# Style Guide

This document provides a style guide for .proto files. By following these conventions, you'll make your protocol buffer message definitions and their corresponding classes consistent and easy to read.

### Standard file formatting

- Keep the line length to 80 characters.
- Use an indent of 2 spaces.

#### File structure

Files should be named lower\_snake\_case.proto

All files should be ordered in the following manner:

- 1. License header (if applicable)
- 2. File overview
- 3. Syntax
- 4. Package
- 5. Imports (sorted)
- 6. File options
- 7. Everything else

## **Packages**

Package name should be in lowercase, and should correspond to the directory hierarchy. e.g., if a file is in my/package/, then the package name should be my.package.

# Message and field names

Use CamelCase (with an initial capital) for message names – for example, SongServerRequest. Use underscore\_separated\_names for field names (including oneof field and extension names) – for example, song\_name.

```
message SongServerRequest {
  required string song_name = 1;
}
```

Using this naming convention for field names gives you accessors like the following:

```
C++:
   const string& song_name() { ... }
   void set_song_name(const string& x) { ... }

Java:
   public String getSongName() { ... }
   public Builder setSongName(String v) { ... }
```

If your field name contains a number, the number should appear after the letter instead of after the underscore. e.g., use song\_name1 instead of song\_name\_1

### Repeated fields

Use pluralized names for repeated fields.

```
repeated string keys = 1;
...
repeated MyMessage accounts = 17;
```

#### **Enums**

Use CamelCase (with an initial capital) for enum type names and CAPITALS\_WITH\_UNDERSCORES for value names:

```
enum Foo {
  FOO_UNSPECIFIED = 0;
  FOO_FIRST_VALUE = 1;
  FOO_SECOND_VALUE = 2;
}
```

Each enum value should end with a semicolon, not a comma. Prefer prefixing enum values instead of surrounding them in an enclosing message. The zero value enum should have the suffix UNSPECIFIED.

#### Services

If your .proto defines an RPC service, you should use CamelCase (with an initial capital) for both the service name and any RPC method names:

```
service FooService {
  rpc GetSomething(FooRequest) returns (FooResponse);
}
```

# Things to avoid

- Required fields (only for proto2)
- Groups (only for proto2)

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