

Chapter # 05

Imp Q # 02

Explain Building Requirements Modeling?

The use of analysis's model is to provide a description of the required informational, functional and behavioural domains for a computer-based system.

The analysis's model and the methods that are used to build it are discussed below

=> Elements of the Requirements Model

There are many different ways to look at the requirements of for a computer-based system.

Some software people argue that it is best to select one mode of representation.

Other developers believes that it's worthwhile to use a number of different modes of representation to depict the requirements model.

Common Elements in Requirements Model

(i) Scenario-Based Elements:

The system is described from the user's point of view using a scenario-based approach.

This ~~often~~ element is often the first part of the model that is developed. As they serve as input for the creation of other modeling elements.

(ii) Class-Based Elements.

Each usage scenario implies a set of objects that are manipulated as an actor interacts with the system. These objects are categorized into classes - a collection of things that have similar attributes and common behaviours.

(iii) Behavioural Elements:

The behaviour of a computer-based system can have a profound effect on the design that is chosen and the implementation approach that is applied. Therefore, the requirements model must provide modelling elements

their depict behaviour

(iv) Flow-Oriented Elements:

Information is transformed as it flows through a computer-based system. The system accepts input in a variety of forms, applies functions to transform it, and produces output in a variety of forms.

Input may be a control signal, a series of numbers typed by an operator, a packet of information transmitted over a network.

The transform(s) may consist of single logical comparison, an algorithm.

The output may light a single LED or produce a 200-page report.

We can create the flow model for any computer based system regardless of size and other complexities.

Analysis Patterns

Anyone who has done requirements engineering on more than a few software projects to notice that certain problems recur all projects within a specific application domain.

Analysis patterns are integrated into the analysis model by reference to the pattern names. They are also stored in a repository so that requirements engineering can use search facilities to find and apply them.