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## Everything

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**Module reflection** 

# Module reflection

source code

Contains a metaclass and helper functions used to create protocol message classes from Descriptor objects at runtime.

Recall that a metaclass is the "type" of a class. (A class is to a metaclass what an instance is to a class.)

In this case, we use the GeneratedProtocolMessageType metaclass to inject all the useful functionality into the classes output by the protocol compiler at compile-time.

The upshot of all this is that the real implementation details for ALL pure-Python protocol buffers are \*here in this file\*.

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#### **Classes**

**GeneratedProtocolMessageType** 

Metaclass for protocol message classes created at runtime from Descriptors.

### **Functions**

ParseMessage (descriptor, byte\_str)

Generate a new Message instance from this Descriptor and a byte string.

MakeClass (descriptor)

Construct a class object for a protobuf

Construct a class object for a protobuf described by descriptor.

## Variables

package = 'google.protobuf'

## **Function Details**

# ParseMessage(descriptor, byte\_str)

source code

Generate a new Message instance from this Descriptor and a byte string.

Args:

descriptor: Protobuf Descriptor object

byte str: Serialized protocol buffer byte string

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