quiz no solution w2

Question 1

If you have a program language that is largely procedural, which architecture style are you likely to use?

1 point

☐ **Pipe and Filter**

☐ **Event Based**

☐ **Main Program and Subroutine**

☐ **Process Control**

Question 2

What are some **disadvantages** of Data-Centric Architecture? Select the **2 correct answers**.

1 point

☐ **Data integrity can be compromised by having it widely accessible.**

☐ **The system becomes heavily reliant on the central data.**

☐ **The existing data schema is difficult to change.**

☐ **Considerable overhead for data transfer between data accessors.**

Question 3

Which of these principles is **NOT** characteristic of a layered system?

1 point

☐ **separation of concerns**

☐ **sandboxing**

☐ **tight coupling**

☐ **abstraction**

Question 4

Which of the following is a common messaging pattern in client/server relationships?

1 point

☐ **one-way**

☐ **request-response**

☐ **handshake**

☐ **solicit-response**

Question 5

How does an n-Tier architecture differ from a layered architecture?

1 point

☐ **A layered architecture is limited to three layers, whereas an n-tier can go to as many as are needed**

☐ **The interaction between tiers in an n-Tier architecture is strictly message based**

☐ **Layered architectures are more loosely coupled**

☐ **n-Tier architectures are only found on the Internet**

Question 6

Which of these is **NOT** a possible use for Interpreters?

1 point

☐ **Giving end users the opportunity to program scripts or macros**

☐ **Allowing developers to develop add-ons in a common language**

☐ **Abstracting away platform details**

☐ **Enhancing resource usage efficiency**

Question 7

Which of these is an advantage of event-based architecture?

1 point

☐ **All interactions happen synchronously**

☐ **Events trigger responses in a predictable manner**

☐ **Events are processed with more efficiency**

☐ **Event generators and event consumers are loosely coupled**

Question 8

There is a common technique that is used in event architectures to indicate whether or not a particular resource is being accessed by another process at that moment. What is it called?

1 point

☐ **access switch**

☐ **semaphore**

☐ **occupied**

☐ **toggle**

Question 9

Beverly is asked to develop a way to control a process. There is a device to measure the height of liquid in a tank, and when the tank is almost full, a pump turns on to empty the tank. Which type of process control architecture will she use?

1 point

☐ **Feedforward Loop**

☐ **Open Loop**

☐ **Feedback Loop**

☐ **Shooting Control**

Question 10

What are the steps in complex, process control system architectures, such as self-driving cars?

1 point

☐ **sense, interpret, model, act**

☐ **monitor, analyze, plan, execute**

☐ **read, plan, deliver**

☐ **analyze, model, plan, act**

Question 11

Which of these applications would be best suited to a procedural programming paradigm, such as the Main Program and Subroutine architecture?

1 point

☐ **Accessing data from a repository**

☐ **A self-driving car**

☐ **A user interface, such as a simple poker game**

☐ **Analyzing data and producing reports**

Question 12

Which of these is **NOT** an advantage of pipe and filter architectures?

1 point

☐ **Complex transformations can be broken down into subtasks**

- [ ] **Filters can be reused**

- [ ] **Data transformation is computationally efficient**

- [ ] **Filters are loosely coupled**