

README DOCUMENTATION BLOG CONTRIBUTE CREW CODE ABOUT Gittip

This page is also available in <u>Chinese</u>, <u>French</u>, <u>German</u>, <u>Hungarian</u>, <u>Korean</u>, <u>Portuguese</u> (<u>Brazilian</u>), <u>Portuguese</u> (<u>European</u>), <u>Russian</u>, <u>Spanish</u> and <u>Japanese</u>.

# Getting Started

Sinatra is a <u>DSL</u> for quickly creating web applications in Ruby with minimal effort:

```
# myapp.rb
require 'sinatra'

get '/' do
   'Hello world!'
end
```

Install the gem:



gem install sinatra

And run with:

```
ruby myapp.rb
```

View at: http://localhost:4567

If you use a different font for code, be sure to stay consistent throughout

It is recommended to also run gem install thin, which Sinatra will pick up if available.

## **Routes**

In Sinatra, a route is an HTTP method paired with a URL-matching pattern. Each route is associated with a block:

```
get '/' do
    .. show something ..
end
```

#### consider organizing the subsections alphabetically

- Routes
- 2. Conditions
- 3. Return Values
- 4. Custom Route Matchers
- 5. Static Files
- 6. Views / Templates

Literal Templates

Available Template Languages

- 1. Haml Templates
- 2. Erb Templates
- 3. Builder Templates
- 4. Nokogiri Templates
- 5. Sass Templates
- 6. SCSS Templates
- 7. Less Templates
- 8. Liquid Templates
- 9. Markdown Templates
- 10. Textile Templates
- 11. RDoc Templates
- 12. Radius Templates
- 13. Markaby Templates
- 14. RABL Templates
- 15. Slim Templates
- 16. Creole Templates
- 17. CoffeeScript Templates
- 18. Stylus Templates
- 19. Yajl Templates
- 20. WLang Templates

Accessing Variables in Templates

Templates with yield and nested layouts Inline Templates

Named Templates

Associating File Extensions

Adding Your Own Template Engine

#### 7. Filters

#### 8. Helpers

Using Sessions Halting

Passing

Triggering Another Route

Setting Body, Status Code and Headers

Streaming Responses

Logging

Mime Types

Generating URLs

Browser Redirect

Cache Control

Sending Files

Accessing the Request Object

Attachments

Dealing with Date and Time

Looking Up Template Files

9. Configuration

```
post '/' do
  .. create something ..
end
put '/' do
  .. replace something ..
end
patch '/' do
  .. modify something ..
end
delete '/' do
  .. annihilate something ..
end
options '/' do
 .. appease something ..
end
link '/' do
 .. affiliate something ..
end
unlink '/' do
  .. separate something ..
end
```

Configuring attack protection Available Settings

- 10. Environments
- 11. Error Handling
  Not Found
  Error
- 12. Rack Middleware
- 13. **Testing**
- 14. Sinatra::Base Middleware, Libraries, and Modular Apps

Modular vs. Classic Style
Serving a Modular Application
Using a Classic Style Application with a
config.ru
When to use a config.ru?
Using Sinatra as Middleware

Using Sinatra as Middleware Dynamic Application Creation 15. **Scopes and Binding** 

- Application/Class Scope Request/Instance Scope
  - Request/Instance Scope Delegation Scope
- 16. Command Line
- 17. Requirement
- 18. The Bleeding Edge
  With Bundler
  Roll Your Own
  Install Globally
- 19. Versioning
- 20. Further Reading

Routes are matched in the order they are defined. The first route that matches the request is invoked.

Route patterns may include named parameters, accessible via the params hash:

```
get '/hello/:name' do
    # matches "GET /hello/foo" and "GET /hello/bar"
    # params[:name] is 'foo' or 'bar'
    "Hello #{params[:name]}!"
end
```

You can also access named parameters via block parameters:

```
get '/hello/:name' do InI
  # matches "GET /hello/foo" and "GET /hello/bar"
  # params[:name] is 'foo' or 'bar'
  # n stores params[:name]
  "Hello #{n}!"
end
```

Route patterns may also include splat (or wildcard) parameters, accessible via the params[:splat] array:

```
get '/say/*/to/*' do
    # matches /say/hello/to/world
   params[:splat] # => ["hello", "world"]
end
```

```
get '/download/*.*' do
    # matches /download/path/to/file.xml
    params[:splat] # => ["path/to/file", "xml"]
end
```

Or with block parameters:

```
get '/download/*.*' do Ipath, ext!
  [path, ext] # => ["path/to/file", "xml"]
end
```

Route matching with Regular Expressions: why is this capitalized?

```
get %r{/hello/([\w]+)} do
  "Hello, #{params[:captures].first}!"
end
```

Or with a block parameter:

```
get %r{/hello/([\w]+)} do IcI
   "Hello, #{c}!"
end
```

Route patterns may have optional parameters:

```
get '/posts.?:format?' do
    # matches "GET /posts" and any extension "GET /posts.json", "GET /posts.xml" etc.
end
```

By the way, unless you disable the path traversal attack protection (see below), the request path might be modified before matching against your routes.

## **Conditions**

Routes may include a variety of matching conditions, such as the user agent:

```
get '/foo', :agent => /Songbird (\d\.\d)[\d\/]*?/ do
   "You're using Songbird version #{params[:agent][0]}"
end

get '/foo' do
   # Matches non-songbird browsers
end
```

Other available conditions are host\_name and provides:

```
get '/', :host_name => /^admin\./ do
   "Admin Area, Access denied!"
```

```
end

get '/', :provides => 'html' do
   haml :index
end

get '/', :provides => ['rss', 'atom', 'xml'] do
   builder :feed
end
```

You can easily define your own conditions:

```
set(:probability) { Ivaluel condition { rand <= value } }

get '/win_a_car', :probability => 0.1 do
   "You won!"
end

get '/win_a_car' do
   "Sorry, you lost."
end
```

For a condition that takes multiple values use a splat:

```
set(:auth) do I*roles| # <- notice the splat here
  condition do
    unless logged_in? && roles.any? {Irole| current_user.in_role? role }
        redirect "/login/", 303
        end
    end
end

get "/my/account/", :auth => [:user, :admin] do
        "Your Account Details"
end

get "/only/admin/", :auth => :admin do
        "Only admins are allowed here!"
end
```

Instead of capitalizing technical terms, consider italicizing or using a

## **Return Values**

The return value of a route block determines at least the response body passed on to the HTTP client, or at least the next middleware in the kack stack. Most commonly, this is a string, as in the above examples. But other values are also accepted.

You can return any object that would either be a valid kack response, kack body object or HTTP status code:

- An Array with three elements: [status (Fixnum), headers (Hash), response body (responds to #each)]
- An Array with two elements: [status (Fixnum), response body (responds to #each)]

- An object that responds to #each and passes nothing but strings to the given block
- A Fixnum representing the status code

That way we can, for instance, easily implement a streaming example:

```
class Stream
  def each
    100.times { lil yield "#{i}\n" }
    end
end

get('/') { Stream.new }
```

You can also use the stream helper method (described below) to reduce boiler plate and embed the streaming logic in the route.

## **Custom Route Matchers**

As shown above, Sinatra ships with built-in support for using String patterns and regular expressions as route matches. However, it does not stop there. You can easily define your own matchers:

```
class AllButPattern
  Match = Struct.new(:captures)

def initialize(except)
    @except = except
    @captures = Match.new([])
  end

def match(str)
    @captures unless @except === str
  end
end

def all_but(pattern)
    AllButPattern.new(pattern)
end

get all_but("/index") do
    # ...
end
```

Note that the above example might be over-engineered, as it can also be expressed as:

```
get // do
  pass if request.path_info == "/index"
  # ...
end
```

Or, using negative look ahead:

```
get %r{^(?!/index$)} do
    # ...
end
```

## **Static Files**

Static files are served from the ./public directory. You can specify a different location by setting the :public\_folder option:

```
set :public_folder, File.dirname(__FILE__) + '/static'
```

Note that the public directory name is not included in the URL. A file ./public/css/style.css is made available as http://example.com/css/style.css.

Use the :static\_cache\_control setting (see below) to add Cache-Control header info.

# **Views / Templates**

Each template language is exposed via its own rendering method. These methods simply return a string:

```
get '/' do
  erb :index
end
```

This renders views/index.erb.

Instead of a template name, you can also just pass in the template content directly:

```
get '/' do
  code = "<%= Time.now %>"
  erb code
end
```

Templates take a second argument, the options hash:

```
get '/' do
  erb :index, :layout => :post
end
```

This will render views/index.erb embedded in the views/post.erb (default is views/layout.erb, if it exists).

Any options not understood by Sinatra will be passed on to the template engine:

```
get '/' do
  haml :index, :format => :html5
end
```

You can also set options per template language in general:

```
set :haml, :format => :html5

get '/' do
   haml :index
end
```

Options passed to the render method override options set via set.

Available Options:

put glossary terms in monospace font

locals

List of locals passed to the document. Handy with partials. Example: erb "<" foo >", :locals > {:foo > "bar"}

default encoding

String encoding to use if uncertain. Defaults to settings.default\_encoding.

views

Views folder to load templates from. Defaults to settings.views.

layout

Whether to use a layout (true or false), if it's a symbol, specifies what template to use.

Example: erb :index, :layout => !request.xh/?

content\_type

Content- $\mathcal{T}$ ype the template produces, default depends on template language.

scope

Scope to render template under. Defaults to the application instance. If you change this, instance variables and helper methods will not be available.

layout\_engine

Template engine to use for rendering the layout. Useful for languages that do not support layouts otherwise. Defaults to the engine used for the template. Example: set :rdoc,

:layout\_engine => :erb

layout options

Special options only used for rendering the layout. Example: set :rdoc, :layout\_options => {
 :views => 'views/layouts' }

Templates are assumed to be located directly under the ./views directory. To use a different views directory: set :views, settings.root + '/templates'

One important thing to remember is that you always have to reference templates with symbols, even if they're in a subdirectory (in this case, use: :'subdir/template' or 'subdir/template'.to\_sym). You must use a symbol because otherwise rendering methods will render any strings passed to them directly.

## **Literal Templates**

```
get '/' do
  haml '%div.title Hello World'
end
```

Renders the template string@

put only one space between sub-parts of content

## **Available Template Languages**

Some languages have multiple implementations. To specify what implementation to use (and to be thread-safe), you should simply require it first:

```
require 'rdiscount' # or require 'bluecloth'
get('/') { markdown :index }
```

#### Haml Templates

consider making a table to organize this information

```
Dependency <u>haml</u>
File Extension .haml
```

Example haml :index, :format => :html5

# Erb Templates

```
Dependency <u>erubis</u> or erb (included in Ruby)
```

File Extensions .erb, .rhtml or .erubis (Erubis only)

Example erb:index

## **Builder Templates**

```
Dependency <u>builder</u>
File Extension .builder
```

Example builder { | xml| xml.em "hi" }

It also takes a block for inline templates (see example).

what example is this referring to?

## Nokogiri Templates

```
Dependency nokogiri
File Extension .nokogiri
Example nokogiri { |xml| xml.em "hi" }
```

It also takes a block for inline templates (see example).

#### Sass Templates

```
Dependency <u>sass</u>
File Extension .sass
Example sass :stylesheet, :style => :expanded
```

#### **SCSS Templates**

```
Dependency <u>sass</u>
File Extension .scss
Example scss :stylesheet, :style => :expanded
```

#### **Less Templates**

```
Dependency <u>less</u>
File Extension .less
Example less :stylesheet
```

#### **Liquid Templates**

```
Dependency <u>liquid</u>
File Extension .liquid
Example liquid :index, :locals => { :key => 'value' }
```

Since you cannot call Ruby methods (except for yield) from a Liquid template, you almost always want to pass locals to it.

## **Markdown Templates**

```
Dependency Anyone of: <u>RDiscount</u>, <u>RedCarpet</u>, <u>BlueCloth</u>, <u>kramdown</u>, <u>maruku</u>
```

File Extensions .markdown, .mkd and .md

```
Example markdown :index, :layout_engine => :erb
```

It is not possible to call methods from markdown nor to pass locals to it. You therefore will usually use it in combination with another rendering engine:

```
erb :overview, :locals => { :text => markdown(:introduction) }
```

Note that you may also call the markdown method from within other templates:

```
%h1 Hello From Haml!
%p= markdown(:greetings)

Mana
```

Since you cannot call Ruby from Markdown you cannot use layouts written in Markdown However, it is possible to use another rendering engine for the template than for the layout by passing the :layout\_engine option.

#### **Textile Templates**

```
Dependency RedCloth
```

File Extension .textile

```
Example textile :index, :layout_engine => :erb
```

It is not possible to call methods from textile nor to pass locals to it. You therefore will usually use it in combination with another rendering engine:

```
erb :overview, :locals => { :text => textile(:introduction) }
```

Note that you may also call the textile method from within other templates:

Maga

```
%h1 Hello From Haml!
%p= textile(:greetings)
```

Since you cannot call Ruby from <u>fextile</u>, you cannot use layouts written in <u>fextile</u> However, it is possible to use another rendering engine for the template than for the layout by passing the :layout\_engine option.

#### **RDoc Templates**

Dependency RDoc

File Extension .rdoc

```
Example rdoc :README, :layout_engine => :erb
```

It is not possible to call methods from (rdo) nor to pass locals to it. You therefore will usually use it

in combination with another rendering engine:

```
erb :overview, :locals => { :text => rdoc(:introduction) }
```

Note that you may also call the rdoc method from within other templates:

```
%h1 Hello From Haml!
%p= rdoc(:greetings)
```

Since you cannot call Ruby from (Doc.) you cannot use layouts written in (Doc.) However, it is possible to use another rendering engine for the template than for the layout by passing the :layout\_engine option.

#### **Radius Templates**

```
Dependency <u>Radius</u>
File Extension .radius

Example radius :index, :locals => { :key => 'value' }
```

Since you cannot call Ruby methods directly from a (kadius) template, you almost always want to pass locals to it.

#### **Markaby Templates**

```
Dependency <u>Markaby</u>
File Extension .mab
Example markaby { h1 "Welcome!" }
```

It also takes a block for inline templates (see example).

## **RABL Templates**

Dependency <u>Rabl</u>
File Extension .rabl
Example rabl :index

## Slim Templates

Dependency Slim Lang

File Extension .slim

Example slim:index

#### Creole Templates

Dependency <u>Creole</u>

File Extension .creole

Example creole :wiki, :layout\_engine => :erb

mono

It is not possible to call methods from <u>(reole)</u>, nor to pass locals to it. You therefore will usually use it in combination with another rendering engine:

```
erb :overview, :locals => { :text => creole(:introduction) }
```

Note that you may also call the creole method from within other templates:

```
%h1 Hello From Haml!
%p= creole(:greetings)
```

Since you cannot call Ruby from (reole), you cannot use layouts written in (reole). However, it is possible to use another rendering engine for the template than for the layout by passing the :layout\_engine option.

#### **CoffeeScript Templates**

Dependency CoffeeScript and a way to execute

javascript

File Extension .coffee

Example coffee :index

## **Stylus Templates**

Dependency Stylus and a way to execute

<u>javascript</u>

File Extension .styl

Example stylus :index

Before being able to use \$\forall tylus templates, you need to load stylus and stylus/tilt first:

```
require 'sinatra'
require 'stylus'
require 'stylus/tilt'
```

```
get '/' do
  stylus :example
end
```

#### Yajl Templates

```
Dependency <u>yajl-ruby</u>
```

```
File
Extension .yajl

Example yajl :index, :locals => { :key => 'qux' }, :callback => 'present', :variable => 'resource'
```

The template source is evaluated as a Ruby string, and the resulting json variable is converted using #to\_json:

MONO

```
json = { :foo => 'bar' }
json[:baz] = key
```

The :callback and :variable options can be used to decorate the rendered object:

```
var resource = {"foo":"bar","baz":"qux"}; present(resource);
```

#### WLang Templates

```
Dependency <u>wlang</u>
File Extension .wlang
Example wlang :index, :locals => { :key => 'value' }
```

Since calling ruby methods is not idiomatic in wlang, you almost always want to pass locals to it. Layouts written in wlang and yield are supported, though.

## Accessing Variables in Templates

Templates are evaluated within the same context as route handlers. Instance variables set in route handlers are directly accessible by templates:

```
get '/:id' do
  @foo = Foo.find(params[:id])
  haml '%h1= @foo.name'
end
```

Or, specify an explicit Hash of local variables:

```
get '/:id' do
  foo = Foo.find(params[:id])
  haml '%h1= bar.name', :locals => { :bar => foo }
end
```

This is typically used when rendering templates as partials from within other templates.

## Templates with yield and nested layouts

A layout is usually just a template that calls yield. Such a template can be used either through the :template option as described above, or it can be rendered with a block as follows:

```
erb :post, :layout => false do
  erb :index
end
```

This code is mostly equivalent to erb :index, :layout => :post.

Passing blocks to rendering methods is most useful for creating nested layouts:

```
erb :main_layout, :layout => false do
  erb :admin_layout do
    erb :user
  end
end
```

This can also be done in fewer lines of code with:

```
erb :admin_layout, :layout => :main_layout do
  erb :user
end
```

Currently the following rendering method accept a block: erb, haml, liquid, slim, wlang. Also the general render method accepts a block.

## **Inline Templates**

Templates may be defined at the end of the source file:

```
require 'sinatra'

get '/' do
   haml :index
end
__END__
```

NOTE: Inline templates defined in the source file that requires sinatra are automatically loaded. Call enable :inline\_templates explicitly if you have inline templates in other source files.

#### **Named Templates**

Templates may also be defined using the top-level template method:

```
template :layout do
   "%html\n =yield\n"
end

template :index do
   '%div.title Hello World!'
end

get '/' do
   haml :index
end
```

If a template named "layout" exists, it will be used each time a template is rendered. You can individually disable layouts by passing :layout => false or disable them by default via set :haml, :layout => false:

```
get '/' do
  haml :index, :layout => !request.xhr?
end
```

## **Associating File Extensions**

To associate a file extension with a template engine, use Tilt.register. For instance, if you like to use the file extension tt for Textile templates, you can do the following:

```
Tilt.register :tt, Tilt[:textile]
```

## **Adding Your Own Template Engine**

First, register your engine with Tilt, then create a rendering method:

```
Tilt.register :myat, MyAwesomeTemplateEngine
helpers do
   def myat(*args) render(:myat, *args) end
end

get '/' do
   myat :index
end
```

Renders ./views/index.myat. See https://github.com/rtomayko/tilt to learn more about Tilt.

## **Filters**

Before filters are evaluated before each request within the same context as the routes will be and can modify the request and response. Instance variables set in filters are accessible by routes and templates:

```
before do
  @note = 'Hi!'
  request.path_info = '/foo/bar/baz'
end

get '/foo/*' do
  @note #=> 'Hi!'
  params[:splat] #=> 'bar/baz'
end
```

After filters are evaluated after each request within the same context and can also modify the request and response. Instance variables set in before filters and routes are accessible by after filters:

```
after do puts response.status end
```

Note: Unless you use the body method rather than just returning a string from the routes, the body will not yet be available in the after filter, since it is generated later on.

Filters optionally take a pattern, causing them to be evaluated only if the request path matches that pattern:

```
before '/protected/*' do
   authenticate!
end

after '/create/:slug' do Islug!
   session[:last_slug] = slug
end
```

Like routes, filters also take conditions:

```
before :agent => /Songbird/ do
    # ...
end

after '/blog/*', :host_name => 'example.com' do
    # ...
end
```

# Helpers

Use the top-level helpers method to define helper methods for use in route handlers and templates:

```
helpers do
  def bar(name)
   "#{name}bar"
  end
end

get '/:name' do
  bar(params[:name])
end
```

Alternatively, helper methods can be separately defined in a module:

```
module FooUtils
  def foo(name) "#{name}foo" end
end

module BarUtils
  def bar(name) "#{name}bar" end
end

helpers FooUtils, BarUtils
```

The effect is the same as including the modules in the application class.

# **Using Sessions**

A session is used to keep state during requests. If activated, you have one session hash per user session:

```
enable :sessions

get '/' do
    "value = " << session[:value].inspect
end</pre>
```

```
get '/:value' do
  session[:value] = params[:value]
end
```

Note that enable :sessions actually stores all data in a cookie. This might not always be what you want (storing lots of data will increase your traffic, for instance). You can use any Rack session middleware: in order to do so, do not call enable :sessions, but instead pull in your middleware of choice as you would any other middleware:

```
use Rack::Session::Pool, :expire_after => 2592000

get '/' do
    "value = " << session[:value].inspect
end

get '/:value' do
    session[:value] = params[:value]
end</pre>
```

To improve security, the session data in the cookie is signed with a session secret. A random secret is generated for you by Sinatra. However, since this secret will change with every start of your application, you might want to set the secret yourself, so all your application instances share it:

```
set :session_secret, 'super secret'
```

If you want to configure it further, you may also store a hash with options in the sessions setting:

```
set :sessions, :domain => 'foo.com'
```

## Halting

To immediately stop a request within a filter or route use:

```
halt
```

You can also specify the status when halting:

```
halt 410
```

Or the body:

```
halt 'this will be the body'
```

Or both:

```
halt 401, 'go away!'
```

With headers:

```
halt 402, {'Content-Type' => 'text/plain'}, 'revenge'
```

It is of course possible to combine a template with halt:

```
halt erb(:error)
```

#### **Passing**

A route can punt processing to the next matching route using pass:

```
get '/guess/:who' do
  pass unless params[:who] == 'Frank'
  'You got me!'
end

get '/guess/*' do
  'You missed!'
end
```

The route block is immediately exited and control continues with the next matching route. If no matching route is found, a 404 is returned.

## **Triggering Another Route**

Sometimes pass is not what you want, instead you would like to get the result of calling another route. Simply use call to achieve this:

```
get '/foo' do
   status, headers, body = call env.merge("PATH_INFO" => '/bar')
   [status, headers, body.map(&:upcase)]
end

get '/bar' do
   "bar"
end
```

Note that in the example above, you would ease testing and increase performance by simply moving  $^{\mathcal{H}}$ bar $^{\mathcal{H}}$  into a helper used by both /foo and /bar.

If you want the request to be sent to the same application instance rather than a duplicate, use call! instead of call.

Check out the Rack specification if you want to learn more about call. include a link to the specification here

#### **Setting Body, Status Code and Headers**

It is possible and recommended to set the status code and response body with the return value of the route block. However, in some scenarios you might want to set the body at an arbitrary point in the execution flow. You can do so with the body helper method. If you do so, you can use that method from there on to access the body:

```
get '/foo' do
  body "bar"
end

after do
  puts body
end
```

It is also possible to pass a block to body, which will be executed by the Rack handler (this can be used to implement streaming, see "Return Values").

Similar to the body, you can also set the status code and headers:

```
get '/foo' do
  status 418
headers \
    "Allow" => "BREW, POST, GET, PROPFIND, WHEN",
    "Refresh" => "Refresh: 20; http://www.ietf.org/rfc/rfc2324.txt"
  body "I'm a tea pot!"
end
```

Like body, headers and status with no arguments can be used to access their current values.

#### **Streaming Responses**

Sometimes you want to start sending out data while still generating parts of the response body. In extreme examples, you want to keep sending data until the client closes the connection. You can use the stream helper to avoid creating your own wrapper:

```
get '/' do
   stream do lout!
   out << "It's gonna be legen -\n"
    sleep 0.5
   out << " (wait for it) \n"
    sleep 1
   out << "- dary!\n"
   end
end</pre>
```

This allows you to implement streaming APIs, Server Sent Events, and can be used as the basis for WebSockets. It can also be used to increase throughput if some but not all content depends on a slow resource.

Note that the streaming behavior, especially the number of concurrent requests, highly depends on the web server used to serve the application. Some servers, like WEBRick, might not even support streaming at all. If the server does not support streaming, the body will be sent all at once after the block passed to stream finishes executing. Streaming does not work at all with Shotgun.

If the optional parameter is set to keep\_open, it will not call close on the stream object, allowing you to close it at any later point in the execution flow. This only works on evented servers, like Thin and Rainbows. Other servers will still close the stream:

```
# long polling
set :server, :thin
connections = \square
aet '/subscribe' do
  # register a client's interest in server events
  stream(:keep_open) { lout| connections << out }</pre>
  # purge dead connections
  connections.reject!(&:closed?)
  # acknowledge
  "subscribed"
end
post '/message' do
  connections.each do lout!
    # notify client that a new message has arrived
    out << params[:message] << "\n"
    # indicate client to connect again
    out.close
  end
  # acknowledge
  "message received"
end
```

## Logging

In the request scope, the logger helper exposes a Logger instance:

```
get '/' do
logger.info "loading data"
# ...
end
```

This logger will automatically take your Rack handler's logging settings into account. If logging is disabled, this method will return a dummy object, so you do not have to worry in your routes and filters about it.

Note that logging is only enabled for Sinatra::Application by default, so if you inherit from Sinatra::Base, you probably want to enable it yourself:

```
class MyApp < Sinatra::Base
  configure :production, :development do
    enable :logging
  end
end</pre>
```

To avoid any logging middleware to be set up, set the logging setting to nil. However, keep in mind that logger will in that case return nil. A common use case is when you want to set your own logger. Sinatra will use whatever it will find in env['rack.logger'].

#### **Mime Types**

When using send\_file or static files you may have mime types Sinatra doesn't understand. Use mime\_type to register them by file extension:

```
configure do
  mime_type :foo, 'text/foo'
end
```

You can also use it with the content\_type helper:

```
get '/' do
  content_type :foo
  "foo foo foo"
end
```

## **Generating URLs**

For generating URLs you should use the url helper method, for instance, in Haml:

```
%a{:href => url('/foo')} foo
```

It takes reverse proxies and Rack routers into account, if present.

This method is also aliased to to (see below for an example).

#### **Browser Redirect**

You can trigger a browser redirect with the redirect helper method:

```
get '/foo' do
  redirect to('/bar')
end
```

Any additional parameters are handled like arguments passed to halt:

```
redirect to('/bar'), 303 redirect 'http://google.com', 'wrong place, buddy'
```

You can also easily redirect back to the page the user came from with redirect back:

```
get '/foo' do
  "<a href='/bar'>do something</a>"
end

get '/bar' do
  do_something
  redirect back
end
```

To pass arguments with a (edirect) either add them to the query:

```
redirect to('/bar?sum=42')
```

Or use a session:

```
enable :sessions

get '/foo' do
    session[:secret] = 'foo'
    redirect to('/bar')
end

get '/bar' do
    session[:secret]
end
```

#### **Cache Control**

Setting your headers correctly is the foundation for proper HTTP caching.

You can easily set the Cache-Control header like this:

```
get '/' do
  cache_control :public
  "cache it!"
end
```

Pro tip: Set up caching in a before filter:

```
before do
  cache_control :public, :must_revalidate, :max_age => 60
end
```

If you are using the expires helper to set the corresponding header, ¢ache-¢ontrol will be set automatically for you:

```
before do
   expires 500, :public, :must_revalidate
end
```

To properly use caches, you should consider using etag or last\_modified. It is recommended to call those helpers before doing any heavy lifting, as they will immediately flush a response if the client already has the current version in its cache:

```
get '/article/:id' do
    @article = Article.find params[:id]
    last_modified @article.updated_at
    etag @article.sha1
    erb :article
end
```

It is also possible to use a weak (FTag)

```
etag @article.sha1, :weak
```

These helpers will not do any caching for you, but rather feed the necessary information to your cache. If you are looking for a quick reverse-proxy caching solution, try <u>rack-cache</u>:

 $\omega \omega \omega$ 

```
require "rack/cache"
require "sinatra"

use Rack::Cache

get '/' do
    cache_control :public, :max_age => 36000
    sleep 5
    "hello"
end
```

Use the :static\_cache\_control setting (see below) to add  $\sqrt[q]{ache} - \sqrt[q]{ontrol}$  header info to static files.

According to RFC 2616 your application should behave differently if the If-Match or If-None-Match header is set to \* depending on whether the resource requested is already in existence. Sinatra assumes resources for safe (like (like (like (put))) and idempotent (like (put)) requests are already in existence, whereas other resources (for instance for post requests), are treated as new resources. You can change this behavior by passing in a :new\_resource option:

```
get '/create' do
  etag '', :new_resource => true
  Article.create
```

```
erb :new_article end
```

If you still want to use a weak (fag) pass in a :kind option:

```
etag '', :new_resource => true, :kind => :weak
```

#### **Sending Files**

For sending files, you can use the send\_file helper method:

```
get '/' do
  send_file 'foo.png'
end
```

It also takes options:

```
send_file 'foo.png', :type => :jpg
```

The options are:

```
filename
```

none file name, in response, defaults to the real file name.

(ast\_modified)

value for Last-Modified header, defaults to the file's mtime.

type

content type to use, guessed from the file extension if missing.

disposition

used for Content-Disposition, possible value: nil (default), :attachment and :inline

ომინ Content-Length header, defaults to file size.

(status)

Status code to be send. Useful when sending a static file as an error page. If supported by the Rack handler, other means than streaming from the Ruby process will be used. If you use this helper method, Sinatra will automatically handle range requests.

## **Accessing the Request Object**

The incoming request object can be accessed from request level (filter, routes, error handlers) through the request method:

```
# app running on http://example.com/example
get '/foo' do
    t = %w[text/css text/html application/javascript]
    request.accept # ['text/html', '*/*']
```

```
request.accept? 'text/xml' # true
 request.preferred_type(t) # 'text/html'
                            # request body sent by the client (see below)
 request.body
                           # "http"
 request.scheme
                            # "/example"
 request.script_name
                            # "/foo"
 request.path_info
 request.port
                            # 80
                           # "GET"
 request.request_method
                            # ""
 request.query_string
                           # length of request.body
 request.content_length
 request.media_type
                           # media type of request.body
                            # "example.com"
 request.host
                            # true (similar methods for other verbs)
 request.get?
                           # false
 request.form_data?
 request["some_param"]
                           # value of some_param parameter. [] is a shortcut to the
params hash.
 request.referrer
                           # the referrer of the client or '/'
 request.user_agent
                           # user agent (used by :agent condition)
                           # hash of browser cookies
 request.cookies
                           # is this an ajax request?
 request.xhr?
                           # "http://example.com/example/foo"
 request.url
 request.path
                           # "/example/foo"
                            # client IP address
 request.ip
 request.secure?
                           # false (would be true over ssl)
                          # true (if running behind a reverse proxy)
 request.forwarded?
                            # raw env hash handed in by Rack
 request.env
end
```

Some options, like script\_name or path\_info, can also be written:

```
before { request.path_info = "/" }
get "/" do
    "all requests end up here"
end
```

The request.body is an IO or StringIO object:

```
post "/api" do
  request.body.rewind # in case someone already read it
  data = JSON.parse request.body.read
  "Hello #{data['name']}!"
end
```

#### **Attachments**

You can use the attachment helper to tell the browser the response should be stored on disk rather than displayed in the browser:

```
get '/' do
  attachment
  "store it!"
end
```

You can also pass it a file name:

```
get '/' do
  attachment "info.txt"
  "store it!"
end
```

#### **Dealing with Date and Time**

Sinatra offers a time\_for helper method that generates a fime object from the given value. It is also able to convert DateTime, Date and similar classes:

```
get '/' do
  pass if Time.now > time_for('Dec 23, 2012')
  "still time"
end
```

This method is used internally by expires, last\_modified and akin. You can therefore easily extend the behavior of those methods by overriding time\_for in your application:

```
helpers do
    def time_for(value)
        case value
        when :yesterday then Time.now - 24*60*60
        when :tomorrow then Time.now + 24*60*60
        else super
        end
        end
end

get '/' do
    last_modified :yesterday
        expires :tomorrow
    "hello"
end
```

## **Looking Up Template Files**

The find\_template helper is used to find template files for rendering:

```
find_template settings.views, 'foo', Tilt[:haml] do | file|
  puts "could be #{file}"
end
```

This is not really useful. But it is useful that you can actually override this method to hook in your own lookup mechanism. For instance, if you want to be able to use more than one view directory:

```
set :views, ['views', 'templates']
helpers do
   def find_template(views, name, engine, &block)
     Array(views).each { IvI super(v, name, engine, &block) }
   end
end
```

Another example would be using different directories for different engines:

```
set :views, :sass => 'views/sass', :haml => 'templates', :default => 'views'
helpers do
    def find_template(views, name, engine, &block)
    _, folder = views.detect { lk,vl engine == Tilt[k] }
    folder ||= views[:default]
        super(folder, name, engine, &block)
    end
end
```

You can also easily wrap this up in an extension and share with others!

Note that find\_template does not check if the file really exists but rather calls the given block for all possible paths. This is not a performance issue, since render will use break as soon as a file is found. Also, template locations (and content) will be cached if you are not running in development mode. You should keep that in mind if you write a really crazy method.

# Configuration

Run once, at startup, in any environment:

```
configure do
    # setting one option
    set :option, 'value'

# setting multiple options
    set :a => 1, :b => 2

# same as `set :option, true`
    enable :option

# same as `set :option, false`
    disable :option

# you can also have dynamic settings with blocks
    set(:css_dir) { File.join(views, 'css') }
end
```

Run only when the environment (RACK\_ENV environment variable) is set to :production:

```
configure :production do
```

```
end end
```

Run when the environment is set to either :production or :test:

```
configure :production, :test do
...
end
```

You can access those options via settings:

```
configure do
   set :foo, 'bar'
end

get '/' do
   settings.foo? # => true
   settings.foo # => 'bar'
   ...
end
```

## Configuring attack protection

Sinatra is using <u>Rack::Protection</u> to defend your application against common, opportunistic attacks. You can easily disable this behavior (which will open up your application to tons of common vulnerabilities):

```
disable :protection
```

To skip a single defense layer, set protection to an options hash:

```
set :protection, :except => :path_traversal
```

You can also hand in an array in order to disable a list of protections:

```
set :protection, :except => [:path_traversal, :session_hijacking]
```

By default, Sinatra will only set up session based protection if :sessions has been enabled.

Sometimes you want to set up sessions on your own, though. In that case you can get it to set up session based protections by passing the :session option:

```
use Rack::Session::Pool
set :protection, :session => true
```

be sure to put the following terms in monospace

**Available Settings** 

#### absolute redirects

If disabled, Sinatra will allow relative redirects, however, Sinatra will no longer conform with RFC 2616 (HTTP 1.1), which only allows absolute redirects.

Enable if your app is running behind a reverse proxy that has not been set up properly. Note that the url helper will still produce absolute URLs, unless you pass in false as the second parameter.

Disabled by default.

#### add charsets

mime types the content\_type helper will automatically add the charset info to. You should add to it rather than overriding this option: settings.add\_charsets << "application/foobar"

app\_file

Path to the main application file, used to detect project root, views and public folder and inline templates.

bind

IP address to bind to (default: 0.0.0.0 or localhost if your `environment` is set to development.). Only used for built-in server.

default\_encoding

encoding to assume if unknown (defaults to "utf-8").

dump errors

display errors in the log.

environment

current environment, defaults to ENV['RACK\_ENV'], or "development" if not available.

logging

use the logger.

lock

Places a lock around every request, only running processing on request per Ruby process concurrently.

Enabled if your app is not thread-safe. Disabled per default.

method override

use \_method magic to allow put/delete forms in browsers that don't support it.

port

Port to listen on. Only used for built-in server.

prefixed\_redirects

Whether or not to insert request.script\_name into redirects if no absolute path is given. That way redirect '/foo' would behave like redirect to('/foo'). Disabled per default.

protection

Whether or not to enable web attack protections. See protection section above.

public dir

Alias for public\_folder. See below.

public folder

Path to the folder public files are served from. Only used if static file serving is enabled (see static setting below). Inferred from app\_file setting if not set.

reload\_templates

Whether or not to reload templates between requests. Enabled in development mode.

root

Path to project root folder. Inferred from app\_file setting if not set.

raise\_errors

raise exceptions (will stop application). Enabled by default when environment is set to "test",

disabled otherwise.

#### run

if enabled, Sinatra will handle starting the web server, do not enable if using rackup or other means.

#### running

is the built-in server running now? do not change this setting!

#### server

Server or list of servers to use for built-in server. order indicates priority, default depends on Ruby implementation.

#### sessions

Enable cookie-based sessions support using Rack::Session::Cookie. See 'Using Sessions' section for more information.

#### show\_exceptions

Show a stack trace in the browser when an exception happens. Enabled by default when environment is set to "development", disabled otherwise.

Can also be set to :after\_handler to trigger app-specified error handling before showing a stack trace in the browser.

#### static

Whether Sinatra should handle serving static files.

Disable when using a server able to do this on its own.

Disabling will boost performance.

Enabled per default in classic style, disabled for modular apps.

#### static cache control

When Sinatra is serving static files, set this to add Cache-Control headers to the responses.

Uses the cache\_control helper. Disabled by default.

Use an explicit array when setting multiple values: set :static\_cache\_control, [:public,
:max\_age => 300]

#### threaded

If set to true, will tell Thin to use EventMachine.defer for processing the request.

#### views

Path to the views folder. Inferred from app\_file setting if not set.

#### x\_cascade

Whether or not to set the X-Cascade header if no route matches. Defaults to true.

if the terms are identified through monospace font, the apostrophes are not necessary

## **Environments**

There are three predefined environments: "development", "production" and "test". Environments can be set through the RACK\_ENV environment variable. The default value is "development". In the "development environment all templates are reloaded between requests, and special not\_found and error handlers display stack traces in your browser. In the production and "test" environments, templates are cached by default.

To run different environments, set the RACK\_ENV environment variable:

RACK\_ENV=production ruby my\_app.rb

You can use predefined methods development?, test? and production? to check the current environment setting:

```
get '/' do
  if settings.development?
   "development!"
  else
   "not development!"
  end
end
```

# **Error Handling**

Error handlers run within the same context as routes and before filters, which means you get all the goodies it has to offer, like haml, erb, halt, etc.

```
[ too much space
```

#### Not Found

When a Sinatra::NotFound exception is raised, or the response's status code is 404, the not\_found handler is invoked:

```
not_found do
'This is nowhere to be found.'
end
```

# Etoo nuch space

#### **Error**

The error handler is invoked any time an exception is raised from a route block or a filter. The exception object can be obtained from the sinatra.error Rack variable:

```
error do
'Sorry there was a nasty error - ' + env['sinatra.error'].name
end
```

#### Custom errors:

```
error MyCustomError do
'So what happened was...' + env['sinatra.error'].message
end
```

#### Then, if this happens:

```
get '/' do
```

```
raise MyCustomError, 'something bad' end
```

#### You get this:

```
So what happened was... something bad
```

Alternatively, you can install an error handler for a status code:

```
error 403 do
'Access forbidden'
end

get '/secret' do
403
end
```

#### Or a range:

```
error 400..510 do
'Boom'
end
```

Sinatra installs special not\_found and error handlers when running under the development environment to display nice stack traces and additional debugging information in your browser.

## **Rack Middleware**

Sinatra rides on <u>Rack</u>, a minimal standard interface for Ruby web frameworks. One of Rack's most interesting capabilities for application developers is support for "middleware" - components that sit between the server and your application monitoring and/or manipulating the HTTP request/response to provide various types of common functionality.

Sinatra makes building Rack middleware pipelines a cinch via a top-level use method:

```
require 'sinatra'
require 'my_custom_middleware'

use Rack::Lint
use MyCustomMiddleware

get '/hello' do
    'Hello World'
end
```

The semantics of use are identical to those defined for the <u>Rack::Builder</u> DSL (most frequently used from rackup files). For example, the use method accepts multiple/variable args as well as blocks:

```
use Rack::Auth::Basic do lusername, password!
  username == 'admin' && password == 'secret'
end
```

Rack is distributed with a variety of standard middleware for logging, debugging, URL routing, authentication, and session handling. Sinatra uses many of these components automatically based on configuration so you typically don't have to use them explicitly.

You can find useful middleware in rack, rack-contrib, with CodeRack or in the Rack wiki.

## **Testing**

Sinatra tests can be written using any Rack-based testing library or framework. Rack::Test is recommended:

```
require 'my_sinatra_app'
require 'test/unit'
require 'rack/test'
class MyAppTest < Test::Unit::TestCase</pre>
 include Rack::Test::Methods
 def app
   Sinatra::Application
 end
 def test_my_default
   get '/
   assert_equal 'Hello World!', last_response.body
 end
 def test_with_params
   get '/meet', :name => 'Frank'
   assert_equal 'Hello Frank!', last_response.body
 def test with rack env
   get '/', {}, 'HTTP_USER_AGENT' => 'Songbird'
   assert_equal "You're using Songbird!", last_response.body
 end
end
```

Note: If you are using Sinatra in the modular style, replace Sinatra::Application above with the class name of your app.

# Sinatra::Base - Middleware, Libraries, and Modular Apps

Defining your app at the top-level works well for micro-apps but has considerable drawbacks when building reusable components such as Rack middleware, Rails metal, simple libraries with a server

component, or even Sinatra extensions. The top-level assumes a micro-app style configuration (e.g., a single application file, ./public and ./views directories, logging, exception detail page, etc.). That's where Sinatra::Base comes into play:

```
require 'sinatra/base'

class MyApp < Sinatra::Base
  set :sessions, true
  set :foo, 'bar'

  get '/' do
    'Hello world!'
  end
end</pre>
```

The methods available to Sinatra::Base subclasses are exactly the same as those available via the top-level DSL. Most top-level apps can be converted to Sinatra::Base components with two modifications:

- Your file should require sinatra/base instead of sinatra; otherwise, all of Sinatra's DSL methods are imported into the main namespace.
- Put your app's routes, error handlers, filters, and options in a subclass of Sinatra::Base.

Sinatra::Base is a blank slate. Most options are disabled by default, including the built-in server. See Options and Configuration for details on available options and their behavior.

## Modular vs. Classic Style

Contrary to common belief, there is nothing wrong with the classic style. If it suits your application, you do not have to switch to a modular application.

The main disadvantage of using the classic style rather than the modular style is that you will only have one Sinatra application per Ruby process. If you plan to use more than one, switch to the modular style. There is no reason you cannot mix the modular and the classic styles.

If switching from one style to the other, you should be aware of slightly different default settings:

larger space needed

	larger space needed	
Setting	Classic	Modular
app_file	file loading sinatra	file subclassing Sinatra::Base
run	\$0 == app_file	false
logging	true	false
$method\_override$	true	false
inline_templates	true	false
static	true	false

## **Serving a Modular Application**

There are two common options for starting a modular app, actively starting with run!:

```
# my_app.rb
require 'sinatra/base'

class MyApp < Sinatra::Base
    # ... app code here ...

# start the server if ruby file executed directly
run! if app_file == $0
end</pre>
```

Start with:

```
ruby my_app.rb
```

Or with a config.ru file, which allows using any Rack handler:

```
# config.ru (run with rackup)
require './my_app'
run MyApp
```

Run:

```
rackup -p 4567
```

## Using a Classic Style Application with a config.ru

Write your app file:

```
# app.rb
require 'sinatra'

get '/' do
    'Hello world!'
end
```

And a corresponding config.ru:

```
require './app'
run Sinatra::Application
```

## When to use a config.ru?

A config.ru file is recommended if:

- You want to deploy with a different Rack handler (Passenger, Unicorn, Heroku, ...).
- You want to use more than one subclass of Sinatra::Base.
- You want to use Sinatra only for middleware, and not as an endpoint.

There is no need to switch to a config.ru simply because you switched to the modular style, and you don't have to use the modular style for running with a config.ru.

change to all Roman type

#### Using Sinatra as Middleware

Not only is Sinatra able to use other Rack middleware, any Sinatra application can in turn be added in front of any Rack endpoint as middleware itself. This endpoint could be another Sinatra application, or any other Rack-based application (Rails) Ramazer Camping (Fig. 2):

```
require 'sinatra/base'
class LoginScreen < Sinatra::Base</pre>
 enable :sessions
 get('/login') { haml :login }
 post('/login') do
   if params[:name] == 'admin' && params[:password] == 'admin'
      session['user_name'] = params[:name]
      redirect '/login'
   end
 end
end
class MyApp < Sinatra::Base
 # middleware will run before filters
 use LoginScreen
 before do
   unless session['user_name']
      halt "Access denied, please <a href='/login'>login</a>."
 end
 get('/') { "Hello #{session['user_name']}." }
end
```

## **Dynamic Application Creation**

Sometimes you want to create new applications at runtime without having to assign them to a constant, you can do this with Sinatra.new:

```
require 'sinatra/base'
my_app = Sinatra.new { get('/') { "hi" } }
my_app.run!
```

It takes the application to inherit from as an optional argument:

```
# config.ru (run with rackup)
require 'sinatra/base'

controller = Sinatra.new do
    enable :logging
    helpers MyHelpers
end

map('/a') do
    run Sinatra.new(controller) { get('/') { 'a' } }
end

map('/b') do
    run Sinatra.new(controller) { get('/') { 'b' } }
end
```

This is especially useful for testing Sinatra extensions or using Sinatra in your own library.

This also makes using Sinatra as middleware extremely easy:

```
require 'sinatra/base'
use Sinatra do
  get('/') { ... }
end
run RailsProject::Application
```

# **Scopes and Binding**

The scope you are currently in determines what methods and variables are available.

## Application/Class Scope

Every Sinatra application corresponds to a subclass of Sinatra::Base. If you are using the top-level DSL (require 'sinatra'), then this class is Sinatra::Application, otherwise it is the subclass you created explicitly. At class level you have methods like get or before, but you cannot access the request or session objects, as there is only a single application class for all requests.

Options created via set are methods at class level:

```
class MyApp < Sinatra::Base
  # Hey, I'm in the application scope!
  set :foo, 42
  foo # => 42
```

```
get '/foo' do
    # Hey, I'm no longer in the application scope!
end
end
```

You have the application scope binding inside:

- Your application class body
- Methods defined by extensions
- The block passed to helpers
- Procs/blocks used as value for set
- The block passed to Sinatra.new

You can reach the scope object (the class) like this:

- Via the object passed to configure blocks (configure { IcI ... })
- settings from within the request scope

#### Request/Instance Scope

For every incoming request, a new instance of your application class is created and all handler blocks run in that scope. From within this scope you can access the request and session objects or call rendering methods like erb or haml. You can access the application scope from within the request scope via the settings helper:

```
class MyApp < Sinatra::Base
  # Hey, I'm in the application scope!
get '/define_route/:name' do
    # Request scope for '/define_route/:name'
    @value = 42

settings.get("/#{params[:name]}") do
    # Request scope for "/#{params[:name]}"
    @value # => nil (not the same request)
    end

"Route defined!"
end
end
```

You have the request scope binding inside:

- get, head, post, put, delete, options, patch, link, and unlink blocks
- before and after filters
- helper methods
- templates/views

#### **Delegation Scope**

The delegation scope just forwards methods to the class scope. However, it does not behave exactly like the class scope, as you do not have the class binding. Only methods explicitly marked for delegation are available, and you do not share variables/state with the class scope (read: you have a different self). You can explicitly add method delegations by calling Sinatra::Delegator.delegate :method name.

You have the delegate scope binding inside:

- The top level binding, if you did require "sinatra"
- An object extended with the Sinatra::Delegator mixin

Mave a look at the code for yourself: here's the Sinatra::Delegator mixin being extending the main object.

this sentence sounds too informal

## **Command Line**

Sinatra applications can be run directly:

```
ruby myapp.rb [-h] [-x] [-e ENVIRONMENT] [-p PORT] [-o HOST] [-s HANDLER]
```

#### Options are:

```
-h # help
-p # set the port (default is 4567)
-o # set the host (default is 0.0.0.0)
-e # set the environment (default is development)
-s # specify rack server/handler (default is thin)
-x # turn on the mutex lock (default is off)
```

## Requirement

The following Ruby versions are officially supported:

Ruby 1.8.7

1.8.7 is fully supported, however, if nothing is keeping you from it, we recommend upgrading or switching to JRuby or Rubinius. Support for 1.8.7 will not be dropped before Sinatra 2.0. Ruby 1.8.6 is no longer supported.

Ruby 1.9.2

1.9.2 is fully supported. Do not use 1.9.2p0, as it is known to cause segmentation faults when running Sinatra. Official support will continue at least until the release of Sinatra 1.5.

Ruby 1.9.3

1.9.3 is fully supported and recommended. Please note that switching to 1.9.3 from an earlier version will invalidate all sessions. 1.9.3 will be supported until the release of Sinatra 2.0.

Ruby 2.0.0

2.0.0 is fully supported and recommended. There are currently no plans to drop official support for it.

Rubinius

Rubinius is officially supported (Rubinius >= 2.x). It is recommended to gem install puma. JRuby

The latest stable release of JRuby is officially supported. It is not recommended to use C extensions with JRuby. It is recommended to gem install trinidad.

We also keep an eye on upcoming Ruby versions.

The following Ruby implementations are not officially supported but still are known to run Sinatra:

- Older versions of JRuby and Rubinius
- Ruby Enterprise Edition
- MacRuby, Maglev, IronRuby
- Ruby 1.9.0 and 1.9.1 (but we do recommend against using those)

Not being officially supported means if things only break there and not on a supported platform, we assume it's not our issue but theirs.

We also run our CI against ruby-head (the upcoming 2.1.0), but we can't guarantee anything, since it is constantly moving. Expect 2.1.0 to be fully supported.

Sinatra should work on any operating system supported by the chosen Ruby implementation.

If you run MacRuby, you should gem install control\_tower.

Sinatra currently doesn't run on Cardinal, SmallRuby, BlueRuby or any Ruby version prior to 1.8.7.

# The Bleeding Edge

If you would like to use Sinatra's latest bleeding-edge code, feel free to run your application against the master branch, it should be rather stable.

We also push out prerelease gems from time to time, so you can do  $\frac{2}{a}$ 

gem install sinatra --pre

To get some of the latest features

#### With Bundler

If you want to run your application with the latest Sinatra, using <u>Bundler</u> is the recommended way.

First, install bundler, if you haven't:

```
gem install bundler
```

Then, in your project directory, create a Gemfile:

```
source 'https://rubygems.org'
gem 'sinatra', :github => "sinatra/sinatra"

# other dependencies
gem 'haml'  # for instance, if you use haml
gem 'activerecord', '~> 3.0' # maybe you also need ActiveRecord 3.x
```

Note that you will have to list all your application's dependencies in the Gemfile. Sinatra's direct dependencies (Rack and Tilt) will, however, be automatically fetched and added by Bundler.

Now you can run your app like this:

```
bundle exec ruby myapp.rb
```

#### **Roll Your Own**

Create a local clone and run your app with the sinatra/lib directory on the \$LOAD\_PATH:

```
cd myapp
git clone git://github.com/sinatra/sinatra.git
ruby -I sinatra/lib myapp.rb
```

To update the Sinatra sources in the future:

```
cd myapp/sinatra
git pull
```

## **Install Globally**

You can build the gem on your own:

```
git clone git://github.com/sinatra/sinatra.git
cd sinatra
rake sinatra.gemspec
rake install
```

If you install gems as root, the last step should be

```
sudo rake install
```

# Versioning

Sinatra follows Semantic Versioning, both SemVer and SemVerTag.

# **Further Reading**

- Project Website Additional documentation, news, and links to other resources.
- Contributing Find a bug? Need help? Have a patch?
- Issue tracker
- <u>Twitter</u>
- Mailing List
- IRC: #sinatra on http://freenode.net
- Sinatra Book Cookbook Tutorial
- Sinatra Recipes Community contributed recipes
- API documentation for the latest release or the current HEAD on http://rubydoc.info
- Cl server