
Protocol Documentation

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Booking.proto

Booking related messages.

This file is really just an example. The data model is completely fictional.

Author: Elvis Stansvik

Booking

Represents the booking of a vehicle.

Vehicles are some cool shit. But drive carefully!

Table 1. Booking Fields

Field	Type	Label	Description
vehicle_id	int32	required	ID of booked vehicle.
customer_id	int32	required	Customer that booked the vehicle.
status	BookingStatus	required	Status of the booking.
confirmation_sent	bool	required	Has booking confirmation been sent?
payment_received	bool	required	Has payment been received?

BookingStatus

Represents the status of a vehicle booking.

Table 2. BookingStatus Fields

Field	Type	Label	Description
id	int32	required	Unique booking status ID.
description	string	required	Booking status description. E.g. "Active".

BookingService

Service for handling vehicle bookings.

Table 3. BookingService Methods

Method Name	Request Type	Response Type	Description
BookVehicle	Booking	BookingStatus	Used to book a vehicle. Pass in a Booking and a BookingStatus will be returned.

Customer.proto

This file has messages for describing a customer.

Author: Elvis Stansvik

Address

Represents a mail address.

Table 4. Address Fields

Field	Type	Label	Description
address_line_1	string	required	First address line.
address_line_2	string	optional	Second address line.
address_line_3	string	optional	Second address line.
town	string	required	Address town.
county	string	optional	Address county, if applicable.
country	string	required	Address country.

Customer

Represents a customer.

Table 5. Customer Fields

Field	Type	Label	Description
id	int32	required	Unique customer ID.
first_name	string	required	Customer first name.
last_name	string	required	Customer last name.
details	string	optional	Customer details.
email_address	string	optional	Customer e-mail address.
phone_number	string	repeated	Customer phone numbers, primary first.
mail_addresses	Address	repeated	Customer mail addresses, primary first.

Vehicle.proto

Messages describing manufacturers / vehicles.

Manufacturer

Represents a manufacturer of cars.

Table 6. Manufacturer Fields

Field	Type	Label	Description
id	int32	required	The unique manufacturer ID.
code	string	required	A manufacturer code, e.g. "DKL4P".
details	string	optional	Manufacturer details (minimum orders et.c.).
category	Manufacturer.Category	optional	Manufacturer category. Default: CATEGORY_EXTERNAL

Model

Represents a vehicle model.

Table 7. Model Fields

Field	Type	Label	Description
id	string	required	The unique model ID.
model_code	string	required	The car model code, e.g. "PZ003".
model_name	string	required	The car model name, e.g. "Z3".
daily_hire_rate_dollars	sint32	required	Dollars per day.
daily_hire_rate_cents	sint32	required	Cents per day.

Vehicle

Represents a vehicle that can be hired.

Table 8. Vehicle Fields

Field	Type	Label	Description
id	int32	required	Unique vehicle ID.

Field	Type	Label	Description
model	Model	required	Vehicle model.
reg_number	string	required	Vehicle registration number.
mileage	sint32	optional	Current vehicle mileage, if known.
category	Vehicle.Category	optional	Vehicle category.
daily_hire_rate_dollars	sint32	optional	Dollars per day. Default: 50
daily_hire_rate_cents	sint32	optional	Cents per day.

Table 9. vehicle Nested Extensions

Extension	Type	Base	Number	Description
series	string	Model	100	Vehicle model series.

Vehicle.Category

Represents a vehicle category. E.g. "Sedan" or "Truck".

Table 10. vehicle.Category Fields

Field	Type	Label	Description
code	string	required	Category code. E.g. "S".
description	string	required	Category name. E.g. "Sedan".

Manufacturer.Category

Manufacturer category. A manufacturer may be either inhouse or external.

Table 11. Manufacturer.Category Values

Name	Number	Description
CATEGORY_INHOUSE	0	The manufacturer is inhouse.
CATEGORY_EXTERNAL	1	The manufacturer is external.

File-level Extensions

Extension	Type	Base	Number	Description
country	string	Manufacturer	100	Manufacturer country. Default: "China"

Scalar Value Types

.proto Type	Notes	C++ Type	Java Type	Python Type
double		double	double	float
float		float	float	float
int32	Uses variable-length encoding. Inefficient for encoding negative numbers – if your field is likely to have negative values, use sint32 instead.	int32	int	int
int64	Uses variable-length encoding. Inefficient for encoding negative numbers – if your field is likely to have negative values, use sint64 instead.	int64	long	int/long
uint32	Uses variable-length encoding.	uint32	int	int/long
uint64	Uses variable-length encoding.	uint64	long	int/long
sint32	Uses variable-length encoding. Signed int value. These more efficiently encode negative numbers than regular int32s.	int32	int	int
sint64	Uses variable-length encoding. Signed int value. These more efficiently encode negative numbers than regular int64s.	int64	long	int/long
fixed32	Always four bytes. More efficient than uint32 if values are often greater than 2^{28} .	uint32	int	int
fixed64	Always eight bytes. More efficient than uint64 if values are often greater than 2^{56} .	uint64	long	int/long
sfixed32	Always four bytes.	int32	int	int
sfixed64	Always eight bytes.	int64	long	int/long
bool		bool	boolean	boolean
string	A string must always contain UTF-8 encoded or 7-bit ASCII text.	string	String	str/unicode
bytes	May contain any arbitrary sequence of bytes.	string	ByteString	str