- class [TypeDeclarationVisitor](#)

Chapter 5

Class Documentation

5.1 edu.illinois.canistelCassabanana.Activator Class Reference

Inherits org::eclipse::ui::plugin::AbstractUIPlugin.

Public Member Functions

- [Activator](#) ()
- void [start](#) (BundleContext context) throws Exception
- void [stop](#) (BundleContext context) throws Exception

Static Public Member Functions

- static [Activator](#) [getDefault](#) ()

Static Public Attributes

- static final String [PLUGIN_ID](#) = "edu.illinois.canistelCassabanana"

Static Private Attributes

- static [Activator](#) [plugin](#)

5.1.1 Detailed Description

The activator class controls the plug-in life cycle

Definition at line 9 of file Activator.java.

5.1.2 Constructor & Destructor Documentation

5.1.2.1 `edu.illinois.canistelCassabanana.Activator.Activator ()`

The constructor

Definition at line 20 of file `Activator.java`.

5.1.3 Member Function Documentation

5.1.3.1 `static Activator edu.illinois.canistelCassabanana.Activator.getDefault ()` [static]

Returns the shared instance

Returns

the shared instance

Definition at line 46 of file `Activator.java`.

5.1.3.2 `void edu.illinois.canistelCassabanana.Activator.start (BundleContext context) throws Exception`

Definition at line 27 of file `Activator.java`.

5.1.3.3 `void edu.illinois.canistelCassabanana.Activator.stop (BundleContext context) throws Exception`

Definition at line 36 of file `Activator.java`.

5.1.4 Member Data Documentation

5.1.4.1 `Activator edu.illinois.canistelCassabanana.Activator.plugin` [static, private]

Definition at line 15 of file `Activator.java`.

5.1.4.2 `final String edu.illinois.canistelCassabanana.Activator.PLUGIN_ID = "edu.illinois.canistelCassabanana"` [static]

Definition at line 12 of file `Activator.java`.

The documentation for this class was generated from the following file:

- `/media/Documents/Documents/Dropbox/16 - College - Senior/CS 427 - Software Engineering I/edu.illinois.canistelCassabanana/src/edu/illinois/canistelCassabanana/Activator.java`

5.2 edu.illinois.canistelCassabanana.visitors.AssignmentExpressionVisitor Class Reference

Inherits org.eclipse.jdt.core.dom.ASTVisitor.

Public Member Functions

- [AssignmentExpressionVisitor](#) ()
- boolean [visit](#) (Assignment assignment)
- Set< Expression > [getLeftHandSideAssignmentExpressions](#) ()
- Set< Expression > [getRightHandSideAssignmentExpressions](#) ()

Private Attributes

- Set< Expression > [leftHandSideAssignmentExpressions](#)
- Set< Expression > [rightHandSideAssignmentExpressions](#)

5.2.1 Detailed Description

Collects the assignments found in the AST subtree from the starting root node, and exposes the results.

Author

jon

Definition at line 23 of file AssignmentExpressionVisitor.java.

5.2.2 Constructor & Destructor Documentation

5.2.2.1 edu.illinois.canistelCassabanana.visitors.AssignmentExpressionVisitor.AssignmentExpressionVisitor ()

Definition at line 31 of file AssignmentExpressionVisitor.java.

5.2.3 Member Function Documentation

5.2.3.1 Set<Expression> edu.illinois.canistelCassabanana.visitors.AssignmentExpressionVisitor.getLeftHandSideAssignmentExpressions ()

Definition at line 50 of file AssignmentExpressionVisitor.java.

5.2.3.2 Set<Expression> edu.illinois.canistelCassabanana.visitors.AssignmentExpressionVisitor.getRightHandSideAssignment ()

Definition at line 54 of file AssignmentExpressionVisitor.java.

5.2.3.3 boolean edu.illinois.canistelCassabanana.visitors.AssignmentExpressionVisitor.visit (Assignment *assignment*)

Collects the expressions that appear in the left hand side of assignments.

Definition at line 42 of file AssignmentExpressionVisitor.java.

5.2.4 Member Data Documentation

5.2.4.1 Set<Expression> edu.illinois.canistelCassabanana.visitors.AssignmentExpressionVisitor.leftHandSide [private]

The expressions that appear in the left hand side of assignments.

Definition at line 28 of file AssignmentExpressionVisitor.java.

5.2.4.2 Set<Expression> edu.illinois.canistelCassabanana.visitors.AssignmentExpressionVisitor.rightHandSide [private]

Definition at line 29 of file AssignmentExpressionVisitor.java.

The documentation for this class was generated from the following file:

- /media/Documents/Documents/Dropbox/16 - College - Senior/CS 427 - Software Engineering I/edu.illinois.canistelCassabanana/src/edu/illinois/canistelCassabanana/visitors/AssignmentExpressionVisitor.java

5.3 edu.illinois.canistelCassabanana.visitors.ConstructorDeclarationVisitor Class Reference

Inherits org.eclipse.jdt.core.dom.ASTVisitor.

Public Member Functions

- [ConstructorDeclarationVisitor](#) ()
- boolean [visit](#) (MethodDeclaration node)
- Set< MethodDeclaration > [getConstructorDeclarations](#) ()

Private Attributes

- Set< MethodDeclaration > [constructorDeclarations](#)

5.3.1 Detailed Description

Collects the constructor declarations found in the AST subtree from the starting root node, and exposes the results.

Author

jon

Definition at line 17 of file ConstructorDeclarationVisitor.java.

5.3.2 Constructor & Destructor Documentation

5.3.2.1 edu.illinois.canistelCassabanana.visitors.ConstructorDeclarationVisitor.ConstructorDeclarationVisitor ()

Definition at line 24 of file ConstructorDeclarationVisitor.java.

5.3.3 Member Function Documentation

5.3.3.1 Set<MethodDeclaration> edu.illinois.canistelCassabanana.visitors.ConstructorDeclarationVisitor.getConstructorDeclarations ()

Definition at line 41 of file ConstructorDeclarationVisitor.java.

5.3.3.2 boolean edu.illinois.canistelCassabanana.visitors.ConstructorDeclarationVisitor.visit (MethodDeclaration *node*)

Collects this method declaration if it is a constructor, and prevents further recursion.

Definition at line 34 of file ConstructorDeclarationVisitor.java.

5.3.4 Member Data Documentation

5.3.4.1 Set<MethodDeclaration> edu.illinois.canistelCassabanana.visitors.ConstructorDeclarationVisitor.constructorDeclarations [private]

The set of constructors (declarations) found

Definition at line 22 of file ConstructorDeclarationVisitor.java.

The documentation for this class was generated from the following file:

- /media/Documents/Documents/Dropbox/16 - College - Senior/CS 427 - Software Engineering I/edu.illinois.canistelCassabanana/src/edu/illinois/canistelCassabanana/visitors/[ConstructorDeclarationVisitor.java](#)

5.4 edu.illinois.canistelCassabanana.visitors.ConstructorInvocationVisitor Class Reference

Inherits org::eclipse::jdt::core::dom::ASTVisitor.

Public Member Functions

- [ConstructorInvocationVisitor](#) ()
- boolean [visit](#) (ConstructorInvocation node)
- Set< ConstructorInvocation > [getConstructorInvocations](#) ()

Private Attributes

- Set< ConstructorInvocation > [constructorInvocations](#)

5.4.1 Detailed Description

Collects the constructor invocations found in the AST subtree from the starting root node, and exposes the results.

Author

jon

Definition at line 20 of file ConstructorInvocationVisitor.java.

5.4.2 Constructor & Destructor Documentation

5.4.2.1 edu.illinois.canistelCassabanana.visitors.ConstructorInvocationVisitor.ConstructorInvocationVisitor ()

Definition at line 27 of file ConstructorInvocationVisitor.java.

5.4.3 Member Function Documentation

5.4.3.1 Set<ConstructorInvocation> edu.illinois.canistelCassabanana.visitors.ConstructorInvocationVisitor.getConstructorInvocations ()

Definition at line 42 of file ConstructorInvocationVisitor.java.

5.4.3.2 boolean edu.illinois.canistelCassabanana.visitors.ConstructorInvocationVisitor.visit (ConstructorInvocation node)

Collects this method invocation if it is a constructor, and prevents further recursion.

Definition at line 37 of file ConstructorInvocationVisitor.java.

5.4.4 Member Data Documentation

5.4.4.1 Set<ConstructorInvocation> edu.illinois.canistelCassabanana.visitors.ConstructorInvocationVisitor.constructorInvocations [private]

The set of constructor calls found

Definition at line 25 of file ConstructorInvocationVisitor.java.

The documentation for this class was generated from the following file:

- /media/Documents/Documents/Dropbox/16 - College - Senior/CS 427 - Software Engineering I/edu.illinois.canistelCassabanana/src/edu/illinois/canistelCassabanana/visitors/[ConstructorInvocationVisitor.java](#)

5.5 edu.illinois.canistelCassabanana.visitors.FieldVariableVisitor Class Reference

Inherits org.eclipse.jdt.core.dom.ASTVisitor.

Public Member Functions

- [FieldVariableVisitor](#) (List< SimpleName > [parameterNames](#))
- boolean [visit](#) (SimpleName node)
- boolean [visit](#) (FieldAccess node)
- Set< IVariableBinding > [getFieldsAssigningParameters](#) ()
- Set< IVariableBinding > [getFields](#) ()
- Map< IVariableBinding, IVariableBinding > [getParametersToFieldBindings](#) ()

Package Attributes

- List< SimpleName > [parameterNames](#)
- Map< IVariableBinding, IVariableBinding > [parameterToFieldBindings](#)

Private Member Functions

- void [checkFieldAssignsParameter](#) (ASTNode node, IVariableBinding fieldBinding)

Private Attributes

- Set< IVariableBinding > [fields](#)
- Set< IVariableBinding > [fieldsAssigningParameters](#)

5.5.1 Detailed Description

Collects the field variables found in the AST subtree from the starting root node.

Author

jon

Definition at line 28 of file FieldVariableVisitor.java.

5.5.2 Constructor & Destructor Documentation

5.5.2.1 `edu.illinois.canistelCassabanana.visitors.FieldVariableVisitor.FieldVariableVisitor (List< SimpleName > parameterNames)`

Builds the visitor with the list of parameter names, used to visit a constructor and resolve bindings of parameters to fields.

Parameters

<i>parameterNames</i>	The list of parameter
-----------------------	-----------------------

Definition at line 57 of file FieldVariableVisitor.java.

5.5.3 Member Function Documentation

5.5.3.1 `void edu.illinois.canistelCassabanana.visitors.FieldVariableVisitor.checkFieldAssignsParameter (ASTNode node, IVariableBinding fieldBinding) [private]`

Checks if the variable binding assigns a parameter, and if it does, adds it to our list.

Parameters

<i>node</i>	The AST node we're investigating
<i>fieldBinding</i>	The binding for the variable assigned (a field)

Definition at line 118 of file FieldVariableVisitor.java.

5.5.3.2 `Set< IVariableBinding > edu.illinois.canistelCassabanana.visitors.FieldVariableVisitor.getFields ()`

Definition at line 160 of file FieldVariableVisitor.java.

5.5.3.3 Set<IVariableBinding> edu.illinois.canistelCassabanana.visitors.FieldVariableVisitor.getFieldsAssigningParameters ()

Definition at line 156 of file FieldVariableVisitor.java.

5.5.3.4 Map<IVariableBinding, IVariableBinding> edu.illinois.canistelCassabanana.visitors.FieldVariableVisitor.getParametersToFieldBindings ()

Definition at line 164 of file FieldVariableVisitor.java.

5.5.3.5 boolean edu.illinois.canistelCassabanana.visitors.FieldVariableVisitor.visit (FieldAccess node)

Visit all field access nodes

Definition at line 96 of file FieldVariableVisitor.java.

5.5.3.6 boolean edu.illinois.canistelCassabanana.visitors.FieldVariableVisitor.visit (SimpleName node)

Visit all simple name nodes that access fields

Definition at line 71 of file FieldVariableVisitor.java.

5.5.4 Member Data Documentation

5.5.4.1 Set<IVariableBinding> edu.illinois.canistelCassabanana.visitors.FieldVariableVisitor.fields [private]

The fields that appear in any simple name nodes we visit.

Definition at line 33 of file FieldVariableVisitor.java.

5.5.4.2 Set<IVariableBinding> edu.illinois.canistelCassabanana.visitors.FieldVariableVisitor.fieldsAssigningParameters [private]

The fields assigned by parameters

Definition at line 38 of file FieldVariableVisitor.java.

5.5.4.3 List<SimpleName> edu.illinois.canistelCassabanana.visitors.FieldVariableVisitor.parameterNames [package]

The parameters of this constructor (this is modified as we visit)

Definition at line 43 of file FieldVariableVisitor.java.

5.5.4.4 `Map<IVariableBinding, IVariableBinding>`
`edu.illinois.canistelCassabanana.visitors.FieldVariableVisitor.parameterToFieldBindings`
 [package]

The map of parameter bindings to field bindings

Definition at line 48 of file `FieldVariableVisitor.java`.

The documentation for this class was generated from the following file:

- `/media/Documents/Documents/Dropbox/16 - College - Senior/CS 427 - Software Engineering I/edu.illinois.canistelCassabanana/src/edu/illinois/canistelCassabanana/visitors/FieldVariableVisitor.java`

5.6 `edu.illinois.canistelCassabanana.visitors.MethodDeclarationVisitor` Class Reference

Inherits `org.eclipse.jdt.core.dom.ASTVisitor`.

Public Member Functions

- `MethodDeclarationVisitor ()`
- boolean `visit (MethodDeclaration node)`
- `Set< MethodDeclaration > getMethodDeclarations ()`

Private Attributes

- `Set< MethodDeclaration > methodDeclarations`

5.6.1 Detailed Description

Collects the method declarations found in the AST subtree from the starting root node, and exposes the results.

Author

jon

Definition at line 17 of file `MethodDeclarationVisitor.java`.

5.6.2 Constructor & Destructor Documentation

5.6.2.1 `edu.illinois.canistelCassabanana.visitors.MethodDeclarationVisitor.MethodDeclarationVisitor ()`

Definition at line 24 of file `MethodDeclarationVisitor.java`.

5.6.3 Member Function Documentation

5.6.3.1 **Set<MethodDeclaration> edu.illinois.canistelCassabanana.visitors.MethodDeclarationVisitor.getMethodDeclarations ()**

Definition at line 38 of file MethodDeclarationVisitor.java.

5.6.3.2 **boolean edu.illinois.canistelCassabanana.visitors.MethodDeclarationVisitor.visit (MethodDeclaration *node*)**

Collects this method declaration if it exists, and prevents recursion.

Definition at line 33 of file MethodDeclarationVisitor.java.

5.6.4 Member Data Documentation

5.6.4.1 **Set<MethodDeclaration> edu.illinois.canistelCassabanana.visitors.MethodDeclarationVisitor.methodDeclarations [private]**

The set of constructors (declarations) found

Definition at line 22 of file MethodDeclarationVisitor.java.

The documentation for this class was generated from the following file:

- /media/Documents/Documents/Dropbox/16 - College - Senior/CS 427 - Software Engineering I/edu.illinois.canistelCassabanana/src/edu/illinois/canistelCassabanana/visitors/[MethodDeclarationVisitor.java](#)

5.7 edu.illinois.canistelCassabanana.visitors.NameBindingVisitor Class Reference

Inherits org::eclipse::jdt::core::dom::ASTVisitor.

Public Member Functions

- [NameBindingVisitor](#) ()
- boolean [visit](#) (QualifiedName name)
- boolean [visit](#) (SimpleName name)
- Set< IBinding > [getIBindings](#) ()

Private Attributes

- Set< IBinding > [iBindings](#)

5.7.1 Detailed Description

Collects the names found in subtree

Author

Joe

Definition at line 19 of file NameBindingVisitor.java.

5.7.2 Constructor & Destructor Documentation

5.7.2.1 `edu.illinois.canistelCassabanana.visitors.NameBindingVisitor.NameBindingVisitor ()`

Definition at line 24 of file NameBindingVisitor.java.

5.7.3 Member Function Documentation

5.7.3.1 `Set<IBinding> edu.illinois.canistelCassabanana.visitors.NameBindingVisitor.getIBindings ()`

Definition at line 47 of file NameBindingVisitor.java.

5.7.3.2 `boolean edu.illinois.canistelCassabanana.visitors.NameBindingVisitor.visit (QualifiedName name)`

Collects the QualifiedNames found in the subtree and adds the simple name

Definition at line 33 of file NameBindingVisitor.java.

5.7.3.3 `boolean edu.illinois.canistelCassabanana.visitors.NameBindingVisitor.visit (SimpleName name)`

Collects the SimpleNames found in the subtree

Definition at line 42 of file NameBindingVisitor.java.

5.7.4 Member Data Documentation

5.7.4.1 `Set<IBinding> edu.illinois.canistelCassabanana.visitors.NameBindingVisitor.iBindings [private]`

Definition at line 22 of file NameBindingVisitor.java.

The documentation for this class was generated from the following file:

- /media/Documents/Documents/Dropbox/16 - College - Senior/CS 427 - Software Engineering I/edu.illinois.canistelCassabanana/src/edu/illinois/canistelCassabanana/visitors/[NameB](#)

5.8

edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsAction

Class Reference

5.8 edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsAction²¹

Class Reference

Inherits org::eclipse::ui::IWorkbenchWindowActionDelegate.

Public Member Functions

- void [dispose](#) ()
- void [init](#) (final IWorkbenchWindow [window](#))
- void [run](#) (final IAction action)
- void [selectionChanged](#) (final IAction action, final ISelection selection)

Private Member Functions

- void [refactorTreeSelection](#) (final IAction action, ITreeSelection treeSelection)
- void [launchRefactoring](#) ([RemoveDuplicateCodeInConstructorsRefactoring](#) refactoring, List< IMethod > constructors)

Private Attributes

- IWorkbenchWindow [window](#)
- ICompilationUnit [unit](#)

5.8.1 Detailed Description

Action invoked by clicking on the menu item corresponding to this refactoring. This should perform the refactoring on the given code.

Author

jon

Definition at line 28 of file RemoveDuplicateCodeInConstructorsAction.java.

5.8.2 Member Function Documentation

5.8.2.1 void edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsAction.dispose ()

Definition at line 43 of file RemoveDuplicateCodeInConstructorsAction.java.

5.8.2.2 void edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsAction.init (final IWorkbenchWindow *window*)

Definition at line 50 of file RemoveDuplicateCodeInConstructorsAction.java.

5.8.2.3 void edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsAction.launchRefactoring
 (RemoveDuplicateCodeInConstructorsRefactoring *refactoring*, List<
 IMethod > *constructors*) [private]

Launches the refactoring.

Definition at line 142 of file RemoveDuplicateCodeInConstructorsAction.java.

5.8.2.4 void edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsAction.refactorTreeSelection
 (final IAction *action*, ITreeSelection *treeSelection*) [private]

Parameters

<i>action</i>	
<i>structuredS- election</i>	

Definition at line 108 of file RemoveDuplicateCodeInConstructorsAction.java.

5.8.2.5 void edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsAction.run (
 final IAction *action*)

Definition at line 57 of file RemoveDuplicateCodeInConstructorsAction.java.

5.8.2.6 void edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsAction.selectionChanged
 (final IAction *action*, final ISelection *selection*)

Definition at line 155 of file RemoveDuplicateCodeInConstructorsAction.java.

5.8.3 Member Data Documentation

5.8.3.1 ICompilationUnit edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsAction.unit
 [private]

The top-level compilation unit

Definition at line 38 of file RemoveDuplicateCodeInConstructorsAction.java.

5.8.3.2 IWorkbenchWindow edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsAction.wi
 [private]

The workbench window, or null

Definition at line 33 of file RemoveDuplicateCodeInConstructorsAction.java.

The documentation for this class was generated from the following file:

- /media/Documents/Documents/Dropbox/16 - College - Senior/CS 427 - Software Engineering I/edu.illinois.canistelCassabanana/src/edu/illinois/canistelCassabanana/[RemoveDuplicateCodeInConstructorsAction.java](#)

Class Reference

Static Public Attributes

- static final String [ERROR_REFACTORING_MESSAGE](#) = "Error performing refactoring. "
- static final String [NO_DUPLICATE_CODE_MESSAGE](#) = "This refactoring must be performed on code with two or more constructors that contain duplicate code."
- static final String [ONE_CONSTRUCTOR_MESSAGE](#) = "This refactoring must be performed on code containing two or more constructors."
- static final String [NO_CONSTRUCTORS_MESSAGE](#) = "This refactoring must be performed on code containing two or more constructors."
- static final String [UNEXPECTED_ERROR_MESSAGE](#) = "An unexpected error occurred. See the error log for more details."
- static final String [NULL_CONSTRUCTORS_MESSAGE](#) = [UNEXPECTED_ERROR_MESSAGE](#)
- static final String [CHECKING_PRECONDITIONS_MESSAGE](#) = "Checking preconditions for refactoring ..."
- static final String [UNABLE_TO_REFACTOR](#) = [ERROR_REFACTORING_MESSAGE](#) + [UNEXPECTED_ERROR_MESSAGE](#)
- static final String [HELPER_FUNCTION_BAD_NAME_MESSAGE](#) = "Invalid name for helper function."
- static final String [HELPER_FUNCTION_EXISTING_NAME_MESSAGE](#) = "Invalid name for helper function. Using an existing name for helper function not allowed."
- static final String [ASSIGNMENT_DEPENDENCY_MESSAGE](#) = "Unable to resolve variable dependencies."
- static final String [REFACTORING_ID](#) = "RemoveDuplicateCodeInConstructorsRefactoring"
- static final String [REFACTORING_NAME](#) = "Remove Duplicate Code In Constructors"
- static final String [REFACTORING_DESCRIPTION](#) = "common construction code to as few constructors or as possible."

5.9.1 Detailed Description

Contains UI constants for the refactoring, including error messages and text constants to appear in the UI.

Author

jon

Definition at line 8 of file RemoveDuplicateCodeInConstructorsConstants.java.

5.9.2 Member Data Documentation

5.9.2.1 `final String edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsConstants.ASSIGNMENT_DEPENDENCY_MESSAGE = "Unable to resolve variable dependencies."`
[static]

Definition at line 24 of file RemoveDuplicateCodeInConstructorsConstants.java.

5.9.2.2 `final String edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsConstants.CHECK_PRECONDITIONS_MESSAGE = "Checking preconditions for refactoring ..."`
[static]

Definition at line 20 of file RemoveDuplicateCodeInConstructorsConstants.java.

5.9.2.3 `final String edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsConstants.ERROR_REFACTORING_MESSAGE = "Error performing refactoring. "`
[static]

Definition at line 11 of file RemoveDuplicateCodeInConstructorsConstants.java.

5.9.2.4 `final String edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsConstants.HELPER_FUNCTION_BAD_NAME_MESSAGE = "Invalid name for helper function."`
[static]

Definition at line 22 of file RemoveDuplicateCodeInConstructorsConstants.java.

5.9.2.5 `final String edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsConstants.HELPER_FUNCTION_EXISTING_NAME_MESSAGE = "Invalid name for helper function. Using an existing name for helper function not allowed."` [static]

Definition at line 23 of file RemoveDuplicateCodeInConstructorsConstants.java.

5.9.2.6 `final String edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsConstants.NO_CONSTRUCTORS_MESSAGE = "This refactoring must be performed on code containing two or more constructors."` [static]

Definition at line 16 of file RemoveDuplicateCodeInConstructorsConstants.java.

5.9.2.7 `final String edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsConstants.NO_DUPLICATE_CODE_MESSAGE = "This refactoring must be performed on code with two or more constructors that contain duplicate code."` [static]

Definition at line 12 of file RemoveDuplicateCodeInConstructorsConstants.java.

5.9

edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsConstants

Class Reference

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5.9.2.8 `final String edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsConstants.NULL_-
CONSTRUCTORS_MESSAGE = UNEXPECTED_ERROR_MESSAGE
[static]`

Definition at line 19 of file RemoveDuplicateCodeInConstructorsConstants.java.

5.9.2.9 `final String edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsConstants.ONE_-
CONSTRUCTOR_MESSAGE = "This refactoring must be performed on code
containing two or more constructors." [static]`

Definition at line 14 of file RemoveDuplicateCodeInConstructorsConstants.java.

5.9.2.10 `final String edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsConstants.REFACTORING_
DESCRIPTION = "common construction code to as few constructors or as
possible." [static]`

Definition at line 29 of file RemoveDuplicateCodeInConstructorsConstants.java.

5.9.2.11 `final String edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsConstants.REFACTORING_
ID = "RemoveDuplicateCodeInConstructorsRefactoring" [static]`

Definition at line 27 of file RemoveDuplicateCodeInConstructorsConstants.java.

5.9.2.12 `final String edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsConstants.REFACTORING_
NAME = "Remove Duplicate Code In Constructors" [static]`

Definition at line 28 of file RemoveDuplicateCodeInConstructorsConstants.java.

5.9.2.13 `final String edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsConstants.UNABLE_-
TO_REFACTOR = ERROR_REFACTORING_MESSAGE +
UNEXPECTED_ERROR_MESSAGE [static]`

Definition at line 21 of file RemoveDuplicateCodeInConstructorsConstants.java.

5.9.2.14 `final String edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsConstants.UNEXPECTED_
ERROR_MESSAGE = "An unexpected error occurred. See the error log for more
details." [static]`

Definition at line 18 of file RemoveDuplicateCodeInConstructorsConstants.java.

The documentation for this class was generated from the following file:

- /media/Documents/Documents/Dropbox/16 - College - Senior/CS 427 - Software Engineering I/edu.illinois.canistelCassabanana/src/edu/illinois/canistelCassabanana/[RemoveDuplicateCodeInConstructorsConstants.java](#)

5.10 edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsDescriptor Class Reference

Inherits org::eclipse::ltk::core::refactoring::RefactoringDescriptor.

Public Member Functions

- Map [getArguments](#) ()
- Refactoring [createRefactoring](#) (RefactoringStatus status) throws CoreException

Static Public Attributes

- static final String [REFACTORING_ID](#) = "org.eclipse.remove.duplicate.code.in.constructors"

Protected Member Functions

- [RemoveDuplicateCodeInConstructorsDescriptor](#) (String project, String description, String comment, Map [arguments](#))

Private Attributes

- Map [arguments](#)

5.10.1 Detailed Description

Descriptor object to allow refactoring to be used in refactoring scripts.

Author

jon

Definition at line 15 of file RemoveDuplicateCodeInConstructorsDescriptor.java.

5.10.2 Constructor & Destructor Documentation

5.10.2.1 edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsDescriptor.RemoveDuplicateCodeInConstructorsDescriptor (String *project*, String *description*, String *comment*, Map *arguments*)
[protected]

Definition at line 25 of file RemoveDuplicateCodeInConstructorsDescriptor.java.

5.11

edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsInputPage
Class Reference 27

5.10.3 Member Function Documentation

5.10.3.1 Refactoring `edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsDescriptor.createRefactoring (RefactoringStatus status)` throws `CoreException`

Definition at line 31 of file `RemoveDuplicateCodeInConstructorsDescriptor.java`.

5.10.3.2 Map `edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsDescriptor.getArguments ()`

Definition at line 21 of file `RemoveDuplicateCodeInConstructorsDescriptor.java`.

5.10.4 Member Data Documentation

5.10.4.1 Map `edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsDescriptor.arguments`
[private]

Definition at line 19 of file `RemoveDuplicateCodeInConstructorsDescriptor.java`.

5.10.4.2 `final String edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsDescriptor.REFACTORING_ID = "org.eclipse.remove.duplicate.code.in.constructors"` [static]

Definition at line 17 of file `RemoveDuplicateCodeInConstructorsDescriptor.java`.

The documentation for this class was generated from the following file:

- `/media/Documents/Documents/Dropbox/16 - College - Senior/CS 427 - Software Engineering I/edu.illinois.canistelCassabanana/src/edu/illinois/canistelCassabanana/RemoveDuplicateCodeInConstructorsInputPage.java`

5.11 edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsInputPage Class Reference

Inherits `org::eclipse::ltk::ui::refactoring::UserInputWizardPage`.

Public Member Functions

- [RemoveDuplicateCodeInConstructorsInputPage](#) (String name, List< IMethod > constructors)
- void [createControl](#) (Composite parent)

Package Attributes

- List< IMethod > [constructors](#)
- [RemoveDuplicateCodeInConstructorsRefactoring](#) `refactoring`

- Combo [accessModifierComboBox](#)
- Button [helperMethodCheckBox](#)
- Text [helperMethodTextBox](#)

Private Member Functions

- void [buildHelperMethodOptions](#) (Composite composite)
- void [buildAccessModifierOptions](#) (Composite composite)
- void [handleInput](#) ()
- ModifyListener [getModifyListener](#) ()
- [RemoveDuplicateCodeInConstructorsRefactoring](#) [getRemoveDuplicateCodeInConstructorsRefactoring](#) ()
- void [enableDisableHelperMethodTextBox](#) ()
- SelectionListener [getHelperMethodCheckBoxListener](#) ()

5.11.1 Detailed Description

The input page for the refactoring wizard. This class will set the fields corresponding to user input on the refactoring object.

Author

jon

Definition at line 37 of file `RemoveDuplicateCodeInConstructorsInputPage.java`.

5.11.2 Constructor & Destructor Documentation

5.11.2.1 `edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsInputPage.RemoveDuplicateCodeInConstructorsInputPage (String name, List<IMethod> constructors)`

Create this input page, initializing the refactoring object and list of constructors.

Parameters

<i>name</i>	The name to display on the input page
<i>constructors</i>	The constructors to selected to refactor

Definition at line 72 of file `RemoveDuplicateCodeInConstructorsInputPage.java`.

5.11

edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsInputPage

Class Reference

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5.11.3 Member Function Documentation

5.11.3.1 void edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsInputPage.buildAccessModifierOptions
(Composite *composite*) [private]

Create the GUI components for the access modifier options, and add them to the parent controls GUI element.

Parameters

<i>composite</i>	The parent for these controls
------------------	-------------------------------

Definition at line 140 of file RemoveDuplicateCodeInConstructorsInputPage.java.

5.11.3.2 void edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsInputPage.buildHelperMethodOptions
(Composite *composite*) [private]

Create the GUI components for the helper method options, and add them to the parent controls GUI element.

Parameters

<i>composite</i>	The parent for these controls
------------------	-------------------------------

Definition at line 113 of file RemoveDuplicateCodeInConstructorsInputPage.java.

5.11.3.3 void edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsInputPage.createControl
(Composite *parent*)

Create the GUI controls for the input page

Parameters

<i>parent</i>	The parent composite object to which to attach all controls
---------------	---

Definition at line 85 of file RemoveDuplicateCodeInConstructorsInputPage.java.

5.11.3.4 void edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsInputPage.enableDisableHelperMethodTextBox
() [private]

Enables or disable the helper method text box based on the check box state.

Definition at line 208 of file RemoveDuplicateCodeInConstructorsInputPage.java.

5.11.3.5 **SelectionListener** `edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsInputPage.getHelperMethod` `() [private]`

Gets the listener for the helper method check box, which enables/disables the corresponding input text box field.

Returns

The selection listener to trigger enabling/disabling the helper method input box

Definition at line 224 of file `RemoveDuplicateCodeInConstructorsInputPage.java`.

5.11.3.6 **ModifyListener** `edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsInputPage.getModifyListener` `() [private]`

Returns a modify listener that will update the variables of the parameter whenever it is triggered.

Definition at line 185 of file `RemoveDuplicateCodeInConstructorsInputPage.java`.

5.11.3.7 **RemoveDuplicateCodeInConstructorsRefactoring** `edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsInputPage.getRemoveDuplicateCodeInConstructorsRefactoring` `() [private]`

Gets the refactoring associated with this input page from the parent input page.

Returns

The refactoring associated with this input page

Definition at line 200 of file `RemoveDuplicateCodeInConstructorsInputPage.java`.

5.11.3.8 **void** `edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsInputPage.handleInput` `() [private]`

Handle the user input, setting the corresponding options on the refactoring object.

Definition at line 164 of file `RemoveDuplicateCodeInConstructorsInputPage.java`.

5.11.4 **Member Data Documentation**

5.11.4.1 **Combo** `edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsInputPage.accessModifier` `[package]`

Combo box to select the access modifier for the new constructor or helper method

Definition at line 52 of file `RemoveDuplicateCodeInConstructorsInputPage.java`.

5.12

edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring

Class Reference

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5.11.4.2 ~~List<IMethod>~~ **edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsInputPage.constructors**
[package]

The list of selected constructors, to pass to the refactoring

Definition at line 42 of file RemoveDuplicateCodeInConstructorsInputPage.java.

5.11.4.3 **Button** **edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsInputPage.helperMethodCheck**
[package]

Check box to specify whether or not the user would prefer to create a helper method over a new constructor, if it is necessary.

Definition at line 58 of file RemoveDuplicateCodeInConstructorsInputPage.java.

5.11.4.4 **Text** **edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsInputPage.helperMethodText**
[package]

Text box to specify the name of the helper method to create instead of a constructor, if the checkbox option has been set.

Definition at line 64 of file RemoveDuplicateCodeInConstructorsInputPage.java.

5.11.4.5 **RemoveDuplicateCodeInConstructorsRefactoring**
edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsInputPage.refactoring
[package]

The refactoring to launch

Definition at line 47 of file RemoveDuplicateCodeInConstructorsInputPage.java.

The documentation for this class was generated from the following file:

- /media/Documents/Documents/Dropbox/16 - College - Senior/CS 427 - Software Engineering I/edu.illinois.canistelCassabanana/src/edu/illinois/canistelCassabanana/[RemoveDuplicateCodeInConstructorsRefactoring.java](#)

5.12 edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring Class Reference

Inherits org::eclipse::ltk::core::refactoring::Refactoring.

Public Member Functions

- [RemoveDuplicateCodeInConstructorsRefactoring](#) (ICompilationUnit unit)
- [RemoveDuplicateCodeInConstructorsRefactoring](#) (ICompilationUnit unit, boolean useHelperFunction, String helperFunctionName, String accessModifier)

- [RemoveDuplicateCodeInConstructorsRefactoring](#) (List< IMethod > [constructors](#))
- [RemoveDuplicateCodeInConstructorsRefactoring](#) ()
- String [getName](#) ()
- RefactoringStatus [checkInitialConditions](#) (IProgressMonitor progressMonitor) throws CoreException, OperationCanceledException
- RefactoringStatus [checkFinalConditions](#) (IProgressMonitor progressMonitor) throws CoreException, OperationCanceledException
- Change [createChange](#) (IProgressMonitor progressMonitor) throws CoreException, OperationCanceledException
- void [setUseHelperFunction](#) (boolean [useHelperFunction](#))
- void [setHelperFunctionName](#) (String [helperFunctionName](#))
- void [setAccessModifier](#) (String [accessModifier](#))

Private Member Functions

- RefactoringStatus [checkNumberOfConstructors](#) (RefactoringStatus errorStatus)
- RefactoringStatus [checkCompileErrors](#) (RefactoringStatus status, RefactoringStatus errorStatus)
- List< IVariableBinding > [getFieldsFromParameterList](#) (MethodDeclaration masterConstructor)
- void [commitChanges](#) (ASTRewrite astRewrite, ImportRewrite importRewrite, MethodDeclaration masterConstructor, MethodDeclaration oldMasterConstructor)
- void [rewriteAST](#) (ASTRewrite astRewrite, ImportRewrite importRewrite)
- boolean [isEmptyEdit](#) (TextEdit astEdit)
- void [removeFinalFieldAssignments](#) (ASTRewrite astRewrite, Map< IVariableBinding, Expression > finalFieldAssignments, Block block, List< Statement > statements)
- void [createMasterConstructorCall](#) (ASTRewrite astRewrite, List< IVariableBinding > fieldsAssignedInOrder, List< Statement > statements, Map< IVariableBinding, Expression > finalFieldAssignments, Block block, RefactoringStatus status)
- boolean [isDependency](#) (List< Statement > statements, RefactoringStatus status, Expression rhs)
- Map< IVariableBinding, Expression > [getFieldAssignments](#) (List< Statement > statements)
- MethodDeclaration [createMasterConstructor](#) (List< IVariableBinding > fieldsAssignedInOrder, ImportRewrite importRewrite, RefactoringStatus status)
- void [buildFieldsAssignedInOrder](#) (List< IVariableBinding > fieldsAssignedInOrder)
- void [mergeInvalidNameError](#) (RefactoringStatus status)
- Block [createConstructorBody](#) (List< SingleVariableDeclaration > parameters, List< IVariableBinding > fieldsAssigned)
- List< IProblem > [initializeConstructors](#) ()
- boolean [otherConstructorsCallConstructors](#) (MethodDeclaration constructorAssigningAllAssignedFields)

5.12

edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring

Class Reference

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- MethodDeclaration [getConstructorContainingAllAssignedFields](#) (RefactoringStatus status)
- Set< IVariableBinding > [getFieldsAssignedInAnyConstructor](#) ()
- boolean [constructorsOverlapAssignments](#) ()

Private Attributes

- List< IMethod > [constructors](#)
- Set< MethodDeclaration > [constructorDeclarations](#)
- Map< MethodDeclaration, Set< IVariableBinding > > [parameterFieldsInConstructorAssignments](#)
- Map< MethodDeclaration, Set< IVariableBinding > > [fieldsInConstructorAssignments](#)
- ICompilationUnit [parent](#)
- CompilationUnit [compilationUnit](#)
- Map< ICompilationUnit, TextFileChange > [changes](#)
- AST [ast](#)
- boolean [useHelperFunction](#)
- String [helperFunctionName](#)
- String [accessModifier](#) = "public"

5.12.1 Detailed Description

The refactoring itself.

Author

jon

Definition at line 75 of file RemoveDuplicateCodeInConstructorsRefactoring.java.

5.12.2 Constructor & Destructor Documentation

5.12.2.1 edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.RemoveDuplicateCodeInConstructorsRefactoring (ICompilationUnit *unit*)

Constructs this refactoring given the compilation unit, the parent of all constructors to be refactored.

Parameters

<i>unit</i>	The compilation unit, the class in which to perform the refactoring.
-------------	--

Definition at line 145 of file RemoveDuplicateCodeInConstructorsRefactoring.java.

5.12.2.2 `edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.RemoveDuplicateCodeInConstructorsRefactoring`
 (`ICompilationUnit unit`, `boolean useHelperFunction`, `String helperFunctionName`,
`String accessModifier`)

Definition at line 149 of file `RemoveDuplicateCodeInConstructorsRefactoring.java`.

5.12.2.3 `edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.RemoveDuplicateCodeInConstructorsRefactoring`
 (`List<IMethod> constructors`)

Constructs this refactoring given a specific set of constructors to refactor.

Parameters

<i>constructors</i>	The constructors to refactor.
---------------------	-------------------------------

Definition at line 166 of file `RemoveDuplicateCodeInConstructorsRefactoring.java`.

5.12.2.4 `edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.RemoveDuplicateCodeInConstructorsRefactoring`
 ()

Definition at line 171 of file `RemoveDuplicateCodeInConstructorsRefactoring.java`.

5.12.3 Member Function Documentation

5.12.3.1 `void edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.buildFieldsAssignedInOrder`
 (`List<IVariableBinding> fieldsAssignedInOrder`) [private]

Builds an alphabetically-ordered list of fields assigned in the class

Parameters

<i>fieldsAssignedInOrder</i>	The list to populate
------------------------------	----------------------

Definition at line 807 of file `RemoveDuplicateCodeInConstructorsRefactoring.java`.

5.12.3.2 `RefactoringStatus edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.checkCompileErrors`
 (`RefactoringStatus status`, `RefactoringStatus errorStatus`) [private]

Checks for compile errors in the constructors of the compilation unit, and merges the proper error statuses into the given status objects if it finds any errors.

Parameters

<i>status</i>	The overall error of the refactoring
<i>errorStatus</i>	A local variable for storing the error status

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edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring

Class Reference

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Returns

The updated refactoring status

Definition at line 281 of file RemoveDuplicateCodeInConstructorsRefactoring.java.

5.12.3.3 RefactoringStatus edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.checkFinalConditions (*IProgressMonitor* *progressMonitor*) throws *CoreException*, *OperationCanceledException*

Checks that the final output of the refactoring is valid

Parameters

<i>progress-Monitor</i>	UI component to monitor the progress of the refactoring
-------------------------	---

Returns

The status of the refactoring

Definition at line 324 of file RemoveDuplicateCodeInConstructorsRefactoring.java.

5.12.3.4 RefactoringStatus edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.checkInitialConditions (*IProgressMonitor* *progressMonitor*) throws *CoreException*, *OperationCanceledException*

Check that the initial conditions for the refactoring are satisfied, specifically that:

- There are at least two constructors in the class
- Each constructor contains no compile errors

Parameters

<i>progress-Monitor</i>	UI component to monitor the progress of the refactoring
-------------------------	---

Returns

The status of the refactoring, i.e. if there was an error and what severity it has.

Definition at line 199 of file RemoveDuplicateCodeInConstructorsRefactoring.java.

5.12.3.5 RefactoringStatus edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.checkNumberOfConstructors (*RefactoringStatus* *errorStatus*) [private]

Check for errors with the number of constructors in the class.

Parameters

<i>errorStatus</i>	The error status object to update if errors are found.
--------------------	--

Returns

The updated error status

Definition at line 252 of file RemoveDuplicateCodeInConstructorsRefactoring.java.

5.12.3.6 void edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.commitChanges
(ASTRewrite *astRewrite*, ImportRewrite *importRewrite*, MethodDeclaration
masterConstructor, MethodDeclaration *oldMasterConstructor*) [private]

Writes the changes to the compilation unit

Parameters

<i>astRewrite</i>	AST rewriter utility
<i>importRewrite</i>	Import rewriter utility
<i>masterConstructor</i>	The actual master constructor
<i>oldMasterConstructor</i>	The master constructor that we found before

Definition at line 437 of file RemoveDuplicateCodeInConstructorsRefactoring.java.

5.12.3.7 boolean edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.constructorsOverlapAss
() [private]

Check for any duplicate assignments between pairs of constructors, from the set of all fields assigned in any constructors. This implicitly handles constructors that give the default value to some field assigned by other constructors.

Returns

True if there are explicit overlapping assignments from the set of all fields assigned in any constructor, false otherwise.

Definition at line 1081 of file RemoveDuplicateCodeInConstructorsRefactoring.java.

5.12.3.8 Change edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.createChange
(IProgressMonitor *progressMonitor*) throws CoreException, OperationCanceledEx-
ception

Actually performs the refactoring.

5.12

edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring

Class Reference

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Parameters

<i>progress-Monitor</i>	A handle on the progress monitor UI component
-------------------------	---

Returns

The change object representing the completed refactoring

Definition at line 891 of file RemoveDuplicateCodeInConstructorsRefactoring.java.

5.12.3.9 Block **edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.createConstructorBody**
(**List< SingleVariableDeclaration > parameters**, **List< IVariableBinding > fieldsAssigned**) [private]

Create the block of statements for a new constructor or helper method. The lists given for parameters and fields are assumed to be provided in the corresponding order.

Parameters

<i>parameters</i>	The parameters to the method
<i>fieldsAssigned</i>	The fields that need to be assigned

Returns

The block of statements assigning the parameters to the

Definition at line 857 of file RemoveDuplicateCodeInConstructorsRefactoring.java.

5.12.3.10 MethodDeclaration **edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.createMasterConstructor**
(**List< IVariableBinding > fieldsAssignedInOrder**, **ImportRewrite importRewrite**, **RefactoringStatus status**) [private]

Helper function to create the master constructor

Parameters

<i>fieldsAssignedInOrder</i>	The list of fields assigned, in order
<i>importRewrite</i>	Utility to allow us to effectively deal with types
<i>status</i>	TODO

Returns

The new constructor, with the body also initialized

Definition at line 744 of file RemoveDuplicateCodeInConstructorsRefactoring.java.

5.12.3.11 void edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.createMasterConstructorCall(
 (ASTRewrite *astRewrite*, List< IVariableBinding > *fieldsAssignedInOrder*,
 List< Statement > *statements*, Map< IVariableBinding, Expression >
finalFieldAssignments, Block *block*, RefactoringStatus *status*) [private]

Create the master constructor call in the given constructor.

Parameters

<i>astRewrite</i>	Utility to allow us to rewrite the AST
<i>fieldsAssignedInOrder</i>	The list of fields assigned in any constructor, in order (matches the order of the parameters of the master constructor)
<i>statements</i>	The statements of this constructor
<i>finalFieldAssignments</i>	The map of values assigned to fields in this constructor
<i>block</i>	TODO
<i>status</i>	TODO

Definition at line 541 of file RemoveDuplicateCodeInConstructorsRefactoring.java.

5.12.3.12 MethodDeclaration edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.getConstructor(
 (RefactoringStatus *status*) [private]

Returns the constructor with every (explicitly) assigned field as arguments, or null if none exists.

Parameters

<i>status</i>	the refactoring status to update if we find a constructor that makes this refactoring impossible
---------------	--

Definition at line 1004 of file RemoveDuplicateCodeInConstructorsRefactoring.java.

5.12.3.13 Map<IVariableBinding, Expression>
 edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.getFieldAssignments(
 (List< Statement > *statements*) [private]

Gets the map of fields and their assigned values from a list of statements.

Parameters

<i>statements</i>	The list of statements from which to find assigned field values
-------------------	---

Returns

The map of fields to their assigned expressions

Definition at line 693 of file RemoveDuplicateCodeInConstructorsRefactoring.java.

5.12

edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring

Class Reference

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5.12.3.14 `Set<IVariableBinding> edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.getFieldsAssignedInA
() [private]`

Returns the set of all fields assigned in all of the constructors.

Returns

A set of variable bindings, corresponding the the set of all fields assigned in any constructors.

Definition at line 1061 of file RemoveDuplicateCodeInConstructorsRefactoring.java.

5.12.3.15 `List<IVariableBinding> edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.getFieldsFromParamete
(MethodDeclaration masterConstructor) [private]`

Definition at line 402 of file RemoveDuplicateCodeInConstructorsRefactoring.java.

5.12.3.16 `String edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.getName
()`

Gets the name of the refactoring.

Parameters

<i>The</i>	unique name given to this refactoring
------------	---------------------------------------

Definition at line 181 of file RemoveDuplicateCodeInConstructorsRefactoring.java.

5.12.3.17 `List<IProblem> edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.initializeConstructors
() [private]`

Initializes the set of constructors for this class, and returns any problems ('error' level) that it found in these constructors.

Returns

IProblem[] - array of problems found in compilation of the unit. Compiler errors do not include anything within methods that are not constructors.

Definition at line 935 of file RemoveDuplicateCodeInConstructorsRefactoring.java.

5.12.3.18 `boolean edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.isDependency
(List< Statement > statements, RefactoringStatus status, Expression rhs)
[private]`

Parameters

<i>statements</i>	
-------------------	--

<i>status</i>	
<i>rhs</i>	

Definition at line 637 of file RemoveDuplicateCodeInConstructorsRefactoring.java.

5.12.3.19 `boolean edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.isEmptyEdit (TextEdit astEdit)` [private]

Definition at line 485 of file RemoveDuplicateCodeInConstructorsRefactoring.java.

5.12.3.20 `void edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.mergeInvalidNameError (RefactoringStatus status)` [private]

Merges a fatal error `HELPER_FUNCTION_BAD_NAME_MESSAGE` into the refactoring status.

Parameters

<i>status</i>	
---------------	--

Definition at line 840 of file RemoveDuplicateCodeInConstructorsRefactoring.java.

5.12.3.21 `boolean edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.otherConstructorsCallC (MethodDeclaration constructorAssigningAllAssignedFields)` [private]

Determines whether or not all other constructors, besides one assigning all used fields, delegate their work to another constructor.

Parameters

<i>constructorAssigningAllAssignedFields</i>	A constructor that assigns all fields, or null if none exists
--	---

Returns

Whether or not all other constructors (besides the parameter) call another constructor.

Definition at line 969 of file RemoveDuplicateCodeInConstructorsRefactoring.java.

5.12

edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring

Class Reference

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```
5.12.3.22 void edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.removeFinalFieldAssignments
( ASTRewrite astRewrite, Map< IVariableBinding, Expression >
finalFieldAssignments, Block block, List< Statement > statements )
[private]
```

Remove statements in original constructors that contained

Parameters

<i>astRewrite</i>	Utility to help rewrite the AST
<i>finalFieldAssignments</i>	Map of original assignment expressions
<i>block</i>	The block of statements of the constructor
<i>statements</i>	The list of statements of the constructor

Definition at line 501 of file RemoveDuplicateCodeInConstructorsRefactoring.java.

```
5.12.3.23 void edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.rewriteAST
( ASTRewrite astRewrite, ImportRewrite importRewrite ) [private]
```

Write back our changes to the AST

Definition at line 453 of file RemoveDuplicateCodeInConstructorsRefactoring.java.

```
5.12.3.24 void edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.setAccessModifier
( String accessModifier )
```

Definition at line 1120 of file RemoveDuplicateCodeInConstructorsRefactoring.java.

```
5.12.3.25 void edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.setHelperFunctionName
( String helperFunctionName )
```

Definition at line 1116 of file RemoveDuplicateCodeInConstructorsRefactoring.java.

```
5.12.3.26 void edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.setUseHelperFunction
( boolean useHelperFunction )
```

Definition at line 1112 of file RemoveDuplicateCodeInConstructorsRefactoring.java.

5.12.4 Member Data Documentation

```
5.12.4.1 String edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.accessModifier
= "public" [private]
```

The access modifier to use for creating a new constructor or helper method.

Definition at line 135 of file RemoveDuplicateCodeInConstructorsRefactoring.java.

5.12.4.2 **AST** `edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.ast` [private]

The AST to use to create new methods, and from which to create the rewriter.

Definition at line 117 of file `RemoveDuplicateCodeInConstructorsRefactoring.java`.

5.12.4.3 **Map**<`ICompilationUnit`, `TextFileChange`> `edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.changes` [private]

Stores a map of changes made to each compilation unit.

Definition at line 111 of file `RemoveDuplicateCodeInConstructorsRefactoring.java`.

5.12.4.4 **CompilationUnit** `edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring` [private]

The heavy weight, parsed compilation unit corresponding to the class.

Definition at line 106 of file `RemoveDuplicateCodeInConstructorsRefactoring.java`.

5.12.4.5 **Set**<`MethodDeclaration`> `edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.constructors` [private]

The constructors for this class

Definition at line 85 of file `RemoveDuplicateCodeInConstructorsRefactoring.java`.

5.12.4.6 **List**<`IMethod`> `edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.methods` [private]

The constructors on which to perform this refactoring

Definition at line 80 of file `RemoveDuplicateCodeInConstructorsRefactoring.java`.

5.12.4.7 **Map**<`MethodDeclaration`, **Set**<`IVariableBinding`> > `edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.fieldsInConstructors` [private]

A map of constructors to the fields in them that appear in assignments

Definition at line 96 of file `RemoveDuplicateCodeInConstructorsRefactoring.java`.

5.12.4.8 **String** `edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.helperFunctionName` [private]

The name of the helper function, only set if the `useHelperFunction` is `true`.

5.13

edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsWizard

Class Reference

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Definition at line 129 of file RemoveDuplicateCodeInConstructorsRefactoring.java.

5.12.4.9 Map<MethodDeclaration, Set<IVariableBinding> >

edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.parameterFieldsInConst
[private]

A map of constructors to the fields in them that appear in assignments from parameters

Definition at line 91 of file RemoveDuplicateCodeInConstructorsRefactoring.java.

5.12.4.10 ICompilationUnit edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.parent

[private]

The compilation unit, the class on which to perform this refactoring

Definition at line 101 of file RemoveDuplicateCodeInConstructorsRefactoring.java.

5.12.4.11 boolean edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring.useHelperFunction

[private]

Whether or not this refactoring should use a helper function instead of a constructor.

Definition at line 123 of file RemoveDuplicateCodeInConstructorsRefactoring.java.

The documentation for this class was generated from the following file:

- /media/Documents/Documents/Dropbox/16 - College - Senior/CS 427 - Software Engineering I/edu.illinois.canistelCassabanana/src/edu/illinois/canistelCassabanana/[RemoveDuplicateCodeInConstructorsRefactoring.java](#)

5.13 edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsWizard

Class Reference

Inherits org::eclipse::ltk::ui::refactoring::RefactoringWizard.

Public Member Functions

- [RemoveDuplicateCodeInConstructorsWizard](#) ([RemoveDuplicateCodeInConstructorsRefactoring](#) refactoring, String pageTitle, List< IMethod > [constructors](#))

Protected Member Functions

- void [addUserInputPages](#) ()

Package Attributes

- List< IMethod > [constructors](#)

5.13.1 Detailed Description

The refactoring wizard class, which displays the input page and passes data on to the refactoring.

Author

jon

Definition at line 13 of file RemoveDuplicateCodeInConstructorsWizard.java.

5.13.2 Constructor & Destructor Documentation

5.13.2.1 `edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsWizard.RemoveDuplicateCodeInConstructors(RemoveDuplicateCodeInConstructorsRefactoring refactoring, String pageTitle, List< IMethod > constructors)`

Builds the refactoring wizard.

Parameters

<i>refactoring</i>	The refactoring object to launch
<i>pageTitle</i>	The title to be displayed on the wizard
<i>constructors</i>	The constructors selected to be refactored. If the class was selected to be refactored, all constructors from the compilation unit will be passed.

Definition at line 28 of file RemoveDuplicateCodeInConstructorsWizard.java.

5.13.3 Member Function Documentation

5.13.3.1 `void edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsWizard.addUserInputPages()` [protected]

Add the only input page for this refactoring wizard

Definition at line 39 of file RemoveDuplicateCodeInConstructorsWizard.java.

5.13.4 Member Data Documentation

5.13.4.1 `List<IMethod> edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsWizard.con`
[package]

The constructors to be refactored

Definition at line 18 of file RemoveDuplicateCodeInConstructorsWizard.java.

The documentation for this class was generated from the following file:

- /media/Documents/Documents/Dropbox/16 - College - Senior/CS 427 - Software Engineering I/edu.illinois.canistelCassabanana/src/edu/illinois/canistelCassabanana/[RemoveDuplicateCodeInCo](#)

5.14 edu.illinois.canistelCassabanana.visitors.TypeDeclarationVisitor Class Reference

Inherits org.eclipse.jdt.core.dom.ASTVisitor.

Public Member Functions

- List< TypeDeclaration > [getTypes](#) ()
- [TypeDeclarationVisitor](#) ()
- boolean [visit](#) (TypeDeclaration node)

Package Attributes

- List< TypeDeclaration > [types](#)

5.14.1 Detailed Description

Collects the type declarations found in the AST subtree from the starting root node.

Author

jon

Definition at line 14 of file TypeDeclarationVisitor.java.

5.14.2 Constructor & Destructor Documentation

5.14.2.1 edu.illinois.canistelCassabanana.visitors.TypeDeclarationVisitor.TypeDeclarationVisitor ()

Definition at line 25 of file TypeDeclarationVisitor.java.

5.14.3 Member Function Documentation

5.14.3.1 List<TypeDeclaration> edu.illinois.canistelCassabanana.visitors.TypeDeclarationVisitor.getTypes ()

Definition at line 21 of file TypeDeclarationVisitor.java.

5.14.3.2 `boolean edu.illinois.canistelCassabanana.visitors.TypeDeclarationVisitor.visit (TypeDeclaration node)`

Definition at line 33 of file TypeDeclarationVisitor.java.

5.14.4 Member Data Documentation

5.14.4.1 `List<TypeDeclaration> edu.illinois.canistelCassabanana.visitors.TypeDeclarationVisitor.types [package]`

The list of type declarations visited.

Definition at line 19 of file TypeDeclarationVisitor.java.

The documentation for this class was generated from the following file:

- /media/Documents/Documents/Dropbox/16 - College - Senior/CS 427 - Software Engineering I/edu.illinois.canistelCassabanana/src/edu/illinois.canistelCassabanana/visitors/[TypeDe](#)

5.15 edu.illinois.canistelCassabanana.utility.Utility Class Reference

Static Public Member Functions

- static String [fullyQualifiedName](#) (ITypeBinding type)
- static IType [lookupIType](#) (ITypeBinding type, IJavaProject in)
- static ICompilationUnit [getParent](#) (List< IMethod > constructors)
- static List< IMethod > [getConstructors](#) (ICompilationUnit unit)
- static< T > Set< Set< T > > [getPairs](#) (Set< T > originalSet)
- static ASTNode [createDefaultValue](#) (IVariableBinding field, AST ast)
- static void [getFieldAssignmentsInConstructors](#) (Set< MethodDeclaration > constructorDeclarations, Map< MethodDeclaration, Set< IVariableBinding >> constructorParameterAssignmentsExpressions, Map< MethodDeclaration, Set< IVariableBinding >> constructorAssignmentsExpressions)
- static Set< MethodDeclaration > [getConstructors](#) (CompilationUnit ast)
- static Set< MethodDeclaration > [getMethods](#) (CompilationUnit ast)

5.15.1 Detailed Description

Definition at line 33 of file Utility.java.

5.15.2 Member Function Documentation

5.15.2.1 `static ASTNode edu.illinois.canistelCassabanana.utility.Utility.createDefaultValue (IVariableBinding field, AST ast) [static]`

Creates the default value ASTNode for a particular field, given the AST.

Parameters

<i>field</i>	The field for which to get the default value
<i>ast</i>	The AST to use to create this default value

Returns

The ASTNode representing the literal default value for this field

Definition at line 220 of file Utility.java.

5.15.2.2 static String edu.illinois.canistelCassabanana.utility.Utility.fullyQualifiedName (ITypeBinding *type*) [static]

Returns the fully qualified name for a ITypeBinding or null if the name can't be determined.

Parameters

<i>type</i>	The binding to determine the fully qualified name for.
-------------	--

Returns

The fully qualified name of the binding.

Definition at line 43 of file Utility.java.

5.15.2.3 static List<IMethod> edu.illinois.canistelCassabanana.utility.Utility.getConstructors (ICompilationUnit *unit*) [static]

Helper function to recursively retrieve all the constructors in some compilation unit.

Parameters

<i>unit</i>	The compilation unit from which to retrieve the constructors
<i>fieldName</i>	The field name

Returns

The list of methods in this compilation unit

Definition at line 153 of file Utility.java.

5.15.2.4 static Set<MethodDeclaration> edu.illinois.canistelCassabanana.utility.Utility.getConstructors (ICompilationUnit *ast*) [static]

Helper function to recursively retrieve all the constructors in some compilation unit

Parameters

<i>unit</i>	The compilation unit from which to retrieve the constructors
-------------	--

Returns

The list of methods in this compilation unit

Definition at line 293 of file Utility.java.

```
5.15.2.5 static void edu.illinois.canistelCassabanana.utility.Utility.getFieldAssignmentsInConstructors
( Set< MethodDeclaration > constructorDeclarations, Map< MethodDeclaration,
Set< IVariableBinding >> constructorParameterAssignmentsExpressions, Map<
MethodDeclaration, Set< IVariableBinding >> constructorAssignmentsExpressions )
[static]
```

Helper function to extract the set of fields that appear in assignment (from parameters and from anything) in each constructor

Definition at line 246 of file Utility.java.

```
5.15.2.6 static Set<MethodDeclaration> edu.illinois.canistelCassabanana.utility.Utility.getMethods
( CompilationUnit ast ) [static]
```

Get the set of top-level method names declared

Parameters

<i>unit</i>	The compilation unit from which to retrieve the methods
-------------	---

Returns

The list of methods in this compilation unit

Definition at line 307 of file Utility.java.

```
5.15.2.7 static <T> Set<Set<T> > edu.illinois.canistelCassabanana.utility.Utility.getPairs (
Set< T > originalSet ) [static]
```

Find every pair of items from a set

Parameters

<i>originalSet</i>	The original set
--------------------	------------------

Returns

A set of every possible pair from the original set

See also

<http://stackoverflow.com/questions/1670862/obtaining-powerset-of-a-set-in-java>

Definition at line 190 of file Utility.java.

5.15.2.8 `static ICompilationUnit edu.illinois.canistelCassabanana.utility.Utility.getParent (List< IMethod > constructors) [static]`

Finds the parent compilation unit of the given constructors.

Parameters

<i>constructors</i>	The list of constructors for which to find the parent
---------------------	---

Returns

The compilation unit containing the given constructors. If the constructors do not share the same compilation unit, this method will return null.

Definition at line 129 of file Utility.java.

5.15.2.9 `static IType edu.illinois.canistelCassabanana.utility.Utility.lookupType (ITypeBinding type, IJavaProject in) [static]`

Converts an AST org.eclipse.jdt.core.dom.ITypeBinding into an org.eclipse.jdt.core.IType, or null if the conversion is not possible. This conversion is useful for resolving types on a project basis a project basis (rather than within a single Java file). If the given ITypeBinding is an array then the IType of the element type is returned.

Parameters

<i>type</i>	The ITypeBinding to convert to an IType.
<i>in</i>	The Java project the binding is contained within.

Returns

The IType corresponding to binding, or null.

Definition at line 94 of file Utility.java.

The documentation for this class was generated from the following file:

- /media/Documents/Documents/Dropbox/16 - College - Senior/CS 427 - Software Engineering I/edu.illinois.canistelCassabanana/src/edu/illinois/canistelCassabanana/utility/[Utility.java](#)

Chapter 6

File Documentation

**6.1 /media/Documents/Documents/Dropbox/16 - College - Senior/CS
427 - Software Engineering I/edu.illinois.canistelCassabanana/src/edu/illinois/canistelCassaba
File Reference**

Classes

- class [edu.illinois.canistelCassabanana.Activator](#)

Packages

- package [edu.illinois.canistelCassabanana](#)

**6.2 /media/Documents/Documents/Dropbox/16 - College - Senior/CS
427 - Software Engineering I/edu.illinois.canistelCassabanana/src/edu/illinois/canistelCassaba
File Reference**

Classes

- class [edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsAction](#)

Packages

- package [edu.illinois.canistelCassabanana](#)

6.3 /media/Documents/Documents/Dropbox/16 - College - Senior/CS 427 - Software Engineering I/edu.illinois.canistelCassabanana/src/edu/illinois/canistelCassabanana/RemoveDuplicateCodeInConstructorsConstants File Reference

Classes

- class [edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsConstants](#)

Packages

- package [edu.illinois.canistelCassabanana](#)

6.4 /media/Documents/Documents/Dropbox/16 - College - Senior/CS 427 - Software Engineering I/edu.illinois.canistelCassabanana/src/edu/illinois/canistelCassabanana/RemoveDuplicateCodeInConstructorsDescriptor File Reference

Classes

- class [edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsDescriptor](#)

Packages

- package [edu.illinois.canistelCassabanana](#)

6.5 /media/Documents/Documents/Dropbox/16 - College - Senior/CS 427 - Software Engineering I/edu.illinois.canistelCassabanana/src/edu/illinois/canistelCassabanana/RemoveDuplicateCodeInConstructorsInputPage File Reference

Classes

- class [edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsInputPage](#)

Packages

- package [edu.illinois.canistelCassabanana](#)

6.6 /media/Documents/Documents/Dropbox/16 - College - Senior/CS 427 -
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I/edu.illinois.canistelCassabanana/src/edu/illinois/canistelCassabanana/RemoveDuplicateCodeInConstructorsRefactoring
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File Reference

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File Reference

Classes

- class [edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsRefactoring](#)

Packages

- package [edu.illinois.canistelCassabanana](#)

6.7 /media/Documents/Documents/Dropbox/16 - College - Senior/CS

427 - Software Engineering I/edu.illinois.canistelCassabanana/src/edu/illinois/canistelCassaba
File Reference

Classes

- class [edu.illinois.canistelCassabanana.RemoveDuplicateCodeInConstructorsWizard](#)

Packages

- package [edu.illinois.canistelCassabanana](#)

6.8 /media/Documents/Documents/Dropbox/16 - College - Senior/CS

427 - Software Engineering I/edu.illinois.canistelCassabanana/src/edu/illinois/canistelCassaba
File Reference

Classes

- class [edu.illinois.canistelCassabanana.utility.Utility](#)

Packages

- package [edu.illinois.canistelCassabanana.utility](#)

6.9 /media/Documents/Documents/Dropbox/16 - College - Senior/CS 427 - Software Engineering I/edu.illinois.canistelCassabanana/src/edu/illinois/canistelCassabanana/visitors/AssignmentExpressionVisitor.java File Reference

Classes

- class [edu.illinois.canistelCassabanana.visitors.AssignmentExpressionVisitor](#)

Packages

- package [edu.illinois.canistelCassabanana.visitors](#)

6.10 /media/Documents/Documents/Dropbox/16 - College - Senior/CS 427 - Software Engineering I/edu.illinois.canistelCassabanana/src/edu/illinois/canistelCassabanana/visitors/ConstructorDeclarationVisitor.java File Reference

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- class [edu.illinois.canistelCassabanana.visitors.ConstructorDeclarationVisitor](#)

Packages

- package [edu.illinois.canistelCassabanana.visitors](#)

6.11 /media/Documents/Documents/Dropbox/16 - College - Senior/CS 427 - Software Engineering I/edu.illinois.canistelCassabanana/src/edu/illinois/canistelCassabanana/visitors/ConstructorInvocationVisitor.java File Reference

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- class [edu.illinois.canistelCassabanana.visitors.ConstructorInvocationVisitor](#)

Packages

- package [edu.illinois.canistelCassabanana.visitors](#)

6.12 /media/Documents/Documents/Dropbox/16 - College - Senior/CS 427 - Software Engineering

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File Reference

427 - Software Engineering I/edu.illinois.canistelCassabanana/src/edu/illinois/canistelCassabanana/visitors/FieldVariableVisitor.java
File Reference

Classes

- class [edu.illinois.canistelCassabanana.visitors.FieldVariableVisitor](#)

Packages

- package [edu.illinois.canistelCassabanana.visitors](#)

6.13 /media/Documents/Documents/Dropbox/16 - College - Senior/CS

427 - Software Engineering I/edu.illinois.canistelCassabanana/src/edu/illinois/canistelCassabanana/visitors/MethodDeclarationVisitor.java
File Reference

Classes

- class [edu.illinois.canistelCassabanana.visitors.MethodDeclarationVisitor](#)

Packages

- package [edu.illinois.canistelCassabanana.visitors](#)

6.14 /media/Documents/Documents/Dropbox/16 - College - Senior/CS

427 - Software Engineering I/edu.illinois.canistelCassabanana/src/edu/illinois/canistelCassabanana/visitors/NameBindingVisitor.java
File Reference

Classes

- class [edu.illinois.canistelCassabanana.visitors.NameBindingVisitor](#)

Packages

- package [edu.illinois.canistelCassabanana.visitors](#)

6.15 /media/Documents/Documents/Dropbox/16 - College - Senior/CS

427 - Software Engineering I/edu.illinois.canistelCassabanana/src/edu/illinois/canis

File Reference

Classes

- class [edu.illinois.canistelCassabanana.visitors.TypeDeclarationVisitor](#)

Packages

- package [edu.illinois.canistelCassabanana.visitors](#)

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