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## Design Levels (cf. Humphrey, 1995, p. 317) Design proceeds at multiple levels of abstraction. (cf. Fig 10.3 Design Pyramid) Decisions should be documented at each level where they are made. If not, they will have to be reconstructed at each successively higher level. This reconstruction is an error-prone process. Attempting to work at multiple levels at one time causes difficulty and facilitates errors.

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## Design Specification

- The goal of software design is "to produce <u>concise</u> and <u>precise</u> statements of exactly <u>what</u> the program is to do and <u>how</u> to do it".
- A design specification describes <u>solutions</u> to the problem in both <u>user</u> and <u>technical</u> terms. One or more potential solutions are proposed.
- Designs are specified at multiple levels:
  - High-Level
  - Detailed

Implementation

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Operational scenarios are descriptions of how a user might expect to interact with the system. They describe things users will want to be able to do. They can also describe incorrect ways the system might be used.

cf. Example template on p. 341-343.

cf. Ivar Jacobson's "Use Cases"

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