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A callback is an object that can perform actions at various stages of training (e.g. at the start or end of an epoch, before or after a single batch, etc).

You can use callbacks to:

- Write TensorBoard logs after every batch of training to monitor your metrics
- Periodically save your model to disk
- Do early stopping
- Get a view on internal states and statistics of a model during training
- ...and more

Usage of callbacks via the built-in fit() loop

You can pass a list of callbacks (as the keyword argument callbacks) to the .fit() method of a model:

```
my_callbacks = [
    tf.keras.callbacks.EarlyStopping(patience=2),
    tf.keras.callbacks.ModelCheckpoint(filepath='model.{epoch:02d}-{val_loss:.2f}.h5'),
    tf.keras.callbacks.TensorBoard(log_dir='./logs'),
]
model.fit(dataset, epochs=10, callbacks=my_callbacks)
```

The relevant methods of the callbacks will then be called at each stage of the training.

Using custom callbacks

Creating new callbacks is a simple and powerful way to customize a training loop. Learn more about creating new callbacks in the guide <u>Writing your own Callbacks</u>, and refer to the documentation for <u>the base Callback class</u>.

Available callbacks

- Base Callback class
- ModelCheckpoint
- TensorBoard
- <u>EarlyStopping</u>
- <u>LearningRateScheduler</u>
- ReduceLROnPlateau
- RemoteMonitor
- <u>LambdaCallback</u>
- <u>TerminateOnNaN</u>
- CSVLogger
- <u>ProgbarLogger</u>

https://keras.io/api/callbacks/