Taming Abstraction

Richard Smedley (Principal Technical Writer, Couchbase)

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RICHARD SMEDLEY

Programmer, Web Developer, and Writer in **England, United Kingdom**



R Hire me

80s: Musician / vegan campaigner.

90s: Organic Horticulturist.

00s: Techie / Systems Admin.

10s: portfolio career / Social Entrepreneur & Developer.

Social Entrepreneur (recycling, tech education, community currencies)., Permaculture Designer working with community #localfood initiatives, Public Speaker, & Technical Writer.









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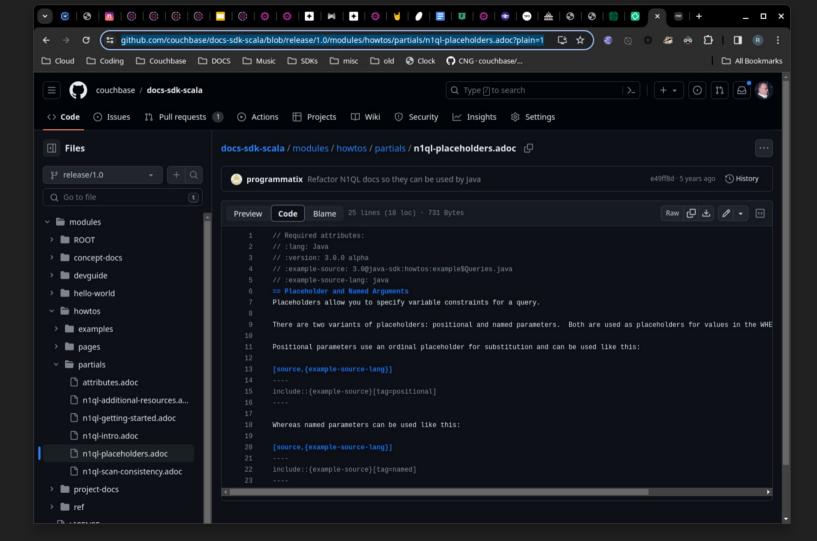
In Donald Knuth's paper *Structured Programming With go to Statements*, he wrote:

"Programmers waste enormous amounts of time thinking about, or worrying about, the speed of noncritical parts of their programs, and these attempts at efficiency actually have a strong negative impact when debugging and maintenance are considered. We should forget about small efficiencies, say about 97% of the time: premature optimization is the root of all evil. Yet we should not pass up our opportunities in that critical 3%."

d.r.y.

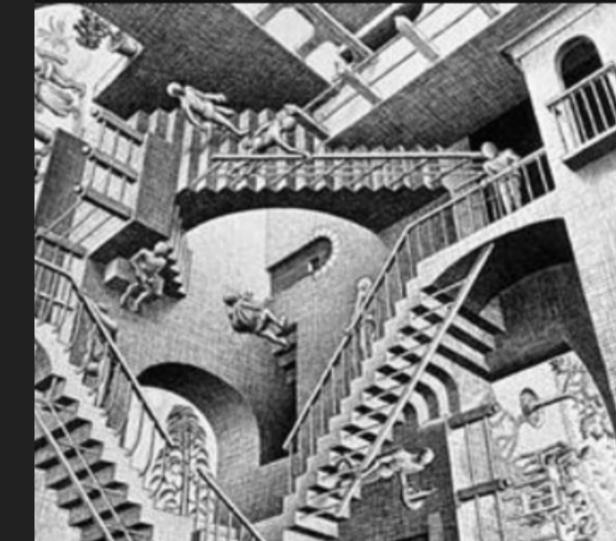
optimize for the general case.

At the first hint of shared content,



```
2
       // :lang: Java
       // :version: 3.0.0 alpha
 3
       // :example-source: 3.0@java-sdk:howtos:example$Queries.java
 4
       // :example-source-lang: java
 5
       == Placeholder and Named Arguments
 6
       Placeholders allow you to specify variable constraints for a
 8
 9
       There are two variants of placeholders: positional and named
10
       Positional parameters use an ordinal placeholder for substitu
11
12
       [source, {example-source-lang}]
13
14
       include::{example-source}[tag=positional]
15
16
17
```

Let's descend a few more layers into madness....



```
docs-couchbase-lite / modules / java / pages
II.
       replication.adoc
                                      in release/3.1
 Edit
         Preview
       = Data Sync using Sync Gateway
       :page-aliases: learn/java-replication.adoc
       ifdef::show_edition[:page-edition: {release}]
       ifdef::prerelease[:page-status: {prerelease}]
       :page-role:
       :description: Couchbase Lite for Java -- Synchronizing data changes between local and remot
       include::partial$_set_page_context_for_java.adoc[]
       :url-repl-cfg: {url-api-references}/index.html?com/couchbase/lite/ReplicatorConfiguration.h
       // END::Local page attributes
11
12
       include::{root-commons}sgw-replication.adoc[subs="macros,attributes"]
13
14
```

```
19 lines (15 loc) · 470 Bytes
                                            Preview
                                                       Code
                                                               Blame
 csharp
                                                     ifdef::is_diag[_set_page_context_for_java]
 iava
  assets
                                                      :param-module: java
                                            ... 4
                                                     :param-name: java
  examples
                                                     :param-title: Java
pages
                                                     :param-platform: jvm
                                                     :source-language: Java
   partials
                                                      :param_is_root!:
    define_module_attributes...
                                                     include::ROOT:partial$_set_page_context.adoc[]
       _set_page_context_for_jav...
                                                     // BEGIN::module page attributes
    api-changes.adoc
                                                     :module: {param-module}
       block_callouts.adoc
                                                      :packageNm: couchbase-lite-{param-module}
                                                     :snippet: {snippets-content--java}
       database-finding-file.adoc
                                                     // :snippet-p2psync-ws: {snippets-p2psync-ws--java}
    n-issues-list.adoc
                                              17
                                                     :url-download-package: {url-download-java}
      blob.adoc
                                                     // END::Local page attributes
   compatibility.adoc
      conflict.adoc
```

:param-module: java

...in line 3....

...And in line 13:

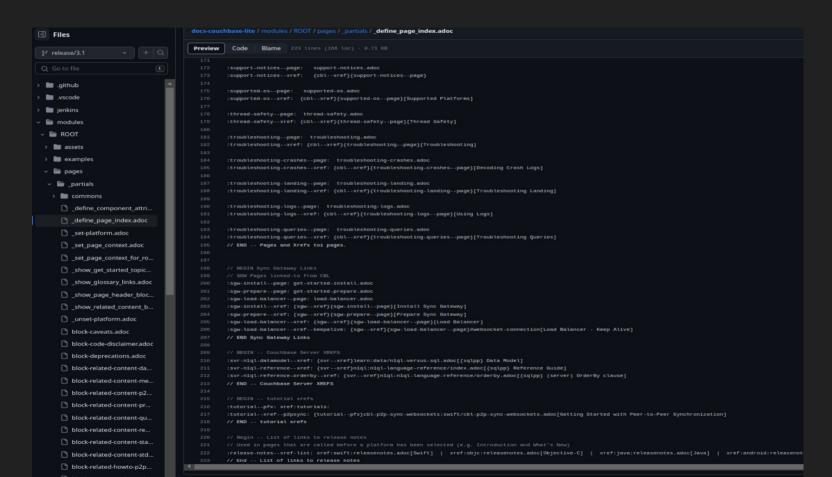
:module: {param-module}

```
ి release<u>/3.1</u>
                                                    ifdef::is diag[ set page context.adoc]
                                                    // BEGIN -- inclusion -- set page context.adoc -- Standard page initialization
 Go to file
                                                    // REQUIRES:
                                                    // :param-module: {param-module}
aithub.
                                                    // :param-name: {param-name}
                                                    // :param-title: {param-title}
.vscode
                                                    // INVOKED-BY:
ienkins 🖿
                                                    // each of the <module>:partial$ set page context for <module>.adoc files
modules
                                                    ifndef::param-name[:param-name: all]
ROOT
                                                    include::ROOT:partial$_define_component_attributes.adoc[]
  assets
                                                    ifndef::param_is_root[]
  examples
                                                    ifdef::is_diag[_define_module_attributes.adoc({param-module})]
     pages
                                                    include::{param-module}:partial$ define module attributes.adoc[]
                                                    endif::param_is_root[]
partials
                                                    include::ROOT:partial define page index.adoc[]
    commons
    define_component_attrib...
                                                    include::ROOT:partial$ show glossary links.adoc[]
    define_page_index.adoc
                                                    // sets a flag to indicate what platform is on
    set-platform.adoc
                                                    include::{root-partials}_set-platform.adoc[]
    set_page_context.adoc
                                                    // Set common code snippet header
                                                    ifndef::param_is_root[:code-snippet: source, {source-language}, subs="{gen-subs}"]
    set_page_context_for_roo...
```

```
ifdef::is_diag[_define_page_index.adoc]
11
// Defines common attributes that contain page-names and xrefs to those pages and, in some case
within the page
// By 'including' this page and using the defined attribute names in any links, you can ensure
legitimacy of those links.
//ifndef::xref-pfx-cbl[]
// Begin -- Construct essential attributes if the calling page/environment does not already cor
ifndef::param-name[:param-name: param-name undefined]
ifndef::param-module[:param-module: param-module undefined]
ifndef::param-title[:param-title: param-title undefined]
ifndef::snippet[:snippet: snippet undefined]
ifndef::ke[:ke: ke undefined]
ifndef::fixed[:fixed: fixed undefined]
ifndef::enh[:enh: enh undefined]
ifndef::nftr[:nftr: nftr undefined]
ifndef::version[:version: version undefined]
// End -- Construct essential attributes if the calling page/environment does not already conta
// BEGIN -- component roots
:cbl-root: xref:
// :cbl-root: xref:couchbase-lite::
:cbl--xref: xref:{param-module}:
:sqw--xref: xref:sync-gateway::
```

:svr--xref: xref:server:
// END -- component roots

223 lines later...





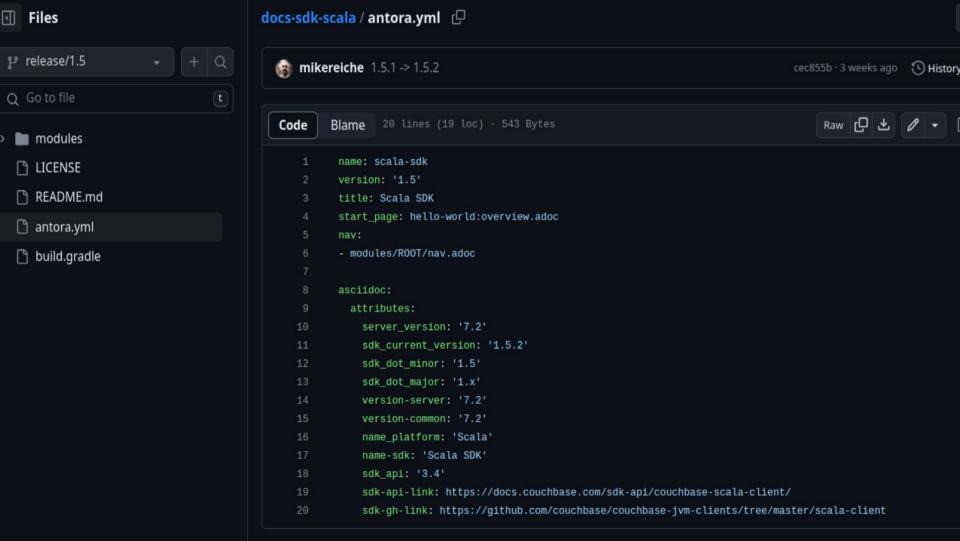
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Version attributes only

:version-server: 6.5







Now the *Key* Question...

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What would you do?