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RUBY ON RAILS 3 Cheat Sheet

**By**

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**Naming Conventions:**

Variables:

all lowercase and words separated by underscores (order\_status)

Classes and Modules:

each word in a phrase is capitalized (LineItem)

Database:

all lowercase words separated by underscores. Table names are plural (line\_items)

Files:

all lowercase with underscores

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| --- | --- |
| Model Naming: | |
| Table | line\_items |
| File | app/models/line\_item.rb |
| Class | LineItem |

|  |  |
| --- | --- |
| Controller Naming: | |
| URL | http://…/store/list |
| File | app/controllers/store\_controller.rb |
| Class | StoreController |
| Method | list |
| Layout | app/views/layouts/store.html.erb |

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| --- | --- |
| View Naming: | |
| URL | http://…/store/list |
| File | app/views/store/list.html.erb (or .builder or .rjs) |
| Helper | module StoreHelper |
| File | app/helpers/store\_helper.rb |

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| --- | --- |
| Class Name | Table Name |
| Order | Orders |
| TaxAgency | Tax\_agencies |
| Batch | Batches |
| Diagnosis | Diagnoses |
| LineItem | Line\_items |
| Person | People |
| Datum | Data |
| Quantity | quantities |
|  |  |

Versions

$ ruby –v # Shows Ruby Version

$ rails –v # Shows Rails Version

Help

$ rails –h # Rails Help

Gems

$ gem list # List of Installed Gems

Bundler

$ bundle install # Install Gems and Dependencies

Routes

$ rake routes # Lists all routes

Rails

$ rails –h # Shows commands available

$ rails new APP\_NAME # creates new Rails App

$ rails server # Start Rails Server

$ rails server –e development # Starts Rails in Development mode

$ rails server –e test # Starts Rails in Test mode

$ rails server –e production # Starts Rails in Production mode

$ rails generate controller CONTROLLER\_NAME # Generate new Controller

$ rails generate model NAME [field:type field:type] # Generates new Model

$ rails generate scaffold NAME [field:type field:type] # Generates new Scaffold

$ rails generate migration NAME [field:type field:type] # Generates new Migration

$ rails generate mailer NAME [method method] # Stubs out a new mailer & views

$ rails destroy controller # Undo last controller code generated with “generate”

$ rails destroy model # Undo last model code generated with “generate”

$ rails destroy scaffold # Undo last scaffold code generated with “generate”

$ rails destroy migration # Undo last migration code generated with “generate”

$ rails destroy mailer # Undo last mailer code generated with “generate”

$ rails runner script/file\_name.rb # Runs ruby code in the specified file

Rake

$ rake –tasks # Full list of tasks

$ rake –describe task # Complete description of specific task

$ rake doc:app # Generates programmer documentation under doc/app

$ rake stats # Code stats

Rake Database

$ rake db:migrate # Run the migration scripts

$ rake db:migrate Version=20110514000009 # Run a particular version of script

$ rake db:migrate:redo STEP=4 # Redo one or more migrations

$ rake db:rollback # Roll back the database

$ rake –trace –dry-run db:setup # Dry Run for Database setup

Rake Testing

$ rake test # Runs all unit, functional and integration tests

$ rake test:benchmark # Benchmark the performance tests

$ rake test:functionals # Runs all the functional tests from test/functional

$ rake test:integration # Runs all the integration tests from test/integration

$ rake test:plugins # Run all the plugin tests from vendor/plugins/\*/\*\*/test

$ rake test:profile # Profile the performance tests

$ rake test:recent # Tests recent changes

$ rake test:uncommitted # Runs tests which are uncommitted in Subversion

$ rake test:units # Runs all the unit tests from test/unit

Rake Test Database

$ rake db:test:clone # Recreate the test database from the current environment’s database schema

$ rake db:test:clone\_structure # Recreate the test databases from the development structure

$ rake db:test:load # Recreate the test database from the current schema.rb

$ rake db:test:prepare # Check for pending migrations and load the test schema

$ rake db:test:purge # Empty the test database.

New Project

$ rails new APP\_NAME –d mysql

$ cd APP\_NAME

$ bundle install

$ rake db:create

$ rails server

## Debugging Rails Applications

To inspect the contents of a variable:

<%= debug @post %>

<%= simple\_format @post.to\_yaml %>

<%= [1, 2, 3, 4, 5].inspect %>

## Routing

URL: http://www.example.com/controller/action/id

resources :photos

|  |
| --- |
|  |

creates 7 different routes in your application, all mapping to the Photos controller:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Verb** | **Path** | **Action** | **Helper** | **used for** |
| GET | /photos | index | photos\_path | display a list of all photos |
| GET | /photos/new | new | new\_photo\_path | return an HTML form for creating a new photo |
| POST | /photos | create | photos\_path | create a new photo |
| GET | /photos/:id | show | photo\_path(id) | display a specific photo |
| GET | /photos/:id/edit | edit | edit\_photo\_path(id) | return an HTML form for editing a photo |
| PUT | /photos/:id | update | photo\_path(id) | update a specific photo |
| DELETE | /photos/:id | destroy | photo\_path(id) | delete a specific photo |

## Creating New Record

Save()

a\_user = User.new

a\_user.name = “Joe”

a\_user.email = “joe@example.com”

a\_user.save

Create()

a\_user = User.create (

:name => “Joe”,

:email => “joe@example.com”

)

Create() both instantiates the model object and stores it into the database

## Finding Records

a\_user = User.find(7)

user = User.find\_by\_name(“Joe”)

users = User.find\_all\_by\_name(“Joe”)

users = User.find\_all\_by\_name\_and\_email(“Joe”, “joe@example.com”)

user = User.find\_or\_initialize\_by\_user\_id(user.id)

user = User.find\_or\_create\_by\_email(“joe@example.com”)

user = User.find\_by\_sql(“select \* from users where email = ‘joe@example.com’ ”)

## Where clause:

user = User.where(“name = :name and email = :email”,

{:name => params[:name], :email => params[:email]})

user = User.where(“name like ?”, params[:name] + “%”)

users = User.where(“name like ?”, params[:name] + “%”).order(“id desc”)

users = User.where(“name like ?”, params[:name] + “%”).order(“id desc”).limit(10)

users = User.where(“name like ?”, params[:name] + “%”).order(“id desc”).limit(10).offset(5)

user = User.select(“name, email”).where(“name like ?”, params[:name] + “%”)

## Column Statistics

average = Order.average(:amount)

max = Order.maximum(:amount)

min = Order.minimum(:amount)

total = Order.sum(:amount)

number = Order.count

orders = Order.where(“amount > 10”).minimum(:amount)

## Named Scopes

class Order < ActiveRecord::Base

scope :last\_n\_days, lambda { |days| where(‘updated < ?’, days) }

scope :checks, where(:pay\_type => :check)

end

orders = Order.checks.last\_n\_days(7)

## Updating Existing Records

order = Order.find(23)

order.name = “fred”

order.save

order = Order.find(23)

order.update\_attribute( :name => “fred” )

order = Order.find(23)

order.update\_attributes( :name => “fred”, :email => “fred@example.com” )

## Deleting Records

Order.delete(23)

User.delete( [2,5,7,9] )

Product.delete\_all( [“price > ?”, @sale\_price ] )

Sequence of Active Record Callbacks

