Spring 2022 courses

DONE db Quiz 3 - data centers, metadata, cloud computing

This ungraded quiz includes questions on data centers, cloud computing, and GNU Emacs Org-mode.

Once you played it for the first time, you can play it unlimited times until the graded final exam, which will draw its questions from all quizzes.

Which of these are measures employed by data centers to "go green"?

TRUE:

- Raise data center temperatures
- Moving from air- to water-based cooling systems
- Using renewable energy sources to power the data center

FALSE:

- Lower data center temperatures
- Moving from water- to air-based cooling systems
- Using fossil fuel based energy sources to power the data center

The security measures to protect data centers from unauthorized access are severe because servers are expensive

FALSE

Feedback: The reason is that unauthorized access to the data centers could lead to the loss of sensitive data. Servers are comparatively inexpensive.

How can I add title metadata to an GNU Emacs Org-mode file?

TRUE:

- `#+TITLE:`

FALSE:

- `##TITLE:`
- `#!TITLE:`
- `#TITLE:`

Org-mode SQLite code blocks require a named database in the header

TRUE

Feedback: The header entry is `:db file.db`

Banks may not currently be the best candidates for cloud computing, because their data are

TRUE:

- Confidential
- Structured

- Long-lasting

FALSE:

- Changeable
- Open
- Unstructured

You can open a shell program inside another program

TRUE

Feedback: examples are `eshell` inside GNU Emacs, and SQLite inside the CMD terminal.

A REPL (Read-Eval-Print-Loop) environment is an application

TRUE

Feedback: a REPL is an application that takes single user input, executes them and returns the result to the user, for example replit.com in the cloud, to learn coding, or a Python, SQLite or R shell program.

What is horizontal server scaling?

TRUE:

- Adding more servers to increase computing performance

FALSE:

- Increasing the power of existing servers to increase computing performance

DataCamp is an example of an SaaS (Software as a Service)

TRUE

Feedback: As a user, you buy their learning applications (services) and use their data only. You have to provide the infrastructure (hence no IaaS), and there is no platform you can log on to for development (hence no PaaS) - the dashboard is not a platform but just a window to the services.

Greater abstraction means less control

TRUE

Feedback: easier to remember is "more complexity means less control." Abstraction takes away detail, which increases complexity - the concepts become more abstract. IaaS (infrastructure) is more concrete than SaaS (services).

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