

Software Design

Design Concept

1).System Design

- a).System Design focusses on what components are required.
- b).It defines the general structure of software major module , the function of module , the interface between module and output format of the system.

2).System Strategies

- a).A system consist of components , we have component of their own. In other word a system is hierarchy of component with the highest level of the component corresponding to the total system.
- b).To such design a hierarchy , there are 2 diff. approaches possible.

Types:-

1).Top-Down Strategies

- a).The top-down strategies starts from the highest level of the component of the hierarchy and proceeds through lower level.
- b).A top-down strategy start of identify the major component of the system , decomposing them their lower-level component.
- c).Top-down design method result in some form of step-wise refinement.³⁵

2).Bottom-up Strategies

- a).Bottom-up approaches start with the lower level of hierarchy and proceeds through progressively higher level of component.
- b).A bottom-up design approaches with the start with the designing the most basic component and proceeds to the higher level component that use these lower level component.
- c).Bottom-up method work big layer's abstraction.

Design Methodologies

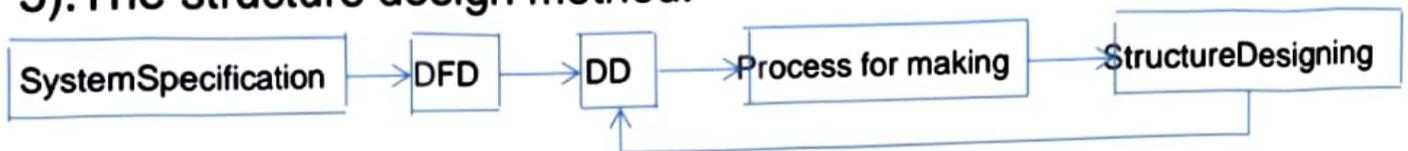
There has been growing move to transform the "Art" of system analysis and design into an "Engineering Type Decision". The feeling that ther have to more clearly define logical method for developing a system that needs user requirement let to new techniques and methodologies that fundamentally attempt to design the system.

Structured Programming

- 1).It is based on tools or methodologies / technique.
- 2).On the basis of DFD (graphical representation) system design identify and describes the functional aspects of the system.
- 3).From DFD , the next stage is defining of the module and their relationship to one another.
- 4).In a form called structure chart using DD or other tools.

36

5).The structure design method.



6).The structure design method partition a program into small independent module.

7).The structure are arranged in a hierarchy of the software(from top to bottom or bottom to top).

