→1←

Define Requirement model Strategies.

ANS:

Requirement modeling in software engineering identifies the requirement that a software application or system must meet in order to solve into the business problem.

There are 2 req Modeling Strategies
1. Flow Based Modeling(It shows how data objects are transformed by processing the function.)
2. Class Based Modeling(Class based modeling represents the object. that are manipulate by the System, operations perform on the objects and collaborations that occurs between objects and classes

→2←

Describe Flow-Oriented Modeling.

ANS:

The flow oriented modeling depicts how data objects are transformed at they move through the system. It has derived from structural analysis, a modeling documentation that represent how input is transfo into output as data objects move through the system.

Flow oriented elements are:-
1. Data flow model
2. Control flow model
3. Control Specification
4. Process Specification

→3←

How to create dataflow model

ANS:

A data flow model is diagramatic representation of the flow and exchange of information within a system.

Data flow model is the graphical representation of flow of data and information

The data objects are represented by labeled arrows. Transformation are represented by circles called as bubbles.

→4←

How to create Control flow model

ANS:

A control flow graph (CFG) is the graphical representation of control flow or computation during the execution of program or applications. Control flow graphs are mostly used in static analysis as well as compiler applications.

(•) list all sensors that are "read" by the software

(•) list all interrupt conditions

(•) list all data conditions

→5←

What are the Control Specification.

ANS:

A control specification represents the behavior of the system in two different ways.

(•) The control specification (CSPEC) contains a state diagram that is sequential specification of behaviour

(•) It can also contain a program activation table — a combinatorial specification of behaviour.

→6←

What are the process specification

ANS:

The process specification is used to describe all flow model process that appear at the final level of refinement. The context of the process specification can include narrative text, mathematical equations, table etc.

→7←

How to create a behavioral model

ANS:

The behavioral model indicates how software will respond to external event or stimuli.

To create the model, you

1.Evaluate all the use cases to completely understand the sequence
2.Identify the event and understand the relation between the specific event.
3.Generate a sequence for each use case.
4.Construct a state diagram for the system.

should perform the following steps.

:STEPS:

(•) Evaluate the all use cases to fully understand the sequence of interaction within the system.

(•) Identify events that drive the interaction sequence and understand how these events relate to specific objects.

(•) Create a sequence for each use case.

(•) Build a state diagram for the system.

(•) Review the behavioral model to verify accuracy and consistency.

→ 8 ←

Describe pattern for Requirement modeling.

ANS:

Requirements modeling comprises several stages, or 'pattern': Scenario - based modeling, class-based modeling, data modeling, Flow-oriented modeling and behavioral modeling.

Each of these stages / patter examines the same problem from a different perspective.