

|  |  |  |  |
|--|--|--|--|
| Legend:  |  |  |  |
| Program Name                                     |  |  |  |
| Pattern Name                                     |  |  |  |
| True Positive                                    |  |  |  |
| False Positive                                   |  |  |  |
| Role Name  |  |  |  |
| Unavailable                                      |  |  |  |
| JHotDraw 5.1                                     |  |  |  |
| Factory Method                                   |  |  |  |
| RaM  |  |  |  |
| ID Creator                                       |  |  |  |
| 1 draw.framework.DrawingView                     |  |  |  |
| 2 draw.framework.Figure                          |  |  |  |
| 3 draw.framework.Figure                          |  |  |  |
| ConcreteCreator                                  |  |  |  |
| draw.standard.StandardDrawingView                |  |  |  |
| draw.standard.AbstractFigure                     |  |  |  |
| draw.figures.EllipseFigure                       |  |  |  |
| Product  |  |  |  |
| draw.framework.Connector                         |  |  |  |
| draw.framework.Handle                            |  |  |  |
| ConcreteProduct                                  |  |  |  |
| CH.ifa.draw.standard.ChopBoxConnector            |  |  |  |
| draw.standard.EastHandle                         |  |  |  |
| DPD  |  |  |  |
| ID Creator                                       |  |  |  |
| 1 CH.ifa.draw.framework.DrawingView              |  |  |  |
| 2 CH.ifa.draw.framework.Figure                   |  |  |  |
| ConcreteCreator                                  |  |  |  |
| CH.ifa.draw.standard.StandardDrawingView         |  |  |  |
| CH.ifa.draw.standard.AbstractFigure              |  |  |  |
| DPF  |  |  |  |
| ID Creator                                       |  |  |  |
| 1 CH.ifa.draw.figures.TextFigure                 |  |  |  |
| 2 CH.ifa.draw.framework.DrawingView              |  |  |  |
| SparT  |  |  |  |
| ID Creator                                       |  |  |  |
| 1 CH.ifa.draw.framework.DrawingView              |  |  |  |
| 2 CH.ifa.draw.framework.Figure                   |  |  |  |
| ConcreteCreator                                  |  |  |  |
| CH.ifa.draw.standard.StandardDrawingView         |  |  |  |
| CH.ifa.draw.standard.AbstractFigure              |  |  |  |
| Product  |  |  |  |
| CH.ifa.draw.framework.FigureEnumeration          |  |  |  |
| CH.ifa.draw.framework.Connector                  |  |  |  |
| CH.ifa.draw.framework.FigureEnumeration          |  |  |  |
| ConcreteProduct                                  |  |  |  |
| CH.ifa.draw.standard.FigureEnumeration           |  |  |  |
| CH.ifa.draw.standard.ChopBoxConnector            |  |  |  |
| CH.ifa.draw.standard.FigureEnumeration           |  |  |  |
| Abstract Factory                                 |  |  |  |
| RaM  |  |  |  |
| DPD  |  |  |  |
| DPF  |  |  |  |
| SparT  |  |  |  |
| Builder  |  |  |  |
| RaM  |  |  |  |
| ID Director                                      |  |  |  |
| 1 CH.ifa.draw.framework.Connector                |  |  |  |
| 2 draw.standard.ConnectionTool                   |  |  |  |
| Builder  |  |  |  |
| CH.ifa.draw.figures.LineConnection               |  |  |  |
| draw.framework.Connector                         |  |  |  |
| DPD  |  |  |  |
| DPF  |  |  |  |
| ID Director                                      |  |  |  |
| 1 CH.ifa.draw.framework.Connector                |  |  |  |
| Builder  |  |  |  |
| CH.ifa.draw.figures.LineConnection               |  |  |  |
| SparT  |  |  |  |
| Prototype  |  |  |  |
| RaM  |  |  |  |
| ID Prototype                                     |  |  |  |
| 1 draw.framework.ConnectionFigure                |  |  |  |
| 2 draw.framework.Figure                          |  |  |  |
| Client   |  |  |  |
| draw.standard.ConnectionHandle                   |  |  |  |
| draw.standard.CreationTool                       |  |  |  |
| ConcretePrototype                                |  |  |  |
| draw.figures.LineConnection                      |  |  |  |
| draw.figures.EllipseFigure                       |  |  |  |
| draw.figures.ImageFigure                         |  |  |  |
| draw.figures.PolygonFigure                       |  |  |  |
| DPD  |  |  |  |
| ID Prototype                                     |  |  |  |
| 1 CH.ifa.draw.framework.Figure                   |  |  |  |
| 2 CH.ifa.draw.framework.Figure                   |  |  |  |
| 3 CH.ifa.draw.framework.Figure                   |  |  |  |
| Client   |  |  |  |
| CH.ifa.draw.standard.ConnectionHandle            |  |  |  |
| CH.ifa.draw.standard.ConnectionTool              |  |  |  |
| CH.ifa.draw.standard.CreationTool                |  |  |  |
| DPF  |  |  |  |
| ID Prototype                                     |  |  |  |
| 1 CH.ifa.draw.framework.ConnectionFigure         |  |  |  |
| 2 CH.ifa.draw.framework.ConnectionFigure         |  |  |  |
| 3 CH.ifa.draw.framework.Figure                   |  |  |  |
| Client   |  |  |  |
| CH.ifa.draw.standard.ConnectionHandle            |  |  |  |
| CH.ifa.draw.standard.ConnectionTool              |  |  |  |
| CH.ifa.draw.standard.CreationTool                |  |  |  |
| SparT  |  |  |  |
| ID Prototype                                     |  |  |  |
| 1 CH.ifa.draw.framework.Figure                   |  |  |  |
| 2 CH.ifa.draw.framework.Figure                   |  |  |  |
| 3 CH.ifa.draw.framework.Figure                   |  |  |  |
| Client   |  |  |  |
| CH.ifa.draw.standard.ConnectionHandle            |  |  |  |
| CH.ifa.draw.standard.ConnectionTool              |  |  |  |
| CH.ifa.draw.standard.CreationTool                |  |  |  |
| Singleton  |  |  |  |
| RaM  |  |  |  |
| ID Singleton                                     |  |  |  |
| 1 draw.util.Clipboard                            |  |  |  |
| 2 draw.util.Iconkit                              |  |  |  |
| DPD  |  |  |  |
| ID Singleton                                     |  |  |  |
| 1 draw.util.Clipboard                            |  |  |  |
| 2 draw.util.Iconkit                              |  |  |  |
| DPF  |  |  |  |
| ID Singleton                                     |  |  |  |
| 1 CH.ifa.draw.util.Clipboard                     |  |  |  |
| 2 CH.ifa.draw.util.Iconkit                       |  |  |  |
| SparT  |  |  |  |
| ID Singleton                                     |  |  |  |
| 1 CH.ifa.draw.util.Clipboard                     |  |  |  |
| 2 CH.ifa.draw.util.Iconkit                       |  |  |  |
| Adapter  |  |  |  |
| RaM  |  |  |  |
| ID Adapter                                       |  |  |  |
| 1 CH.ifa.draw.applet.DrawApplet                  |  |  |  |
| 2 CH.ifa.draw.application.DrawApplication        |  |  |  |
| 3 CH.ifa.draw.contrib.PolygonHandle              |  |  |  |
| 4 CH.ifa.draw.contrib.PolygonTool                |  |  |  |
| 5 CH.ifa.draw.figures.AttributeFigure            |  |  |  |
| 6 CH.ifa.draw.figures.LineConnection             |  |  |  |
| 7 CH.ifa.draw.figures.RadiusHandle               |  |  |  |
| 8 CH.ifa.draw.figures.TextFigure                 |  |  |  |
| 9 CH.ifa.draw.standard.AbstractFigure            |  |  |  |
| 10 CH.ifa.draw.standard.AbstractTool             |  |  |  |
| 11 CH.ifa.draw.standard.CreationTool             |  |  |  |
| 12 CH.ifa.draw.standard.CreationTool             |  |  |  |
| 13 CH.ifa.draw.standard.HandleTracker            |  |  |  |
| 14 CH.ifa.draw.standard.LocatorHandle            |  |  |  |
| 15 CH.ifa.draw.standard.ReverseFigureEnumeration |  |  |  |
| 16 CH.ifa.draw.standard.StandardDrawingView      |  |  |  |
| 17 CH.ifa.draw.standard.StandardDrawingView      |  |  |  |
| 18 CH.ifa.draw.standard.StandardDrawingView      |  |  |  |
| 19 CH.ifa.draw.standard.ToolButton               |  |  |  |
| Adaptee  |  |  |  |
| CH.ifa.draw.standard.ToolButton                  |  |  |  |
| CH.ifa.draw.standard.ToolButton                  |  |  |  |
| CH.ifa.draw.framework.Locator                    |  |  |  |
| CH.ifa.draw.framework.Connector                  |  |  |  |
| CH.ifa.draw.figures.RoundRectangleFigure         |  |  |  |
| CH.ifa.draw.framework.Handle                     |  |  |  |
| CH.ifa.draw.framework.FigureChangeListener       |  |  |  |
| CH.ifa.draw.framework.DrawingView                |  |  |  |
| CH.ifa.draw.framework.ConnectionFigure           |  |  |  |
| CH.ifa.draw.framework.Figure                     |  |  |  |
| CH.ifa.draw.framework.Locator                    |  |  |  |
| CH.ifa.draw.framework.Locator                    |  |  |  |
| CH.ifa.draw.util.ReverseVectorEnumeration        |  |  |  |
| CH.ifa.draw.framework.Drawing                    |  |  |  |
| CH.ifa.draw.framework.DrawingEditor              |  |  |  |
| CH.ifa.draw.framework.Painter                    |  |  |  |
| CH.ifa.draw.util.PaletteIcon                     |  |  |  |
| DPD  |  |  |  |
| ID Adapter                                       |  |  |  |
| 1 CH.ifa.draw.applet.DrawApplet                  |  |  |  |
| 2 CH.ifa.draw.application.DrawApplication        |  |  |  |
| 3 CH.ifa.draw.contrib.PolygonHandle              |  |  |  |
| 4 CH.ifa.draw.figures.LineConnection             |  |  |  |
| 5 CH.ifa.draw.figures.RadiusHandle               |  |  |  |
| 6 CH.ifa.draw.figures.TextFigure                 |  |  |  |
| 7 CH.ifa.draw.standard.AbstractFigure            |  |  |  |
| 8 CH.ifa.draw.standard.AbstractTool              |  |  |  |
| 9 CH.ifa.draw.standard.LocatorHandle             |  |  |  |
| 10 CH.ifa.draw.standard.ReverseFigureEnumeration |  |  |  |
| 11 CH.ifa.draw.standard.StandardDrawingView      |  |  |  |
| 12 CH.ifa.draw.standard.StandardDrawingView      |  |  |  |
| 13 CH.ifa.draw.standard.StandardDrawingView      |  |  |  |
| 14 CH.ifa.draw.standard.ToolButton               |  |  |  |
| Adaptee  |  |  |  |
| CH.ifa.draw.framework.Connector                  |  |  |  |
| CH.ifa.draw.figures.RoundRectangleFigure         |  |  |  |
| CH.ifa.draw.framework.Figure                     |  |  |  |
| CH.ifa.draw.framework.FigureChangeListener       |  |  |  |
| CH.ifa.draw.framework.Drawing                    |  |  |  |
| CH.ifa.draw.util.PaletteIcon                     |  |  |  |
| CH.ifa.draw.util.ReverseVectorEnumeration        |  |  |  |
| DPF  |  |  |  |
| ID Adapter                                       |  |  |  |
| 1 CH.ifa.draw.figures.LineConnection             |  |  |  |
| 2 CH.ifa.draw.figures.RadiusHandle               |  |  |  |
| 3 CH.ifa.draw.standard.AbstractConnector         |  |  |  |
| 4 CH.ifa.draw.standard.AbstractFigure            |  |  |  |
| 5 CH.ifa.draw.standard.StandardDrawingView       |  |  |  |
| 6 CH.ifa.draw.standard.ToolButton                |  |  |  |
| 7  |  |  |  |
| SparT  |  |  |  |
| ID Adapter                                       |  |  |  |
| 1 CH.ifa.draw.applet.DrawApplet                  |  |  |  |
| 2 CH.ifa.draw.application.DrawApplication        |  |  |  |
| 3 CH.ifa.draw.contrib.PolygonHandle              |  |  |  |
| 4 CH.ifa.draw.contrib.PolygonTool                |  |  |  |
| 5 CH.ifa.draw.figures.AttributeFigure            |  |  |  |
| 6 CH.ifa.draw.figures.TextFigure                 |  |  |  |
| 7 CH.ifa.draw.figures.TextFigure                 |  |  |  |
| Adaptee  |  |  |  |
| CH.ifa.draw.standard.ToolButton                  |  |  |  |
| CH.ifa.draw.standard.ToolButton                  |  |  |  |
| CH.ifa.draw.framework.Locator                    |  |  |  |
| CH.ifa.draw.contrib.PolygonFigure                |  |  |  |
| CH.ifa.draw.figures.FigureAttributes             |  |  |  |
| CH.ifa.draw.framework.Connector                  |  |  |  |
| CH.ifa.draw.figures.RoundRectangleFigure         |  |  |  |
| CH.ifa.draw.framework.Handle                     |  |  |  |
| CH.ifa.draw.framework.FigureChangeListener       |  |  |  |
| CH.ifa.draw.framework.DrawingView                |  |  |  |
| CH.ifa.draw.framework.ConnectionFigure           |  |  |  |
| CH.ifa.draw.framework.Figure                     |  |  |  |
| CH.ifa.draw.framework.Locator                    |  |  |  |
| CH.ifa.draw.framework.Locator                    |  |  |  |
| CH.ifa.draw.util.ReverseVectorEnumeration        |  |  |  |
| CH.ifa.draw.framework.Drawing                    |  |  |  |
| CH.ifa.draw.framework.DrawingEditor              |  |  |  |
| CH.ifa.draw.framework.Painter                    |  |  |  |
| CH.ifa.draw.util.PaletteIcon                     |  |  |  |

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|-----------------|--|--|--|--|
| 8               | CH.ifa.draw.standard.AbstractTool            | CH.ifa.draw.framework.DrawingView          |  |  |
| 9               | CH.ifa.draw.standard.HandleTracker           | CH.ifa.draw.framework.Handle               |  |  |
| 10              | CH.ifa.draw.standard.LocatorHandle           | CH.ifa.draw.framework.Locator              |  |  |
| 11              | CH.ifa.draw.standard.ReverseFigureEnumerator | CH.ifa.draw.util.ReverseVectorEnumerator   |  |  |
| 12              | CH.ifa.draw.standard.StandardDrawingView     | CH.ifa.draw.framework.Drawing              |  |  |
| 13              | CH.ifa.draw.standard.StandardDrawingView     | CH.ifa.draw.framework.DrawingEditor        |  |  |
| 14              | CH.ifa.draw.standard.ToolButton              | CH.ifa.draw.util.PaletteIcon               |  |  |
| Bridge          |  |  |  |  |
| RaM             |  |  |  |  |
| ID              | Abstraction                                  | Implementor                                |  |  |
| 1               | CH.ifa.draw.applet.DrawApplet                | CH.ifa.draw.standard.ToolButton            |  |  |
| 2               | CH.ifa.draw.applet.DrawApplet                | CH.ifa.draw.framework.Drawing              |  |  |
| 3               | CH.ifa.draw.applet.DrawApplet                | CH.ifa.draw.framework.Tool                 |  |  |
| 4               | CH.ifa.draw.applet.DrawApplet                | CH.ifa.draw.standard.StandardDrawingView   |  |  |
| 5               | CH.ifa.draw.contrib.PolygonHandle            | CH.ifa.draw.framework.Locator              |  |  |
| 6               | CH.ifa.draw.contrib.PolygonTool              | CH.ifa.draw.contrib.PolygonFigure          |  |  |
| 7               | CH.ifa.draw.figures.AttributeFigure          | CH.ifa.draw.figures.FigureAttributes       |  |  |
| 8               | CH.ifa.draw.figures.GroupCommand             | CH.ifa.draw.framework.DrawingView          |  |  |
| 9               | CH.ifa.draw.figures.InsertImageCommand       | CH.ifa.draw.framework.DrawingView          |  |  |
| 10              | CH.ifa.draw.figures.TextFigure               | CH.ifa.draw.framework.Figure               |  |  |
| 11              | CH.ifa.draw.figures.UngroupCommand           | CH.ifa.draw.framework.DrawingView          |  |  |
| 12              | CH.ifa.draw.standard.AbstractFigure          | CH.ifa.draw.framework.FigureChangeListener |  |  |
| 13              | CH.ifa.draw.standard.AlignCommand            | CH.ifa.draw.framework.DrawingView          |  |  |
| 14              | CH.ifa.draw.standard.BringToFrontCommand     | CH.ifa.draw.framework.DrawingView          |  |  |
| 15              | CH.ifa.draw.standard.ChangeAttributeCommand  | CH.ifa.draw.framework.DrawingView          |  |  |
| 16              | CH.ifa.draw.standard.ChangeConnectionHandle  | CH.ifa.draw.framework.Figure               |  |  |
| 17              | CH.ifa.draw.standard.ConnectionHandle        | CH.ifa.draw.framework.Figure               |  |  |
| 18              | CH.ifa.draw.standard.ConnectionTool          | CH.ifa.draw.framework.Connector            |  |  |
| 19              | CH.ifa.draw.standard.CreationTool            | CH.ifa.draw.framework.Figure               |  |  |
| 20              | CH.ifa.draw.standard.DecoratorFigure         | CH.ifa.draw.framework.Figure               |  |  |
| 21              | CH.ifa.draw.standard.FigureTransferCommand   | CH.ifa.draw.framework.DrawingView          |  |  |
| 22              | CH.ifa.draw.standard.HandleTracker           | CH.ifa.draw.framework.Handle               |  |  |
| 23              | CH.ifa.draw.standard.LocatorConnector        | CH.ifa.draw.framework.Locator              |  |  |
| 24              | CH.ifa.draw.standard.SendToBackCommand       | CH.ifa.draw.framework.DrawingView          |  |  |
| 25              | CH.ifa.draw.standard.ToggleGridCommand       | CH.ifa.draw.framework.DrawingView          |  |  |
| 26              | CH.ifa.draw.util.CommandButton               | CH.ifa.draw.util.Command                   |  |  |
| DPD             |  |  |  |  |
| DPF             |  |  |  |  |
| ID              | Abstraction                                  | Implementor                                |  |  |
| 1               | CH.ifa.draw.applet.DrawApplet                | CH.ifa.draw.standard.StandardDrawingView   |  |  |
| 2               | CH.ifa.draw.applet.DrawApplet                | CH.ifa.draw.framework.Tool                 |  |  |
| 3               | CH.ifa.draw.contrib.PolygonHandle            | CH.ifa.draw.framework.Locator              |  |  |
| 4               | CH.ifa.draw.contrib.PolygonTool              | CH.ifa.draw.contrib.PolygonFigure          |  |  |
| 5               | CH.ifa.draw.figures.AttributeFigure          | CH.ifa.draw.figures.FigureAttributes       |  |  |
| 6               | CH.ifa.draw.figures.GroupCommand             | CH.ifa.draw.framework.DrawingView          |  |  |
| 7               | CH.ifa.draw.figures.InsertImageCommand       | CH.ifa.draw.framework.DrawingView          |  |  |
| 8               | CH.ifa.draw.figures.TextFigure               | CH.ifa.draw.framework.Figure               |  |  |
| 9               | CH.ifa.draw.figures.UngroupCommand           | CH.ifa.draw.framework.DrawingView          |  |  |
| 10              | CH.ifa.draw.standard.AbstractFigure          | CH.ifa.draw.framework.FigureChangeListener |  |  |
| 11              | CH.ifa.draw.standard.AlignCommand            | CH.ifa.draw.framework.DrawingView          |  |  |
| 12              | CH.ifa.draw.standard.BringToFrontCommand     | CH.ifa.draw.framework.DrawingView          |  |  |
| 13              | CH.ifa.draw.standard.ChangeAttributeCommand  | CH.ifa.draw.framework.DrawingView          |  |  |
| 14              | CH.ifa.draw.standard.ChangeConnectionHandle  | CH.ifa.draw.framework.Figure               |  |  |
| 15              | CH.ifa.draw.standard.ConnectionHandle        | CH.ifa.draw.framework.Figure               |  |  |
| 16              | CH.ifa.draw.standard.ConnectionTool          | CH.ifa.draw.framework.Connector            |  |  |
| 17              | CH.ifa.draw.standard.GreenTool               | CH.ifa.draw.framework.Figure               |  |  |
| 18              | CH.ifa.draw.standard.DecoratorFigure         | CH.ifa.draw.framework.Figure               |  |  |
| 19              | CH.ifa.draw.standard.DrawApplet              | CH.ifa.draw.standard.DrawingApplet         |  |  |
| 20              | CH.ifa.draw.standard.DrawApplet              | CH.ifa.draw.standard.ToolButton            |  |  |
| 21              | CH.ifa.draw.standard.FigureTransferCommand   | CH.ifa.draw.framework.DrawingView          |  |  |
| 22              | CH.ifa.draw.standard.LocatorConnector        | CH.ifa.draw.framework.Locator              |  |  |
| 23              | CH.ifa.draw.standard.LocatorConnector        | CH.ifa.draw.framework.Locator              |  |  |
| 24              | CH.ifa.draw.standard.SendToBackCommand       | CH.ifa.draw.framework.DrawingView          |  |  |
| 25              | CH.ifa.draw.standard.ToggleGridCommand       | CH.ifa.draw.framework.DrawingView          |  |  |
| 26              | CH.ifa.draw.util.CommandButton               | CH.ifa.draw.util.Command                   |  |  |
| SparT           |  |  |  |  |
| Composite       |  |  |  |  |
| RaM             |  |  |  |  |
| ID              | Component                                    | Composite                                  |  |  |
| 1               | draw.framework.Figure                        | draw.standard.CompositeFigure              |  |  |
| DPD             |  |  |  |  |
| ID              | Component                                    | Composite                                  |  |  |
| 1               | draw.framework.Figure                        | draw.standard.CompositeFigure              |  |  |
| DPF             |  |  |  |  |
| ID              | Component                                    | Composite                                  |  |  |
| 1               | draw.framework.Figure                        | draw.standard.CompositeFigure              |  |  |
| SparT           |  |  |  |  |
| ID              | Component                                    | Composite                                  |  |  |
| 1               | draw.framework.Figure                        | draw.standard.CompositeFigure              |  |  |
| Decorator       |  |  |  |  |
| RaM             |  |  |  |  |
| ID              | Component                                    | Decorator                                  |  |  |
| 1               | draw.framework.Figure                        | draw.standard.DecoratorFigure              |  |  |
| 2               | draw.framework.Locator                       | draw.standard.OffsetLocator                |  |  |
| 3               | draw.framework.Tool                          | draw.standard.SelectionTool                |  |  |
| DPD             |  |  |  |  |
| ID              | Component                                    | Decorator                                  |  |  |
| 1               | draw.framework.Figure                        | draw.standard.DecoratorFigure              |  |  |
| 2               | draw.framework.Locator                       | draw.standard.OffsetLocator                |  |  |
| 3               | draw.framework.Tool                          | draw.standard.SelectionTool                |  |  |
| DPF             |  |  |  |  |
| ID              | Component                                    | Decorator                                  |  |  |
| 1               | draw.framework.Figure                        | draw.standard.DecoratorFigure              |  |  |
| 2               | draw.framework.Locator                       | draw.standard.OffsetLocator                |  |  |
| 3               | draw.framework.Tool                          | draw.standard.SelectionTool                |  |  |
| SparT           |  |  |  |  |
| ID              | Component                                    | Decorator                                  |  |  |
| 1               | draw.framework.Figure                        | draw.standard.DecoratorFigure              |  |  |
| 2               | draw.framework.Locator                       | draw.standard.OffsetLocator                |  |  |
| 3               | draw.framework.Tool                          | draw.standard.SelectionTool                |  |  |
| Facade          |  |  |  |  |
| RaM             |  |  |  |  |
| DPD             |  |  |  |  |
| DPF             |  |  |  |  |
| SparT           |  |  |  |  |
| Flyweight       |  |  |  |  |
| RaM             |  |  |  |  |
| DPD             |  |  |  |  |
| DPF             |  |  |  |  |
| SparT           |  |  |  |  |
| Proxy           |  |  |  |  |
| RaM             |  |  |  |  |
| DPD             |  |  |  |  |
| DPF             |  |  |  |  |
| SparT           |  |  |  |  |
| Interpreter     |  |  |  |  |
| RaM             |  |  |  |  |
| ID              | NonterminalExpression                        | AbstractExpression                         |  |  |
| 1               | draw.standard.StandardDrawing                | CH.ifa.draw.framework.Drawing              |  |  |
| DPD             |  |  |  |  |
| DPF             |  |  |  |  |
| SparT           |  |  |  |  |
| Template Method |  |  |  |  |
| RaM             |  |  |  |  |
| ID              | AbstractClass                                |  |  |  |
| 1               | CH.ifa.draw.standard.AbstractFigure          |  |  |  |
| 2               | CH.ifa.draw.standard.AbstractHandle          |  |  |  |
| 3               | CH.ifa.draw.standard.ActionTool              |  |  |  |
| 4               | CH.ifa.draw.standard.ChangeConnectionHandle  |  |  |  |
| 5               | CH.ifa.draw.util.PaletteButton               |  |  |  |
| DPD             |  |  |  |  |
| ID              | AbstractClass                                |  |  |  |
| 1               | CH.ifa.draw.standard.AbstractFigure          |  |  |  |
| 2               | CH.ifa.draw.standard.AbstractHandle          |  |  |  |

|                         |   |  |  |  |
|-------------------------|---|--|--|--|
| 3                       | CH.ifa.draw.standard.ActionTool             |  |  |  |
| 4                       | CH.ifa.draw.standard.ChangeConnectionHandle |  |  |  |
| 5                       | CH.ifa.draw.util.PaletteButton              |  |  |  |
| DPF                     |   |  |  |  |
| ID AbstractClass        |   |  |  |  |
| 1                       | CH.ifa.draw.standard.AbstractFigure         |  |  |  |
| 2                       | CH.ifa.draw.standard.AbstractHandle         |  |  |  |
| 3                       | CH.ifa.draw.standard.ActionTool             |  |  |  |
| 4                       | CH.ifa.draw.standard.ChangeConnectionHandle |  |  |  |
| 5                       | CH.ifa.draw.util.PaletteButton              |  |  |  |
| 6                       | CH.ifa.draw.applet.DrawApplet               |  |  |  |
| 7                       | CH.ifa.draw.standard.ChopBoxConnector       |  |  |  |
| 8                       | CH.ifa.draw.figures.AttributeFigure         |  |  |  |
| 9                       | CH.ifa.draw.standard.AbstractConnector      |  |  |  |
| 10                      | CH.ifa.draw.application.DrawApplication     |  |  |  |
| 11                      | CH.ifa.draw.figures.TextFigure              |  |  |  |
| SparT                   |   |  |  |  |
| ID AbstractClass        |   |  |  |  |
| 1                       | CH.ifa.draw.standard.AbstractFigure         |  |  |  |
| 2                       | CH.ifa.draw.standard.AbstractHandle         |  |  |  |
| 3                       | CH.ifa.draw.standard.ActionTool             |  |  |  |
| 4                       | CH.ifa.draw.standard.ChangeConnectionHandle |  |  |  |
| 5                       | CH.ifa.draw.util.PaletteButton              |  |  |  |
| Chain of Responsibility |   |  |  |  |
| RaM                     |   |  |  |  |
| DPD                     |   |  |  |  |
| DPF                     |   |  |  |  |
| SparT                   |   |  |  |  |
| Command                 |   |  |  |  |
| RaM                     |   |  |  |  |
| ID Command              |   |  |  |  |
| 1                       | CH.ifa.draw.util.Command                    | ConcreteCommand                              | Receiver                                     |  |
| 2                       | CH.ifa.draw.util.Command                    | CH.ifa.draw.figures.GroupCommand             | CH.ifa.draw.framework.DrawingView            |  |
| 3                       | CH.ifa.draw.util.Command                    | CH.ifa.draw.figures.InsertImageCommand       | CH.ifa.draw.framework.DrawingView            |  |
| 4                       | CH.ifa.draw.util.Command                    | CH.ifa.draw.figures.UngroupCommand           | CH.ifa.draw.framework.DrawingView            |  |
| 5                       | CH.ifa.draw.util.Command                    | CH.ifa.draw.standard.AlignCommand            | CH.ifa.draw.framework.DrawingView            |  |
| 6                       | CH.ifa.draw.util.Command                    | CH.ifa.draw.standard.BringToFrontCommand     | CH.ifa.draw.framework.DrawingView            |  |
| 7                       | CH.ifa.draw.util.Command                    | CH.ifa.draw.standard.ChangeAttributeCommand  | CH.ifa.draw.framework.DrawingView            |  |
| 8                       | CH.ifa.draw.util.Command                    | CH.ifa.draw.standard.SendToBackCommand       | CH.ifa.draw.framework.DrawingView            |  |
| DPD                     |   |  |  |  |
| ID Command              |   |  |  |  |
| 1                       | CH.ifa.draw.util.Command                    | ConcreteCommand                              | Receiver                                     |  |
| 2                       | CH.ifa.draw.util.Command                    | CH.ifa.draw.figures.GroupCommand             | CH.ifa.draw.framework.DrawingView            |  |
| 3                       | CH.ifa.draw.util.Command                    | CH.ifa.draw.figures.InsertImageCommand       | CH.ifa.draw.framework.DrawingView            |  |
| 4                       | CH.ifa.draw.util.Command                    | CH.ifa.draw.figures.UngroupCommand           | CH.ifa.draw.framework.DrawingView            |  |
| 5                       | CH.ifa.draw.util.Command                    | CH.ifa.draw.standard.AlignCommand            | CH.ifa.draw.framework.DrawingView            |  |
| 6                       | CH.ifa.draw.util.Command                    | CH.ifa.draw.standard.BringToFrontCommand     | CH.ifa.draw.framework.DrawingView            |  |
| 7                       | CH.ifa.draw.util.Command                    | CH.ifa.draw.standard.ChangeAttributeCommand  | CH.ifa.draw.framework.DrawingView            |  |
| 8                       | CH.ifa.draw.util.Command                    | CH.ifa.draw.standard.SendToBackCommand       | CH.ifa.draw.framework.DrawingView            |  |
| DPF                     |   |  |  |  |
| ID Command              |   |  |  |  |
| 1                       |   | ConcreteCommand                              | Receiver                                     | Invoker                                  |
| 2                       |   | CH.ifa.draw.figures.GroupCommand             | CH.ifa.draw.figures.GroupCommand             | CH.ifa.draw.framework.DrawingView        |
| 3                       |   | CH.ifa.draw.figures.InsertImageCommand       | CH.ifa.draw.figures.InsertImageCommand       | CH.ifa.draw.framework.DrawingView        |
| 4                       |   | CH.ifa.draw.figures.UngroupCommand           | CH.ifa.draw.figures.UngroupCommand           | CH.ifa.draw.framework.DrawingView        |
| 5                       |   | CH.ifa.draw.standard.AlignCommand            | CH.ifa.draw.standard.AlignCommand            | CH.ifa.draw.framework.DrawingView        |
| 6                       |   | CH.ifa.draw.standard.BringToFrontCommand     | CH.ifa.draw.standard.BringToFrontCommand     | CH.ifa.draw.framework.DrawingView        |
| 7                       |   | CH.ifa.draw.standard.ChangeAttributeCommand  | CH.ifa.draw.standard.ChangeAttributeCommand  | CH.ifa.draw.framework.DrawingView        |
| 8                       |   | CH.ifa.draw.standard.SendToBackCommand       | CH.ifa.draw.standard.SendToBackCommand       | CH.ifa.draw.framework.DrawingView        |
| 9                       |   | CH.ifa.draw.standard.ToggleGridCommand       | CH.ifa.draw.standard.ToggleGridCommand       | CH.ifa.draw.framework.DrawingView        |
| 10                      |   | CH.ifa.draw.figures.TextFigure               | CH.ifa.draw.figures.TextFigure               | CH.ifa.draw.framework.DrawingView        |
| 11                      |   | CH.ifa.draw.standard.AbstractTool            | CH.ifa.draw.standard.AbstractTool            | CH.ifa.draw.framework.DrawingView        |
| 12                      |   | CH.ifa.draw.figures.LineConnection           | CH.ifa.draw.figures.LineConnection           | CH.ifa.draw.framework.Connector          |
| 13                      |   | CH.ifa.draw.standard.AbstractConnector       | CH.ifa.draw.standard.AbstractConnector       | CH.ifa.draw.framework.Figure             |
| 14                      |   | CH.ifa.draw.applet.DrawApplet                | CH.ifa.draw.applet.DrawApplet                | CH.ifa.draw.standard.ToolButton          |
| 15                      |   | CH.ifa.draw.application.DrawApplication      | CH.ifa.draw.application.DrawApplication      | CH.ifa.draw.standard.ToolButton          |
| 16                      |   | CH.ifa.draw.standard.StandardDrawingView     | CH.ifa.draw.standard.StandardDrawingView     | CH.ifa.draw.framework.DrawingEditor      |
| 17                      |   | CH.ifa.draw.contrib.PolygonHandle            | CH.ifa.draw.contrib.PolygonHandle            | CH.ifa.draw.framework.Locator            |
| 18                      |   | CH.ifa.draw.standard.LocatorHandle           | CH.ifa.draw.standard.LocatorHandle           | CH.ifa.draw.framework.Locator            |
| 19                      |   | CH.ifa.draw.standard.ToolButton              | CH.ifa.draw.standard.ToolButton              | CH.ifa.draw.util.PaletteIcon             |
| 20                      |   | CH.ifa.draw.standard.StandardDrawingView     | CH.ifa.draw.standard.StandardDrawingView     | CH.ifa.draw.framework.Painter            |
| 21                      |   | CH.ifa.draw.standard.ReverseFigureEnumerator | CH.ifa.draw.standard.ReverseFigureEnumerator | CH.ifa.draw.util.ReverseVectorEnumerator |
| SparT                   |   |  |  |  |
| ID Command              |   |  |  |  |
| 1                       | CH.ifa.draw.util.Command                    | ConcreteCommand                              | Receiver                                     |  |
| 2                       | CH.ifa.draw.util.Command                    | CH.ifa.draw.figures.GroupCommand             | CH.ifa.draw.framework.DrawingView            |  |
| 3                       | CH.ifa.draw.util.Command                    | CH.ifa.draw.figures.InsertImageCommand       | CH.ifa.draw.framework.DrawingView            |  |
| 4                       | CH.ifa.draw.util.Command                    | CH.ifa.draw.figures.UngroupCommand           | CH.ifa.draw.framework.DrawingView            |  |
| 5                       | CH.ifa.draw.util.Command                    | CH.ifa.draw.standard.AlignCommand            | CH.ifa.draw.framework.DrawingView            |  |
| 6                       | CH.ifa.draw.util.Command                    | CH.ifa.draw.standard.BringToFrontCommand     | CH.ifa.draw.framework.DrawingView            |  |
| 7                       | CH.ifa.draw.util.Command                    | CH.ifa.draw.standard.ChangeAttributeCommand  | CH.ifa.draw.framework.DrawingView            |  |
| 8                       | CH.ifa.draw.util.Command                    | CH.ifa.draw.standard.SendToBackCommand       | CH.ifa.draw.framework.DrawingView            |  |
| Iterator                |   |  |  |  |
| RaM                     |   |  |  |  |
| DPD                     |   |  |  |  |
| DPF                     |   |  |  |  |
| SparT                   |   |  |  |  |
| Mediator                |   |  |  |  |
| RaM                     |   |  |  |  |
| DPD                     |   |  |  |  |
| DPF                     |   |  |  |  |
| SparT                   |   |  |  |  |
| Memento                 |   |  |  |  |
| RaM                     |   |  |  |  |
| ID Originator           |   |  |  |  |
| 1                       | CH.ifa.draw.standard.StandardDrawingView    | Memento                                      |  |  |
| 2                       | CH.ifa.draw.standard.ToolButton             | CH.ifa.draw.applet.DrawApplet                |  |  |
| DPD                     |   |  |  |  |
| DPF                     |   |  |  |  |
| SparT                   |   |  |  |  |
| Observer                |   |  |  |  |
| RaM                     |   |  |  |  |
| ID Subject              |   |  |  |  |
| 1                       | CH.ifa.draw.framework.Figure                | Observer                                     | ConcreteSubject                              | ConcreteObserver                         |
| 2                       | CH.ifa.draw.framework.Drawing               | CH.ifa.draw.framework.FigureChangeListener   | CH.ifa.draw.figures.EllipseFigure            | CH.ifa.draw.figures.GroupFigure          |
| DPD                     |   |  |  |  |
| ID Subject              |   |  |  |  |
| 1                       | CH.ifa.draw.standard.StandardDrawing        | Observer                                     |  |  |
| 2                       | CH.ifa.draw.standard.StandardDrawingView    | CH.ifa.draw.framework.DrawingChangeListener  |  |  |
| 3                       | CH.ifa.draw.standard.StandardDrawingView    | CH.ifa.draw.framework.Painter                |  |  |
| DPF                     |   |  |  |  |
| ID Subject              |   |  |  |  |
| 1                       | CH.ifa.draw.standard.StandardDrawingView    | Observer                                     |  |  |
| SparT                   |   |  |  |  |
| ID Subject              |   |  |  |  |
| 1                       | CH.ifa.draw.standard.StandardDrawing        | Observer                                     |  |  |
| 2                       | CH.ifa.draw.standard.StandardDrawingView    | CH.ifa.draw.framework.DrawingChangeListener  |  |  |
| 3                       | CH.ifa.draw.standard.StandardDrawingView    | CH.ifa.draw.framework.Figure                 |  |  |
| 4                       | CH.ifa.draw.util.CommandMenu                | CH.ifa.draw.util.Command                     |  |  |
| State / Strategy        |   |  |  |  |
| RaM                     |   |  |  |  |
| ID Context              |   |  |  |  |
| 1                       | CH.ifa.draw.applet.DrawApplet               | State / Strategy                             |  |  |
| 2                       | CH.ifa.draw.contrib.PolygonHandle           | CH.ifa.draw.framework.Tool                   |  |  |
| 3                       | CH.ifa.draw.figures.GroupCommand            | CH.ifa.draw.framework.Locator                |  |  |
| 4                       | CH.ifa.draw.figures.InsertImageCommand      | CH.ifa.draw.framework.DrawingView            |  |  |
| 5                       | CH.ifa.draw.figures.LineConnection          | CH.ifa.draw.framework.DrawingView            |  |  |
| 6                       | CH.ifa.draw.figures.UngroupCommand          | CH.ifa.draw.framework.Connector              |  |  |
| 7                       | CH.ifa.draw.samples.javajdraw.Animator      | CH.ifa.draw.framework.DrawingView            |  |  |
| 8                       | CH.ifa.draw.samples.javajdraw.URLTool       | CH.ifa.draw.framework.DrawingView            |  |  |
| 9                       | CH.ifa.draw.standard.AbstractConnector      | CH.ifa.draw.framework.Figure                 |  |  |
| 10                      | CH.ifa.draw.standard.AbstractFigure         | CH.ifa.draw.framework.FigureChangeListener   |  |  |
| 11                      | CH.ifa.draw.standard.AbstractTool           | CH.ifa.draw.framework.DrawingView            |  |  |
| 12                      | CH.ifa.draw.standard.AlignCommand           | CH.ifa.draw.framework.DrawingView            |  |  |
| 13                      | CH.ifa.draw.standard.BringToFrontCommand    | CH.ifa.draw.framework.DrawingView            |  |  |
| 14                      | CH.ifa.draw.standard.ChangeAttributeCommand | CH.ifa.draw.framework.DrawingView            |  |  |
| 15                      | CH.ifa.draw.standard.ChangeConnectionHandle | CH.ifa.draw.framework.DrawingView            |  |  |

|                  |   |  |  |  |
|------------------|---|--|--|--|
| 16               | CH.ifa.draw.standard.ChangeConnectionHandle | CH.ifa.draw.framework.ConnectionFigure     |  |  |
| 17               | CH.ifa.draw.standard.ConnectionTool         | CH.ifa.draw.framework.ConnectionFigure     |  |  |
| 18               | CH.ifa.draw.standard.FigureTransferCommand  | CH.ifa.draw.framework.DrawingView          |  |  |
| 19               | CH.ifa.draw.standard.SelectionTool          | CH.ifa.draw.framework.Tool                 |  |  |
| 20               | CH.ifa.draw.standard.SendToBackCommand      | CH.ifa.draw.framework.DrawingView          |  |  |
| 21               | CH.ifa.draw.standard.StandardDrawingView    | CH.ifa.draw.framework.Drawing              |  |  |
| 22               | CH.ifa.draw.standard.StandardDrawingView    | CH.ifa.draw.framework.DrawingEditor        |  |  |
| 23               | CH.ifa.draw.standard.ToggleGridCommand      | CH.ifa.draw.framework.DrawingView          |  |  |
| 24               | CH.ifa.draw.util.CommandButton              | CH.ifa.draw.util.Command                   |  |  |
| 25               | CH.ifa.draw.util.PaletteButton              | CH.ifa.draw.util.PaletteListener           |  |  |
| DPD              |   |  |  |  |
| ID               | Context                                     | State / Strategy                           |  |  |
| 1                | CH.ifa.draw.standard.AbstractFigure         | CH.ifa.draw.framework.FigureChangeListener |  |  |
| 2                | CH.ifa.draw.applet.DrawApplet               | CH.ifa.draw.framework.Tool                 |  |  |
| 3                | CH.ifa.draw.applet.DrawApplet               | CH.ifa.draw.framework.Drawing              |  |  |
| 4                | CH.ifa.draw.application.DrawApplication     | CH.ifa.draw.framework.Tool                 |  |  |
| 5                | CH.ifa.draw.application.DrawApplication     | CH.ifa.draw.framework.Drawing              |  |  |
| 6                | CH.ifa.draw.contrib.PolygonHandle           | CH.ifa.draw.framework.Locator              |  |  |
| 7                | CH.ifa.draw.figures.GroupCommand            | CH.ifa.draw.framework.DrawingView          |  |  |
| 8                | CH.ifa.draw.figures.InsertImageCommand      | CH.ifa.draw.framework.DrawingView          |  |  |
| 9                | CH.ifa.draw.figures.LineConnection          | CH.ifa.draw.framework.Connector            |  |  |
| 10               | CH.ifa.draw.figures.PolyLineFigure          | CH.ifa.draw.figures.LineDecoration         |  |  |
| 11               | CH.ifa.draw.figures.TextTool                | CH.ifa.draw.standard.TextHolder            |  |  |
| 12               | CH.ifa.draw.figures.UngroupCommand          | CH.ifa.draw.framework.DrawingView          |  |  |
| 13               | CH.ifa.draw.samples.javadraw.Animator       | CH.ifa.draw.framework.DrawingView          |  |  |
| 14               | CH.ifa.draw.samples.javadraw.Animator       | CH.ifa.draw.util.Animatable                |  |  |
| 15               | CH.ifa.draw.standard.AbstractTool           | CH.ifa.draw.framework.DrawingView          |  |  |
| 16               | CH.ifa.draw.standard.AlignCommand           | CH.ifa.draw.framework.DrawingView          |  |  |
| 17               | CH.ifa.draw.standard.BringToFrontCommand    | CH.ifa.draw.framework.DrawingView          |  |  |
| 18               | CH.ifa.draw.standard.ChangeAttributeCommand | CH.ifa.draw.framework.DrawingView          |  |  |
| 19               | CH.ifa.draw.standard.ChangeConnectionHandle | CH.ifa.draw.framework.Figure               |  |  |
| 20               | CH.ifa.draw.standard.ChangeConnectionHandle | CH.ifa.draw.framework.ConnectionFigure     |  |  |
| 21               | CH.ifa.draw.standard.ChangeConnectionHandle | CH.ifa.draw.framework.Connector            |  |  |
| 22               | CH.ifa.draw.standard.ConnectionHandle       | CH.ifa.draw.framework.Figure               |  |  |
| 23               | CH.ifa.draw.standard.ConnectionHandle       | CH.ifa.draw.framework.ConnectionFigure     |  |  |
| 24               | CH.ifa.draw.standard.ConnectionTool         | CH.ifa.draw.framework.Figure               |  |  |
| 25               | CH.ifa.draw.standard.ConnectionTool         | CH.ifa.draw.framework.ConnectionFigure     |  |  |
| 26               | CH.ifa.draw.standard.ConnectionTool         | CH.ifa.draw.framework.Connector            |  |  |
| 27               | CH.ifa.draw.standard.CreationTool           | CH.ifa.draw.framework.Figure               |  |  |
| 28               | CH.ifa.draw.standard.FigureTransferCommand  | CH.ifa.draw.framework.DrawingView          |  |  |
| 29               | CH.ifa.draw.standard.HandleTracker          | CH.ifa.draw.framework.Handle               |  |  |
| 30               | CH.ifa.draw.standard.LocatorConnector       | CH.ifa.draw.framework.Locator              |  |  |
| 31               | CH.ifa.draw.standard.LocatorHandle          | CH.ifa.draw.framework.Locator              |  |  |
| 32               | CH.ifa.draw.standard.SendToBackCommand      | CH.ifa.draw.framework.DrawingView          |  |  |
| 33               | CH.ifa.draw.standard.StandardDrawingView    | CH.ifa.draw.framework.Drawing              |  |  |
| 34               | CH.ifa.draw.standard.StandardDrawingView    | CH.ifa.draw.framework.DrawingEditor        |  |  |
| 35               | CH.ifa.draw.standard.StandardDrawingView    | CH.ifa.draw.framework.Painter              |  |  |
| 36               | CH.ifa.draw.standard.StandardDrawingView    | CH.ifa.draw.framework.PointConstrainer     |  |  |
| 37               | CH.ifa.draw.standard.ToggleGridCommand      | CH.ifa.draw.framework.DrawingView          |  |  |
| 38               | CH.ifa.draw.util.CommandButton              | CH.ifa.draw.util.Command                   |  |  |
| 39               | CH.ifa.draw.util.PaletteButton              | CH.ifa.draw.util.PaletteListener           |  |  |
| DPF              |   |  |  |  |
| ID               | Context                                     | State / Strategy                           |  |  |
| 1                | CH.ifa.draw.applet.DrawApplet               | CH.ifa.draw.framework.Tool                 |  |  |
| 2                | CH.ifa.draw.applet.DrawApplet               | CH.ifa.draw.framework.Drawing              |  |  |
| 3                | CH.ifa.draw.application.DrawApplication     | CH.ifa.draw.framework.Tool                 |  |  |
| 4                | CH.ifa.draw.application.DrawApplication     | CH.ifa.draw.framework.Drawing              |  |  |
| 5                | CH.ifa.draw.contrib.PolygonHandle           | CH.ifa.draw.framework.Locator              |  |  |
| 6                | CH.ifa.draw.figures.GroupCommand            | CH.ifa.draw.framework.DrawingView          |  |  |
| 7                | CH.ifa.draw.figures.InsertImageCommand      | CH.ifa.draw.framework.DrawingView          |  |  |
| 8                | CH.ifa.draw.figures.LineConnection          | CH.ifa.draw.framework.Connector            |  |  |
| 9                | CH.ifa.draw.figures.PolyLineFigure          | CH.ifa.draw.figures.LineDecoration         |  |  |
| 10               | CH.ifa.draw.figures.TextTool                | CH.ifa.draw.standard.TextHolder            |  |  |
| 11               | CH.ifa.draw.figures.UngroupCommand          | CH.ifa.draw.framework.DrawingView          |  |  |
| 12               | CH.ifa.draw.samples.javadraw.Animator       | CH.ifa.draw.framework.DrawingView          |  |  |
| 13               | CH.ifa.draw.samples.javadraw.Animator       | CH.ifa.draw.util.Animatable                |  |  |
| 14               | CH.ifa.draw.samples.javadraw.Util.Tool      | CH.ifa.draw.framework.Figure               |  |  |
| 15               | CH.ifa.draw.standard.AbstractConnector      | CH.ifa.draw.framework.Figure               |  |  |
| 16               | CH.ifa.draw.standard.AbstractFigure         | CH.ifa.draw.framework.FigureChangeListener |  |  |
| 17               | CH.ifa.draw.standard.AbstractTool           | CH.ifa.draw.framework.DrawingView          |  |  |
| 18               | CH.ifa.draw.standard.AlignCommand           | CH.ifa.draw.framework.DrawingView          |  |  |
| 19               | CH.ifa.draw.standard.BringToFrontCommand    | CH.ifa.draw.framework.DrawingView          |  |  |
| 20               | CH.ifa.draw.standard.ChangeAttributeCommand | CH.ifa.draw.framework.DrawingView          |  |  |
| 21               | CH.ifa.draw.standard.ChangeConnectionHandle | CH.ifa.draw.framework.Figure               |  |  |
| 22               | CH.ifa.draw.standard.ChangeConnectionHandle | CH.ifa.draw.framework.ConnectionFigure     |  |  |
| 23               | CH.ifa.draw.standard.ChangeConnectionHandle | CH.ifa.draw.framework.Connector            |  |  |
| 24               | CH.ifa.draw.standard.ConnectionHandle       | CH.ifa.draw.framework.Figure               |  |  |
| 25               | CH.ifa.draw.standard.ConnectionHandle       | CH.ifa.draw.framework.ConnectionFigure     |  |  |
| 26               | CH.ifa.draw.standard.ConnectionTool         | CH.ifa.draw.framework.Figure               |  |  |
| 27               | CH.ifa.draw.standard.ConnectionTool         | CH.ifa.draw.framework.ConnectionFigure     |  |  |
| 28               | CH.ifa.draw.standard.ConnectionTool         | CH.ifa.draw.framework.Connector            |  |  |
| 29               | CH.ifa.draw.standard.CreationTool           | CH.ifa.draw.framework.Figure               |  |  |
| 30               | CH.ifa.draw.standard.DragTracker            | CH.ifa.draw.framework.Figure               |  |  |
| 31               | CH.ifa.draw.standard.FigureTransferCommand  | CH.ifa.draw.framework.DrawingView          |  |  |
| 32               | CH.ifa.draw.standard.HandleTracker          | CH.ifa.draw.framework.Handle               |  |  |
| 33               | CH.ifa.draw.standard.LocatorConnector       | CH.ifa.draw.framework.Locator              |  |  |
| 34               | CH.ifa.draw.standard.LocatorHandle          | CH.ifa.draw.framework.Locator              |  |  |
| 35               | CH.ifa.draw.standard.SelectionTool          | CH.ifa.draw.framework.Tool                 |  |  |
| 36               | CH.ifa.draw.standard.SelectionTool          | CH.ifa.draw.framework.Drawing              |  |  |
| 37               | CH.ifa.draw.standard.SendToBackCommand      | CH.ifa.draw.framework.DrawingView          |  |  |
| 38               | CH.ifa.draw.standard.StandardDrawingView    | CH.ifa.draw.framework.Drawing              |  |  |
| 39               | CH.ifa.draw.standard.StandardDrawingView    | CH.ifa.draw.framework.DrawingEditor        |  |  |
| 40               | CH.ifa.draw.standard.StandardDrawingView    | CH.ifa.draw.framework.Painter              |  |  |
| 41               | CH.ifa.draw.standard.StandardDrawingView    | CH.ifa.draw.framework.PointConstrainer     |  |  |
| 42               | CH.ifa.draw.standard.ToggleGridCommand      | CH.ifa.draw.framework.DrawingView          |  |  |
| 43               | CH.ifa.draw.util.CommandButton              | CH.ifa.draw.util.Command                   |  |  |
| 44               | CH.ifa.draw.util.PaletteButton              | CH.ifa.draw.util.PaletteListener           |  |  |
| SparT            |   |  |  |  |
| ID               | Context                                     | State / Strategy                           |  |  |
| 1                | CH.ifa.draw.applet.DrawApplet               | CH.ifa.draw.framework.Drawing              |  |  |
| 2                | CH.ifa.draw.application.DrawApplication     | CH.ifa.draw.framework.Tool                 |  |  |
| 3                | CH.ifa.draw.contrib.PolygonHandle           | CH.ifa.draw.framework.Locator              |  |  |
| 4                | CH.ifa.draw.figures.LineConnection          | CH.ifa.draw.framework.Connector            |  |  |
| 5                | CH.ifa.draw.figures.TextTool                | CH.ifa.draw.standard.TextHolder            |  |  |
| 6                | CH.ifa.draw.samples.javadraw.Animator       | CH.ifa.draw.framework.DrawingView          |  |  |
| 7                | CH.ifa.draw.samples.javadraw.Animator       | CH.ifa.draw.util.Animatable                |  |  |
| 8                | CH.ifa.draw.standard.AbstractTool           | CH.ifa.draw.framework.DrawingView          |  |  |
| 9                | CH.ifa.draw.standard.ChangeConnectionHandle | CH.ifa.draw.framework.ConnectionFigure     |  |  |
| 10               | CH.ifa.draw.standard.ChangeConnectionHandle | CH.ifa.draw.framework.Connector            |  |  |
| 11               | CH.ifa.draw.standard.ChangeConnectionHandle | CH.ifa.draw.framework.Figure               |  |  |
| 12               | CH.ifa.draw.standard.ConnectionHandle       | CH.ifa.draw.framework.ConnectionFigure     |  |  |
| 13               | CH.ifa.draw.standard.ConnectionHandle       | CH.ifa.draw.framework.Figure               |  |  |
| 14               | CH.ifa.draw.standard.ConnectionTool         | CH.ifa.draw.framework.ConnectionFigure     |  |  |
| 15               | CH.ifa.draw.standard.ConnectionTool         | CH.ifa.draw.framework.Connector            |  |  |
| 16               | CH.ifa.draw.standard.ConnectionTool         | CH.ifa.draw.framework.Figure               |  |  |
| 17               | CH.ifa.draw.standard.CreationTool           | CH.ifa.draw.framework.Figure               |  |  |
| 18               | CH.ifa.draw.standard.HandleTracker          | CH.ifa.draw.framework.Handle               |  |  |
| 19               | CH.ifa.draw.standard.LocatorConnector       | CH.ifa.draw.framework.Locator              |  |  |
| 20               | CH.ifa.draw.standard.LocatorHandle          | CH.ifa.draw.framework.Locator              |  |  |
| 21               | CH.ifa.draw.standard.StandardDrawingView    | CH.ifa.draw.framework.Drawing              |  |  |
| 22               | CH.ifa.draw.standard.StandardDrawingView    | CH.ifa.draw.framework.DrawingEditor        |  |  |
| 23               | CH.ifa.draw.standard.StandardDrawingView    | CH.ifa.draw.framework.Painter              |  |  |
| 24               | CH.ifa.draw.standard.StandardDrawingView    | CH.ifa.draw.framework.PointConstrainer     |  |  |
| Visitor          |   |  |  |  |
| RaM              |   |  |  |  |
| DPD              |   |  |  |  |
| DPF              |   |  |  |  |
| SparT            |   |  |  |  |
| JUnit 3.7        |   |  |  |  |
| Factory Method   |   |  |  |  |
| RaM              |   |  |  |  |
| DPD              |   |  |  |  |
| DPF              |   |  |  |  |
| ID               | Creator                                     | ConcreteCreator                            |  |  |
| 1                | junit.framework.Test                        | junit.samples.AllTests                     |  |  |
| 2                | junit.framework.Test                        | junit.samples.SimpleTest                   |  |  |
| 3                | junit.framework.Test                        | junit.samples.VectorTest                   |  |  |
| 4                | junit.framework.Test                        | junit.samples.AllTests                     |  |  |
| 5                | junit.framework.Test                        | junit.tests.AllTests                       |  |  |
| 6                | junit.framework.Test                        | junit.tests.FrameworkTestCase              |  |  |
| 7                | junit.samples.money.IMoney                  | junit.tests.SuiteTest                      |  |  |
| SparT            |   |  |  |  |
| ID               | Creator                                     | ConcreteCreator                            |  |  |
| 1                | junit.samples.money.IMoney                  | junit.samples.money.Money                  |  |  |
| Abstract Factory |   |  |  |  |
| RaM              |   |  |  |  |
| DPD              |   |  |  |  |
| DPF              |   |  |  |  |
| SparT            |   |  |  |  |

|                         |                                     |                                |                              |
|-------------------------|-------------------------------------|--------------------------------|------------------------------|
| Builder                 |                                     |                                |                              |
| RaM                     |                                     |                                |                              |
| DPD                     |                                     |                                |                              |
| DPF                     |                                     |                                |                              |
| SparT                   |                                     |                                |                              |
| Prototype               |                                     |                                |                              |
| RaM                     |                                     |                                |                              |
| DPD                     |                                     |                                |                              |
| DPF                     |                                     |                                |                              |
| SparT                   |                                     |                                |                              |
| Singleton               |                                     |                                |                              |
| RaM                     |                                     |                                |                              |
| DPD                     |                                     |                                |                              |
| DPF                     |                                     |                                |                              |
| SparT                   |                                     |                                |                              |
| Adapter                 |                                     |                                |                              |
| RaM                     |                                     |                                |                              |
| ID                      | Adapter                             | Adaptee                        | Target                       |
| 1                       | junit.awtui.TestRunner              | junit.awtui.ProgressBar        | junit.framework.TestListener |
| 2                       | junit.awtui.TestRunner              | junit.framework.TestResult     | junit.swingui.TestRunView    |
| 3                       | junit.extensions.TestSetup\$1       | junit.extensions.TestSetup     | junit.framework.Protectable  |
| 4                       | junit.framework.TestResult\$1       | junit.framework.TestCase       | junit.swingui.TestRunView    |
| 5                       | junit.swingui.TestHierarchyRunView  | junit.swingui.TestSuitePanel   | junit.swingui.TestRunView    |
| 6                       | junit.swingui.TestSuitePanel        | junit.swingui.TestTreeModel    | junit.framework.TestListener |
| DPD                     |                                     |                                |                              |
| ID                      | Adapter                             | Adaptee                        | Target                       |
| 1                       | junit.awtui.TestRunner              | junit.awtui.ProgressBar        | junit.framework.TestListener |
| 2                       | junit.awtui.TestRunner              | junit.framework.TestResult     | junit.framework.TestListener |
| 3                       | junit.swingui.TestHierarchyRunView  | junit.swingui.TestSuitePanel   | junit.swingui.TestRunView    |
| 4                       | junit.swingui.TestSuitePanel        | junit.swingui.TestTreeModel    | junit.framework.TestListener |
| DPF                     |                                     |                                |                              |
| ID                      | Adapter                             | Adaptee                        | Target                       |
| 1                       | junit.awtui.TestRunner              | junit.framework.TestResult     | junit.swingui.TestRunView    |
| 2                       | junit.swingui.TestHierarchyRunView  | junit.swingui.TestSuitePanel   | junit.swingui.TestRunView    |
| 3                       | junit.swingui.TestRunner            | junit.swingui.ProgressBar      | junit.framework.TestListener |
| 4                       | junit.swingui.TestSuitePanel        | junit.swingui.TestTreeModel    | junit.framework.TestListener |
| SparT                   |                                     |                                |                              |
| ID                      | Adapter                             | Adaptee                        | Target                       |
| 1                       | junit.awtui.TestRunner              | junit.awtui.ProgressBar        | junit.framework.TestListener |
| 2                       | junit.awtui.TestRunner              | junit.framework.TestResult     | junit.framework.TestListener |
| 3                       | junit.swingui.TestHierarchyRunView  | junit.swingui.TestSuitePanel   | junit.swingui.TestRunView    |
| 4                       | junit.swingui.TestRunner            | junit.swingui.CounterPanel     | junit.framework.TestListener |
| 5                       | junit.swingui.TestRunner            | junit.swingui.StatusLine       | junit.runner.BaseTestRunner  |
| 6                       | junit.swingui.TestSuitePanel        | junit.swingui.TestTreeModel    | junit.framework.TestListener |
| Bridge                  |                                     |                                |                              |
| RaM                     |                                     |                                |                              |
| DPD                     |                                     |                                |                              |
| DPF                     |                                     |                                |                              |
| SparT                   |                                     |                                |                              |
| Composite               |                                     |                                |                              |
| RaM                     |                                     |                                |                              |
| ID                      | Component                           | Composite                      |                              |
| 1                       | junit.framework.Test                | junit.framework.TestSuite      |                              |
| DPD                     |                                     |                                |                              |
| ID                      | Component                           | Composite                      |                              |
| 1                       | junit.framework.Test                | junit.framework.TestSuite      |                              |
| DPF                     |                                     |                                |                              |
| ID                      | Component                           | Composite                      |                              |
| 1                       | junit.framework.Test                | junit.framework.TestSuite      |                              |
| SparT                   |                                     |                                |                              |
| ID                      | Component                           | Composite                      |                              |
| 1                       | junit.framework.Test                | junit.framework.TestSuite      |                              |
| Decorator               |                                     |                                |                              |
| RaM                     |                                     |                                |                              |
| ID                      | Component                           | Decorator                      |                              |
| 1                       | junit.framework.Test                | junit.extensions.TestDecorator |                              |
| DPD                     |                                     |                                |                              |
| ID                      | Component                           | Decorator                      |                              |
| 1                       | junit.framework.Test                | junit.extensions.TestDecorator |                              |
| DPF                     |                                     |                                |                              |
| ID                      | Component                           | Decorator                      |                              |
| 1                       | junit.framework.Test                | junit.extensions.TestDecorator |                              |
| SparT                   |                                     |                                |                              |
| ID                      | Component                           | Decorator                      |                              |
| 1                       | junit.framework.Test                | junit.extensions.TestDecorator |                              |
| Facade                  |                                     |                                |                              |
| RaM                     |                                     |                                |                              |
| DPD                     |                                     |                                |                              |
| DPF                     |                                     |                                |                              |
| SparT                   |                                     |                                |                              |
| Flyweight               |                                     |                                |                              |
| RaM                     |                                     |                                |                              |
| DPD                     |                                     |                                |                              |
| DPF                     |                                     |                                |                              |
| SparT                   |                                     |                                |                              |
| Proxy                   |                                     |                                |                              |
| RaM                     |                                     |                                |                              |
| DPD                     |                                     |                                |                              |
| DPF                     |                                     |                                |                              |
| SparT                   |                                     |                                |                              |
| Interpreter             |                                     |                                |                              |
| RaM                     |                                     |                                |                              |
| DPD                     |                                     |                                |                              |
| DPF                     |                                     |                                |                              |
| SparT                   |                                     |                                |                              |
| Template Method         |                                     |                                |                              |
| RaM                     |                                     |                                |                              |
| ID                      | AbstractClass                       |                                |                              |
| 1                       | junit.runner.BaseTestRunner         |                                |                              |
| DPD                     |                                     |                                |                              |
| ID                      | AbstractClass                       |                                |                              |
| 1                       | junit.runner.BaseTestRunner         |                                |                              |
| DPF                     |                                     |                                |                              |
| ID                      | AbstractClass                       |                                |                              |
| 1                       | junit.awtui.TestRunner              |                                |                              |
| 2                       | junit.extensions.TestSetup          |                                |                              |
| 3                       | junit.framework.TestCase            |                                |                              |
| 4                       | junit.framework.TestSuite           |                                |                              |
| 5                       | junit.runner.BaseTestRunner         |                                |                              |
| 6                       | junit.runner.ClassPathTestCollector |                                |                              |
| SparT                   |                                     |                                |                              |
| ID                      | AbstractClass                       |                                |                              |
| 1                       | junit.runner.BaseTestRunner         |                                |                              |
| Chain of Responsibility |                                     |                                |                              |
| RaM                     |                                     |                                |                              |

|                   |   |   |                              |
|-------------------|---|---|------------------------------|
|                   |   |   |                              |
| DPD               |   |   |                              |
| DPF               |   |   |                              |
| SparT             |   |   |                              |
| Command           |   |   |                              |
| RaM               |   |   |                              |
| DPD               |   |   |                              |
| DPF               |   |   |                              |
| SparT             |   |   |                              |
| Iterator          |   |   |                              |
| RaM               |   |   |                              |
| DPD               |   |   |                              |
| DPF               |   |   |                              |
| SparT             |   |   |                              |
| Mediator          |   |   |                              |
| RaM               |   |   |                              |
| DPD               |   |   |                              |
| DPF               |   |   |                              |
| SparT             |   |   |                              |
| Memento           |   |   |                              |
| RaM               |   |   |                              |
| ID                | Originator  | Memento   |                              |
| 1                 | junit.swingui.StatusLine                                | junit.swingui.TestRunner                              |                              |
| DPD               |   |   |                              |
| DPF               |   |   |                              |
| SparT             |   |   |                              |
| Observer          |   |   |                              |
| RaM               |   |   |                              |
| ID                | Subject   | Observer  | ConcreteSubject              |
| 1                 | junit.framework.TestResult                              | junit.framework.TestListener                          | junit.framework.TestListener |
| 2                 | junit.awt.Component                                     | junit.awt.event.MouseListener                         | junit.swingui.TestSelector   |
| 3                 | java.awt.Component                                      | java.awt.event.KeyListener                            | junit.swingui.TestSelector   |
| DPD               |   |   |                              |
| ID                | Subject   | Observer  | ConcreteObserver             |
| 1                 | junit.framework.TestResult                              | junit.framework.TestListener                          | junit.swingui.TestSelector   |
| DPF               |   |   |                              |
| ID                | Subject   | Observer  |                              |
| 1                 | junit.framework.TestResult                              | junit.framework.TestListener                          |                              |
| SparT             |   |   |                              |
| ID                | Subject   | Observer  |                              |
| 1                 | junit.framework.TestResult                              | junit.framework.TestListener                          |                              |
| State / Strategy  |   |   |                              |
| RaM               |   |   |                              |
| ID                | Context   | State / Strategy                                      |                              |
| 3                 | junit.extensions.ActiveTestSuite\$1                     | junit.framework.Test                                  |                              |
| 1                 | junit.swingui.FailureRunView                            | junit.swingui.TestRunContext                          |                              |
| 2                 | junit.swingui.TestRunner                                | junit.runner.FailureDetailView                        |                              |
| DPD               |   |   |                              |
| ID                | Context   | State / Strategy                                      |                              |
| 1                 | junit.swingui.FailureRunView                            | junit.swingui.TestRunContext                          |                              |
| 2                 | junit.swingui.TestHierarchyRunView                      | junit.swingui.TestRunContext                          |                              |
| 3                 | junit.swingui.TestRunner                                | junit.runner.FailureDetailView                        |                              |
| DPF               |   |   |                              |
| ID                | Context   | State / Strategy                                      |                              |
| 1                 | junit.swingui.TestRunner\$10                            | junit.framework.Test                                  |                              |
| 2                 | junit.extensions.ActiveTestSuite\$1                     | junit.framework.TestSuite                             |                              |
| 3                 | junit.extensions.ActiveTestSuite\$1                     | junit.framework.Test                                  |                              |
| 4                 | junit.samples.money.MoneyTest                           | junit.samples.money.Money                             |                              |
| 5                 | junit.swingui.FailureRunView                            | junit.swingui.TestRunContext                          |                              |
| 6                 | junit.swingui.TestHierarchyRunView                      | junit.swingui.TestRunContext                          |                              |
| 7                 | junit.swingui.TestRunner                                | junit.runner.FailureDetailView                        |                              |
| 8                 | junit.swingui.TestRunner\$16                            | junit.framework.Test                                  |                              |
| 9                 | junit.swingui.TestRunner\$17                            | junit.framework.Test                                  |                              |
| SparT             |   |   |                              |
| ID                | Context   | State / Strategy                                      |                              |
| 1                 | junit.swingui.FailureRunView                            | junit.swingui.TestRunContext                          |                              |
| 2                 | junit.swingui.TestHierarchyRunView                      | junit.swingui.TestRunContext                          |                              |
| 3                 | junit.swingui.TestRunner                                | junit.runner.FailureDetailView                        |                              |
| 4                 | junit.tests.RepeatedTest                                | junit.framework.TestSuite                             |                              |
| 5                 | junit.tests.TestImplementorTest\$DoubleTestCase         | junit.framework.TestCase                              |                              |
| Visitor           |   |   |                              |
| RaM               |   |   |                              |
| DPD               |   |   |                              |
| DPF               |   |   |                              |
| SparT             |   |   |                              |
| JRefactory 2.6.24 |   |   |                              |
| Factory Method    |   |   |                              |
| RaM               |   |   |                              |
| DPD               |   |   |                              |
| ID                | Creator   | ConcreteCreator                                       |                              |
| 1                 | org.acm.seguin.refactor.type.TypeChangeVisitor          | org.acm.seguin.refactor.EliminatePackageImportVisitor |                              |
| 2                 | org.acm.seguin.refactor.type.TypeChangeVisitor          | org.acm.seguin.refactor.type.MoveClassVisitor         |                              |
| 3                 | org.acm.seguin.refactor.type.TypeChangeVisitor          | org.acm.seguin.refactor.type.RenameClassVisitor       |                              |
| DPF               |   |   |                              |
| ID                | Creator   | ConcreteCreator                                       |                              |
| 1                 | org.acm.seguin.ide.common.PackageListFilter             |   |                              |
| 2                 | org.acm.seguin.ide.common.SourceBrowser                 |   |                              |
| 3                 | org.acm.seguin.ide.jbuilder.RefactoryNodeViewerFactory  |   |                              |
| 4                 | org.acm.seguin.ide.jbuilder.UMLNodeViewerFactory        |   |                              |
| 5                 | org.acm.seguin.parser.ast.SimpleNode                    | org.acm.seguin.parser.JavaParser                      |                              |
| 6                 | org.acm.seguin.parser.ParseException                    |   |                              |
| 7                 | org.acm.seguin.parser.Token                             | org.acm.seguin.parser.JavaParserTokenManager          |                              |
| 8                 | org.acm.seguin.pretty.ai.RequiredTags                   |   |                              |
| 9                 | org.acm.seguin.print.xml.AttributeState                 | org.acm.seguin.print.xml.AttributeState               |                              |
| 10                | org.acm.seguin.print.xml.TagState                       | org.acm.seguin.print.xml.TagState                     |                              |
| 11                | org.acm.seguin.print.xml.State                          | org.acm.seguin.print.xml.QuotedAttributeState         |                              |
| 12                | org.acm.seguin.print.xml.State                          | org.acm.seguin.print.xml.AttributeValueState          |                              |
| 13                | org.acm.seguin.print.xml.State                          | org.acm.seguin.print.xml.TextState                    |                              |
| 14                | org.acm.seguin.refactor.type.TypeChangeVisitor          |   |                              |
| 15                | org.acm.seguin.refactor.undo.UndoStack                  |   |                              |
| SparT             |   |   |                              |
| ID                | Creator   | ConcreteCreator                                       |                              |
| 1                 | org.acm.seguin.refactor.type.TypeChangeVisitor          | org.acm.seguin.refactor.EliminatePackageImportVisitor |                              |
| 2                 | org.acm.seguin.refactor.type.TypeChangeVisitor          | org.acm.seguin.refactor.type.MoveClassVisitor         |                              |
| 3                 | org.acm.seguin.refactor.type.TypeChangeVisitor          | org.acm.seguin.refactor.type.RenameClassVisitor       |                              |
| Abstract Factory  |   |   |                              |
| RaM               |   |   |                              |
| DPD               |   |   |                              |
| DPF               |   |   |                              |
| ID                | AbstractFactory   |   |                              |
| 1                 | org.acm.seguin.ide.jbuilder.UMLNodeViewerFactory        |   |                              |
| 2                 | org.acm.seguin.ide.jbuilder.RefactoryNodeViewerFactory  |   |                              |
| SparT             |   |   |                              |
| Builder           |   |   |                              |
| RaM               |   |   |                              |
| DPD               |   |   |                              |
| DPF               |   |   |                              |
| ID                | Director  | Builder   |                              |
| 1                 | org.acm.seguin.ide.jbuilder.UMLNode                     | org.acm.seguin.ide.jbuilder.refactor.MenuBuilder      |                              |
| 2                 | org.acm.seguin.refactor.method.ExtractMethodRefactoring | org.acm.seguin.refactor.method.FMBuilder              |                              |
| SparT             |   |   |                              |
| ID                | Director  | Builder   |                              |

|           |   |   |  |
|-----------|---|---|--|
| 1         | org.acm.sequin.ide.jbuilder.UMLNode                       | org.acm.sequin.ide.jbuilder.refactor.MenuBuilder        |  |
| 2         | org.acm.sequin.refactor.method.AddConstructor             | org.acm.sequin.parser.build.BuildExpression             |  |
| 3         | org.acm.sequin.refactor.method.EMBuilder                  | org.acm.sequin.parser.build.BuildExpression             |  |
| 4         | org.acm.sequin.refactor.method.ExtractMethodRefactoring   | org.acm.sequin.parser.build.BuildExpression             |  |
| 5         | org.acm.sequin.refactor.method.ExtractMethodRefactoring   | org.acm.sequin.refactor.method.EMBuilder                |  |
| 6         | org.acm.sequin.refactor.method.InvokeMovedMethodTransform | org.acm.sequin.parser.build.BuildExpression             |  |
| Prototype |   |   |  |
| RaM       |   |   |  |
| DPD       |   |   |  |
| DPF       |   |   |  |
| SparT     |   |   |  |
| Singleton |   |   |  |
| RaM       |   |   |  |
| DPD       |   |   |  |
| ID        | Singleton   |   |  |
| 1         | org.acm.sequin.ide.command.PackageSelectorPanel           |   |  |
| 2         | org.acm.sequin.ide.common.action.CurrentSummary           |   |  |
| 3         | org.acm.sequin.ide.common.EditorOperations                |   |  |
| 4         | org.acm.sequin.ide.common.PackageListFilter               |   |  |
| 5         | org.acm.sequin.ide.common.SourceBrowser                   |   |  |
| 6         | org.acm.sequin.ide.jbuilder.RefactoryNodeViewerFactory    |   |  |
| 7         | org.acm.sequin.ide.jbuilder.UMLNodeViewerFactory          |   |  |
| 8         | org.acm.sequin.pretty.ai.RequiredTags                     |   |  |
| 9         | org.acm.sequin.refactor.RefactoringFactory                |   |  |
| 10        | org.acm.sequin.refactor.undo.UndoStack                    |   |  |
| 11        | org.acm.sequin.uml.line.LabelSizeComputation              |   |  |
| 12        | org.acm.sequin.version.VersionControlCache                |   |  |
| DPF       |   |   |  |
| ID        | Singleton   |   |  |
| 1         | org.acm.sequin.amt.CVSUtil.CVSEntry                       |   |  |
| 2         | org.acm.sequin.ide.jbuilder.RefactoryNodeViewerFactory    |   |  |
| 3         | org.acm.sequin.ide.jbuilder.UMLNodeViewerFactory          |   |  |
| 4         | org.acm.sequin.parser.Token                               |   |  |
| 5         | org.acm.sequin.pretty.ai.RequiredTags                     |   |  |
| 6         | org.acm.sequin.uml.line.LabelSizeComputation              |   |  |
| SparT     |   |   |  |
| ID        | Singleton   |   |  |
| 1         | org.acm.sequin.ide.command.PackageSelectorPanel           |   |  |
| 2         | org.acm.sequin.ide.common.action.CurrentSummary           |   |  |
| 3         | org.acm.sequin.ide.common.EditorOperations                |   |  |
| 4         | org.acm.sequin.ide.common.PackageListFilter               |   |  |
| 5         | org.acm.sequin.ide.common.SourceBrowser                   |   |  |
| 6         | org.acm.sequin.ide.jbuilder.RefactoryNodeViewerFactory    |   |  |
| 7         | org.acm.sequin.ide.jbuilder.UMLNodeViewerFactory          |   |  |
| 8         | org.acm.sequin.pretty.ai.RequiredTags                     |   |  |
| 9         | org.acm.sequin.refactor.RefactoringFactory                |   |  |
| 10        | org.acm.sequin.refactor.undo.UndoStack                    |   |  |
| 11        | org.acm.sequin.uml.line.LabelSizeComputation              |   |  |
| 12        | org.acm.sequin.version.VersionControlCache                |   |  |
| Adapter   |   |   |  |
| RaM       |   |   |  |
| DPD       |   |   |  |
| ID        | Adapter   | Adaptee   |  |
| 1         | org.acm.sequin.metrics.GatherData                         | org.acm.sequin.metrics.MetricsReport                    |  |
| 2         | org.acm.sequin.metrics.MethodMetricsFrame                 | org.acm.sequin.summary.MethodSummary                    |  |
| 3         | org.acm.sequin.metrics.PackageMetricsFrame                | org.acm.sequin.summary.PackageSummary                   |  |
| 4         | org.acm.sequin.metrics.TypeMetricsFrame                   | org.acm.sequin.summary.TypeSummary                      |  |
| 5         | org.acm.sequin.pretty.PrettyPrintVisitor                  | org.acm.sequin.pretty.FieldSizeLookAhead                |  |
| 6         | org.acm.sequin.pretty.PrettyPrintVisitor                  | org.acm.sequin.summary.load.LoadStatus                  |  |
| 7         | org.acm.sequin.print.text.TextPagePrinter                 | org.acm.sequin.print.text.LineSet                       |  |
| 8         | org.acm.sequin.print.text.TextPagePrinter                 | org.acm.sequin.print.text.LinePrinter                   |  |
| 9         | org.acm.sequin.refactor.AddImportTransform                | org.acm.sequin.parser.ast.ASTName                       |  |
| 10        | org.acm.sequin.refactor.EliminatePackageImportVisitor     | org.acm.sequin.summary.PackageSummary                   |  |
| 11        | org.acm.sequin.refactor.RefactoringFactory                | org.acm.sequin.summary.MethodSummary                    |  |
| 12        | org.acm.sequin.refactor.type.ChangePackageTransform       | org.acm.sequin.parser.ast.ASTName                       |  |
| 13        | org.acm.sequin.refactor.type.ExtractInterfaceRefactoring  | org.acm.sequin.refactor.ComplexTransform                |  |
| 14        | org.acm.sequin.refactor.type.RemoveEmptyClassRefactoring  | org.acm.sequin.summary.TypeSummary                      |  |
| 15        | org.acm.sequin.summary.load.SwingLoadStatus               | org.acm.sequin.tools.install.RefactoryStorage           |  |
| 16        | org.acm.sequin.summary.SummaryTraversal                   | org.acm.sequin.summary.load.LoadStatus                  |  |
| 17        | org.acm.sequin.tools.stub.SubGenTraversal                 | org.acm.sequin.tools.stub.SubFile                       |  |
| 18        | org.acm.sequin.uml.print.UMLPagePrinter                   | org.acm.sequin.uml.UMLPackage                           |  |
| 19        | org.acm.sequin.uml.refactor.ExtractMethodDialog           | org.acm.sequin.refactor.method.ExtractMethodRefactoring |  |
| 20        | org.acm.sequin.uml.refactor.ExtractMethodDialog           | org.acm.sequin.awt.OrderableList                        |  |
| 21        | org.acm.sequin.uml.refactor.MoveMethodDialog              | org.acm.sequin.uml.refactor.ParameterPanel              |  |
| 22        | org.acm.sequin.uml.refactor.RenameClassDialog             | org.acm.sequin.summary.TypeSummary                      |  |
| 23        | org.acm.sequin.uml.refactor.RenameParameterDialog         | org.acm.sequin.summary.MethodSummary                    |  |
| 24        | org.acm.sequin.uml.UMLPackage                             | org.acm.sequin.summary.PackageSummary                   |  |
| 25        | org.acm.sequin.uml.UMLPackage                             | org.acm.sequin.uml.line.SegmentedLine                   |  |
| 26        | PrettyPrinter   | org.acm.sequin.pretty.PrettyPrintFile                   |  |
| DPF       |   |   |  |
| ID        | Adapter   | Adaptee   |  |
| 1         | org.acm.sequin.metrics.GatherData                         | org.acm.sequin.metrics.MetricsReport                    |  |
| 2         | org.acm.sequin.metrics.MethodMetricsFrame                 | org.acm.sequin.summary.MethodSummary                    |  |
| 3         | org.acm.sequin.metrics.PackageMetricsFrame                | org.acm.sequin.summary.PackageSummary                   |  |
| 4         | org.acm.sequin.metrics.TextReport                         | org.acm.sequin.util.TextFormatter                       |  |
| 5         | org.acm.sequin.metrics.TypeMetricsFrame                   | org.acm.sequin.summary.TypeSummary                      |  |
| 6         | org.acm.sequin.pretty.PrettyPrintVisitor                  | org.acm.sequin.pretty.FieldSizeLookAhead                |  |
| 7         | org.acm.sequin.pretty.PrettyPrintVisitor                  | org.acm.sequin.summary.load.LoadStatus                  |  |
| 8         | org.acm.sequin.refactor.AddImportTransform                | org.acm.sequin.parser.ast.ASTName                       |  |
| 9         | org.acm.sequin.refactor.type.ChangePackageTransform       | org.acm.sequin.parser.ast.ASTName                       |  |
| 10        | org.acm.sequin.refactor.type.ExtractInterfaceRefactoring  | org.acm.sequin.refactor.ComplexTransform                |  |
| 11        | org.acm.sequin.summary.load.SwingLoadStatus               | org.acm.sequin.tools.install.RefactoryStorage           |  |
| 12        | org.acm.sequin.summary.SummaryTraversal                   | org.acm.sequin.summary.load.LoadStatus                  |  |
| 13        | org.acm.sequin.tools.stub.SubGenTraversal                 | org.acm.sequin.tools.stub.SubFile                       |  |
| 14        | org.acm.sequin.uml.refactor.ExtractMethodDialog           | org.acm.sequin.refactor.method.ExtractMethodRefactoring |  |
| 15        | org.acm.sequin.uml.refactor.ExtractMethodDialog           | org.acm.sequin.awt.OrderableList                        |  |
| 16        | org.acm.sequin.uml.refactor.MoveMethodDialog              | org.acm.sequin.uml.refactor.ParameterPanel              |  |
| 17        | org.acm.sequin.uml.refactor.RenameClassDialog             | org.acm.sequin.summary.TypeSummary                      |  |
| 18        | org.acm.sequin.uml.refactor.RenameFieldDialog             | org.acm.sequin.summary.FieldSummary                     |  |
| 19        | org.acm.sequin.uml.refactor.RenameParameterDialog         | org.acm.sequin.summary.ParameterSummary                 |  |
| 20        | org.acm.sequin.uml.UMLPackage                             | org.acm.sequin.uml.line.SegmentedLine                   |  |
| 21        | org.acm.sequin.uml.UMLPackage                             | org.acm.sequin.summary.PackageSummary                   |  |
| 22        | PrettyPrinter   | org.acm.sequin.pretty.PrettyPrintFile                   |  |
| SparT     |   |   |  |
| ID        | Adapter   | Adaptee   |  |
| 1         | org.acm.sequin.metrics.GatherData                         | org.acm.sequin.metrics.MetricsReport                    |  |
| 2         | org.acm.sequin.metrics.MethodMetricsFrame                 | org.acm.sequin.summary.MethodSummary                    |  |
| 3         | org.acm.sequin.metrics.PackageMetricsFrame                | org.acm.sequin.summary.PackageSummary                   |  |
| 4         | org.acm.sequin.metrics.TextReport                         | org.acm.sequin.util.TextFormatter                       |  |
| 5         | org.acm.sequin.metrics.TypeMetricsFrame                   | org.acm.sequin.summary.TypeSummary                      |  |
| 6         | org.acm.sequin.refactor.AddImportTransform                | org.acm.sequin.parser.ast.ASTName                       |  |
| 7         | org.acm.sequin.refactor.EliminatePackageImportVisitor     | org.acm.sequin.summary.PackageSummary                   |  |
| 8         | org.acm.sequin.refactor.method.MoveMethodRefactoring      | org.acm.sequin.summary.MethodSummary                    |  |
| 9         | org.acm.sequin.refactor.method.RenameParameterRefactoring | org.acm.sequin.summary.MethodSummary                    |  |
| 10        | org.acm.sequin.refactor.method.RenameParameterRefactoring | org.acm.sequin.summary.ParameterSummary                 |  |
| 11        | org.acm.sequin.refactor.type.ChangePackageTransform       | org.acm.sequin.parser.ast.ASTName                       |  |
| 12        | org.acm.sequin.refactor.type.ExtractInterfaceRefactoring  | org.acm.sequin.refactor.ComplexTransform                |  |
| 13        | org.acm.sequin.refactor.type.RemoveEmptyClassRefactoring  | org.acm.sequin.summary.TypeSummary                      |  |
| 14        | org.acm.sequin.summary.load.SwingLoadStatus               | org.acm.sequin.tools.install.RefactoryStorage           |  |
| 15        | org.acm.sequin.summary.SummaryTraversal                   | org.acm.sequin.summary.FrameworkLoader                  |  |
| 16        | org.acm.sequin.summary.SummaryTraversal                   | org.acm.sequin.summary.load.LoadStatus                  |  |
| 17        | org.acm.sequin.tools.stub.SubGenTraversal                 | org.acm.sequin.tools.stub.SubFile                       |  |
| 18        | org.acm.sequin.uml.line.AssociationRelationship           | org.acm.sequin.uml.UMLField                             |  |
| 19        | org.acm.sequin.uml.refactor.ExtractMethodDialog           | org.acm.sequin.awt.OrderableList                        |  |
| 20        | org.acm.sequin.uml.refactor.ExtractMethodDialog           | org.acm.sequin.refactor.method.ExtractMethodRefactoring |  |
| 21        | org.acm.sequin.uml.refactor.MoveMethodDialog              | org.acm.sequin.uml.refactor.ParameterPanel              |  |
| 22        | org.acm.sequin.uml.refactor.RenameClassDialog             | org.acm.sequin.summary.TypeSummary                      |  |
| 23        | org.acm.sequin.uml.refactor.RenameFieldDialog             | org.acm.sequin.summary.FieldSummary                     |  |
| 24        | org.acm.sequin.uml.refactor.RenameParameterDialog         | org.acm.sequin.summary.MethodSummary                    |  |
| 25        | org.acm.sequin.uml.refactor.RenameParameterDialog         | org.acm.sequin.summary.ParameterSummary                 |  |
| 26        | org.acm.sequin.uml.UMLLine                                | org.acm.sequin.uml.line.SizableLabel                    |  |
| 27        | org.acm.sequin.uml.UMLPackage                             | org.acm.sequin.summary.PackageSummary                   |  |
| 28        | org.acm.sequin.uml.UMLType                                | org.acm.sequin.summary.TypeSummary                      |  |
| 29        | org.acm.sequin.uml.UMLType                                | org.acm.sequin.uml.RoleHolder                           |  |
| 30        | org.acm.sequin.uml.UMLType                                | org.acm.sequin.uml.line.SizableLabel                    |  |
| 31        | PrettyPrinter   | org.acm.sequin.pretty.PrettyPrintFile                   |  |
| Bridge    |   |   |  |
| RaM       |   |   |  |
| DPD       |   |   |  |
| DPF       |   |   |  |
| SparT     |   |   |  |
| Composite |   |   |  |
| RaM       |   |   |  |
| DPD       |   |   |  |
| DPF       |   |   |  |

|   |  |   |  |
|---|--|---|--|
| SparT   |  |   |  |
| Decorator   |  |   |  |
| RaM   |  |   |  |
| DPD   |  |   |  |
| DPF   |  |   |  |
| SparT   |  |   |  |
| Facade  |  |   |  |
| RaM   |  |   |  |
| DPD   |  |   |  |
| DPF   |  |   |  |
| SparT   |  |   |  |
| Flweight  |  |   |  |
| RaM   |  |   |  |
| DPD   |  |   |  |
| DPF   |  |   |  |
| SparT   |  |   |  |
| Proxy   |  |   |  |
| RaM   |  |   |  |
| DPD   |  |   |  |
| DPF   |  |   |  |
| ID Proxy  | RealSubject                                  |   |  |
| 1 org.acm.sequin.uml.UMLLine                              | org.acm.sequin.uml.UMLType                   |   |  |
| 2 org.acm.sequin.parser.ast.ASTClassDeclaration           | org.acm.sequin.pretty.JavaDocableImpl        |   |  |
| 3 org.acm.sequin.parser.ast.ASTConstructorDeclaration     | org.acm.sequin.pretty.JavaDocableImpl        |   |  |
| 4 org.acm.sequin.parser.ast.ASTFieldDeclaration           | org.acm.sequin.pretty.JavaDocableImpl        |   |  |
| 5 org.acm.sequin.parser.ast.ASTInterfaceDeclaration       | org.acm.sequin.pretty.JavaDocableImpl        |   |  |
| 6 org.acm.sequin.parser.ast.ASTMethodDeclaration          | org.acm.sequin.pretty.JavaDocableImpl        |   |  |
| 7 org.acm.sequin.parser.ast.ASTNestedClassDeclaration     | org.acm.sequin.pretty.JavaDocableImpl        |   |  |
| 8 org.acm.sequin.parser.ast.ASTNestedInterfaceDeclaration | org.acm.sequin.pretty.JavaDocableImpl        |   |  |
| 9 org.acm.sequin.parser.ast.ASTPackageDeclaration         | org.acm.sequin.pretty.JavaDocableImpl        |   |  |
| 10 org.acm.sequin.pretty.sort.MultipleOrdering            | org.acm.sequin.pretty.sort.Ordering          |   |  |
| SparT   |  |   |  |
| ID Proxy  | RealSubject                                  | Subject                                   |  |
| 1 org.acm.sequin.parser.JavaParser                        | org.acm.sequin.parser.JavaParserTokenManager | org.acm.sequin.parser.JavaParserConstants |  |
| 2 org.acm.sequin.parser.ast.ASTClassDeclaration           | org.acm.sequin.pretty.JavaDocableImpl        | org.acm.sequin.pretty.JavaDocable         |  |
| 3 org.acm.sequin.parser.ast.ASTConstructorDeclaration     | org.acm.sequin.pretty.JavaDocableImpl        | org.acm.sequin.pretty.JavaDocable         |  |
| 4 org.acm.sequin.parser.ast.ASTFieldDeclaration           | org.acm.sequin.pretty.JavaDocableImpl        | org.acm.sequin.pretty.JavaDocable         |  |
| 5 org.acm.sequin.parser.ast.ASTInterfaceDeclaration       | org.acm.sequin.pretty.JavaDocableImpl        | org.acm.sequin.pretty.JavaDocable         |  |
| 6 org.acm.sequin.parser.ast.ASTMethodDeclaration          | org.acm.sequin.pretty.JavaDocableImpl        | org.acm.sequin.pretty.JavaDocable         |  |
| 7 org.acm.sequin.parser.ast.ASTNestedClassDeclaration     | org.acm.sequin.pretty.JavaDocableImpl        | org.acm.sequin.pretty.JavaDocable         |  |
| 8 org.acm.sequin.parser.ast.ASTNestedInterfaceDeclaration | org.acm.sequin.pretty.JavaDocableImpl        | org.acm.sequin.pretty.JavaDocable         |  |
| 9 org.acm.sequin.parser.ast.ASTPackageDeclaration         | org.acm.sequin.pretty.JavaDocableImpl        | org.acm.sequin.pretty.JavaDocable         |  |
| 10 org.acm.sequin.uml.UMLLine                             | org.acm.sequin.uml.Line.SizableLabel         | org.acm.sequin.uml.Line.ScalablePanel     |  |
| 11 org.acm.sequin.uml.UMLType                             | org.acm.sequin.uml.Line.SizableLabel         | org.acm.sequin.uml.Line.ScalablePanel     |  |
| 12 org.acm.sequin.util.FileSettings                       | org.acm.sequin.util.FileSettings             | org.acm.sequin.util.Settings              |  |
| Interpreter   |  |   |  |
| RaM   |  |   |  |
| DPD   |  |   |  |
| DPF   |  |   |  |
| SparT   |  |   |  |
| Template Method   |  |   |  |
| RaM   |  |   |  |
| DPD   |  |   |  |
| ID AbstractClass  |  |   |  |
| 1 org.acm.sequin.ide.common.action.CurrentSummary         |  |   |  |
| 2 org.acm.sequin.ide.common.action.RefactoringAction      |  |   |  |
| 3 org.acm.sequin.io.DirectoryTreeTraversal                |  |   |  |
| 4 org.acm.sequin.metrics.MetricsFrame                     |  |   |  |
| 5 org.acm.sequin.metrics.MetricsReport                    |  |   |  |
| 6 org.acm.sequin.parser.factory.ParserFactory             |  |   |  |
| 7 org.acm.sequin.pretty.PrettyPrintFromIDE                |  |   |  |
| 8 org.acm.sequin.pretty.sort.Ordering                     |  |   |  |
| 9 org.acm.sequin.print.xml.State                          |  |   |  |
| 10 org.acm.sequin.refactor.Refactoring                    |  |   |  |
| 11 org.acm.sequin.refactor.type.AddClassRefactoring       |  |   |  |
| 12 org.acm.sequin.refactor.type.TypeChangeVisitor         |  |   |  |
| 13 org.acm.sequin.summary.query.TypeList                  |  |   |  |
| 14 org.acm.sequin.uml.refactor.DialogViewListener         |  |   |  |
| 15 org.acm.sequin.uml.refactor.ExtractMethodDialog        |  |   |  |
| 16 org.acm.sequin.uml.refactor.NoInputRefactoringListener |  |   |  |
| 17 org.acm.sequin.uml.refactor.RefactoringDialog          |  |   |  |
| DPF   |  |   |  |
| ID AbstractClass  |  |   |  |
| 1 org.acm.sequin.ide.common.action.CurrentSummary         |  |   |  |
| 2 org.acm.sequin.ide.common.action.RefactoringAction      |  |   |  |
| 3 org.acm.sequin.ide.elxir.PrettyPrinterExtension         |  |   |  |
| 4 org.acm.sequin.io.DirectoryTreeTraversal                |  |   |  |
| 5 org.acm.sequin.metrics.MetricsFrame                     |  |   |  |
| 6 org.acm.sequin.metrics.MetricsReport                    |  |   |  |
| 7 org.acm.sequin.parser.ast.SimpleNode                    |  |   |  |
| 8 org.acm.sequin.parser.factory.ParserFactory             |  |   |  |
| 9 org.acm.sequin.pretty.LineQueue                         |  |   |  |
| 10 org.acm.sequin.pretty.PrettyPrintFile                  |  |   |  |
| 11 org.acm.sequin.pretty.PrettyPrintFromIDE               |  |   |  |
| 12 org.acm.sequin.pretty.PrettyPrintString                |  |   |  |
| 13 org.acm.sequin.pretty.PrintData                        |  |   |  |
| 14 org.acm.sequin.pretty.sort.Ordering                    |  |   |  |
| 15 org.acm.sequin.print.text.LinePrinter                  |  |   |  |
| 16 org.acm.sequin.print.xml.State                         |  |   |  |
| 17 org.acm.sequin.refactor.method.AddNewMethod            |  |   |  |
| 18 org.acm.sequin.refactor.Refactoring                    |  |   |  |
| 19 org.acm.sequin.refactor.RefactoringFactory             |  |   |  |
| 20 org.acm.sequin.refactor.type.RenameClassVisitor        |  |   |  |
| 21 org.acm.sequin.refactor.type.TypeChangeVisitor         |  |   |  |
| 22 org.acm.sequin.summary.LineCountVisitor                |  |   |  |
| 23 org.acm.sequin.summary.query.TypeList                  |  |   |  |
| 24 org.acm.sequin.uml.line.SegmentedLine                  |  |   |  |
| 25 org.acm.sequin.uml.refactor.DialogViewListener         |  |   |  |
| 26 org.acm.sequin.uml.refactor.ExtractMethodDialog        |  |   |  |
| 27 org.acm.sequin.uml.refactor.NoInputRefactoringListener |  |   |  |
| 28 org.acm.sequin.uml.refactor.RefactoringDialog          |  |   |  |
| 29 org.acm.sequin.uml.UMLLine                             |  |   |  |
| SparT   |  |   |  |
| ID AbstractClass  |  |   |  |
| 1 org.acm.sequin.ide.common.action.CurrentSummary         |  |   |  |
| 2 org.acm.sequin.ide.common.action.RefactoringAction      |  |   |  |
| 3 org.acm.sequin.io.DirectoryTreeTraversal                |  |   |  |
| 4 org.acm.sequin.metrics.MetricsFrame                     |  |   |  |
| 5 org.acm.sequin.metrics.MetricsReport                    |  |   |  |
| 6 org.acm.sequin.parser.factory.ParserFactory             |  |   |  |
| 7 org.acm.sequin.pretty.PrettyPrintFromIDE                |  |   |  |
| 8 org.acm.sequin.pretty.sort.Ordering                     |  |   |  |
| 9 org.acm.sequin.print.xml.State                          |  |   |  |
| 10 org.acm.sequin.refactor.Refactoring                    |  |   |  |
| 11 org.acm.sequin.refactor.type.AddClassRefactoring       |  |   |  |
| 12 org.acm.sequin.refactor.type.TypeChangeVisitor         |  |   |  |
| 13 org.acm.sequin.summary.query.TypeList                  |  |   |  |
| 14 org.acm.sequin.uml.refactor.ClassNameDialog            |  |   |  |
| 15 org.acm.sequin.uml.refactor.DialogViewListener         |  |   |  |
| 16 org.acm.sequin.uml.refactor.ExtractMethodDialog        |  |   |  |
| 17 org.acm.sequin.uml.refactor.NoInputRefactoringListener |  |   |  |
| 18 org.acm.sequin.uml.refactor.RefactoringDialog          |  |   |  |
| Chain of Responsibility                                   |  |   |  |
| RaM   |  |   |  |
| DPD   |  |   |  |
| DPF   |  |   |  |
| SparT   |  |   |  |
| Command   |  |   |  |
| RaM   |  |   |  |
| DPD   |  |   |  |
| DPF   |  |   |  |
| ID Invoker  | Receiver                                     | Command                                   |  |



|                  |  |   |   |
|------------------|--|---|---|
| 1                |  | org.acm.sequin.refactor.method.ExtractMethodRefactoring   | org.acm.sequin.uml.refactor.ExtractMethodDialog           |
| 2                |  | org.acm.sequin.uml.line.SizableLabel                      | org.acm.sequin.uml.UMLLine                                |
| 3                | org.acm.sequin.refactor.ComplexTransform                     | org.acm.sequin.refactor.type.ExtractInterfaceRefactoring  | org.acm.sequin.refactor.type.ExtractInterfaceRefactoring  |
| 4                | org.acm.sequin.summary.PackageSummary                        | org.acm.sequin.refactor.EliminatePackageImportVisitor     | org.acm.sequin.refactor.EliminatePackageImportVisitor     |
| 5                | org.acm.sequin.parser.ast.ASTName                            | org.acm.sequin.refactor.AddImportTransform                | org.acm.sequin.refactor.AddImportTransform                |
| 6                | org.acm.sequin.parser.ast.ASTName                            | org.acm.sequin.refactor.type.ChangePackageTransform       | org.acm.sequin.refactor.type.ChangePackageTransform       |
| 7                | org.acm.sequin.summary.MethodSummary                         | org.acm.sequin.refactor.method.RenameParameterRefactoring | org.acm.sequin.refactor.method.RenameParameterRefactoring |
| 8                | org.acm.sequin.summary.ParameterSummary                      | org.acm.sequin.refactor.method.RenameParameterRefactoring | org.acm.sequin.refactor.method.RenameParameterRefactoring |
| 9                | org.acm.sequin.pretty.FieldSizeLookAhead                     | org.acm.sequin.pretty.PrettyPrintVisitor                  | org.acm.sequin.pretty.PrettyPrintVisitor                  |
| 10               | org.acm.sequin.pretty.LocalVariableLookAhead                 | org.acm.sequin.pretty.PrettyPrintVisitor                  | org.acm.sequin.pretty.PrettyPrintVisitor                  |
| 11               | org.acm.sequin.util.TextFormatter                            | org.acm.sequin.metrics.TextReport                         | org.acm.sequin.metrics.TextReport                         |
| 12               | org.acm.sequin.refactor.method.ExtractMethodRefactoring      | org.acm.sequin.uml.refactor.ExtractMethodDialog           | org.acm.sequin.uml.refactor.ExtractMethodDialog           |
| 13               | org.acm.sequin.awt.OrderableList                             | org.acm.sequin.uml.refactor.ExtractMethodDialog           | org.acm.sequin.uml.refactor.ExtractMethodDialog           |
| 14               | org.acm.sequin.uml.refactor.ParameterPanel                   | org.acm.sequin.uml.refactor.MoveMethodDialog              | org.acm.sequin.uml.refactor.MoveMethodDialog              |
| 15               | org.acm.sequin.tools.stub.StubFile                           | org.acm.sequin.tools.stub.StubGenTraversal                | org.acm.sequin.tools.stub.StubGenTraversal                |
| 16               | org.acm.sequin.summary.MethodSummary                         | org.acm.sequin.uml.refactor.RenameParameterDialog         | org.acm.sequin.uml.refactor.RenameParameterDialog         |
| 17               | org.acm.sequin.summary.FieldSummary                          | org.acm.sequin.uml.refactor.RenameFieldDialog             | org.acm.sequin.uml.refactor.RenameFieldDialog             |
| 18               | org.acm.sequin.summary.TypeSummary                           | org.acm.sequin.uml.refactor.RenameClassDialog             | org.acm.sequin.uml.refactor.RenameClassDialog             |
| 19               | org.acm.sequin.summary.ParameterSummary                      | org.acm.sequin.uml.refactor.RenameParameterDialog         | org.acm.sequin.uml.refactor.RenameParameterDialog         |
| 20               | org.acm.sequin.uml.line.SegmentedLine                        | org.acm.sequin.uml.UMLPackage                             | org.acm.sequin.uml.UMLPackage                             |
| 21               | org.acm.sequin.tools.install.RefactorStorage                 | org.acm.sequin.summary.load.SwingLoadStatus               | org.acm.sequin.summary.load.SwingLoadStatus               |
| 22               | org.acm.sequin.summary.load.LoadStatus                       | org.acm.sequin.summary.SummaryTraversal                   | org.acm.sequin.summary.SummaryTraversal                   |
| 23               | org.acm.sequin.metrics.MetricsReport                         | org.acm.sequin.metrics.GatherData                         | org.acm.sequin.metrics.GatherData                         |
| 24               | org.acm.sequin.pretty.PrettyPrintFile                        | PrettyPrinter   | PrettyPrinter   |
| 25               | org.acm.sequin.summary.MethodSummary                         | org.acm.sequin.metrics.MethodMetricsFrame                 | org.acm.sequin.metrics.MethodMetricsFrame                 |
| 26               | org.acm.sequin.summary.PackageSummary                        | org.acm.sequin.metrics.PackageMetricsFrame                | org.acm.sequin.metrics.PackageMetricsFrame                |
| 27               | org.acm.sequin.summary.TypeSummary                           | org.acm.sequin.metrics.TypeMetricsFrame                   | org.acm.sequin.metrics.TypeMetricsFrame                   |
| 28               | org.acm.sequin.summary.PackageSummary                        | org.acm.sequin.uml.UMLPackage                             | org.acm.sequin.uml.UMLPackage                             |
| SparT            |  |   |   |
| Iterator         |  |   |   |
| RaM              |  |   |   |
| DPD              |  |   |   |
| DPF              |  |   |   |
| SparT            |  |   |   |
| Mediator         |  |   |   |
| RaM              |  |   |   |
| DPD              |  |   |   |
| DPF              |  |   |   |
| SparT            |  |   |   |
| Memento          |  |   |   |
| RaM              |  |   |   |
| DPD              |  |   |   |
| DPF              |  |   |   |
| SparT            |  |   |   |
| Observer         |  |   |   |
| RaM              |  |   |   |
| DPD              |  |   |   |
| ID               | Subject  | Observer  |   |
| 1                | org.acm.sequin.refactor.ComplexTransform                     | org.acm.sequin.refactor.TransformAST                      |   |
| DPF              |  |   |   |
| ID               | Subject  | Observer  |   |
| 1                | org.acm.sequin.refactor.ComplexTransform                     | org.acm.sequin.refactor.TransformAST                      |   |
| SparT            |  |   |   |
| ID               | Subject  | Observer  |   |
| 1                | org.acm.sequin.refactor.ComplexTransform                     | org.acm.sequin.refactor.TransformAST                      |   |
| State / Strategy |  |   |   |
| RaM              |  |   |   |
| DPD              |  |   |   |
| ID               | Context  | State / Strategy  |   |
| 1                | org.acm.sequin.ide.common.action.RefactoringAction           | org.acm.sequin.ide.common.action.SelectedFileSet          |   |
| 2                | org.acm.sequin.ide.common.SourceBrowserAdapter               | org.acm.sequin.uml.Sourceful                              |   |
| 3                | org.acm.sequin.ide.elixir.version.ElixirContainsThread       | org.acm.sequin.version.VersionControl                     |   |
| 4                | org.acm.sequin.ide.elixir.version.ElixirVersionControlThread | org.acm.sequin.version.VersionControl                     |   |
| 5                | org.acm.sequin.refactor.method.EMParameterFinder             | org.acm.sequin.parser.Node                                |   |
| 6                | org.acm.sequin.refactor.method.ExtractMethodRefactoring      | org.acm.sequin.parser.Node                                |   |
| 7                | org.acm.sequin.refactor.method.MoveMethodRefactoring         | org.acm.sequin.summary.Summary                            |   |
| 8                | org.acm.sequin.refactor.method.MoveMethodVisitor             | org.acm.sequin.summary.Summary                            |   |
| 9                | org.acm.sequin.summary.FrameworkFileSummaryLoader            | org.acm.sequin.summary.load.LoadStatus                    |   |
| 10               | org.acm.sequin.summary.SummaryTraversal                      | org.acm.sequin.summary.load.LoadStatus                    |   |
| 11               | org.acm.sequin.summary.SummaryTraversal                      | org.acm.sequin.summary.FrameworkLoader                    |   |
| 12               | org.acm.sequin.uml.line.DragPanelAdapter                     | org.acm.sequin.uml.line.EndPointPanel                     |   |
| 13               | org.acm.sequin.uml.line.DragPanelAdapter                     | org.acm.sequin.uml.line.LinedPanel                        |   |
| 14               | org.acm.sequin.uml.line.LineMouseAdapter                     | org.acm.sequin.uml.line.LinedPanel                        |   |
| 15               | org.acm.sequin.uml.line.SegmentedLine                        | org.acm.sequin.uml.line.EndPointPanel                     |   |
| 16               | org.acm.sequin.uml.loader.ReloadSingleTon                    | org.acm.sequin.uml.loader.ReloadSingleTon                 |   |
| 17               | org.acm.sequin.uml.SaveMenuSelection                         | org.acm.sequin.io.Saveable                                |   |
| 18               | org.acm.sequin.uml.UMLLine                                   | org.acm.sequin.uml.UMLIcon                                |   |
| DPF              |  |   |   |
| ID               | Context  | State / Strategy  |   |
| 1                | org.acm.sequin.print.xml.XMLLinePrinter                      | org.acm.sequin.print.xml.State                            |   |
| 2                | org.acm.sequin.summary.FileSummary                           |   |   |
| 3                | org.acm.sequin.ide.common.action.RefactoringAction           | org.acm.sequin.ide.common.action.SelectedFileSet          |   |
| 4                | org.acm.sequin.ide.common.SourceBrowserAdapter               | org.acm.sequin.uml.Sourceful                              |   |
| 5                | org.acm.sequin.ide.elixir.version.ElixirContainsThread       | org.acm.sequin.version.VersionControl                     |   |
| 6                | org.acm.sequin.parser.ast.ASTClassDeclaration                | org.acm.sequin.parser.JavaParserVisitor                   |   |
| 7                | org.acm.sequin.parser.ast.ASTConstructorDeclaration          | org.acm.sequin.parser.JavaParserVisitor                   |   |
| 8                | org.acm.sequin.parser.ast.ASTFieldDeclaration                | org.acm.sequin.parser.JavaParserVisitor                   |   |
| 9                | org.acm.sequin.parser.ast.ASTInterfaceDeclaration            | org.acm.sequin.parser.JavaParserVisitor                   |   |
| 10               | org.acm.sequin.parser.ast.ASTMethodDeclaration               | org.acm.sequin.parser.JavaParserVisitor                   |   |
| 11               | org.acm.sequin.parser.ast.ASTNestedClassDeclaration          | org.acm.sequin.parser.JavaParserVisitor                   |   |
| 12               | org.acm.sequin.parser.ast.ASTNestedInterfaceDeclaration      | org.acm.sequin.parser.JavaParserVisitor                   |   |
| 13               | org.acm.sequin.parser.ast.ASTPackageDeclaration              | org.acm.sequin.parser.JavaParserVisitor                   |   |
| 14               | org.acm.sequin.parser.ast.SimpleNode                         | org.acm.sequin.parser.Node                                |   |
| 15               | org.acm.sequin.parser.ast.SimpleNode                         | org.acm.sequin.parser.JavaParserVisitor                   |   |
| 16               | org.acm.sequin.pretty.PrettyPrintVisitor                     | org.acm.sequin.parser.Node                                |   |
| 17               | org.acm.sequin.pretty.sort.MultipleOrdering                  | org.acm.sequin.pretty.sort.Ordering                       |   |
| 18               | org.acm.sequin.pretty.sort.MultipleOrdering                  | org.acm.sequin.util.Settings                              |   |
| 19               | org.acm.sequin.refactor.AddImportTransform                   | org.acm.sequin.parser.Node                                |   |
| 20               | org.acm.sequin.refactor.ComplexTransform                     | org.acm.sequin.refactor.TransformAST                      |   |
| 21               | org.acm.sequin.refactor.field.RenameFieldData                | org.acm.sequin.summary.Summary                            |   |
| 22               | org.acm.sequin.refactor.method.EMParameterFinder             | org.acm.sequin.parser.Node                                |   |
| 23               | org.acm.sequin.refactor.method.ExtractMethodRefactoring      | org.acm.sequin.parser.Node                                |   |
| 24               | org.acm.sequin.refactor.method.MoveMethodRefactoring         | org.acm.sequin.summary.Summary                            |   |
| 25               | org.acm.sequin.refactor.method.MoveMethodVisitor             | org.acm.sequin.summary.Summary                            |   |
| 26               | org.acm.sequin.summary.FrameworkFileSummaryLoader            | org.acm.sequin.summary.load.LoadStatus                    |   |
| 27               | org.acm.sequin.summary.ImportSummary                         | org.acm.sequin.summary.SummaryVisitor                     |   |
| 28               | org.acm.sequin.summary.MethodSummary                         | org.acm.sequin.summary.SummaryVisitor                     |   |
| 29               | org.acm.sequin.summary.SummaryTraversal                      | org.acm.sequin.summary.load.LoadStatus                    |   |
| 30               | org.acm.sequin.summary.SummaryTraversal                      | org.acm.sequin.summary.FrameworkLoader                    |   |
| 31               | org.acm.sequin.summary.TypeSummary                           | org.acm.sequin.summary.SummaryVisitor                     |   |
| 32               | org.acm.sequin.summary.VariableSummary                       | org.acm.sequin.summary.SummaryVisitor                     |   |
| 33               | org.acm.sequin.uml.line.DragPanelAdapter                     | org.acm.sequin.uml.line.EndPointPanel                     |   |
| 34               | org.acm.sequin.uml.line.DragPanelAdapter                     | org.acm.sequin.uml.line.LinedPanel                        |   |
| 35               | org.acm.sequin.uml.line.LineMouseAdapter                     | org.acm.sequin.uml.line.LinedPanel                        |   |
| 36               | org.acm.sequin.uml.line.SegmentedLine                        | org.acm.sequin.uml.line.EndPointPanel                     |   |
| 37               | org.acm.sequin.uml.loader.ReloadSingleTon                    | org.acm.sequin.uml.loader.ReloadSingleTon                 |   |
| 38               | org.acm.sequin.uml.SaveMenuSelection                         | org.acm.sequin.io.Saveable                                |   |
| 39               | org.acm.sequin.uml.UMLLine                                   | org.acm.sequin.uml.UMLIcon                                |   |
| SparT            |  |   |   |
| ID               | Context  | State / Strategy  |   |
| 1                | org.acm.sequin.ide.common.action.RefactoringAction           | org.acm.sequin.ide.common.action.SelectedFileSet          |   |
| 2                | org.acm.sequin.ide.common.PackageSelectorDialog              | org.acm.sequin.ide.common.PackageSelectorArea             |   |
| 3                | org.acm.sequin.ide.elixir.version.ElixirContainsThread       | org.acm.sequin.version.VersionControl                     |   |
| 4                | org.acm.sequin.ide.elixir.version.ElixirVersionControlThread | org.acm.sequin.version.VersionControl                     |   |
| 5                | org.acm.sequin.ide.ibuilder.UMLNodeViewer                    | org.acm.sequin.ide.common.ClassDiagramReloader            |   |
| 6                | org.acm.sequin.ide.ibuilder.UMLNodeViewerFactory             | org.acm.sequin.ide.common.MultipleDirClassDiagramReloader |   |
| 7                | org.acm.sequin.metrics.GatherData                            | org.acm.sequin.metrics.MetricsReport                      |   |
| 8                | org.acm.sequin.parser.JavaParser                             | org.acm.sequin.parser.io.CharStream                       |   |
| 9                | org.acm.sequin.parser.JavaParserTokenManager                 | org.acm.sequin.parser.io.CharStream                       |   |
| 10               | org.acm.sequin.pretty.JavadocDescriptionPrinter              | org.acm.sequin.pretty.PrintData                           |   |
| 11               | org.acm.sequin.pretty.PrettyPrintFromIDE                     | org.acm.sequin.pretty.PrintData                           |   |
| 12               | org.acm.sequin.pretty.PrintData                              | org.acm.sequin.pretty.LineQueue                           |   |
| 13               | org.acm.sequin.print.text.TextPagePrinter                    | org.acm.sequin.print.text.LinePrinter                     |   |
| 14               | org.acm.sequin.refactor.method.MoveMethodRefactoring         | org.acm.sequin.summary.Summary                            |   |
| 15               | org.acm.sequin.refactor.method.MoveMethodVisitor             | org.acm.sequin.summary.Summary                            |   |
| 16               | org.acm.sequin.summary.SummaryTraversal                      | org.acm.sequin.summary.FrameworkLoader                    |   |
| 17               | org.acm.sequin.summary.SummaryTraversal                      | org.acm.sequin.summary.load.LoadStatus                    |   |
| 18               | org.acm.sequin.uml.line.DragPanelAdapter                     | org.acm.sequin.uml.line.EndPointPanel                     |   |
| 19               | org.acm.sequin.uml.line.SegmentedLine                        | org.acm.sequin.uml.line.EndPointPanel                     |   |
| 20               | org.acm.sequin.uml.SaveMenuSelection                         | org.acm.sequin.io.Saveable                                |   |
| 21               | org.acm.sequin.uml.UMLLine                                   | org.acm.sequin.uml.UMLIcon                                |   |
| 22               | org.acm.sequin.uml.UMLPackage                                | org.acm.sequin.uml.line.SegmentedLine                     |   |
| 23               | PrettyPrinter  | org.acm.sequin.pretty.PrettyPrintFile                     |   |

|                  |  |   |                                |  |
|------------------|--|---|--------------------------------|--|
| 24               | RenameType                               | org.acm.seguin.refactor.type.RenameClassRefactoring |                                |  |
| 25               | Repackage                                | org.acm.seguin.refactor.type.MoveClass              |                                |  |
| Visitor          |  |   |                                |  |
| RaM              |  |   |                                |  |
| DPD              |  |   |                                |  |
| ID               | Visitor                                  | Element   |                                |  |
| 1                | org.acm.seguin.parser.JavaParserVisitor  | org.acm.seguin.parser.ast.SimpleNode                |                                |  |
| 2                | org.acm.seguin.summary.SummaryVisitor    | org.acm.seguin.summary.Summary                      |                                |  |
| DPF              |  |   |                                |  |
| ID               | Visitor                                  | Element   |                                |  |
| 1                | org.acm.seguin.parser.JavaParserVisitor  | org.acm.seguin.parser.Node                          |                                |  |
| 2                | org.acm.seguin.summary.SummaryVisitor    | org.acm.seguin.summary.Summary                      |                                |  |
| SparT            |  |   |                                |  |
| ID               | Visitor                                  | Element   |                                |  |
| 1                | org.acm.seguin.parser.JavaParserVisitor  | org.acm.seguin.parser.Node                          |                                |  |
| 2                | org.acm.seguin.summary.SummaryVisitor    | org.acm.seguin.summary.Summary                      |                                |  |
| QuickUML 2001    |  |   |                                |  |
| Factory Method   |  |   |                                |  |
| RaM              |  |   |                                |  |
| DPF              |  |   |                                |  |
| SparT            |  |   |                                |  |
| Abstract Factory |  |   |                                |  |
| RaM              |  |   |                                |  |
| ID               | AbstractProduct                          | Product   |                                |  |
| 1                | diagram.FigureRenderer                   | diagram.DefaultFigureRenderer                       |                                |  |
| DPF              |  |   |                                |  |
| ID               | AbstractProduct                          | Product   | Client                         |  |
| 1                | diagram.FigureRenderer                   | diagram.DefaultFigureRenderer                       | diagram.DefaultFigureEditor    |  |
|                  |  | ...   | diagram.DiagramUI              |  |
| SparT            |  |   |                                |  |
| Builder          |  |   |                                |  |
| RaM              |  |   |                                |  |
| ID               | Director                                 | Builder   |                                |  |
| 1                | uml.ui.BuildAction                       | uml.builder.CodeBuilder                             |                                |  |
| DPF              |  |   |                                |  |
| ID               | Director                                 | Builder   |                                |  |
| 1                | uml.ui.BuildAction                       | uml.builder.CodeBuilder                             |                                |  |
| SparT            |  |   |                                |  |
| ID               | Director                                 | Builder   |                                |  |
| 1                | uml.ui.BuildAction\$BuildDialog          | uml.builder.CodeBuilder                             |                                |  |
| Prototype        |  |   |                                |  |
| RaM              |  |   |                                |  |
| ID               | Prototype                                | Client  | ConcretePrototype              |  |
| 1                | diagram.Figure                           |   | diagram.figures.PolygonFigure  |  |
| DPF              |  |   |                                |  |
| ID               | Prototype                                | Client  |                                |  |
| 1                | diagram.tool.Tool                        | acme.IntHashtable                                   |                                |  |
| 2                | uml.ui.FileAction                        | acme.IntHashtable                                   |                                |  |
| 3                | diagram.SelectionModel                   | acme.IntHashtable                                   |                                |  |
| 4                | diagram.DiagramModel                     | acme.IntHashtable                                   |                                |  |
| 5                | diagram.shape.PolyLine2D                 | acme.IntHashtable                                   |                                |  |
| 6                | diagram.Link                             | acme.IntHashtable                                   |                                |  |
| 7                | diagram.Figure                           | diagram.tool.ClipboardTool                          |                                |  |
| SparT            |  |   |                                |  |
| ID               | Prototype                                | Client  | ConcretePrototype              |  |
| 1                | diagram.Figure                           | diagram.tool.ClipboardTool                          | diagram.figures.PolygonFigure  |  |
| 2                | diagram.Figure                           | diagram.tool.FigureTool\$MouseHandler               | diagram.figures.PolygonFigure  |  |
| Singleton        |  |   |                                |  |
| RaM              |  |   |                                |  |
| ID               | Singleton                                |   |                                |  |
| 1                | uml.ui.IconManager                       |   |                                |  |
| DPF              |  |   |                                |  |
| ID               | Singleton                                |   |                                |  |
| 1                | uml.ui.IconManager                       |   |                                |  |
| SparT            |  |   |                                |  |
| ID               | Singleton                                |   |                                |  |
| 1                | uml.ui.IconManager                       |   |                                |  |
| Adapter          |  |   |                                |  |
| RaM              |  |   |                                |  |
| ID               | Adapter                                  | Adaptee   | Target                         |  |
| 1                | acme.GifEncoder                          | acme.IntHashtable                                   | acme.ImageEncoder              |  |
| 2                | diagram.AbstractDiagramModel             | util.WeakList                                       | diagram.DiagramModel           |  |
| 3                | diagram.AbstractSelectionModel           | util.WeakList                                       | diagram.SelectionModel         |  |
| 4                | diagram.DefaultFigureRenderer            | diagram.Figure                                      | diagram.FigureRenderer         |  |
| 5                | diagram.DiagramUI\$ModelHandler          | diagram.DiagramUI                                   |                                |  |
| 6                | diagram.figure.polylink                  | diagram.figure                                      | diagram.tool.link              |  |
| 7                | diagram.tool.AbstractTool                | util.WeakList                                       | diagram.tool.Tool              |  |
| 8                | diagram.tool.LinkShappingTool            | diagram.diagram                                     | diagram.tool.AbstractTool      |  |
| 9                | uml.ui.DiagramContainer\$ExportGIFAction | uml.ui.DiagramContainer                             |                                |  |
| 10               | uml.ui.ToolPalette                       | uml.ui.ToolPalette\$ToolButton                      | acme.Diagram.Tool.ToolListener |  |
| DPF              |  |   |                                |  |
| ID               | Adapter                                  | Adaptee   |                                |  |
| 1                | acme.GifEncoder                          | acme.IntHashtable                                   |                                |  |
| 2                | diagram.AbstractDiagramModel             | util.WeakList                                       |                                |  |
| 3                | diagram.AbstractSelectionModel           | util.WeakList                                       |                                |  |
| 4                | diagram.DefaultFigureRenderer            | diagram.Figure                                      |                                |  |
| 5                | diagram.DiagramUI\$ModelHandler          | diagram.DiagramUI                                   |                                |  |
| 6                | diagram.tool.AbstractTool                | util.WeakList                                       |                                |  |
| 7                | diagram.tool.EditingTool                 | diagram.Diagram                                     |                                |  |
| 8                | diagram.tool.FigureDraggingTool          | diagram.Diagram                                     |                                |  |
| 9                | diagram.tool.FigureShappingTool          | diagram.Diagram                                     |                                |  |
| 10               | diagram.tool.FigureTool                  | diagram.Diagram                                     |                                |  |
| 11               | diagram.tool.LinkShappingTool            | diagram.Diagram                                     |                                |  |
| 12               | diagram.tool.LinkTool                    | diagram.Diagram                                     |                                |  |
| 13               | uml.ui.CardinalityTool                   | diagram.Diagram                                     |                                |  |
| 14               | uml.ui.DiagramContainer\$ExportGIFAction | uml.ui.DiagramContainer                             |                                |  |
| 15               | uml.ui.ToolPalette                       | uml.ui.ToolPalette\$ToolButton                      |                                |  |
| SparT            |  |   |                                |  |
| ID               | Adapter                                  | Adaptee   |                                |  |
| 1                | acme.GifEncoder                          | acme.IntHashtable                                   |                                |  |
| 2                | diagram.AbstractDiagramModel             | util.WeakList                                       |                                |  |
| 3                | diagram.AbstractSelectionModel           | util.WeakList                                       |                                |  |
| 4                | diagram.figures.PolyLink                 | diagram.Figure                                      |                                |  |
| 5                | diagram.tool.AbstractTool                | util.WeakList                                       |                                |  |
| 6                | diagram.ValueIterator                    | diagram.DiagramModel                                |                                |  |
| 7                | uml.diagram.InterfaceEditor              | uml.diagram.InterfaceRenderer                       |                                |  |
| 8                | uml.diagram.NoteEditor                   | uml.diagram.NoteRenderer                            |                                |  |
| 9                | uml.ui.ToolPalette                       | uml.ui.ToolPalette\$ToolButton                      |                                |  |
| Bridge           |  |   |                                |  |
| RaM              |  |   |                                |  |
| DPF              |  |   |                                |  |
| SparT            |  |   |                                |  |
| Composite        |  |   |                                |  |
| RaM              |  |   |                                |  |
| ID               | Component                                | Composite   |                                |  |
| 1                | diagram.tool.Tool                        | diagram.tool.CompositeTool                          |                                |  |
| 2                | diagram.DefaultFigureEditor              | diagram.tool.DefaultLinkEditor                      |                                |  |
| DPF              |  |   |                                |  |
| ID               | Component                                | Composite   |                                |  |
| 1                | diagram.tool.Tool                        | diagram.tool.CompositeTool                          |                                |  |
| SparT            |  |   |                                |  |
| ID               | Component                                | Composite   |                                |  |
| 1                | diagram.tool.Tool                        | diagram.tool.CompositeTool                          |                                |  |
| Decorator        |  |   |                                |  |
| RaM              |  |   |                                |  |
| DPF              |  |   |                                |  |
| SparT            |  |   |                                |  |
| Facade           |  |   |                                |  |
| RaM              |  |   |                                |  |
| DPF              |  |   |                                |  |

|  |                                  |                         |                    |
|--|----------------------------------|-------------------------|--------------------|
| SparT                                      |                                  |                         |                    |
| Flyweight                                  |                                  |                         |                    |
| RaM  |                                  |                         |                    |
| DPF  |                                  |                         |                    |
| SparT                                      |                                  |                         |                    |
| Proxy                                      |                                  |                         |                    |
| RaM  |                                  |                         |                    |
| ID Proxy                                   | RealSubject                      | Subject                 |                    |
| 1 uml builder.ObjectBuilder                | uml builder.RealizationBuilder   | uml builder.CodeBuilder |                    |
| DPF  |                                  |                         |                    |
| ID Proxy                                   | RealSubject                      |                         |                    |
| 1 diagram.DefaultLinkRenderer              | diagram.DefaultLabelRenderer     |                         |                    |
| 2 uml builder.ObjectBuilder                | uml builder.AssociationBuilder   |                         |                    |
| 3 uml builder.ObjectBuilder                | uml builder.InheritanceBuilder   |                         |                    |
| 4 uml builder.ObjectBuilder                | uml builder.RealizationBuilder   |                         |                    |
| SparT                                      |                                  |                         |                    |
| ID Proxy                                   | RealSubject                      | Subject                 |                    |
| 1 diagram.DefaultLinkRenderer              | diagram.DefaultLabelRenderer     | diagram.FigureRenderer  |                    |
| 2 uml builder.ObjectBuilder                | uml builder.AssociationBuilder   | uml builder.CodeBuilder |                    |
| 3 uml builder.ObjectBuilder                | uml builder.ClassBuilder         | uml builder.CodeBuilder |                    |
| 4 uml builder.ObjectBuilder                | uml builder.CompositionBuilder   | uml builder.CodeBuilder |                    |
| 5 uml builder.ObjectBuilder                | uml builder.InheritanceBuilder   | uml builder.CodeBuilder |                    |
| 6 uml builder.ObjectBuilder                | uml builder.RealizationBuilder   | uml builder.CodeBuilder |                    |
| Interpreter                                |                                  |                         |                    |
| RaM  |                                  |                         |                    |
| DPF  |                                  |                         |                    |
| SparT                                      |                                  |                         |                    |
| ID Iterator                                | ConcreteIterator                 |                         |                    |
| 1 java.util.Enumeration                    | acme.InheritableEnumerator       |                         |                    |
| 2 java.util.Iterator                       | util.FilteredIterator            |                         |                    |
| 3 java.util.Iterator                       | util.WrappedIterator             |                         |                    |
| Template Method                            |                                  |                         |                    |
| RaM  |                                  |                         |                    |
| ID AbstractClass                           |                                  |                         |                    |
| 1 acme.ImageEncoder                        |                                  |                         |                    |
| 2 diagram.shape.PolyLine2D                 |                                  |                         |                    |
| 3 uml diagram.AbstractLayout               |                                  |                         |                    |
| 4 uml ui.ExportAction                      |                                  |                         |                    |
| 5 uml ui.PrintableAction                   |                                  |                         |                    |
| DPF  |                                  |                         |                    |
| ID AbstractClass                           |                                  |                         |                    |
| 1 acme.ImageEncoder                        |                                  |                         |                    |
| 2 diagram.DefaultFigureRenderer            |                                  |                         |                    |
| 3 diagram.DefaultLabelRenderer             |                                  |                         |                    |
| 4 diagram.DefaultLinkRenderer              |                                  |                         |                    |
| 5 diagram.shape.PolyLine2D                 |                                  |                         |                    |
| 6 uml builder.MetaComponent                |                                  |                         |                    |
| 7 uml ui.ExportAction                      |                                  |                         |                    |
| 8 uml ui.PrintableAction                   |                                  |                         |                    |
| SparT                                      |                                  |                         |                    |
| ID AbstractClass                           |                                  |                         |                    |
| 1 acme.ImageEncoder                        |                                  |                         |                    |
| 2 diagram.shape.PolyLine2D                 |                                  |                         |                    |
| 3 uml ui.ExportAction                      |                                  |                         |                    |
| 4 uml ui.PrintableAction                   |                                  |                         |                    |
| Chain of Responsibility                    |                                  |                         |                    |
| RaM  |                                  |                         |                    |
| DPF  |                                  |                         |                    |
| SparT                                      |                                  |                         |                    |
| Command                                    |                                  |                         |                    |
| RaM  |                                  |                         |                    |
| ID Command                                 | ConcreteCommand                  |                         |                    |
| 1 diagram.DiagramModel                     | diagram.AbstractDiagramModel     |                         |                    |
| 2 diagram.SelectionModel                   | diagram.AbstractSelectionModel   |                         |                    |
| DPF  |                                  |                         |                    |
| SparT                                      |                                  |                         |                    |
| Iterator                                   |                                  |                         |                    |
| RaM  |                                  |                         |                    |
| DPF  |                                  |                         |                    |
| SparT                                      |                                  |                         |                    |
| Mediator                                   |                                  |                         |                    |
| RaM  |                                  |                         |                    |
| DPF  |                                  |                         |                    |
| SparT                                      |                                  |                         |                    |
| Memento                                    |                                  |                         |                    |
| RaM  |                                  |                         |                    |
| DPF  |                                  |                         |                    |
| SparT                                      |                                  |                         |                    |
| Observer                                   |                                  |                         |                    |
| RaM  |                                  |                         |                    |
| ID Subject                                 | Observer                         | ConcreteSubject         | ConcreteObserver   |
| 1 diagram.tool.AbstractTool                | diagram.tool.ToolListener        | uml ui.CardinalityTool  | uml ui.ToolPalette |
| DPF  |                                  |                         |                    |
| ID Subject                                 | Observer                         | ConcreteSubject         | ConcreteSubject    |
| 1 diagram.tool.AbstractTool                | diagram.tool.ToolListener        | uml ui.AssociationTool  | uml ui.ToolPalette |
| SparT                                      |                                  |                         |                    |
| ID Subject                                 | Observer                         |                         |                    |
| 1 diagram.AbstractDiagramModel             | diagram.DiagramModelListener     |                         |                    |
| 2 diagram.AbstractSelectionModel           | diagram.DiagramSelectionListener |                         |                    |
| 3 diagram.tool.AbstractTool                | diagram.tool.ToolListener        |                         |                    |
| State / Strategy                           |                                  |                         |                    |
| RaM  |                                  |                         |                    |
| ID Context                                 | State / Strategy                 |                         |                    |
| 1 diagram.DefaultFigureRenderer            | diagram.Figure                   |                         |                    |
| 2 diagram.uml ui.ToolPalette               | diagram.tool.Tool                |                         |                    |
| DPF  |                                  |                         |                    |
| ID Context                                 | State / Strategy                 |                         |                    |
| 1 diagram.DiagramUI                        | diagram.FigureRenderer           |                         |                    |
| 2 diagram.DiagramUI                        | diagram.SelectionModel           |                         |                    |
| 3 diagram.DiagramUI                        | diagram.DiagramModel             |                         |                    |
| 4 diagram.DiagramUI\$Layer                 | diagram.FigureRenderer           |                         |                    |
| 5 diagram.DiagramUI\$Layer                 | diagram.SelectionModel           |                         |                    |
| 6 diagram.DiagramUI\$PropertyChangeHandler | diagram.DiagramModel             |                         |                    |
| 7 diagram.DiagramUI\$PropertyChangeHandler | diagram.SelectionModel           |                         |                    |
| 8 diagram.Figure                           | diagram.DefaultFigureRenderer    |                         |                    |
| 9 diagram.shape.PolyLine2D\$Iterator       | diagram.shape.PolyLine2D         |                         |                    |
| 10 diagram.uml ui.ToolPalette              | diagram.tool.Tool                |                         |                    |
| 11 uml ui.BuildAction\$BuildDialog         | uml builder.CodeBuilder          |                         |                    |
| 12 uml ui.ToolPalette\$ToolButton          | diagram.tool.Tool                |                         |                    |
| SparT                                      |                                  |                         |                    |
| ID Context                                 | State / Strategy                 |                         |                    |
| 1 diagram.DefaultLinkEditor                | diagram.DefaultLabelRenderer     |                         |                    |
| 2 diagram.DefaultLinkRenderer              | diagram.DefaultLabelRenderer     |                         |                    |
| 3 diagram.tool.EditingTool                 | diagram.FigureEditor             |                         |                    |
| 4 diagram.ValueIterator                    | diagram.DiagramModel             |                         |                    |
| 5 uml ui.ToolPalette                       | diagram.tool.Tool                |                         |                    |
| 6 uml ui.ToolPalette\$ToolButton           | diagram.tool.Tool                |                         |                    |
| Visitor                                    |                                  |                         |                    |
| RaM  |                                  |                         |                    |
| DPF  |                                  |                         |                    |
| SparT                                      |                                  |                         |                    |
| PMO 1.8                                    |                                  |                         |                    |
| Factory Method                             |                                  |                         |                    |
| DPF  |                                  |                         |                    |
| ID Creator                                 |                                  |                         |                    |

|                         |  |  |  |   |
|-------------------------|--|--|--|---|
| 1                       | net.sourceforge.pmd.cpd.Language   |  |  |   |
| 2                       | net.sourceforge.pmd.cpd.Language   |  |  |   |
| 3                       | net.sourceforge.pmd.cpd.Language   |  |  |   |
| 4                       | net.sourceforge.pmd.symboltable.AbstractScopeEvaluator                           |  |  |   |
| 5                       | net.sourceforge.pmd.symboltable.AbstractScopeEvaluator                           |  |  |   |
| 6                       | net.sourceforge.pmd.symboltable.AbstractScopeEvaluator                           |  |  |   |
| 7                       | net.sourceforge.pmd.symboltable.AbstractScopeEvaluator                           |  |  |   |
| 8                       | net.sourceforge.pmd.TargetJDKVersion   |  |  |   |
| SparT                   |  |  |  |   |
| ID                      | Creator  | ConcreteCreator  |  |   |
| 1                       | net.sourceforge.pmd.cpd.Language   | net.sourceforge.pmd.cpd.CPPLanguage                        |  |   |
| 2                       | net.sourceforge.pmd.cpd.Language   | net.sourceforge.pmd.cpd.JaVaLanguage                       |  |   |
| 3                       | net.sourceforge.pmd.cpd.Language   | net.sourceforge.pmd.cpd.PHPLanguage                        |  |   |
| 4                       | net.sourceforge.pmd.symboltable.AbstractScopeEvaluator                           | net.sourceforge.pmd.symboltable.ClassScopeEvaluator        |  |   |
| 5                       | net.sourceforge.pmd.symboltable.AbstractScopeEvaluator                           | net.sourceforge.pmd.symboltable.GlobalScopeEvaluator       |  |   |
| 6                       | net.sourceforge.pmd.symboltable.AbstractScopeEvaluator                           | net.sourceforge.pmd.symboltable.LocalScopeEvaluator        |  |   |
| 7                       | net.sourceforge.pmd.symboltable.AbstractScopeEvaluator                           | net.sourceforge.pmd.symboltable.MethodScopeEvaluator       |  |   |
| Abstract Factory        |  |  |  |   |
| DPF                     |  |  |  |   |
| SparT                   |  |  |  |   |
| Builder                 |  |  |  |   |
| DPF                     |  |  |  |   |
| ID                      | Director   | Builder  |  |   |
| 1                       | net.sourceforge.pmd.ant.Formatter  | rs.CVSRenderer   |  |   |
| 2                       | net.sourceforge.pmd.CommandLineOptions   | net.sourceforge.pmd.renderers.Renderer                     |  |   |
| SparT                   |  |  |  |   |
| Prototype               |  |  |  |   |
| DPF                     |  |  |  |   |
| SparT                   |  |  |  |   |
| Singleton               |  |  |  |   |
| DPF                     |  |  |  |   |
| ID                      | Singleton  |  |  |   |
| 1                       | net.sourceforge.pmd.cpd.TokenEntry   |  |  |   |
| 2                       | net.sourceforge.pmd.cpd.ccpast.Token   |  |  |   |
| 3                       | net.sourceforge.pmd.ast.Token  |  |  |   |
| 4                       | net.sourceforge.pmd.rules.ConstructorCallsOverridableMethodRule.MethodInvocation |  |  |   |
| 5                       | net.sourceforge.pmd.cpd.TokenEntry   |  |  |   |
| SparT                   |  |  |  |   |
| ID                      | Singleton  |  |  |   |
| 1                       | net.sourceforge.pmd.cpd.TokenEntry   |  |  |   |
| Adapter                 |  |  |  |   |
| DPF                     |  |  |  |   |
| ID                      | Adapter  | Adaptee  |  |   |
| 1                       | net.sourceforge.pmd.symboltable.ImageFinderFunction                              | net.sourceforge.pmd.symboltable.NameDeclaration            |  |   |
| 2                       | net.sourceforge.pmd.util.viewer.gui.ASTPanel                                     | net.sourceforge.pmd.util.viewer.model.ViewerModel          |  |   |
| 3                       | net.sourceforge.pmd.util.viewer.gui.EvaluationResultsPanel                       | net.sourceforge.pmd.util.viewer.model.ViewerModel          |  |   |
| 4                       | net.sourceforge.pmd.util.viewer.gui.MainFrame                                    | net.sourceforge.pmd.util.viewer.model.ViewerModel          |  |   |
| SparT                   |  |  |  |   |
| ID                      | Adapter  | Adaptee  |  |   |
| 1                       | net.sourceforge.pmd.util.viewer.gui.ASTPanel                                     | net.sourceforge.pmd.util.viewer.model.ViewerModel          |  |   |
| 2                       | net.sourceforge.pmd.util.viewer.gui.EvaluationResultsPanel                       | net.sourceforge.pmd.util.viewer.model.ViewerModel          |  |   |
| 3                       | net.sourceforge.pmd.util.viewer.gui.MainFrame                                    | net.sourceforge.pmd.util.viewer.model.ViewerModel          |  |   |
| Bridge                  |  |  |  |   |
| DPF                     |  |  |  |   |
| SparT                   |  |  |  |   |
| Composite               |  |  |  |   |
| DPF                     |  |  |  |   |
| ID                      | Component  | Composite  | Client   | Leaf  |
| 1                       | net.sourceforge.pmd.ast.CharStream   | net.sourceforge.pmd.TargetJDK1_4                           | net.sourceforge.pmd.ast.JavaParser                         | net.sourceforge.pmd.ast.SimpleStream        |
| 2                       | net.sourceforge.pmd.ast.CharStream   | net.sourceforge.pmd.ast.JavaCharStream                     | net.sourceforge.pmd.ast.JavaParser.TokenManager            | net.sourceforge.pmd.ast.SimpleStream        |
| 3                       | net.sourceforge.pmd.ast.Node   | net.sourceforge.pmd.ast.ASTVariableDeclaratorID            |  | net.sourceforge.pmd.ast.SimpleStream        |
| SparT                   |  |  |  |   |
| ID                      | Component  | Composite  |  |   |
| 1                       | net.sourceforge.pmd.cpd.ccpast.Scope   | net.sourceforge.pmd.cpd.ccpast.ClassScope                  |  |   |
| Decorator               |  |  |  |   |
| DPF                     |  |  |  |   |
| ID                      | Component  | Decorator  |  |   |
| 1                       | net.sourceforge.pmd.symboltable.Scope  | net.sourceforge.pmd.symboltable.AbstractScope              |  |   |
| SparT                   |  |  |  |   |
| ID                      | Component  | Decorator  |  |   |
| 1                       | net.sourceforge.pmd.symboltable.Scope  | net.sourceforge.pmd.symboltable.AbstractScope              |  |   |
| Facade                  |  |  |  |   |
| DPF                     |  |  |  |   |
| SparT                   |  |  |  |   |
| Flyweight               |  |  |  |   |
| DPF                     |  |  |  |   |
| SparT                   |  |  |  |   |
| Proxy                   |  |  |  |   |
| DPF                     |  |  |  |   |
| ID                      | Proxy  | RealSubject  | Subject  |   |
| 1                       | net.sourceforge.pmd.ast.JavaParser   | net.sourceforge.pmd.ast.JavaParser.TokenManager            | net.sourceforge.pmd.ast.JavaParser.Constants               |   |
| SparT                   |  |  |  |   |
| ID                      | Proxy  | RealSubject  | Subject  |   |
| 1                       | net.sourceforge.pmd.ast.JavaParser   | net.sourceforge.pmd.ast.JavaParser.TokenManager            | net.sourceforge.pmd.ast.JavaParser.Constants               |   |
| 2                       | net.sourceforge.pmd.cpd.ccpast.CPPParser   | net.sourceforge.pmd.cpd.ccpast.CPPParser.TokenManager      | net.sourceforge.pmd.cpd.ccpast.CPPParser.Constants         |   |
| Interpreter             |  |  |  |   |
| DPF                     |  |  |  |   |
| SparT                   |  |  |  |   |
| Template Method         |  |  |  |   |
| DPF                     |  |  |  |   |
| ID                      | AbstractClass  |  |  |   |
| 1                       | net.sourceforge.pmd.jaxen.NodeIterator   |  |  |   |
| 2                       | net.sourceforge.pmd.symboltable.AbstractScope                                    |  |  |   |
| SparT                   |  |  |  |   |
| ID                      | AbstractClass  |  |  |   |
| 1                       | net.sourceforge.pmd.jaxen.NodeIterator   |  |  |   |
| 2                       | net.sourceforge.pmd.symboltable.AbstractScope                                    |  |  |   |
| Chain of Responsibility |  |  |  |   |
| DPF                     |  |  |  |   |
| SparT                   |  |  |  |   |
| Command                 |  |  |  |   |
| DPF                     |  |  |  |   |
| ID                      | Invoker  | Receiver   | Command  |   |
| 1                       | net.sourceforge.pmd.util.viewer.gui.MainFrame                                    | net.sourceforge.pmd.util.viewer.model.ViewerModel          | net.sourceforge.pmd.util.viewer.gui.MainFrame              |   |
| 2                       | net.sourceforge.pmd.util.viewer.gui.ASTPanel                                     | net.sourceforge.pmd.util.viewer.model.ViewerModel          | net.sourceforge.pmd.util.viewer.gui.ASTPanel               |   |
| 3                       | net.sourceforge.pmd.util.viewer.gui.EvaluationResultsPanel                       | net.sourceforge.pmd.util.viewer.model.ViewerModel          | net.sourceforge.pmd.util.viewer.gui.EvaluationResultsPanel |   |
| 4                       | net.sourceforge.pmd.symboltable.ImageFinderFunction                              | net.sourceforge.pmd.symboltable.NameDeclaration            | net.sourceforge.pmd.symboltable.ImageFinderFunction        |   |
| SparT                   |  |  |  |   |
| Iterator                |  |  |  |   |
| DPF                     |  |  |  |   |
| ID                      | Iterator   | ConcreteIterator   | Aggregate  | ConcreteAggregate                           |
| 1                       | java.util.Iterator   | net.sourceforge.pmd.jaxen.NodeIterator                     | org.jaxen.DefaultNavigator                                 | net.sourceforge.pmd.jaxen.DocumentNavigator |
| SparT                   |  |  |  |   |
| ID                      | Iterator   | ConcreteIterator   |  |   |
| 1                       | java.util.Iterator   | net.sourceforge.pmd.jaxen.AttributeAxisIterator            |  |   |
| 2                       | java.util.Iterator   | net.sourceforge.pmd.jaxen.NodeIterator                     |  |   |
| Mediator                |  |  |  |   |
| DPF                     |  |  |  |   |
| SparT                   |  |  |  |   |
| Memento                 |  |  |  |   |
| DPF                     |  |  |  |   |
| SparT                   |  |  |  |   |
| Observer                |  |  |  |   |
| DPF                     |  |  |  |   |
| ID                      | Subject  | Observer   |  |   |
| 1                       | net.sourceforge.pmd.util.viewer.model.ViewerModel                                | net.sourceforge.pmd.util.viewer.model.ViewerModel.Listener |  |   |

|                  |   |   |  |
|------------------|---|---|--|
| SparT            |   |   |  |
| ID               | Subject   | Observer  |  |
| 1                | net.sourceforge.pmd.Report  | net.sourceforge.pmd.ReportListener                        |  |
| 2                | net.sourceforge.pmd.RuleSet   | net.sourceforge.pmd.Rule                                  |  |
| 3                | net.sourceforge.pmd.util.viewer.model.ViewerModel                                 | net.sourceforge.pmd.util.viewer.model.ViewerModelListener |  |
| State / Strategy |   |   |  |
| DPF              |   |   |  |
| ID               | Context   | State / Strategy  |  |
| 1                | net.sourceforge.pmd.ast.JavaParserTokenManager                                    | net.sourceforge.pmd.ast.CharStream                        |  |
| 2                | net.sourceforge.pmd.ast.SimpleNode  | net.sourceforge.pmd.ast.Node                              |  |
| 3                | net.sourceforge.pmd.ast.SimpleNode  | net.sourceforge.pmd.ast.JavaParserVisitor                 |  |
| 4                | net.sourceforge.pmd.cpd.CPD   | net.sourceforge.pmd.cpd.CPDListener                       |  |
| 5                | net.sourceforge.pmd.cpd.CPD   | net.sourceforge.pmd.cpd.Tokenizer                         |  |
| 6                | net.sourceforge.pmd.cpd.CPD   | net.sourceforge.pmd.cpd.Language                          |  |
| 7                | net.sourceforge.pmd.cpd.MatchAlgorithm  | net.sourceforge.pmd.cpd.CPDListener                       |  |
| 8                | net.sourceforge.pmd.jaxen.NodeIterator  | net.sourceforge.pmd.ast.Node                              |  |
| 9                | net.sourceforge.pmd.PMD   | net.sourceforge.pmd.TargetDKVersion                       |  |
| 10               | net.sourceforge.pmd.rules.ConstructorCallsOverridableMethodRule\$MethodInvocation | net.sourceforge.pmd.ast.Node                              |  |
| 11               | net.sourceforge.pmd.symboltable.BasicScopeCreationVisitor                         | net.sourceforge.pmd.symboltable.ScopeFactory              |  |
| 12               | net.sourceforge.pmd.symboltable.ImageFinderFunction                               | net.sourceforge.pmd.symboltable.NameDeclaration           |  |
| 13               | net.sourceforge.pmd.symboltable.NameOccurrence                                    | net.sourceforge.pmd.ast.Node                              |  |
| 14               | net.sourceforge.pmd.symboltable.Search  | net.sourceforge.pmd.symboltable.Scope                     |  |
| 15               | net.sourceforge.pmd.util.viewer.gui.menu.SimpleNodeSubMenu                        | net.sourceforge.pmd.ast.Node                              |  |
| 16               | test.net.sourceforge.pmd.rules.AvoidDeeplyNestedIfStmtsRuleTest                   | net.sourceforge.pmd.Rule                                  |  |
| 17               | test.net.sourceforge.pmd.rules.BeanMembersShouldSerializeRuleTest                 | net.sourceforge.pmd.Rule                                  |  |
| 18               | test.net.sourceforge.pmd.rules.CouplingBetweenObjectsRuleTest                     | net.sourceforge.pmd.Rule                                  |  |
| 19               | test.net.sourceforge.pmd.rules.ExcessiveImportsRuleTest                           | net.sourceforge.pmd.Rule                                  |  |
| 20               | test.net.sourceforge.pmd.rules.ShortVariableRuleTest                              | net.sourceforge.pmd.Rule                                  |  |
| 21               | test.net.sourceforge.pmd.stat.StatisticalRuleTest                                 | net.sourceforge.pmd.Rule                                  |  |
| SparT            |   |   |  |
| ID               | Context   | State / Strategy  |  |
| 1                | net.sourceforge.pmd.ast.JavaParserTokenManager                                    | net.sourceforge.pmd.ast.CharStream                        |  |
| 2                | net.sourceforge.pmd.PMD   | net.sourceforge.pmd.TargetDKVersion                       |  |
| 3                | net.sourceforge.pmd.RuleViolation   | net.sourceforge.pmd.Rule                                  |  |
| 4                | net.sourceforge.pmd.symboltable.AbstractNameDeclaration                           | net.sourceforge.pmd.ast.SimpleNode                        |  |
| 5                | net.sourceforge.pmd.symboltable.BasicScopeCreationVisitor                         | net.sourceforge.pmd.symboltable.ScopeFactory              |  |
| 6                | net.sourceforge.pmd.symboltable.NameOccurrence                                    | net.sourceforge.pmd.ast.SimpleNode                        |  |
| 7                | net.sourceforge.pmd.util.viewer.gui.menu.AttributesSubMenu                        | net.sourceforge.pmd.ast.SimpleNode                        |  |
| 8                | net.sourceforge.pmd.util.viewer.gui.menu.SimpleNodeSubMenu                        | net.sourceforge.pmd.ast.SimpleNode                        |  |
| 9                | net.sourceforge.pmd.util.viewer.model.SimpleNodeTreeNodeAdapter                   | net.sourceforge.pmd.ast.SimpleNode                        |  |
| 10               | test.net.sourceforge.pmd.rules.AvoidDeeplyNestedIfStmtsRuleTest                   | net.sourceforge.pmd.Rule                                  |  |
| 11               | test.net.sourceforge.pmd.rules.BeanMembersShouldSerializeRuleTest                 | net.sourceforge.pmd.Rule                                  |  |
| 12               | test.net.sourceforge.pmd.rules.CouplingBetweenObjectsRuleTest                     | net.sourceforge.pmd.Rule                                  |  |
| 13               | test.net.sourceforge.pmd.rules.ExcessiveImportsRuleTest                           | net.sourceforge.pmd.Rule                                  |  |
| 14               | test.net.sourceforge.pmd.rules.ShortVariableRuleTest                              | net.sourceforge.pmd.Rule                                  |  |
| Visitor          |   |   |  |
| DPF              |   |   |  |
| ID               | Visitor   | Element   |  |
| 1                | net.sourceforge.pmd.ast.JavaParserVisitor   | net.sourceforge.pmd.ast.Node                              |  |
| SparT            |   |   |  |
| ID               | Visitor   | Element   |  |
| 1                | net.sourceforge.pmd.ast.JavaParserVisitor   | net.sourceforge.pmd.ast.Node                              |  |