

Kicking off a new Rails app

Now you have a version of Ruby installed how do you start your new Rails app?

```
machine:repos rl$ rbenv shell 3.1.2
```

This is just Ruby, it doesn't come with all the bells and whistles and when I say that I mean **bundler**. Ruby applications generally bundle all of their dependencies together, and **bundler** is the defacto Ruby library for this. So we need to make sure it's up to date.

```
machine:repos rl$ bundle -v
Bundler version 1.17.2
```

1.17.2 is old, let's install the latest version. In order to install any gem you can use the **gem** binary which comes with Ruby

```
machine:repos rl$ gem install bundler
Fetching bundler-2.3.26.gem
Successfully installed bundler-2.3.26
1 gem installed
```

There are other options to the **gem** command but you don't need many

```
machine:repos rl$ gem -h
RubyGems is a sophisticated package manager for Ruby. This is a
basic help message containing pointers to more information.
```

Usage:

```
gem -h/--help
gem -v/--version
gem command [arguments...] [options...]
```

Examples:

```
gem install rake
gem list --local
gem build package.gemspec
gem help install
```

Further help:

gem help commands	list all 'gem' commands
gem help examples	show some examples of usage
gem help gem_dependencies	gem dependencies file guide
gem help platforms	gem platforms guide

```
gem help <COMMAND>      show help on COMMAND
                          (e.g. 'gem help install')
gem server                present a web page at
                          http://localhost:8808/
                          with info about installed gems

Further information:
http://guides.rubygems.org
```

Gem list shows what gems we've got installed by default.

```
machine:repos rl$ gem list

*** LOCAL GEMS ***

bigdecimal (default: 1.4.1)
bundler (2.3.26, default: 1.17.2)
cmath (default: 1.0.0)
...
```

You'll notice Rails isn't there by default and why would it be? Let's install it.

```
machine:repos rl$ gem install rails
Successfully installed rails-7.0.4
1 gem installed
```

We start a new Rails app by running the **rails** binary with our new application name. This will create the new skeleton Rails application.

```
machine:repos rl$ rails new kunghla
create
create  README.md
create  Rakefile
create  .ruby-version
create  config.ru
create  .gitignore
create  .gitattributes
create  Gemfile
      run git init from "."
Initialized empty Git repository in /Users/rl/repos/kunghla/.git/
create  app
create  app/assets/config/manifest.js
create  app/assets/stylesheets/application.css
create  app/channels/application_cable/channel.rb
create  app/channels/application_cable/connection.rb
create  app/controllers/application_controller.rb
create  app/helpers/application_helper.rb
create  app/jobs/application_job.rb
```

```
create app/mailers/application_mailer.rb
create app/models/application_record.rb
create app/views/layouts/application.html.erb
create app/views/layouts/mailer.html.erb
create app/views/layouts/mailer.text.erb
create app/assets/images
create app/assets/images/.keep
create app/controllers/concerns/.keep
create app/models/concerns/.keep
create bin
create bin/rails
create bin/rake
create bin/setup
create config
create config/routes.rb
create config/application.rb
create config/environment.rb
create config/cable.yml
create config/puma.rb
create config/storage.yml
create config/environments
create config/environments/development.rb
create config/environments/production.rb
create config/environments/test.rb
create config/initializers
create config/initializers/assets.rb
create config/initializers/content_security_policy.rb
create config/initializers/cors.rb
create config/initializers/filter_parameter_logging.rb
create config/initializers/inflections.rb
create config/initializers/new_framework_defaults_7_0.rb
create config/initializers/permissions_policy.rb
create config/locales
create config/locales/en.yml
create config/master.key
append .gitignore
create config/boot.rb
create config/database.yml
create db
create db/seeds.rb
create lib
create lib/tasks
create lib/tasks/.keep
create lib/assets
create lib/assets/.keep
create log
create log/.keep
create public
create public/404.html
create public/422.html
create public/500.html
```

```
create public/apple-touch-icon-precomposed.png
create public/apple-touch-icon.png
create public/favicon.ico
create public/robots.txt
create tmp
create tmp/.keep
create tmp/pids
create tmp/pids/.keep
create tmp/cache
create tmp/cache/assets
create vendor
create vendor/.keep
create test/fixtures/files
create test/fixtures/files/.keep
create test/controllers
create test/controllers/.keep
create test/mailers
create test/mailers/.keep
create test/models
create test/models/.keep
create test/helpers
create test/helpers/.keep
create test/integration
create test/integration/.keep
create test/channels/application_cable/connection_test.rb
create test/test_helper.rb
create test/system
create test/system/.keep
create test/application_system_test_case.rb
create storage
create storage/.keep
create tmp/storage
create tmp/storage/.keep
remove config/initializers/cors.rb
remove config/initializers/new_framework_defaults_7_0.rb
run bundle install
```

Fetching gem metadata from <https://rubygems.org/>.....

Resolving dependencies.....

Using rake 13.0.6

Using concurrent-ruby 1.1.10

Using timeout 0.3.1

Using builder 3.2.4

Using public_suffix 5.0.1

Using bindindex 0.8.1

Using msgpack 1.6.0

Using bundler 2.3.15

Using websocket-extensions 0.1.5

Using marcel 1.0.2

Using regexp_parser 2.6.1

Using thor 1.2.1

Using minitest 5.16.3

```
Using zeitwerk 2.6.6
Using rubyzip 2.3.2
Using websocket 1.2.9
Using sqlite3 1.5.4 (x86_64-darwin)
Using i18n 1.12.0
Using tzinfo 2.0.5
Using addressable 2.8.1
Using bootsnap 1.15.0
Using erubi 1.11.0
Fetching date 3.3.3
Using rexml 3.2.5
Using matrix 0.4.2
Using racc 1.6.1
Using crass 1.0.6
Using selenium-webdriver 4.7.1
Using rack 2.2.4
Fetching io-console 0.6.0
Using nio4r 2.5.8
Using mini_mime 1.1.2
Using net-protocol 0.2.1
Using websocket-driver 0.7.5
Using activesupport 7.0.4
Using net-pop 0.1.2
Using net-smtp 0.3.3
Using puma 5.6.5
Fetching sprockets 4.2.0
Using method_source 1.0.0
Using rack-test 2.0.2
Using nokogiri 1.13.10 (x86_64-darwin)
Using globalid 1.0.0
Using rails-dom-testing 2.0.3
Using activemodel 7.0.4
Using xpath 3.2.0
Using activejob 7.0.4
Using activerecord 7.0.4
Using capybara 3.38.0
Using webdrivers 5.2.0
Using loofah 2.19.1
Using rails-html-sanitizer 1.4.4
Using actionview 7.0.4
Using jbuilder 2.11.5
Using actionpack 7.0.4
Using activestorage 7.0.4
Using railties 7.0.4
Using actioncable 7.0.4
Using actiontext 7.0.4
Using importmap-rails 1.1.5
Using stimulus-rails 1.2.1
Using turbo-rails 1.3.2
Using web-console 4.2.0
Installing io-console 0.6.0 with native extensions
```

```

Installing sprockets 4.2.0
Installing date 3.3.3 with native extensions
Using sprockets-rails 3.4.2
Using reline 0.3.2
Using irb 1.6.1
Using debug 1.7.0
Using net-imap 0.3.2
Using mail 2.8.0
Using actionmailbox 7.0.4
Using actionmailer 7.0.4
Using rails 7.0.4
Bundle complete! 15 Gemfile dependencies, 72 gems now installed.
Use `bundle info [gemname]` to see where a bundled gem is installed.
    run bundle binstubs bundler
    rails importmap:install
Add Importmap include tags in application layout
    insert app/views/layouts/application.html.erb
Create application.js module as entrypoint
    create app/javascript/application.js
Use vendor/javascript for downloaded pins
    create vendor/javascript
    create vendor/javascript/.keep
Ensure JavaScript files are in the Sprocket manifest
    append app/assets/config/manifest.js
Configure importmap paths in config/importmap.rb
    create config/importmap.rb
Copying binstub
    create bin/importmap
    rails turbo:install stimulus:install
Import Turbo
    append app/javascript/application.js
Pin Turbo
    append config/importmap.rb
Enable redis in bundle
    gsub Gemfile
    run bundle install
Fetching gem metadata from https://rubygems.org/.....
Resolving dependencies...
Using rake 13.0.6
Using concurrent-ruby 1.1.10
Using minitest 5.16.3
Using builder 3.2.4
Using racc 1.6.1
Using crass 1.0.6
Using bundler 2.3.15
Using nio4r 2.5.8
Using rack 2.2.4
Using io-console 0.6.0
Using mini_mime 1.1.2
Using marcel 1.0.2
Using thor 1.2.1

```

```
Using zeitwerk 2.6.6
Using redis 4.8.0
Using rexml 3.2.5
Using rubyzip 2.3.2
Using websocket 1.2.9
Using sqlite3 1.5.4 (x86_64-darwin)
Using i18n 1.12.0
Using timeout 0.3.1
Using tzinfo 2.0.5
Using method_source 1.0.0
Using public_suffix 5.0.1
Using rack-test 2.0.2
Using bindindex 0.8.1
Using selenium-webdriver 4.7.1
Using regexp_parser 2.6.1
Using nokogiri 1.13.10 (x86_64-darwin)
Using matrix 0.4.2
Using date 3.3.3
Using webdrivers 5.2.0
Using xpath 3.2.0
Using puma 5.6.5
Using msgpack 1.6.0
Using reline 0.3.2
Using erubi 1.11.0
Using bootsnap 1.15.0
Using irb 1.6.1
Using addressable 2.8.1
Using websocket-extensions 0.1.5
Using sprockets 4.2.0
Using loofah 2.19.1
Using activesupport 7.0.4
Using rails-html-sanitizer 1.4.4
Using capybara 3.38.0
Using net-protocol 0.2.1
Using websocket-driver 0.7.5
Using globalid 1.0.0
Using activemodel 7.0.4
Using rails-dom-testing 2.0.3
Using debug 1.7.0
Using activerecord 7.0.4
Using actionview 7.0.4
Using net-pop 0.1.2
Using actionpack 7.0.4
Using net-smtp 0.3.3
Using jbuilder 2.11.5
Using railties 7.0.4
Using sprockets-rails 3.4.2
Using importmap-rails 1.1.5
Using net-imap 0.3.2
Using actioncable 7.0.4
Using stimulus-rails 1.2.1
```

```
Using web-console 4.2.0
Using activejob 7.0.4
Using mail 2.8.0
Using activestorage 7.0.4
Using turbo-rails 1.3.2
Using actionmailer 7.0.4
Using actionmailbox 7.0.4
Using actiontext 7.0.4
Using rails 7.0.4
Bundle complete! 16 Gemfile dependencies, 73 gems now installed.
Use `bundle info [gemname]` to see where a bundled gem is installed.
Switch development cable to use redis
    gsub config/cable.yml
Create controllers directory
    create app/javascript/controllers
    create app/javascript/controllers/index.js
    create app/javascript/controllers/application.js
    create app/javascript/controllers/hello_controller.js
Import Stimulus controllers
    append app/javascript/application.js
Pin Stimulus
Appending: pin "@hotwired/stimulus", to: "stimulus.min.js", preload: true"
    append config/importmap.rb
Appending: pin "@hotwired/stimulus-loading", to: "stimulus-loading.js", preload: true
    append config/importmap.rb
Pin all controllers
Appending: pin_all_from "app/javascript/controllers", under: "controllers"
    append config/importmap.rb
```

If you're reading above there is a ton to take in. But for the most part if create the directory structure for the MVC (Model View Controller) framework, routing config, set up for sending email and background jobs, base CSS and Javascript assets, a default Gemfile. And if you recall I said earlier that we use bundler, well a Gemfile provides the list of gem dependencies that an application requires to get started and initially this can seem terrifying since there are so many. But each has a unique function and for the most part you can let it get on with it's job and not worry. The core gems for a Rails app are ActionPack for booting the application and serving requests, ActiveRecord database interaction, with ActiveSupport adding so extensions to core Ruby