## **Getting Started**

- Basic concepts
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## Basic concepts

Kiuwan Architecture is based on some basic concepts you should understand.

As formerly said, Kiuwan Architecture automatically builds a map of a software system. That map is known as a Model.

The Model is automatically built upon reading source code provided to Kiuwan and will be associated to an Application.



A Model is a directed-graph composed of Components and Relations among them.

Similarly to code analyses, an application may have many models depending on how many times that application has been analyzed. Once you have selected an application, you can select the model based on the date (and label) you ran the analysis. Obviously, every model will be different because every analysis was run against different source code.



A Component is any entity found during inspection of source code.

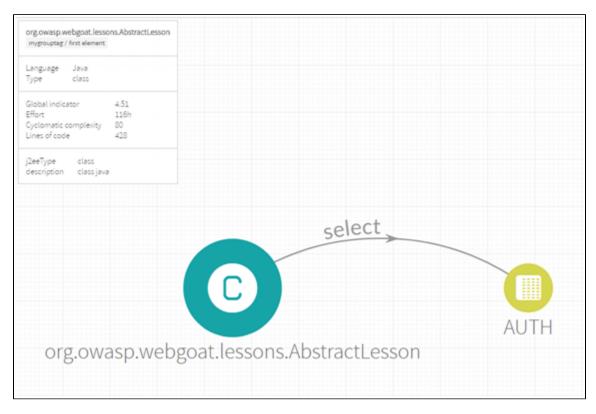
A component can be any software entity such as a class, a configuration file, a database, a table, a web service, etc.etc. Every component has a *name* (that uniquely identifies it), a *type*, an associated programming *language*, a physical *file*, as well as associated *properties*. Also, a component can be "*Analyzed*", i.e. found during analysis process because it's associated to an artifact (typically, a file), or "*Inferred*" (it was discovered because some other component refers to it but it was not found an artifact for it).



A Relation is any association between two components.

Depending on the nature of the components, the relation can be of different *type* (calls, contains, includes, inherits, insert, etc.). Also, a relation has a *direction*.

As an example, the next image shows two components (a java class and a database table) where the relation is "select" (the java class is accessing the table through a "select" statement). You can also see the properties associated to the java class.



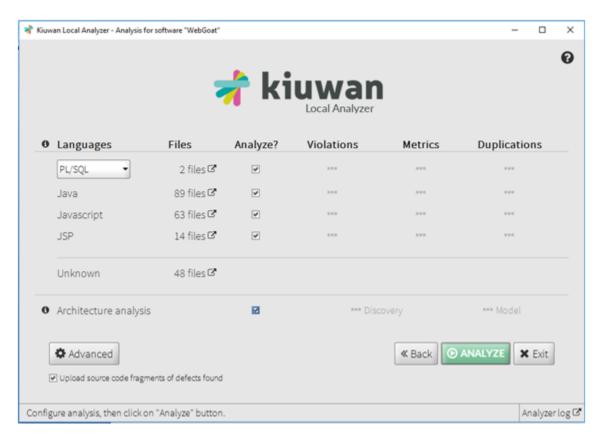
Components and Relations are building blocks of Kiuwan Architecture and they will be thoroughly used during this documentation.

## How to build a Model



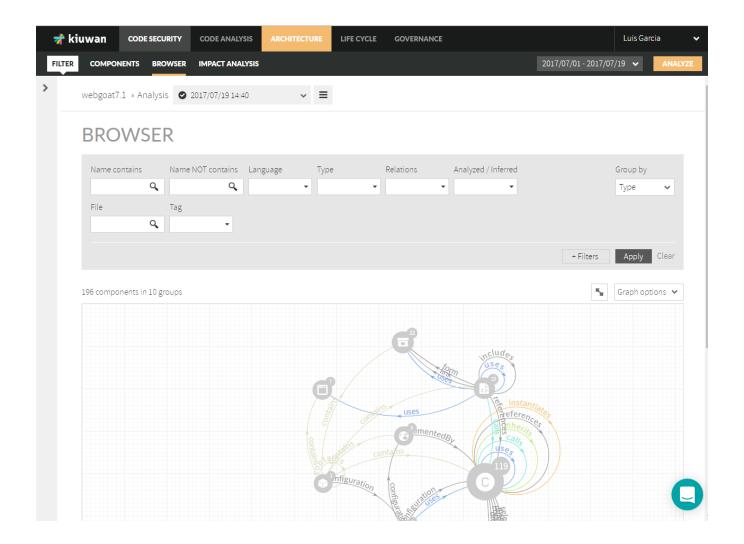
A Model is **automatically built** during the analysis of the source code of an application.

To build a model you must use Kiuwan Local Analyzer Deprecated.



The model will be built when "Architecture analysis" is checked.

After the analysis is finished you will be able to access the model in Kiuwan Dashboard by selecting the right application and analysis and accessing the **Ar chitecture** Section.



Now you are ready to fully work with your model by using Components, Browser, and Impact Analysis.