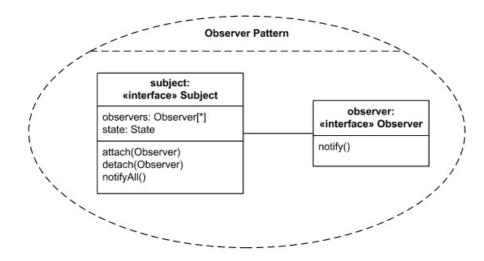
## **Observer Design Pattern**

## UML Composite Structure Diagram Example

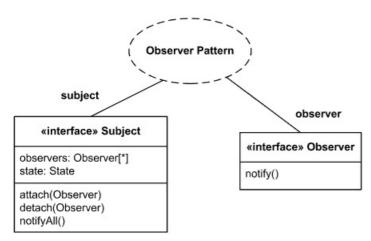
**Observer** pattern is a behavioral software **design pattern** in which a subject maintains a list of subscribers called observers and notifies them of any state changes usually by calling one of their methods. Once state change notification is received observer can request current state of the subject.

An example of **collaboration** for Observer design pattern is shown below. Two roles of the collaboration - **subject** and **observer** - will be played by instances of classifiers typed by Subject and Observer interfaces. These interfaces can be viewed as a projection of the externally observable **features** of classifiers playing the roles.



Collaboration example - Observer design pattern

The same collaboration could be shown using alternative notation for properties. Collaboration icon is connected to each of the rectangles denoting interfaces that are types of properties of the collaboration. Each line is labeled by the name of the property (role).



Composite structure example - Observer design pattern

Noticed a spelling error? Select the text using the mouse and press Ctrl + Enter.













by Kirill Fakhroutdinov

This document describes UML versions up to *UML* 2.5 and is based on the corresponding **OMG**<sup>™</sup> **Unified Modeling Language**<sup>™</sup> **(OMG UML®)** specifications. UML diagrams were created in **Microsoft® Visio®** 2007-2016 using *UML* 2.x Visio Stencils. Lucidchart is a nice, free UML tool that I recommend for students.

You can send your comments and suggestions to webmaster at webmaster@uml-diagrams.org.

