Cs504 2016 All Quiz With Answer

External Entity may be

Select correct option

source of input data only

source of input data or destination of results

destination of results only

repository of data

System _____ are built to allow the System Engineer to evaluate the system components in relationship to one another.

Select correct option

Requirements

Documents

Models

Test Cases
The relationship is kind of a generalization specialization relationship.
Select correct option
Bit-Byte
Uses
Binary
Extends
All the documents related to the software are also considered as part
of the
Select correct option
Physical Document
Logical Document

Relational Database

Software

In object oriented design, the structure of the system revolves around.

Select correct option

Objects

Methods

Properties

None of the given options

Which elements of business processing engineering are the responsibilities of the software engineer?

Select correct option

business area analysis

business system design

product planning

information strategy planning

The Use case diagram shows that which _____ interact with each use case.

Select correct option

Use case

Actor

Component

Relation

A class will be cohesive if: Select correct option Class does not implement Complex interfaces Class does not have Complex Methods If most of the methods do not use most of the data members most of the time if most of the methods use most of the data members most of the time. diagram does not capture control flow information, it just shows the flow of the data in a system. Select correct option Sequence **Data Flow**

Activity

Class

A Process in Data Flow Diagram (DFD) represents

Select correct option

Flow of data

Transformation of data

Storage of data

An external agent

Regarding Flow Chart which of the following statement(s) is/are TRUE:

Select correct option

Flow charts are usually used to describe flow of control in a system

Flow Charts just show the flow of the data in a system.

Looping or Iterations can not be represented in Flow Chart

None of given options

The system model template contains which of the following elements

Select correct option

Input

Output

System Out

Input / Output

Which one of the following is the external quality of a software product?

Select correct option Correctness Concision Cohesion **Low Coupling** structure represents the internal organization of the various data and control items. Select correct option Data Value Information Conceptual

An arrow in Data Flow Diagram (DFD) represents Select correct option

Direction of flow of data
Processing of data
External agent
Internal agent
In this case of, intra component linkages are stronge while inter component linkages are weak.
Select correct option
high cohesion
low coupling

low cohesion

high coupling A context diagram is used Select correct option as the first step in developing a detailed DFD of a system in systems analysis of very complex systems as an aid to system design as an aid to programmers is a technique in which we construct a model of an entity based upon its essential characteristics and ignore the inessential details. Select correct option

Inheritance

Polymorphism Aggregation Abstraction relationship is concerned with classes not with the class instantiates. Select correct option **Association** Inheritance Aggregation Composition

interface.

requirements cause frequent modifications in user

Select correct option

Functional

Non-functional

Unstable

User

The context diagram is used as the top level abstraction in a developed according to principles of structured analysis.

Select correct option

Dataflow diagram

Activity Diagram

State Transition Diagram

USe Case Diagram

In Data Flow Diagram, the entity or system, outside the boundary of this system is called

Select correct option

Process

Data Flow

External Agent

Data Store

In the case of action-oriented approach, data is decomposed according to:

Select correct option

Object requirements

Functionality requirements

Corresponding domain model

Compatibility with object interface

An external entity that interacts with a system is called a(n):

Select correct option

use case

actor

stakeholder

association

_____ requirements are often called product features.

Select correct option

Functional

Non- Functional

Developer

User

When two components of a system are using the same global data area, they are related as

Select correct option

Data Coupling

Content Coupling

Common Coupling

External Coupling

The context diagram is used as the top level abstraction in a developed according to principles of structured analysis.

Select correct option

Dataflow diagram

Activity Diagram

State Transition Diagram

USe Case Diagram

Modules with high cohesion and low coupling can be treated and analyzed as:

Select correct option

White Boxes

Black Boxes

Gray Boxes

None of the given options

Identify the TRUE statement:

Select correct option

Normally Object Oriented design is more maintainable than functional oriented.

Software with Functional oriented design does not fulfill non functional requirements.

Object Oriented design can not implement "Separation of concerns" strategy

Function Oriented design does not lead to an efficient product.

A context diagram:

Select correct option

describes detailed design of a system

is a DFD which gives an overview of the system

is a detailed description of a system

is not used in drawing a detailed DFD

The modules that interact with each other through message passing have _____.

Select correct option

Low Coupling

High Coupling

Low Cohesion

High Cohesion

A maintainable design is a design , which supports Select correct option

Change

debugging

Adding new features

All of the given

The best way to conduct a requirements validation review is to

Select correct option

examine the system model for errors

have the customer look over the requirements

send them to the design team and see if they have any concerns

use a checklist of questions to examine each requirement

In _____ the analyst determines all the sources of requirements and where do these requirements consume Select correct option

Data Flow Analysis

Source and Sink Analysis

Down Parsing

Which of the following sentence is true regarding user interface design?

Select correct option

Up Parsing

GUI interfaces are good for all tasks which a user needs to perform at an interface.

The higher the response time, the better is the interface.

The simpler the interface, the efficient is the system.

Command-line interfaces are faster for some tasks which the user needs to perform.

Which of the following strategy/strategies lead(s) to a good software design:

Select correct option

Separation of Concerns

Modularity

Divide-and-conquer

All of the given options

In object oriented design, the structure of the system revolves around.

Select correct option

Objects

Methods

Properties

None of the given options

Data cannot flow from one external entity to other external entity because:

Select correct option

It will get corrupted

It is not allowed in DFD

An external entity has no mechanism to read or write

Both are outside the context of the system

At which stage of software development loop, results are delivered?

Select correct option

Problem definition

Solution integration

Technical development

Status quo

A context diagram is used

Select correct option

as the first step in developing a detailed DFD of a system

in systems analysis of very complex systems

as an aid to system design

as an aid to programmers

All the documents related to the software are also considered as part

of the _____.

Select correct option

Physical Document

Logical Document

Relational Database

Software

The condition that must be met before the use case can be invoked, is called:

Select correct option

Pre-Condition

Post-Condition

Pre-Assertion

Post-Assertion

In use case diagram, an ellipse signifies a(n):

Select correct option

actor

class

use case

system boundary

Modules with high cohesion and low coupling can be treated and analyzed as:

Select correct option

White Boxes

Black Boxes

Gray Boxes

None of the given options

The system specification describes the

Select correct option

function and behavior of a computer-based system

implementation of each allocated system element

algorithmic detail and data structures

time required for system simulation

A use case represents:

Select correct option

a class, its attributes and operations.

an operation's interface and signature.

the role a user plays when interacting with the system.

the system's functionality for a particular purpose.

is a technique that can be used to reduce
customer dissatisfaction at requirement stage.
Select correct option
Analysis
Negotiation
Prototyping
GUI
The data on which the program operates is also considered as part of the
Select correct option
Important Data

Software

Logical Data

Utility Software

The modules interacting with each other through message passing have _____ between them.

Select correct option

low cohesion

high cohesion

low coupling

high couling

By leveling a DFD (adding more levels of abstraction) we mean

Select correct option

Splitting it into different levels

Make its structure uniform

Expanding a process into one with more sub-processes giving more detail

Summarizing a DFD to specify only the essentials

Following is/are example(s) of illegal data flow in Data Flow Diagram (DFD)

Select correct option

External Agents directly communicating with each other

External Agent updating information in a Data Store

External Agent accessing information from a Data Store

All of the given options

Construction

Software Design discusses _____ aspect of software development Select correct option What How Who When Which one is not a part of Software Development phase? Select correct option

Scope

Project Vision

Definition

_____ structure represents the internal organization of the various data and control items.

Select correct option

Data

Value

Information

Conceptual

Modules with high cohesion and low coupling can be treated and analyzed as:

Select correct option

White Boxes

Black Boxes

Gray Boxes

None of the given options

The best way to conduct a requirements validation review is to

Select correct option

examine the system model for errors

have the customer look over the requirements

send them to the design team and see if they have any concerns

use a checklist of questions to examine each requirement

In the functional design, the structure of the system revolves around. Select correct option objects properties **functions** All of the given options of the total cost of the software development is spent on maintenance. Select correct option one third two third

one fourth
three fourth
is one of the techniques to document domain knowledge
Select correct option
State transition diagram
Feasibility matrix
System matrix
None of given options
Which of the following sentence is true regarding user interface design?
Select correct option

GUI interfaces are good for all tasks which a user needs to perform at an interface.

The higher the response time, the better is the interface.

The simpler the interface, the efficient is the system.

Command-line interfaces are faster for some tasks which the user needs to perform.

External Entity may be

Select correct option

source of input data only

source of input data or destination of results

destination of results only

repository of data

The context diagram is used as the top level abstraction in a developed according to principles of structured analysis.

Select correct option

Dataflow diagram

Activity Diagram

State Transition Diagram

USe Case Diagram

A Process in Data Flow Diagram (DFD) represents Select correct option

Flow of data

Transformation of data

Storage of data
An external agent
of the total cost of the software development is spent on maintenance.
Select correct option
one third
two third
one fourth
three fourth
Construction activities are directly related to software
Select correct option
Management

Planning
Quality Assurance
Development
In this case of, intra component linkages are stronger while inter component linkages are weak.
Select correct option
high cohesion
low coupling
low cohesion
high coupling
In Data Flow Diagram (DFD), one data store cannot directly copy the data from another

Select correct option

Agent

Process

Data store

Flow

System models include:

Select correct option

User business processes

User activities for conducting the business processes

Processes that need to be automated

All of the given options

The project manager would need _____ document to monitor and track the progress of the project.

Select correct option

Design

Project

Requirement

Planning

External Entity may be

Select correct option

source of input data only

source of input data or destination of results

destination of results only

repository of data

Regarding Data Flow Model, which of the following statement(s) is/are true:

Select correct option

It captures the transformation of data between processes/functions of a system

Processes on a data flow can operate in parallel

Only those processes are represented which we need to automate

All of the given options

Use case construction is a technique used for:

Select correct option

requirements determination.

requirements structuring.

user interface design.

database design.

In the functional design, the structure of the system revolves around.

Select correct option

objects

properties

functions

All of the given options

In Data Flow Diagram (DFD), data flow can:

Select correct option

Only originate from an external entity

Only terminate in an external entity

Originate and terminate in an external entity

Either originate or terminate in an external entity but not both

A context diagram:

Select correct option

describes detailed design of a system

is a DFD which gives an overview of the system

is a detailed description of a system is not used in drawing a detailed DFD Coupling is a measure of _____ of a module or component. Select correct option Independence Dependence Aggregation Composition Coupling is a measure of _____ of a module or component.

Independence

Select correct option

Dependence Aggregation Composition Software Design discusses _____ aspect of software development Select correct option What How Who When Which of the following strategy/strategies lead(s) to a good software design: Select correct option

Separation of Concerns

Modularity
Divide-and-conquer
All of the given options
relationship is concerned with classes not
with the class instantiates.
Select correct option
Association
Inheritance
Aggregation
Composition

When two components of a system are using the same global data area, they are related as

Select correct option

Data Coupling

Content Coupling

Common Coupling

External Coupling

The best way to conduct a requirements validation review is to

Select correct option

examine the system model for errors

have the customer look over the requirements

send them to the design team and see if they have any concerns

use a checklist of questions to examine each requirement

Data Flow Model:
Select correct option
Captures the flow of data in a system
Helps in developing an understanding of system's functionality
Describes data origination, transformations and consumption in a system
All of the given options diagram does not capture control flow information, it
just shows the flow of the data in a system.
Select correct option
Sequence
Data Flow

Activity

Class

To construct a system model the engineer should consider one of the following restraining factors?

Select correct option

assumptions and constraints

budget and expenses

data objects and operations

schedule and milestones

A class will be cohesive if:

Select correct option

Class does not implement Complex interfaces

Class does not have Complex Methods

If most of the methods do not use most of the data members most of the time

if most of the methods use most of the data members most of the time.

Which one of the following is the external quality of a software product?

Select correct option

Correctness

Concision

Cohesion

Low Coupling

Regarding Data Flow Model, which of the following statement(s) is/are true:

Select correct option

It captures the transformation of data between processes/functions of a system

Processes on a data flow can operate in parallel

Only those processes are represented which we need to automate

All of the given options

The system model template contains which of the following elements

Select correct option Input Output System Out Input / Output A _____ is not the real product but just a real looking mock-up of what would be eventually delivered. Select correct option Software Program **Prototype Test Case**

In the case of in a system, module boundaries are not well defined.
Select correct option
low cohesion
high coupling
low coupling
high cohesion
Data cannot flow from one external entity to other external entity because:
Select correct option
It will get corrupted
It is not allowed in DFD

An external entity has no mechanism to read or write

Both are outside the context of the system

The process of utilizing our knowledge of computer science in effective production of software systems is called Select correct option **Chemical Engineering Electrical Engineering** Computer Engineering Software Engineerin Arranging information in _____ form makes it easy to read, understand and comprehend as compared to streams of text. Select correct option

Columns
Paragraph
Tabular
Rows
The goal of is to translate the customer's desire for a set of defined capabilities into a working product.
Select correct option
Electrical Engineering
Product Engineering
Hardware Engineering
Mechanical Engineering

In data flow diagram (DFD), Create, Update, Delete and Read operations are normally called:

Select correct option

CRUD operations

DURC operations

RUDC operations

CDUR operation

In use case diagram, an ellipse signifies a(n):

Select correct option

actor

class

use case

system boundary

In the case of action-oriented approach, data is decomposed according to:

Select correct option

Object requirements

Functionality requirements

Corresponding domain model

Compatibility with object interface

A class will be cohesive if:

Select correct option

Class does not implement Complex interfaces

Class does not have Complex Methods

If most of the methods do not use most of the data members most of the time

if most of the methods use most of the data members most of the time.

The design process usually involves:

Select correct option

Developing a number of different models.

Looking at the system from different angles.

Describing the system at various levels of abstraction.

All of the given options

The architecture components for product engineering are Select correct option

data, hardware, software, people

data, documentation, hardware, software

data, hardware, software, procedures

documentation, hardware, people, procedures

In use case diagram, the scope of the system is defined by: Select correct option

Actor

Entity

System Boundary

"Extends" relationship
requirements cause frequent modifications in
user interface.
Select correct option
Functional
Non-functional
Unstable
User
All the documents related to the software are also considered as
part part
of the
Select correct option
Physical Document

Logical Document

Relational Database

Software

The use of traceability tables helps to Select correct option

debug programs following the detection of run-time errors

determine the performance of algorithm implementations

identify, control, and track requirements changes

none of the given