Software Design

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SWEBOK
V3.0

Guide to the Software Engineering Body of Knowledge

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http://www.computer.org/web/swebok/v3
Sw Design

* the process of defining
  * the architecture
  * components
  * interfaces
  * other characteristics
* of a system or component

* the result of this process
SD Fundamentals

* general SD concepts
* context of SD
* SD process
* SD principles
Key Issues in SD

- concurrency
- event handling
- data persistence
- distribution of components
- error handling
- fault tolerance
- interaction
- presentation
- security
Structure & Architecture

* architectural viewpoints
* architectural styles
* design patterns
* architecture design decisions
* families of programs & frameworks
UI Design

* general UID principles
* UID issues
* user interaction modalities
* info presentation
* UID process
* localisation / internationalisation
* metaphors & conceptual models
Quality Analysis

- quality attributes
- quality analysis techniques
- quality evaluation techniques
- measures
SD Notations

* structural descriptions
  * static view

* behavioural descriptions
  * dynamic view

* tools
SD Strategies

* general strategies
* functional / structured
* OOD
* data structure centred
* component-based
* ...