

Module Qualities

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Abstract

This module addresses the Qualities.

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logo

TBD

Qualities as Integrating Needles

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Abstract

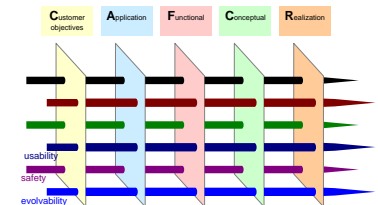
Many stakeholder concerns can be specified in terms of qualities. These qualities can be viewed from all 5 “CAFCR” viewpoints. In this way qualities can be used to relate the views to each other.

The meaning of qualities for the different views is described. A checklist of qualities is provided as a means for architecting. All qualities in the checklist are described briefly.

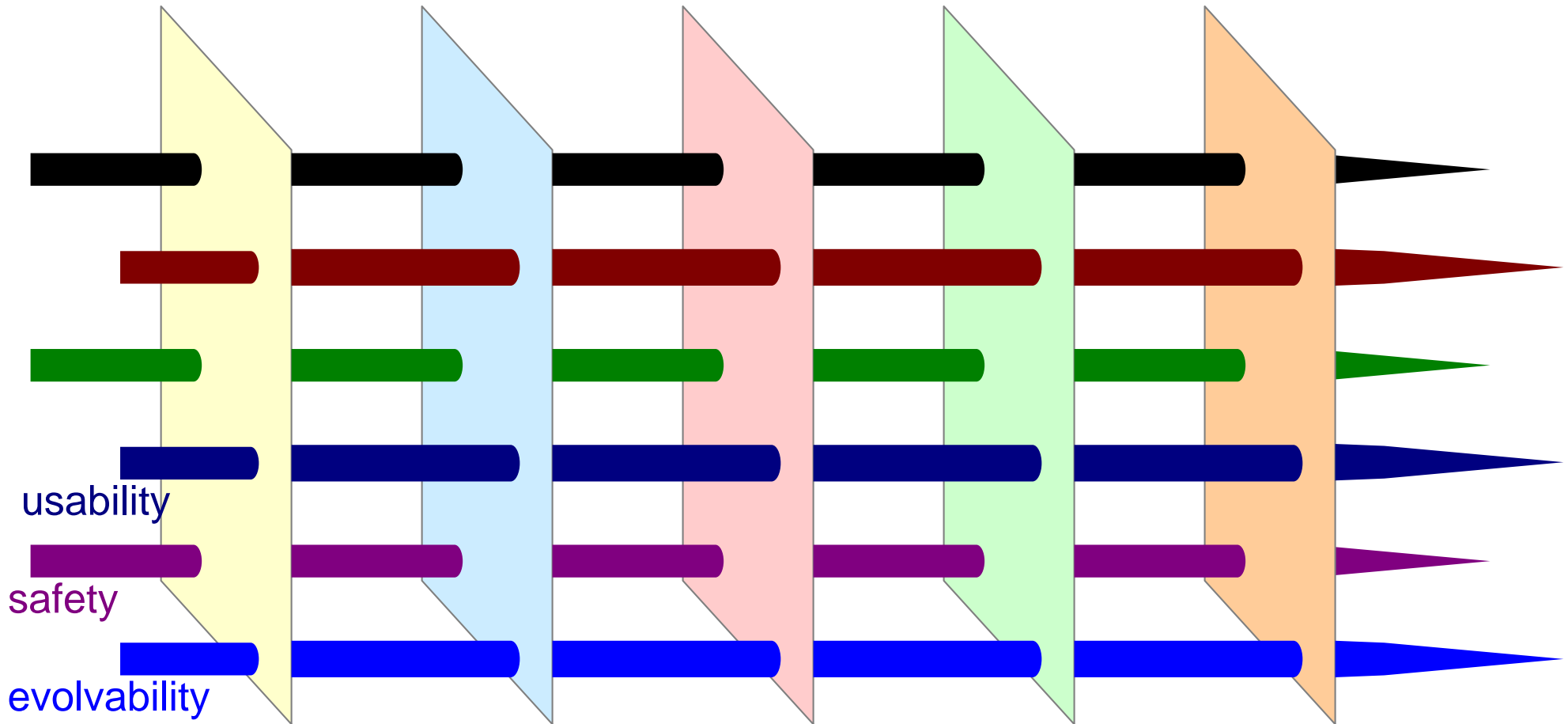
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Quality needles as generic integrating concepts



Security as example through all views

Customer objectives	Application	Functional	Conceptual	Realization
 <p>sensitive information</p> <p>trusted</p>	<p>selection classification people information authentication badges passwords locks / walls guards administrators</p>	<p>functions for administration authentication intrusion detection logging quantification</p>	<p>cryptography firewall security zones authentication registry logging</p>	<p><i>specific</i> algorithms interfaces libraries servers storage protocols</p>
<p><i>desired characteristics, specifications & mechanisms</i></p>				
 <p>not trusted</p>	<p>social contacts open passwords blackmail burglary fraud unworkable procedures</p>	<p>missing functionality wrong quantification</p>	<p>holes between concepts</p>	<p>bugs buffer overflow non encrypted storage poor exception handling</p>
<p><i>threats</i></p>				

Quality Checklist

usable

usability
attractiveness
responsiveness
image quality
wearability
storability
transportability

dependable

safety
security
reliability
robustness
integrity
availability

effective

throughput or
productivity

interoperable

connectivity
3rd party extendible

liable

liability
testability
traceability
standards compliance

efficient

resource utilization
cost of ownership

consistent

reproducibility
predictability

serviceable

serviceability
configurability
installability

future proof

evolvability
portability
upgradeability
extendibility
maintainability

logistics friendly

manufacturability
logistics flexibility
lead time

ecological

ecological footprint
contamination
noise
disposability

down to earth attributes

cost price
power consumption
consumption rate
(water, air,
chemicals,
et cetera)
size, weight
accuracy

Exercise Qualities

- Determine most important qualities.
- Annotate 3 most important qualities in every CAFCR view