CH # 8

The Design Model:

The design model can be viewed in two different dimensions. The process dimension indicates the evolution of the design model as design tasks are executed as part of the software process. The abstraction dimmension represents the level of detail as each element of the analysis model is transformed. Some of the design elements are:

(1) Data Design Elements:

Like other software engineering activities, data design creates a model of data and/or information that is represented at a high level of abstraction.

The structure of data has always been an important part of software design. At the

Date: __/__/____ Day: M T W T

component level, the design of data structures and the assosiated algorithms required to manipulate them is essential to the creation of high-quality applications.

Architectural Design Elements:-

The architectural model is derived from three sources (1):- information about the application domain for the software to be built. (2):- specific requirements model elements such as data flow diagrams or analysis classes. (3):- the availability of architectural styles and pattern.

(1) Interface Design Elements:-

There are three important elements of interface design : (1) the user interface (UI): (2) external interface to other systems, devices, networks or other ~~prod~~ producers or consumers

Date: / / Day: M T W T F S

of information ; (3) and internal interfaces between various design components.

(·) Component - Level Design Elements:-

The component-level design for software fully describes the internal detail of each software component. To accomplish this, the component-level design defines data structure for all local data objects and algorithmic detail for all processing that occurs within a component.

(·) Deployment - Level Design Elements:-

Deployment-level design elements indicates how software functionality and subsystems will be allocated within the physical computing enviroment that will support the software.