A Useful Architecture Description Language

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# Requirements

1. The description language should be abstract and dissimilar to literal code

2. The user is not learning a new programming language

3. The system shall be used to model architecture before modeling design

4. The system shall not be heavily formal

5. The system shall be visual with visual architectural components

6. The system be used to define a framework and its application

7. The system shall bridge between framework and design

8. The system’s code structure shall mirror the architecture

9.The system shall be able to describe any framework using its components

10. The system shall support nested components

**Purpose:**

**Keywords;**

Synchronized – Synchronoss & Asynchronous

Model – Yellow Double Lined Rectangle

View – Rounded Blue Rectangle

Controller – Yellow Diamond

Filter – Show things/Hide Things Blue Box with vertical line inside

Service - Box with Yellow Dotted Line Border

MicroService – Box with Red Dottedd Line Border

Process – Box with Grey Dotted Line Border

Thread – Box with Blue Dotted Line Border

Executable – Orange Box with Double Line Border

Web Services – Box with Red Dotted Line Border

Application – Black Box with with Double Line Bor

Container – Yellow Box

Component – Blue Box

Module – Green Box (highest level piece of architecture)  
Factory – Green Cylinder

File System – Yellow Cylinder

Persistance – Grey Cylinder

Static Asssets – Blue Cylinder

Ports – Dotted Arrows

Bus – Long Horizontal Double Solid Lines

Server – Green Diamond

Client – Blue Diamond

Monolithic Code – Red Parellelogram

API – Black Upside Down Triangle

Authentication – Black Box with White Text

Library – Orange Upside Down Triangle

Query – Red Diamond

Public Accessors – Green line arrow

Package Accessor - Yellow Line arrow

Private Accessor - Red Line Arrow

Cloud – Picture of a Cloud

Generic Specialization (unique to architecture) – Universal White Box

Protocol – Yellow Dotted Arrows

Proxy – Blue Dotted Double Ended Arrows

Black Arrow – This uses this

Black Double Arrow – These use each other

Black Dotted Line – This is this

Black Hollow Diamond – This contains this

Black Solid Diamond -This is an aggregate of this

Black Multiple (arrow back) – There are multiples of this

Dashed Black Arrow – This sends data to this

Double Lined Arrow - Poll System

**Enforce These:**

Loosely coupled

Moderately coupled

Information Hiding

Separation of Concerns

Cohesion

Versioning

Data should only flow in one direction

THE MORE COMPLEXITY THE WORSE

HIGH VISIBILITY – BAD  
HIGH ENCAPSULATION - GOOD

THE ARCHITECTURE SHOUJLD LEAD TO LOW VIS AND HIGH ENCAPS

HIGH RESILIENCY

CONSTRAINTS

What am I allowed to do?

What can I do?

Connectors:

**Put things on that are more meaningful than lines and boxes**