✅ **Selamat! Anda lulus!**

Nilai diterima 100%   UNTUK LULUS 80% atau lebih tinggi

[**Pergi ke item berikutnya**]

Week 4 Quiz

Nilai Kiriman Terbaru 100%

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1. What advantage does Federated Learning give you?   `1 / 1 poin`

- ◯ User data can remain private on their device but still be used to train models
- ◯ Users can have models trained on everybody's data
- ◯ Models can be frequently updated
- ⦿ All of the above

✅ **Benar**

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2. What is the privacy principle of focused collection?   `1 / 1 poin`

- ◯ Data is filtered by the network to remove all irrelevant data
- ◯ Devices filter all the data from the server to only use updates
- ⦿ Devices report only the data needed for a specific computation
- ◯ Engineer filters all the data to get only what she needs for a calculation

✅ **Benar**

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3. What is secure aggregation?   `1 / 1 poin`

- ◯ Devices in a network pair up, and aggregate mutual data before sending to the server
- ⦿ Devices in a network pair up, and create obfuscation keys that get cancelled out when aggregated on the server
- ◯ Data is aggregated on the device before sending to the server, and sent on an encrypted channel
- ◯ Data is aggregated before being sent to the server, and only sent on encrypted channels

✅ **Benar**

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4. TensorFlow Federated includes a Federated Learning API, a Federated Core API and a runtime for simulations. What's the role of the Federated Learning API?   `1 / 1 poin`

- ◯ It's designed to allow the expression of new Federated algorithms
- ⦿ It contains implementations of federated training that can be applied to existing tensorflow models and data
- ◯ It is a mobile runtime for Federated Learning
- ◯ It is the API for everything Federated Learning

✅ **Benar**

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5. If you want to declare a federated type, where a numeric item of data is available across all your devices, how do you do it?   `1 / 1 poin`

- ⦿ You declare the type as {float32}@clients
- ◯ You declare the type as {float32}@server
- ◯ You can't do this for privacy reasons, you have to declare it when submitting to the server
- ◯ Each device needs the same variable name and type

✅ **Benar**

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6. If you want to do a federated computation on the server, what do you need to do to your computation function?   `1 / 1 poin`

- ◯ Attribute the function with @federated
- ⦿ Attribute the function with @tff.federated_computation

○ Nothing, it will just work automatically

○ Make sure it returns its value to @Clients

✓ **Benar**

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7. You want to return a mean value of client values, calculated on the server, back to the clients. How do you do this?   `1 / 1 poin`

○ You can't do this for privacy reasons

○ You have to explicitly open a network pipe and send the value to all of the clients using it

◉ You have to use a tff.federated_mean to calculate the value and return its results

○ The return value from your function is automatically mapped to the clients

✓ **Benar**

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8. If you want to try the tensorflow federated APIs, how do you install them for Python?   `1 / 1 poin`

◉ Pip install tensorflow_federated

○ Pip install tensorflow-federated

○ Do nothing, they're included in TensorFlow

○ Pip install tf-federated

✓ **Benar**