

Time left 0:5

1 Comparing results from the simulation with actual data from the real system is helpful to

Improve on animation  
 Verify the model  
 avoid type II error  
 Validate the model

[Clear my choice](#)

Validate the model

Final Exam Spring2021

Time left 0:5

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

Logical Model  
 Simulation system  
 Validation  
 Steady State of the System

[Clear my choice](#)

Next page

Question 4  
Not yet answered  
Marked out of 1.00  
[Flag question](#)

Logical model

### Quiz navigation

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Time left 0:57:47

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](#)

Question 3  
Not yet  
answered  
Marked out of  
1.00  
Flag  
question

[Next page](#)

[Finish attempt ...](#)

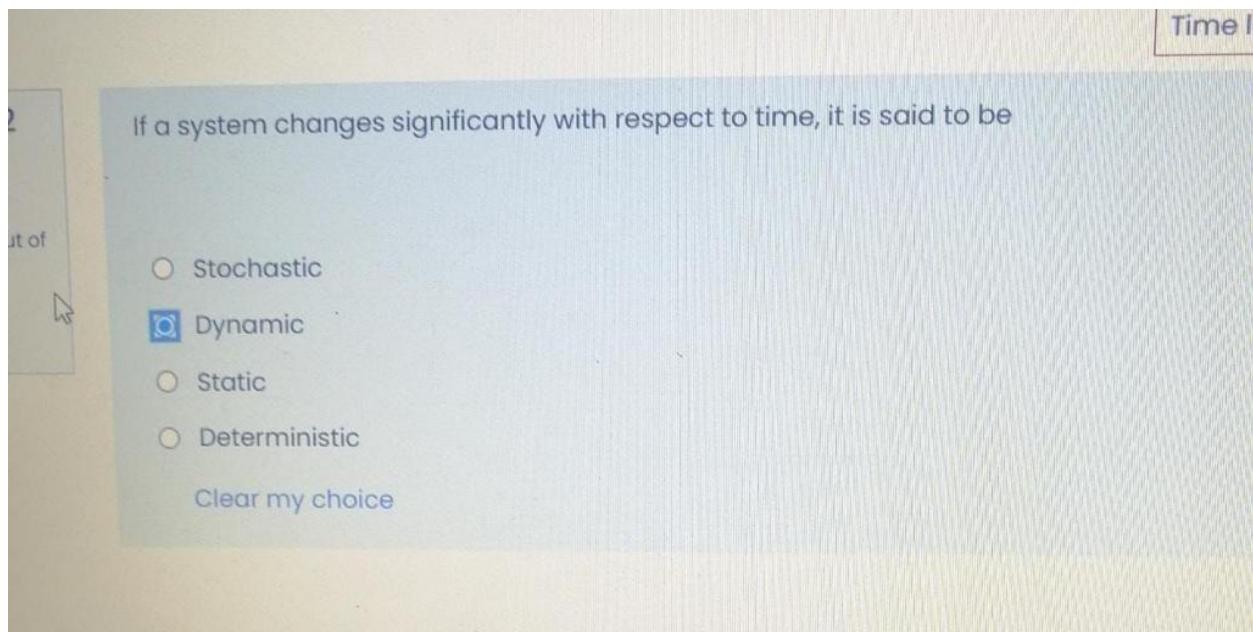
verification

Time left: 1:10

2 If a system changes significantly with respect to time, it is said to be

Stochastic  
 Dynamic  
 Static  
 Deterministic

[Clear my choice](#)



dynamic

Time left: 0:51:10

SIMULATION

Home My courses SIMULATION General Final Exam Spring2021

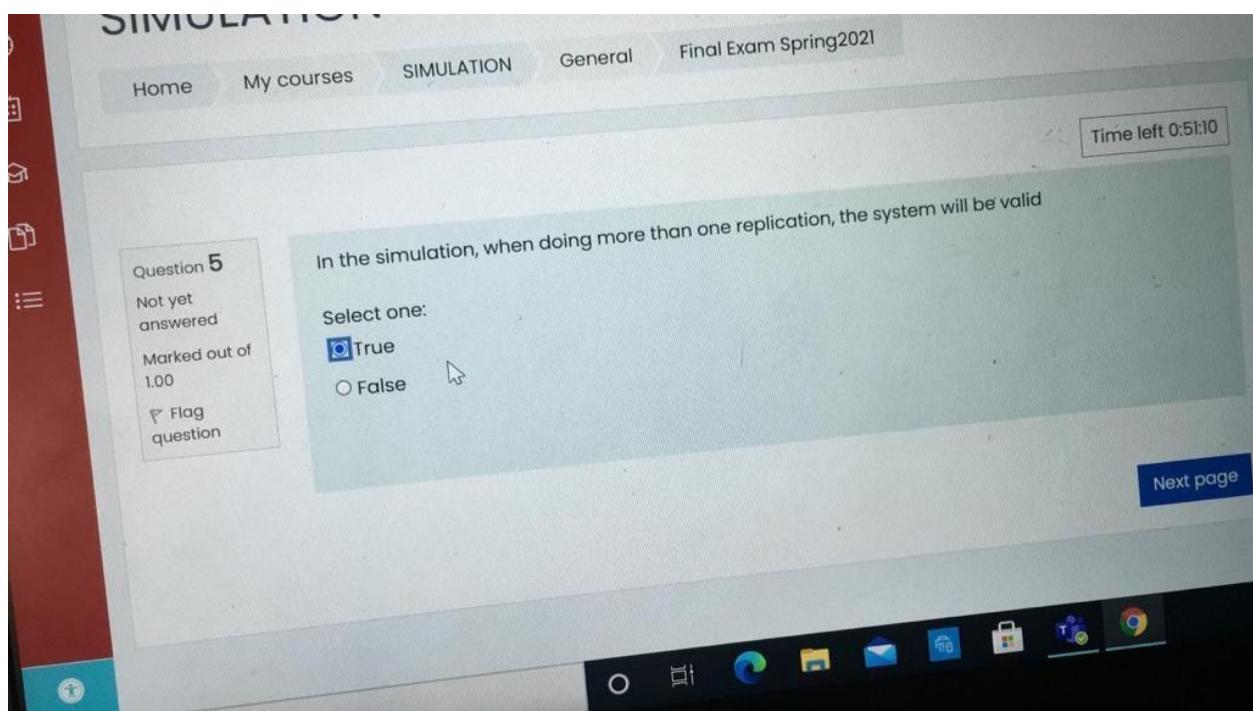
Question 5 Not yet answered Marked out of 1.00 Flag question

In the simulation, when doing more than one replication, the system will be valid

Select one:

True  
 False

[Next page](#)



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

Time left 0:59:29

Question 1  
Not yet answered  
Marked out of 100  
Flag question

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

Quiz navigation

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Finish attempt ...

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Time left 0:53:39

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

Select one:

True

False



[Next page](#)

true

Quiz navigation

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13	14	15
17	18	19
21	22	23
25	26	27
29	30	

Time left 0:56:08

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

Select one:

True

False

Flag question

Question 5  
Not yet  
answered  
Marked out of  
1.00

Question 5  
Not yet  
answered  
Marked out of  
1.00

Question 5  
Not yet  
answered  
Marked out of  
1.00

Next page

Finish attempt

true

The screenshot shows a simulation exam interface. At the top, there is a navigation bar with links: Home, My courses, SIMULATION, General, and Final Exam Spring2021. A red box highlights the 'SIMULATION' link. On the left, a sidebar for 'Question 1' displays: 'Not yet answered', 'Marked out of 1.00', and a 'Flag question' button. The main content area contains a question: 'A failure policy MUST be attached to two resources or more'. Below the question, it says 'Select one:' followed by two radio buttons: 'True' and 'False'. In the top right corner of the main area, a red box contains the text 'Time left 0:57:38'. In the bottom right corner of the main area, there is a blue button labeled 'Next page'.

false

Time left 0:39:59

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

Select one:

- True
- False

Next page

true

Time left 0:39:06

A \_\_\_\_\_ is a global quantity that can be initiated and changed during simulation

- Variable
- Expression
- Attribute
- Simulation Clock

[Clear my choice](#)

Next page

variable

Time left

The delay module from the block panel includes, by default, the store, and un-store modules

Select one:

- True
- False

Next

true

Tin

Adding a delay for two minutes instead of a route that takes two minutes:

- This would work from modeling/numerical output viewpoints
- This would not allow animation of part transfers
- All of the above
- None of the above

c

7:40



X 194085698\_7518431821562... ...

A limited storage space is best modeled by

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

Resource

The screenshot shows a software interface for a simulation exam. At the top, there are tabs: 'HOME', 'My Courses', 'SIMULATION', 'General', and 'Final Exam Spring 2021'. A progress bar indicates 'Question 1' of '10' has been completed. On the left, a sidebar shows 'Score: 100' and 'Time: 00:00:00'. The main area contains a question: 'We may have more than one entity type and multiple realizations of the entities in the same system'. Below the question, it says 'Select one:' followed by two options: 'True' (selected) and 'False'. A cursor arrow is positioned next to the 'False' option. In the bottom right corner of the main area, there is a blue button labeled 'Next page'.

Time left 0:58:36

Question 1  
Score: 100  
Time: 00:00:00

We may have more than one entity type and multiple realizations of the entities in the same system

Select one:

True

False

Next page

true

Time left 0:52:32

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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

Time

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

- Verification
- Validation
- Type III Error

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

Time left 0:45:06

Quiz

1 2  
7 8  
13 14  
19 20  
25 26

Finish off

Next page

Type here to search

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

b

Time left 0:51:24

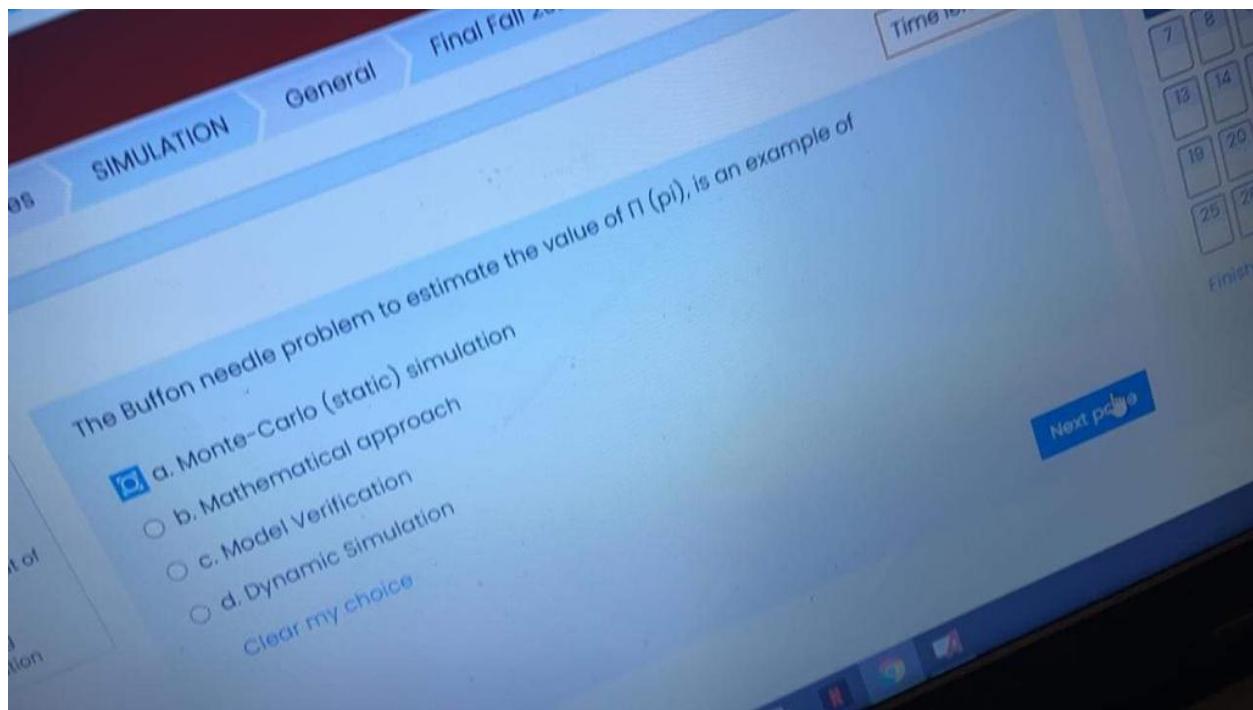
Global Expression stores formulas as well as numbers, it can be scalar, or vector, or matrix

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  
answeredMarked out of  
50Flag  
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. Sioze area
- d. Decide
- e. Queue

**Question 14**Not yet  
answeredMarked out of  
50

Answer

here to search

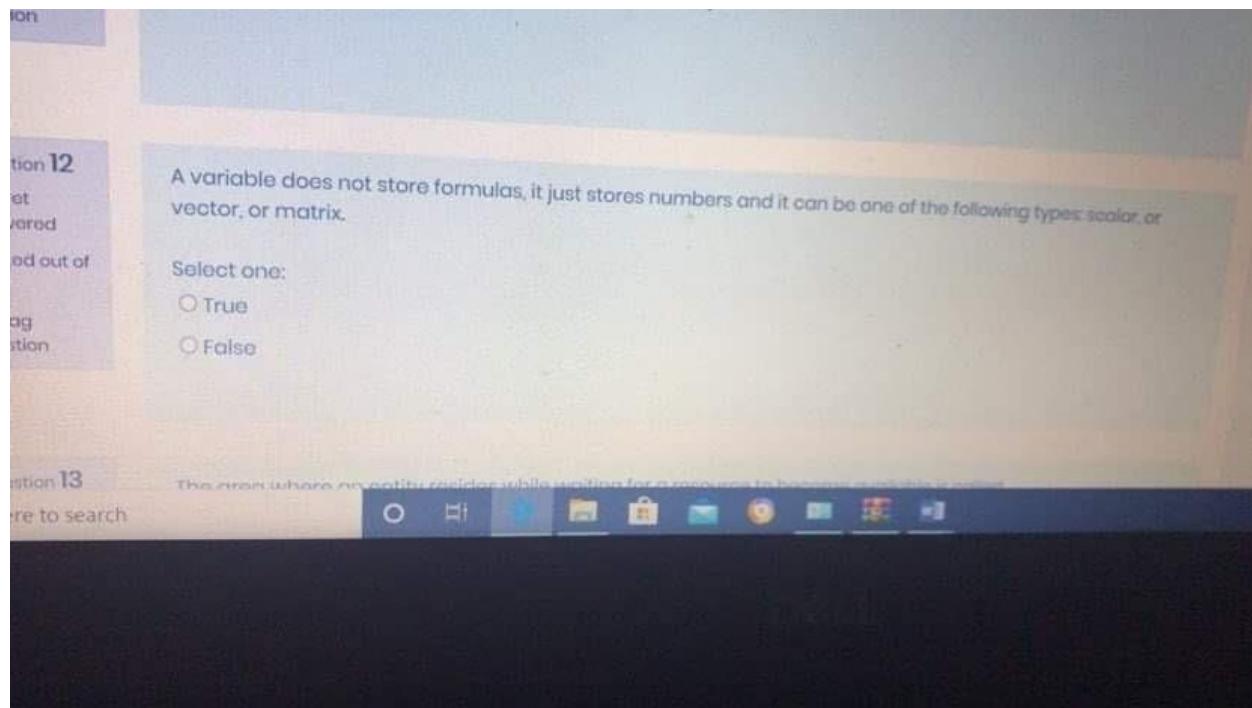
Not releasing a resource before leaving the model might cause

Select one or more:

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



Q13 E



TRUE

Home

My courses

SIMULATION

General

Final Exam

**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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[Jump to...](#)



B

Flag question

- True
- False

**Question 7**

Not yet answered

Marked out of  
150

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  
150

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  
150

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  
150

Flag

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  
150

Flag  
question

One of the problems in the Queueing 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  
150

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)

My courses

SIMULATION

General

Final Exam

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

Time left 0:52:14

The news vendor problem is an example of

- Dynamic, Discrete, Stochastic
- Dynamic, Continuous, Stochastic
- Dynamic, Continuous, Deterministic

Static, Discrete, Stochastic

[Clear my choice](#)

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d

- d. Sequential Sampling
- e. Type III Error

**Question 3**

Not yet  
answered

Marked out of  
1.00

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  
1.00

Flag  
question

One of the problems in the Queueing 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  
150

 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(5)

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a

Chapter\_01\_Simulation

juexams.com/moodle/mod/quiz/attempt.php?attempt=169

SIMULATION

General

Final Exam Spring2021

Time left: 10:00

15 16 17 18 19 20  
21 22 23 24 25  
26 27 28 29 30  
Finish attempt

**SIMULATION**

Home My courses

Question 6 Not yet answered Marked out of 1.00 Flag question

One of the following is not an event:

Entity leaving the queue and starts service

When the simulation clock hits the final simulation time

Third entity leaves the service

Arrival of the second entity

Clear my choice

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a

Home > My courses > SIMULATION > General > Final Exam Spring2021

Time left 0:59:38

Question 1

Not yet answered

Marked out of 1.00

Flag question

A \_\_\_\_\_ is a global quantity that can be initiated and changed during simulation

Variable

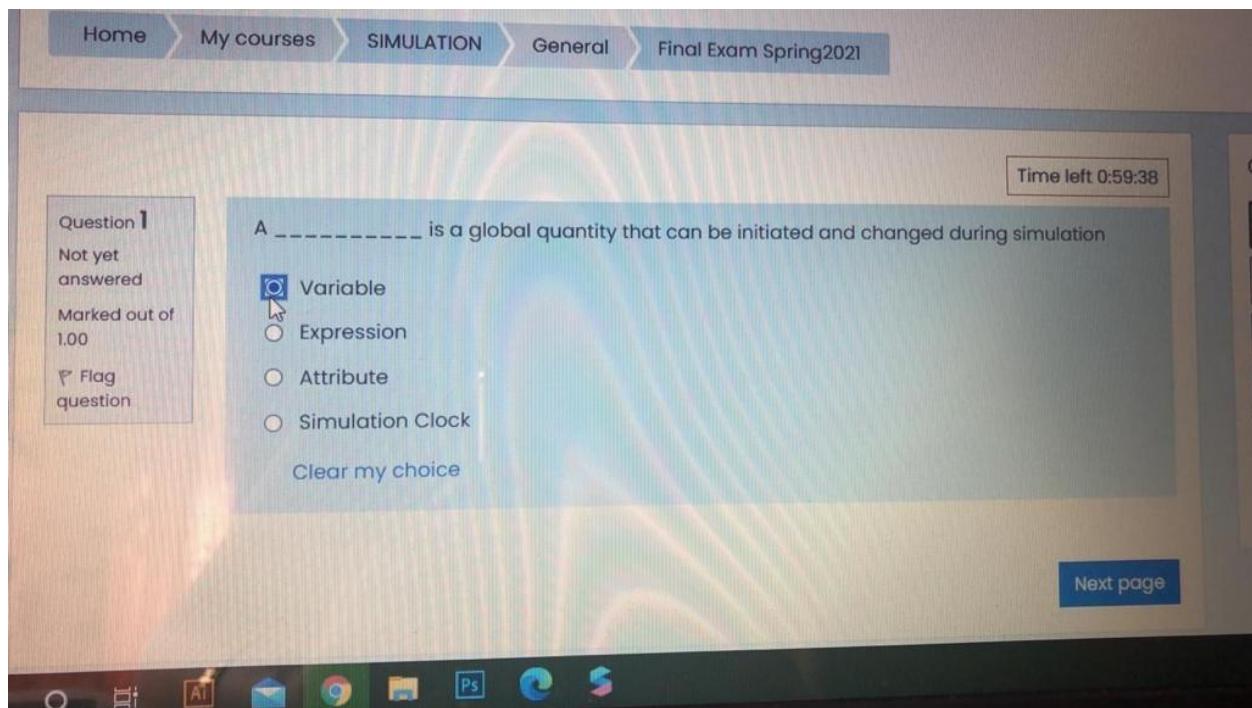
Expression

Attribute

Simulation Clock

Clear my choice

Next page



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