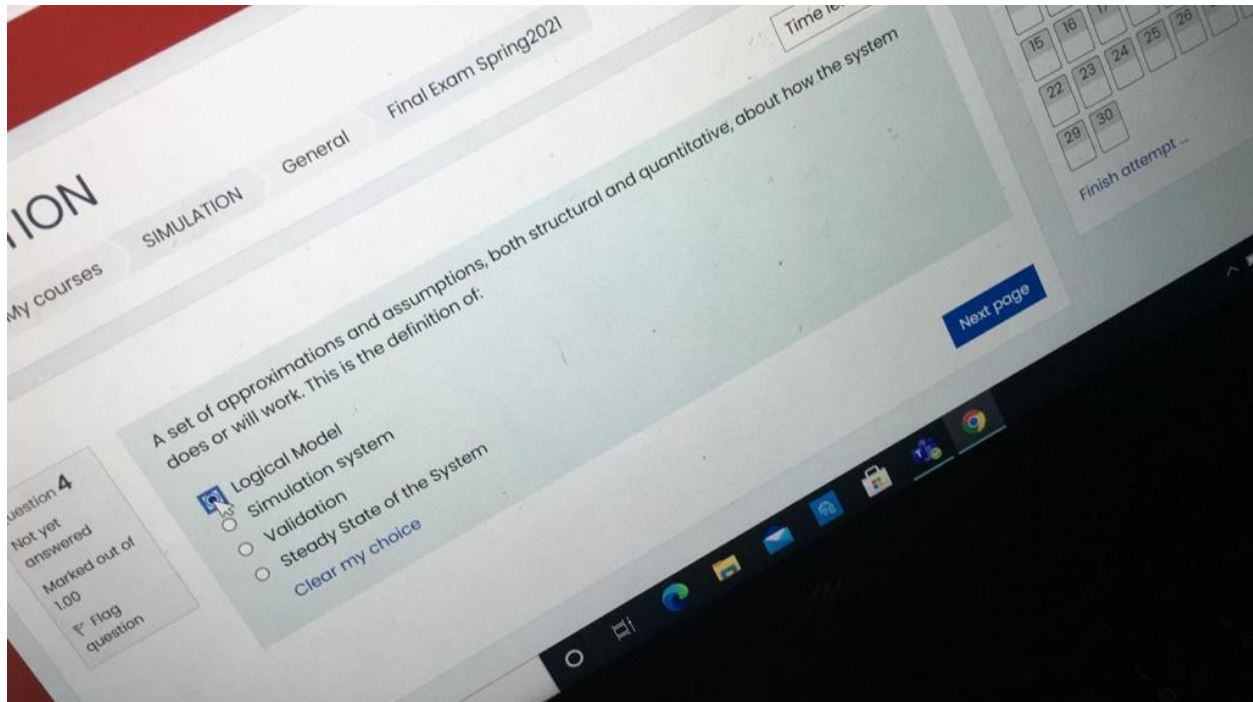


Validate the model



Logical model

Time left 0:57:47

Question 3
Not yet answered
Marked out of 1.00
Flag question

Incorrectly specifying the delay logic in the process module from "Seize Delay Release to Seize Delay" is an issue that should be fixed using

- Verification
 - Steady state system
 - Type II error
 - Validation
- [Clear my choice](#)

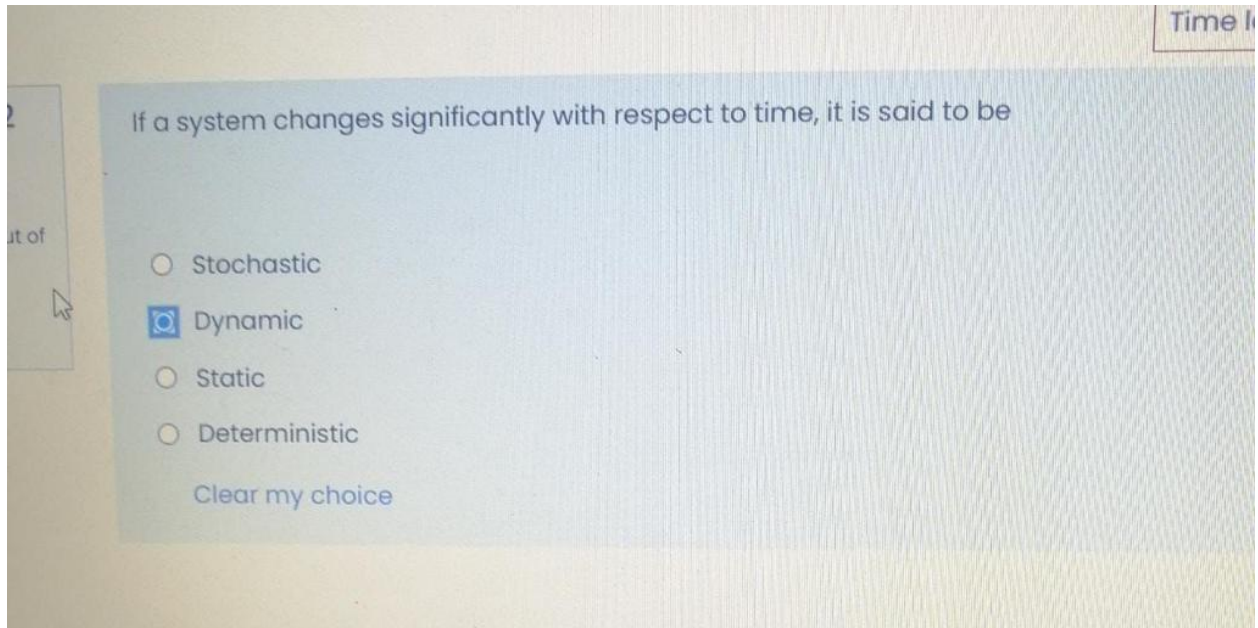
[Next page](#)

Quiz navigation

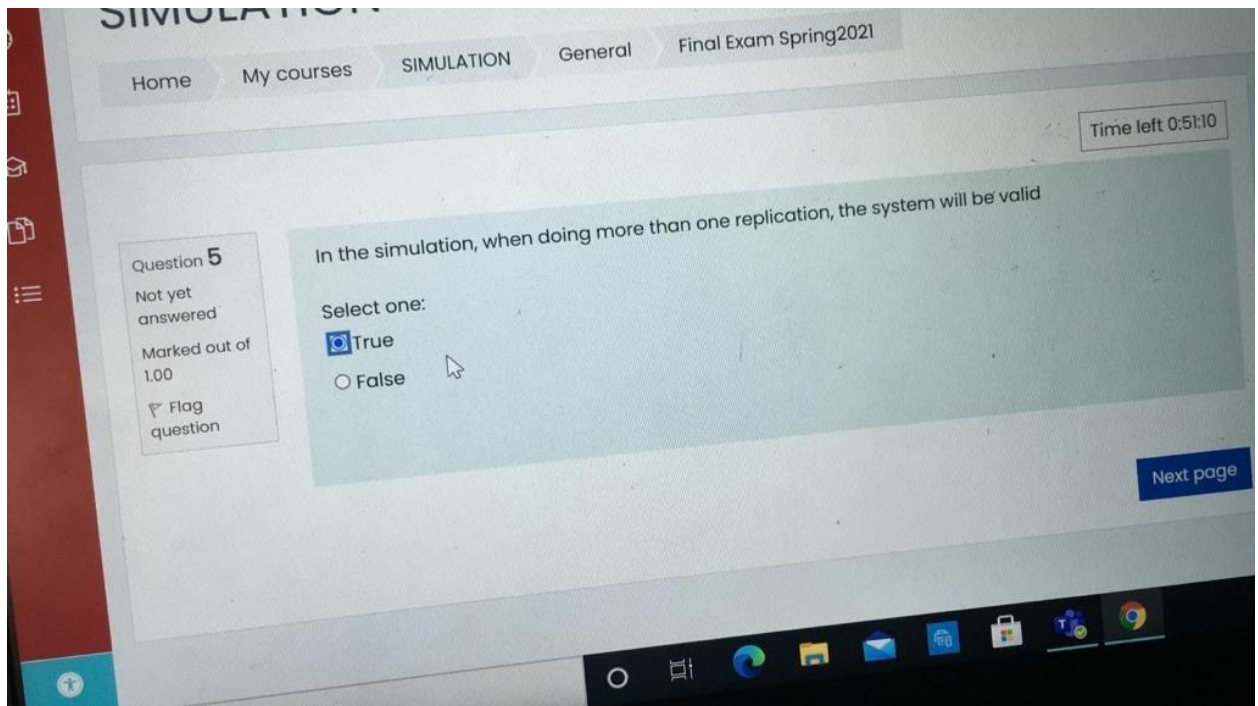
| | | | |
|----|----|----|----|
| 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 |
| 29 | 30 | | |

Finish attempt ...

verification



dynamic



False

Time left 0:54:45

Ensuring that the model captures the real system is called

- Verification
- Validation
- Type III Error
- Sequential Sampling
- None of the above

Clear my choice

Next page

Validation

Question 1
Not yet answered
Marked out of 1.00
Flag question

Time left 0:59:29

- Making too many assumptions about a system to build a model may lead you to
- Working on the wrong problem, an issue that you should realize by verification.
 - Working on the right problem incorrectly, an issue that you should realize by verification.
 - Working on the wrong problem, an issue that you should realize by validation.
 - Working on the right problem incorrectly, an issue that you should realize by validation.
- [Clear my choice](#)

[Next page](#)

Quiz navigation

| | | | |
|----|----|----|----|
| 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 |
| 29 | 30 | | |

[Finish attempt ...](#)

Time left 0:53:35

The maximum waiting time in queue is an example of the worst-case measure.

Select one:

True

False



Next page

true

Time left 0:56:08

Question 5
Not yet answered
Marked out of 1.00
Flag question

Over simplifying a model by making assumptions will allow us to use traditional methods easily

Select one:

- True
- False

Next page

Quiz navigation

| | | |
|----|----|----|
| 1 | 2 | 3 |
| 4 | 5 | 6 |
| 7 | 8 | 9 |
| 10 | 11 | 12 |
| 13 | 14 | 15 |
| 16 | 17 | 18 |
| 19 | 20 | 21 |
| 22 | 23 | 24 |
| 25 | 26 | 27 |
| 28 | 29 | 30 |

Finish attempt

true

Time left 0:57:38

Question 1

Not yet answered

Marked out of 1.00

Flag question

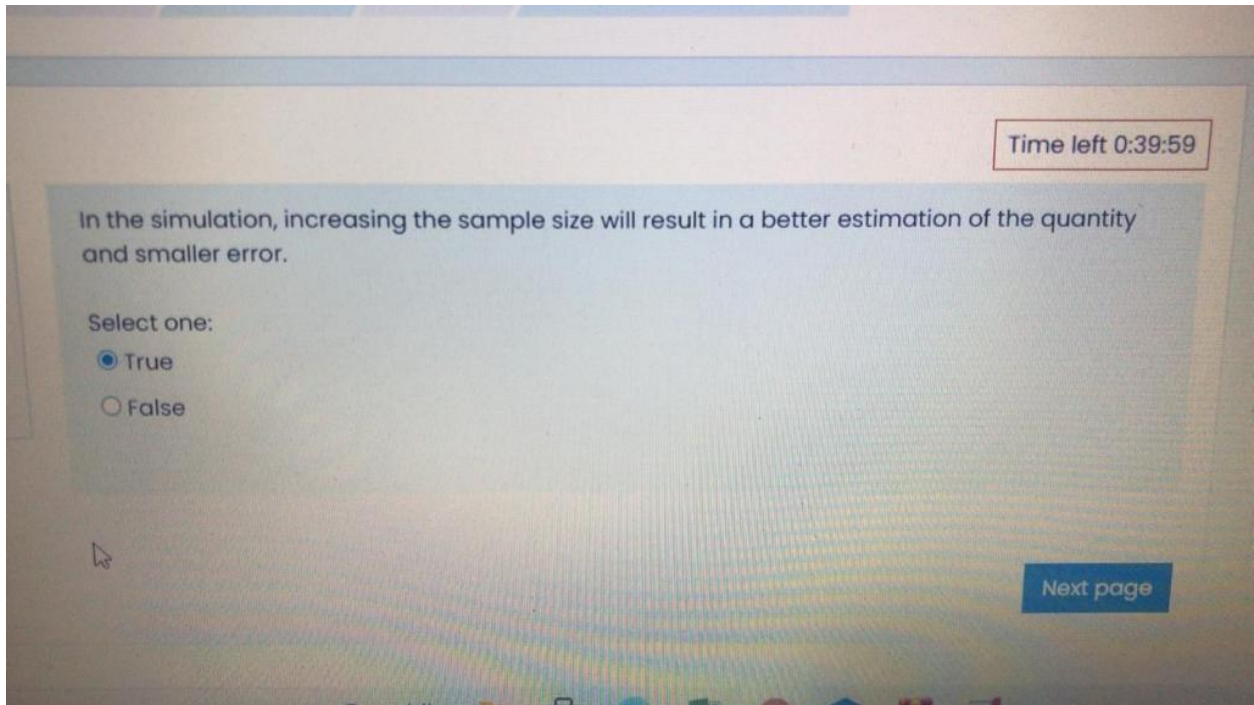
A failure policy MUST be attached to two resources or more

Select one:

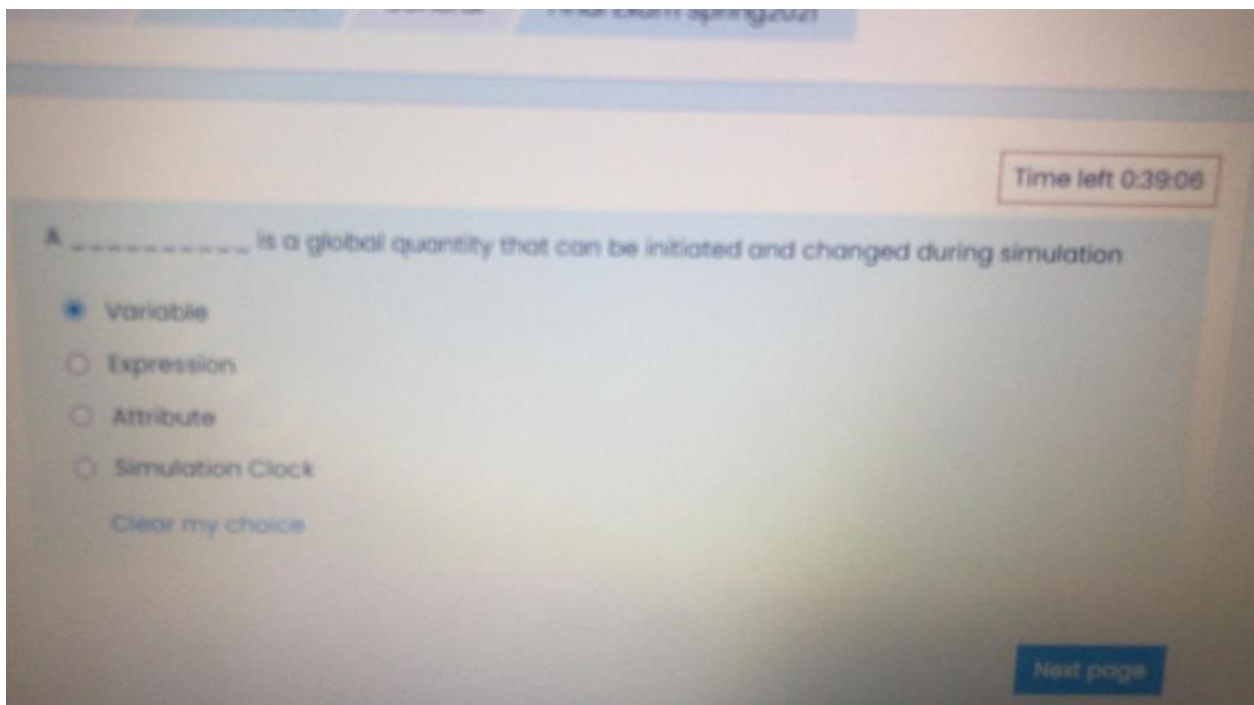
- True
- False

Next page

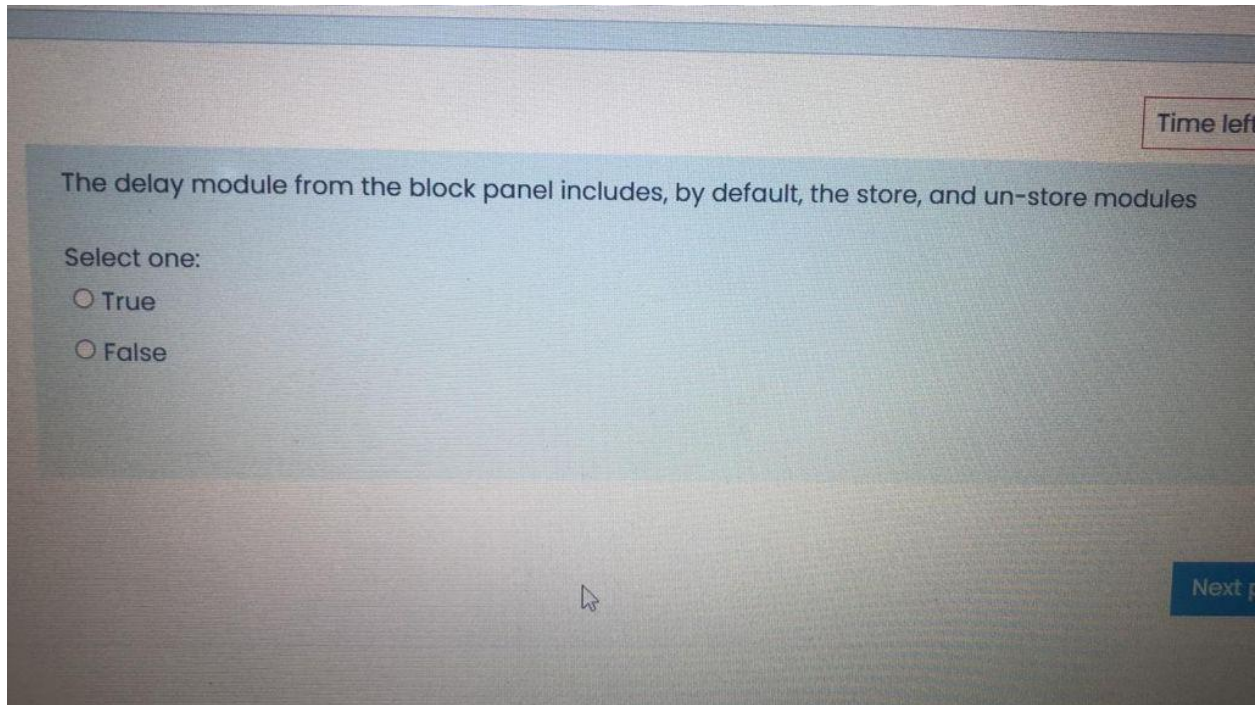
false



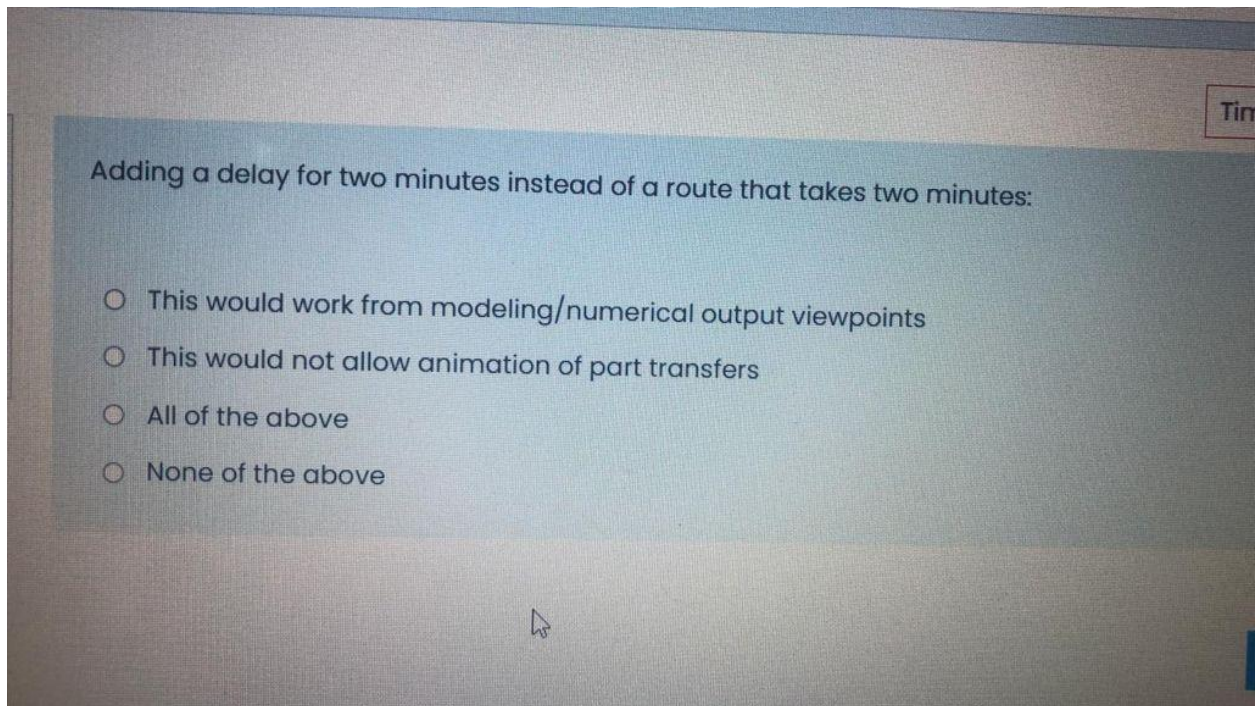
true



variable



true



c

7:40



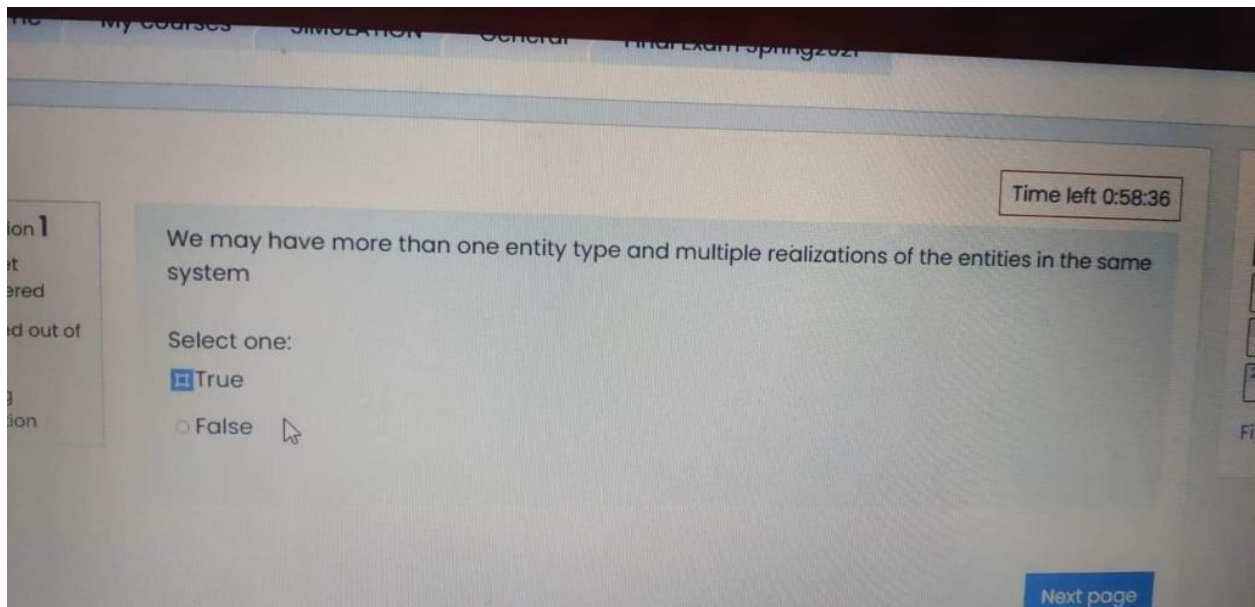
194085698_7518431821562...



A limited storage space is best modeled by

- a. Queue
- b. Resource
- c. Delay
- d. Entity
- e. Variable

Resource



true

Time left 0:52:32

tion **5**

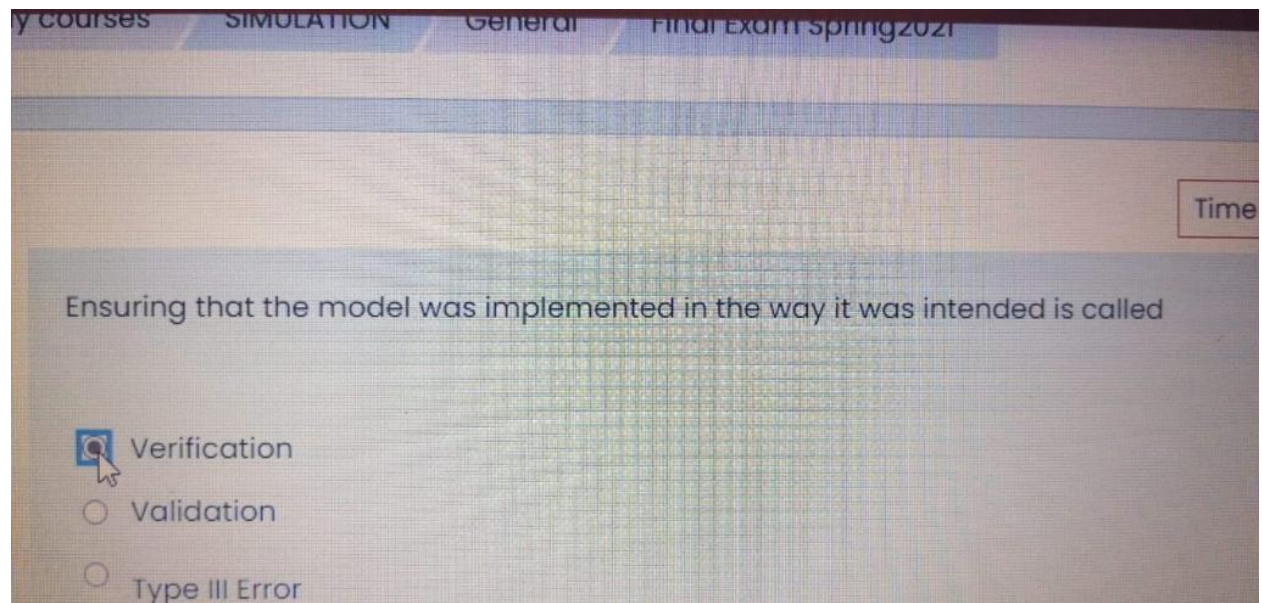
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ered
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g
stion

User-defined values associated with individual entities, such as customer type, product size, time job entered the system etc. are examples of

- System Events
- Attributes
- Variables
- Fake-Entities
- None of the above

[Clear my choice](#)

attributes



verification

SIMULATION

Home

My courses

SIMULATION

General

Midterm Fall 2020

Question 4

Not yet answered

Marked out of 1.00

Flag question

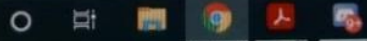
The main difference between the static and dynamic simulation models is that in dynamic the state of the system can change continuously.

Select one:

- True
- False

Next page

Type here to search



True

Final Fall 2020

Time left 0:45:06

Question 3
Not yet answered
Marked out of 1.00
Flag question

Not releasing a resource before leaving the model is an issue (select all that apply)

- a. The output from the model will be zero
- b. Syntax error due to entity trying to take the resource out of the system
- c. It should be realized by verification not validation
- d. The output from the model will be one

Next page

Quiz

| | |
|----|----|
| 1 | 2 |
| 7 | 8 |
| 13 | 14 |
| 19 | 20 |
| 25 | 26 |

Finish at

Type here to search

b

Time left 0:51:24

Global Expression stores formulas as well as numbers, it can be scalar, or vector, or matrix

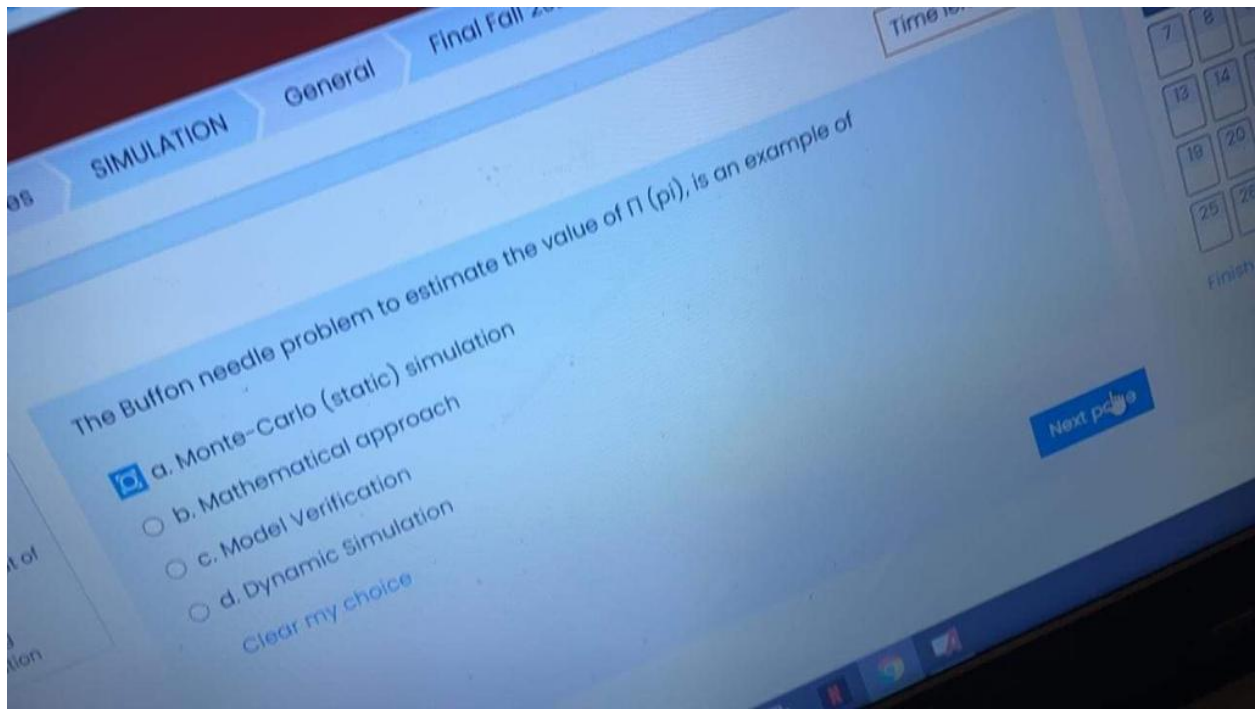
Select one:

True

False

Next page

true



a

Time left 0:54:50

A set of approximations and assumptions, both structural and quantitative, about the way the system does or will work. This is the definition of:

- a. Steady State of the System
- b. Simulation system
- c. Validation
- d. Logical Model

Next page

d

- d. Decide
- e. Queue

Question 14

Not yet answered

Marked out of 1.50

Flag question

Not releasing a resource before leaving the model might cause

Select one or more:

- a. Too many entities will build up in queue
- b. The output will be zero
- c. Syntax error due to entity trying to take the resource out of the system
- d. The output will be one

Question 15

Not yet answered

Marked out of 1.50

Flag question

What was the purpose of the drilling center case study model (i.e. what question did we want to answer?)

Select one:

- a. if exponential time is appropriate for the create
- b. if the drilling center will work or not
- c. How many parts the system can process
- d. Non of the above

Q14 c

Q15 c

Question 13

Not yet answered

Marked out of 5.00

Flag question

The area where an entity resides while waiting for a resource to become available is called

Select one:

- a. None of the above
- b. Delay
- c. Seize area
- d. Decide
- e. Queue

Question 14

Not yet answered

Marked out of 5.00

Flag question

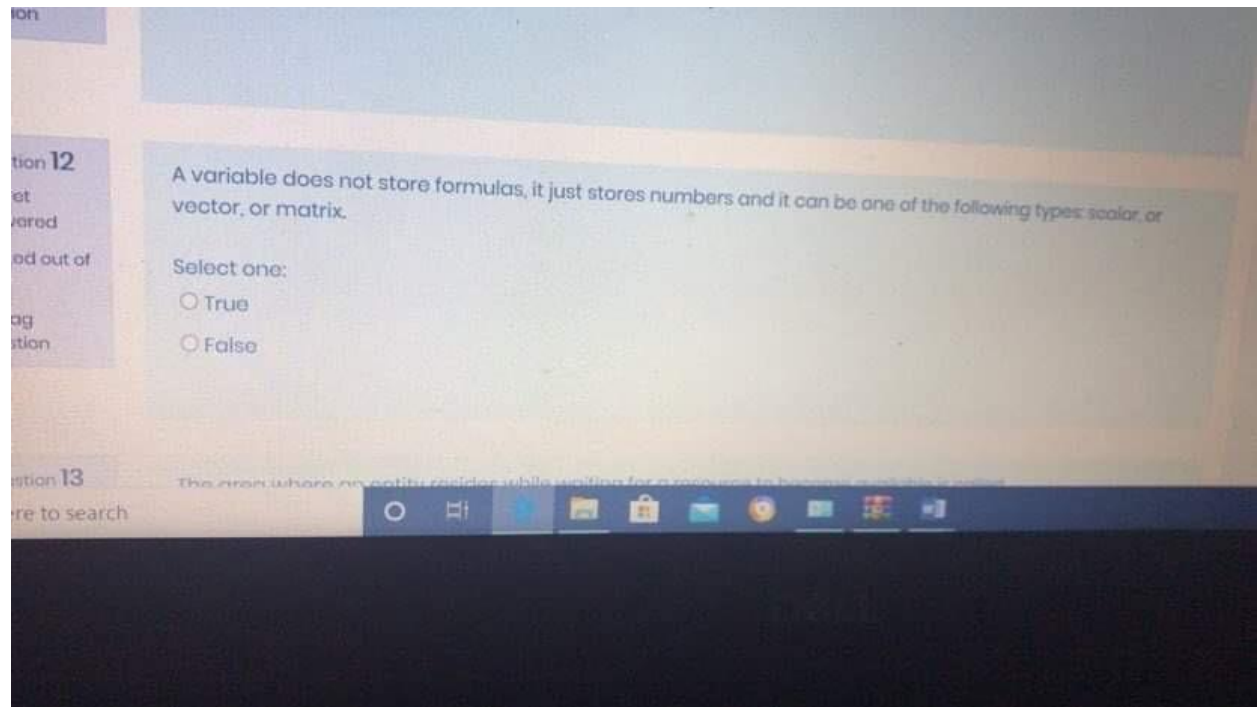
Not releasing a resource before leaving the model might cause

Select one or more:

- a. Too many entities will build up in queue
- b. The output will be zero

here to search

Q13 E



TRUE

Question 11

Not yet answered

Marked out of 1.50

Flag question

Spreadsheets are not well suited for simulation of dynamic models.

Select one:

 True False**Question 12**

Not yet answered

Marked out of 1.50

Flag question

A variable does not store formulas, it just stores numbers and it can be one of the following types: scalar, or vector, or matrix.

Select one:

 True False

Q11 TRUE

d. It depends on the last enters the queue

Question 10

Not yet answered

Marked out of 1.50

[Flag question](#)

For a simulation model with an output of 15 and utilization of 85%, doubling the inter-arrival time distribution parameter is expected (most likely) to:

Select one:

- a. Increase waiting time and decrease output
- b. Increase the output and increase the utilization
- c. None of the above
- d. Decrease the output and increase the utilization
- e. Increase the output and decrease the utilization

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[Instructions for downloading Arena](#)

Jump to...

B

Flag question

- True
- False

Question 7

Not yet answered

Marked out of 1.50

Flag question

In simulation, increasing the sample size will result in a better estimation of the quantity and bigger error.

Select one:

- True
- False

Question 8

Not yet answered

Marked out of 1.50

Flag question

The maximum waiting time in queue, is an example of the worst-case measure.

Select one:

- True
- False

Q7 TRUE

Question 1

Not yet answered

Marked out of 1.50

Flag question

If all analysis methods of a system are applicable with no limitations, the best approach is:

Select one:

- a. Traditional methods
- b. Mathematical modeling using linear programming
- c. Queuing theory
- d. Working with the real system
- e. Simulation

Question 2

Not yet answered

Marked out of 1.50

Flag question

Ensuring that the model behaves in the way it was intended is called

Select one:

- a. None of the above

d

e. Verification

Question 4

Not yet answered

Marked out of 1.50

Flag question

One of the problems in the Queuing theory analysis approach in queuing systems is the time frame, which is due the assumption

Select one:

- a. Must have $E(\text{service}) < E(\text{interarrival})$
- b. Interarrival times - exponential
- c. Service times - exponential, independent of interarrivals
- d. Steady State

Question 5

Not yet answered

Marked out of 1.50

Flag question

The following data was recorded for the arrival rate of customers per minute to a bank, which follows Poisson arrival process: 1, 4, 5, 6, 9. The closest statistical input model for the times between arrivals would be

Select one:

- a. Random.Exponential(0.2)

The main difference between the static and dynamic simulation models is that in *dynamic* the state of the system can change continuously.

Select one:

True

False

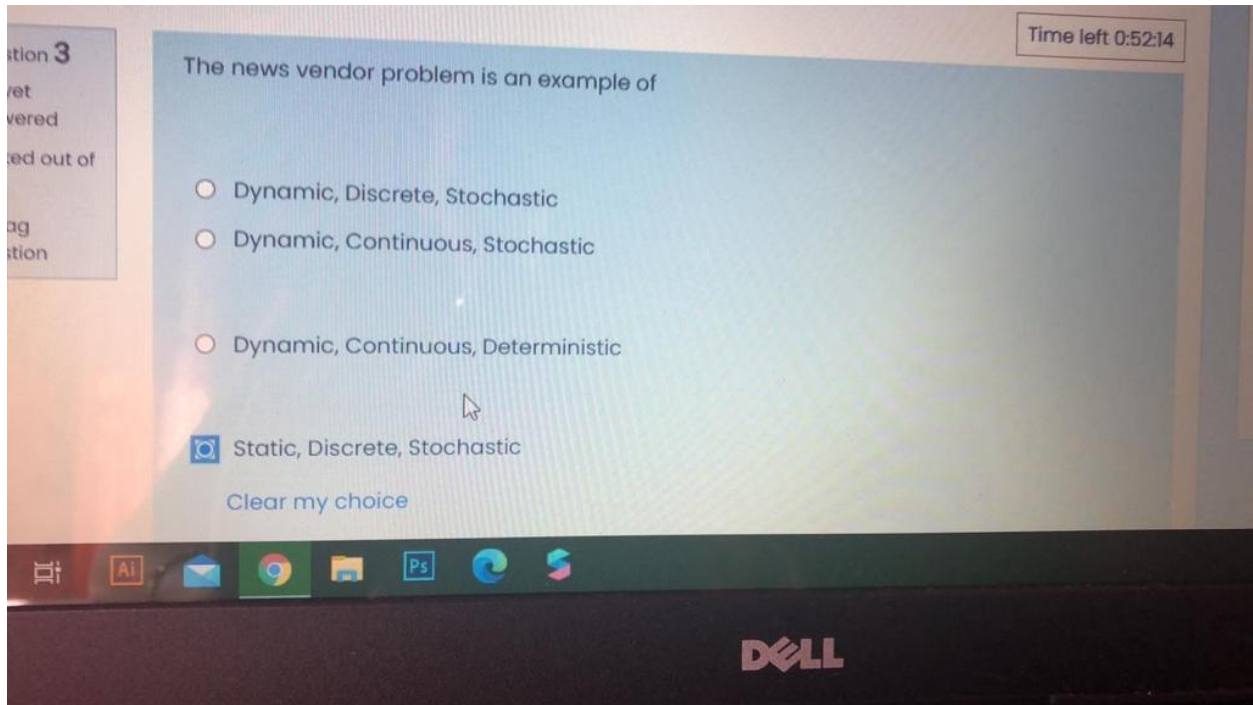
In simulation, increasing the sample size will result in a better estimation of the quantity and bigger error.

Select one:

True

False

True / True



d

- d. Sequential Sampling
- e. Type III Error

Question 3

Not yet answered

Marked out of 1.50

Flag question

Comparing the results from a simulation model after running it with actual data is called

Select one:

- a. Validation
- b. Type III Error
- c. None of the above
- d. Sequential Sampling
- e. Verification

Question 4

Not yet answered

Marked out of 1.50

Flag question

One of the problems in the Queuing theory analysis approach in queuing systems is the time frame, which is due the assumption

Select one:

- a. Must have $E(\text{service}) < E(\text{interarrival})$
- b. interarrival times - exponential

Q3 a

- c. Service times - exponential, independent of interarrivals
- d. Steady State

Question 5
Not yet answered
Marked out of 1.50
Flag question

The following data was recorded for the arrival rate of customers per minute to a bank, which follows Poisson arrival process: 1, 4, 5, 6, 9. The closest statistical input model for the times between arrivals would be

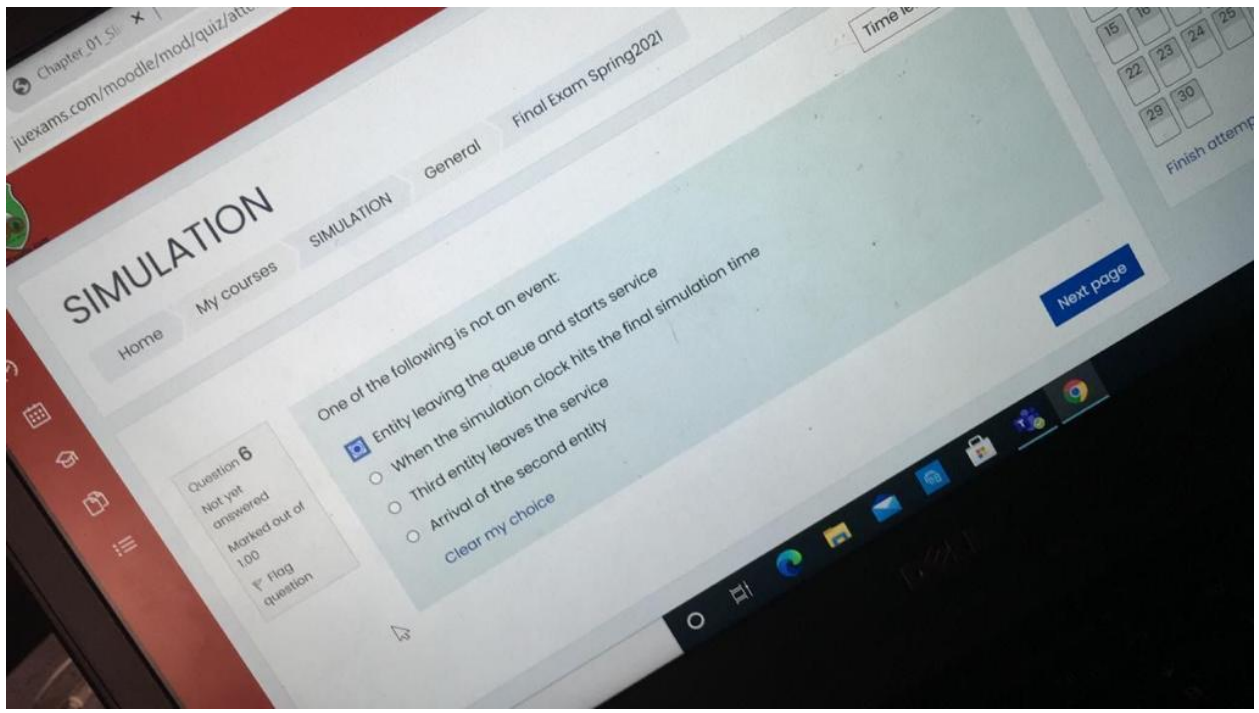
- Select one:
- a. Random.Exponential(0.2)
 - b. Random.Exponential(6)
 - c. Random.Poisson(0.167)
 - d. Random.Poisson(6)

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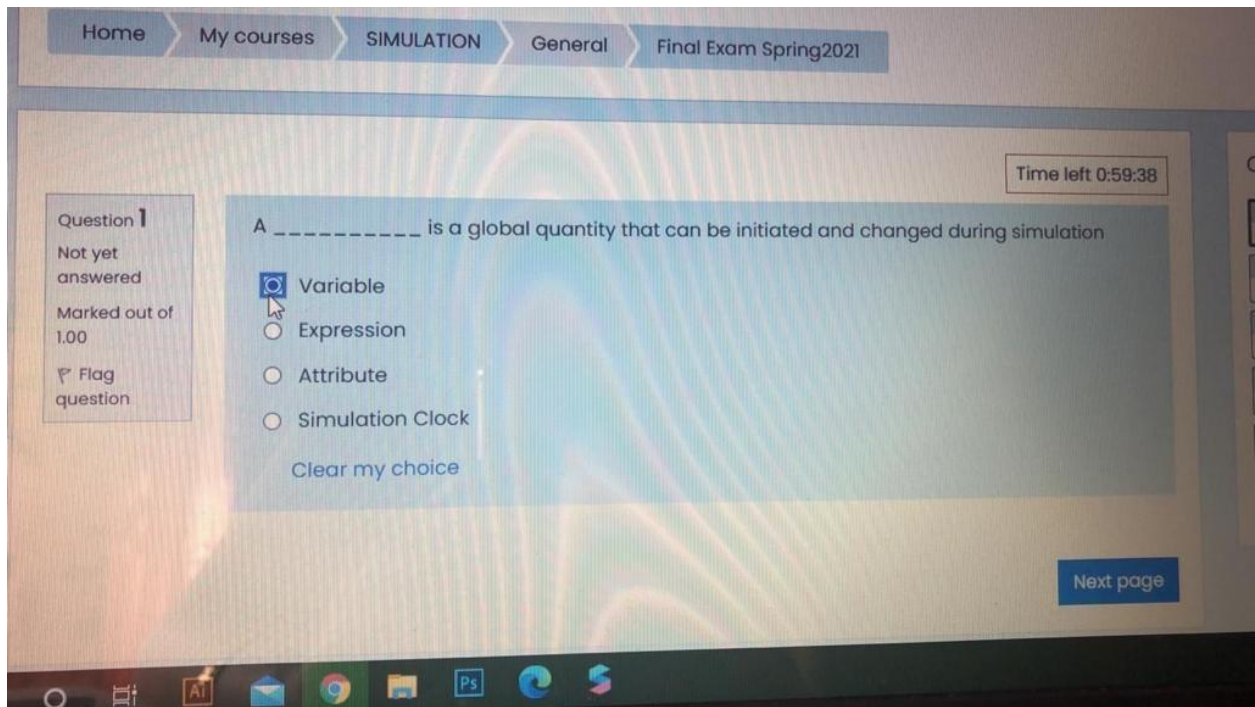
Instructions for downloading Arena

Jump to...

a



a



variable

User-defined values associated with individual entities, such as customer type, product size, time job entered the system etc. are examples of

- System Events
- Attributes
- Variables
- Fake-Entities
- None of the above

[Clear my choice](#)

attributes