

# Using Other Features

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# Overview



**Global Enumerations**

**Multiple Messages**

**Imports**

**Packages**



# Enumerations

```
message Customer {  
    enum Type {  
        REGULAR = 0;  
        MEMBER = 1;  
        SPONSOR = 2;  
    }  
    Type type = 1;  
}
```

```
var customer = new Customer();  
  
customer.setType(  
    Customer.Type.REGULAR);
```



# Enumerations

```
message Customer {
```

```
    CustomerType type = 1;
```

```
}
```

```
enum CustomerType {
```

```
    REGULAR = 0;
```

```
    MEMBER = 1;
```

```
    SPONSOR = 2;
```

```
}
```

```
var customer = new Customer();
```

```
customer.setType(  
    CustomerType.REGULAR);
```



# Multiple Messages

**Nested**

**Siblings**



# Nested Message Types

```
message Customer {  
    message Address {  
        . . .  
    }  
    repeated Address addresses = 1;  
}
```

```
var customer = new Customer();  
  
var address = new  
    Customer.Address();
```



# Sibling Message Types

```
message Customer {  
    repeated Address  
        addresses = 1;  
}
```

```
var customer = new Customer();
```

```
message Address {  
    string address = 1;  
    string city    2;  
}
```

```
var address = new Address();
```



Update demo to make  
address a sibling and enum  
global





# Importing

## customer.proto

```
import "address.proto";  
message Customer {  
    string name = 1;  
    Address address = 2;  
}
```

## address.proto

```
message Address {  
    string address = 1;  
    string city = 2;  
}
```

Move address to  
address.proto and update  
demo



# Packages

Global

Customer

Address

...

customer.

```
import "./ad  
message Cust  
  string nam  
  Address ad  
}
```

s.proto

```
ress {  
  dress = 1;  
  ty = 2;
```



# Packages

Global

customerdata

Customer

Address

customer.

```
import "address.proto"
message Customer {
  string name;
  Address address;
}
```

address.proto

```
message Address {
  int32 id = 1;
  string type = 2;
}
```



# Packages

## customer.proto

```
import "address.proto";  
package customerdata;  
message Customer {  
    string name = 1;  
    Address address = 2;  
}
```

## address.proto

```
package customerdata;  
message Address {  
    string address = 1;  
    string city = 2;  
}
```

Add packages to .protos



# Summary



**Global Enumerations**

**Multiple Messages**

**Imports**

**Packages**

