

Ruby on Rails

Convención sobre
configuración

Convenciones

- tablas: books (Plural)
- modelo: book (Singular)
- claves foráneas: book_id (singular)
- claves primarias: id (auto generados)

Model / Class	Table / Schema
Article	articles
LineItem	line_items
Deer	deers
Mouse	mice
Person	people

Tipos de datos

	db2	mysql	openbase	oracle	postgresql	sqlite	sqlserver	sybase
:binary	blob(32768)	blob	object	blob	bytea	blob	image	image
:boolean	decimal(1)	tinyint(1)	boolean	number(1)	boolean	boolean	bit	bit
:date	date	date	date	date	date	date	date	datetime
:datetime	timestamp	datetime	datetime	date	timestamp	datetime	datetime	datetime
:decimal	decimal	decimal	decimal	decimal	decimal	decimal	decimal	decimal
:float	float	float	float	number	float	float	float(8)	float(8)
:integer	int	int(11)	integer	number(38)	integer	integer	int	int
:string	varchar(255)	varchar(255)	char(4096)	varchar2(255)	(note 1)	varchar(255)	varchar(255)	varchar(255)
:text	clob(32768)	text	text	clob	text	text	text	text
:time	time	time	time	date	time	datetime	time	time
:timestamp	timestamp	datetime	timestamp	date	timestamp	datetime	datetime	timestamp

Migraciones

- Manera de alterar el esquema de base de datos en el tiempo
- No tiene que escribir SQL a mano

```
class CreateProducts < ActiveRecord::Migration
  def change
    create_table :products do |t|
      t.string :name
      t.text :description

      t.timestamps null: false
    end
  end
end
```

```
bin/rails generate migration
CreateProducts name:string
description:text
```

Migraciones

CreateTable

AddFiled(s)ToTable

RemoveField(s)FromTable

bin/rails generate migration AddPartNumberToProducts
part_number:string

```
class AddPartNumberToProducts < ActiveRecord::Migration
  def change
    add_column :products, :part_number, :string
  end
end
```

bin/rails generate migration
RemovePartNumberFromProducts part_number:string

```
class RemovePartNumberFromProducts < ActiveRecord::Migration
  def change
    remove_column :products, :part_number, :string
  end
end
```

bin/rails generate migration AddDetailsToProducts
part_number:string price:decimal

```
class AddDetailsToProducts < ActiveRecord::Migration
  def change
    add_column :products, :part_number, :string
    add_column :products, :price, :decimal
  end
end
```

Migraciones

bin/rails generate migration AddUserRefToProducts user:references

```
class AddUserRefToProducts < ActiveRecord::Migration
  def change
    add_reference :products, :user, index: true
  end
end
```

bin/rails g migration CreateJoinTableCustomerProduct customer product

```
class CreateJoinTableCustomerProduct < ActiveRecord::Migration
  def change
    create_join_table :customers, :products do |t|
      # t.index [:customer_id, :product_id]
      # t.index [:product_id, :customer_id]
    end
  end
end
```

add_foreign_key :articles, :authors

Migraciones

- `add_column`
- `add_index`
- `add_reference`
- `add_timestamps`
- `add_foreign_key`
- `create_table`
- `create_join_table`
- `drop_table` (must supply a block)
- `drop_join_table` (must supply a block)
- `remove_timestamps`
- `rename_column`
- `rename_index`
- `remove_reference`
- `rename_table`

```
bin/rake db:migrate
```

```
bin/rake db:rollback
```

```
bin/rake db:rollback STEP=3
```

```
bin/rake db:migrate:redo STEP=3
```

```
bin/rake db:migrate:up  
VERSION=20080906120000
```

```
bin/rake db:migrate RAILS_ENV=test
```

Migraciones

bin/rails generate migration CreateProducts name:string description:text
supplier:references

```
class CreateProducts < ActiveRecord::Migration
  def change
    create_table :products do |t|
      t.string :name
      t.text :description
      t.references :supplier, index: true
    end
    add_foreign_key :products, :suppliers
  end
end
```


Primer reto

Modelos

```
1 class Product < ActiveRecord::Base
2   belongs_to :supplier
3 end
4
```

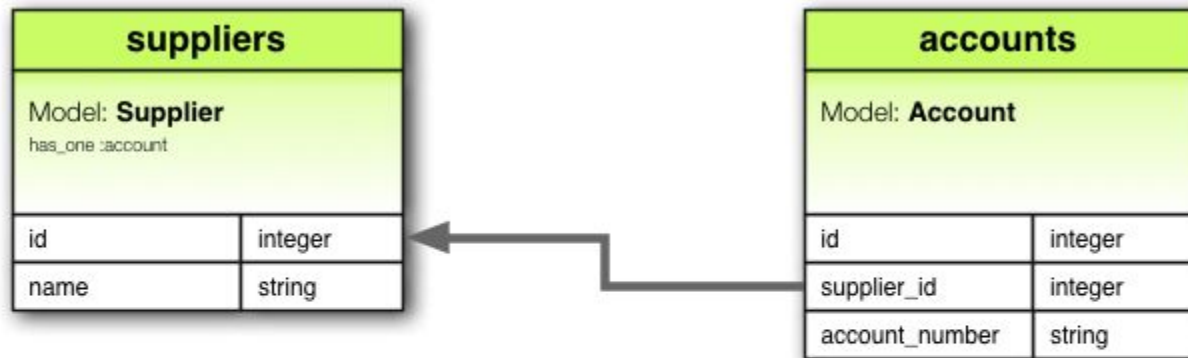
```
class CreateProducts < ActiveRecord::Migration
  def change
    create_table :products do |t|
      t.string :name
      t.text :description
      t.references :supplier, index: true

      t.timestamps null: false
    end
    add_foreign_key :products, :suppliers
  end
end
```

bin/rails generate
model Product
name:string
description:text
supplier:references

Asociaciones entre modelos

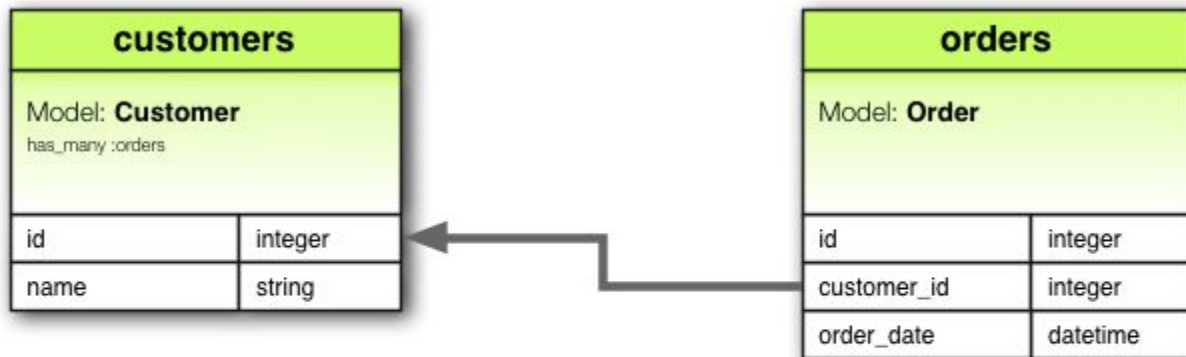
- has_one



```
class Supplier < ActiveRecord::Base
  has_one :account
end
```

Asociaciones entre modelos

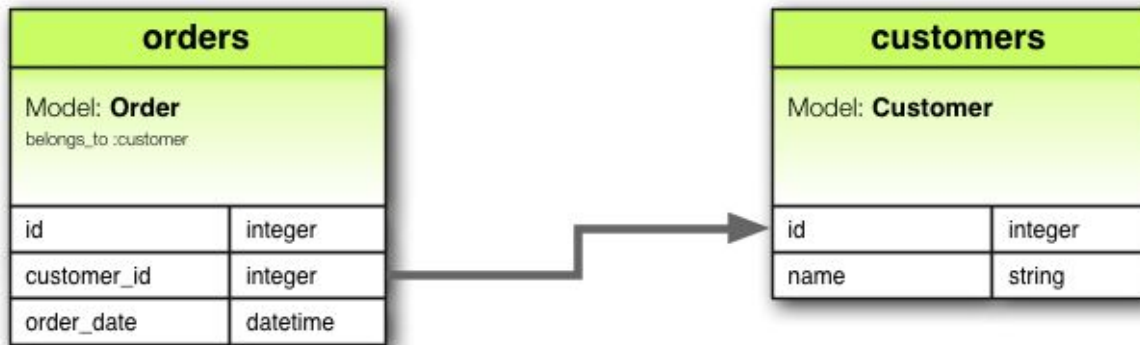
- has_many



```
class Customer < ActiveRecord::Base
  has_many :orders
end
```

Asociaciones entre modelos

- belongs_to



```
class Order < ActiveRecord::Base
  belongs_to :customer
end
```

Asociaciones entre modelos

- has_and_belongs_to_many

assemblies	
Model: Assembly has_and_belongs_to_many :parts	
id	integer
name	string

parts	
Model: Part has_and_belongs_to_many :assemblies	
id	integer
part_number	string

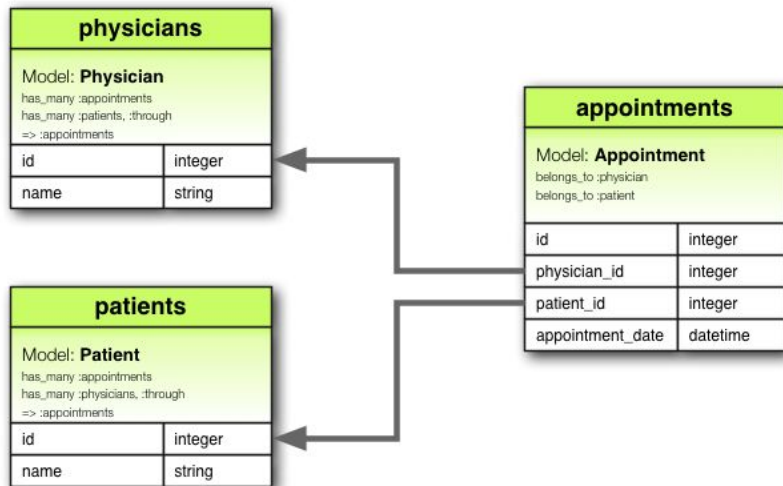
assemblies_parts	
assembly_id	integer
part_id	integer

```
class Assembly < ActiveRecord::Base
  has_and_belongs_to_many :parts
end
```

```
class Part < ActiveRecord::Base
  has_and_belongs_to_many :assemblies
end
```


Asociaciones entre modelos

- has_many :through



```
class Physician < ActiveRecord::Base
  has_many :appointments
  has_many :patients, :through => :appointments
end
```

```
class Appointment < ActiveRecord::Base
  belongs_to :physician
  belongs_to :patient
end
```

```
class Patient < ActiveRecord::Base
  has_many :appointments
  has_many :physicians, :through => :appointments
end
```

Usando

Active Record Query Interface