

Converting classes to tables

Process

The conversion process of class diagrams is the following:

- always start with a class which is being converted (interfaces can't be converted)
- evaluate all the base classes
- evaluate all the interfaces used in the class and base classes get in previous step
- merge attributes (the tables are concerned only about the data)
- determine the key
- generate data types and flags
- check if key does not contain an optional attribute (this causes a failure)
- generate the output - table structure

Conditions

There are few conditions which tells if an attribute can or can not be converted into SQL:

- not static
- must be public
- must have read-write mode
- type can't be IREF (interface reference)

Allowed types

- int, range, float
- string
- bool
- cref
- optional, struct, type

Transformations

TYPE

Is generically replaced with the resolved type

CREF

A reference to a class is transformed to the key of the class

OPTIONAL

Sets the optional flag to true, and calls the evaluation to its descendant

STRUCT

Push the current item name onto the prefix stack, and call evaluation to elements

Implementation

The method which will collect the data from a class can be defined as:

```
function collect_type_info( $current_node
                          , $is_optional = false
                          , $prefix     = array()
                          ) // bool
```