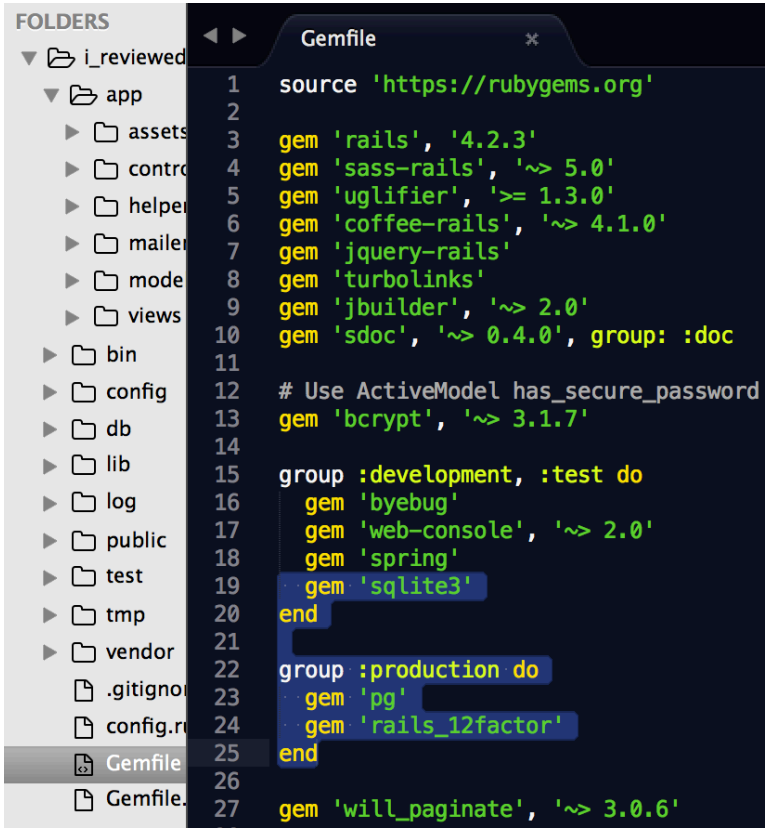
In this lecture, we will discuss…

- ✧ Deploying to Heroku
- ✧ Enabling SSL

Heroku Deployment




```
~/sandbox/i_reviewed$ bundle --without production
```

Heroku Deployment

```
~/sandbox/i_reviewed$ git st
On branch master
Your branch is up-to-date with 'origin/master'.
nothing to commit, working directory clean
~/sandbox/i_reviewed$ ls
.            .git         Gemfile.lock app          config.ru    log          tmp
..           .gitignore   README.rdoc  bin          db           public       vendor
.bundle      Gemfile      Rakefile     config       lib          test
~/sandbox/i_reviewed$ heroku login
Setting up node-v4.2.1... done
Installing core plugin heroku-cli-addons... done
Enter your Heroku credentials.
Email: kalmanh@gmail.com
Password (typing will be hidden):
Logged in as kalmanh@gmail.com
~/sandbox/i_reviewed$ heroku create ireview-books
Creating ireview-books... done, stack is cedar-14
https://ireview-books.herokuapp.com/ | https://git.heroku.com/ireview-books.git
Git remote heroku added
~/sandbox/i_reviewed$
```

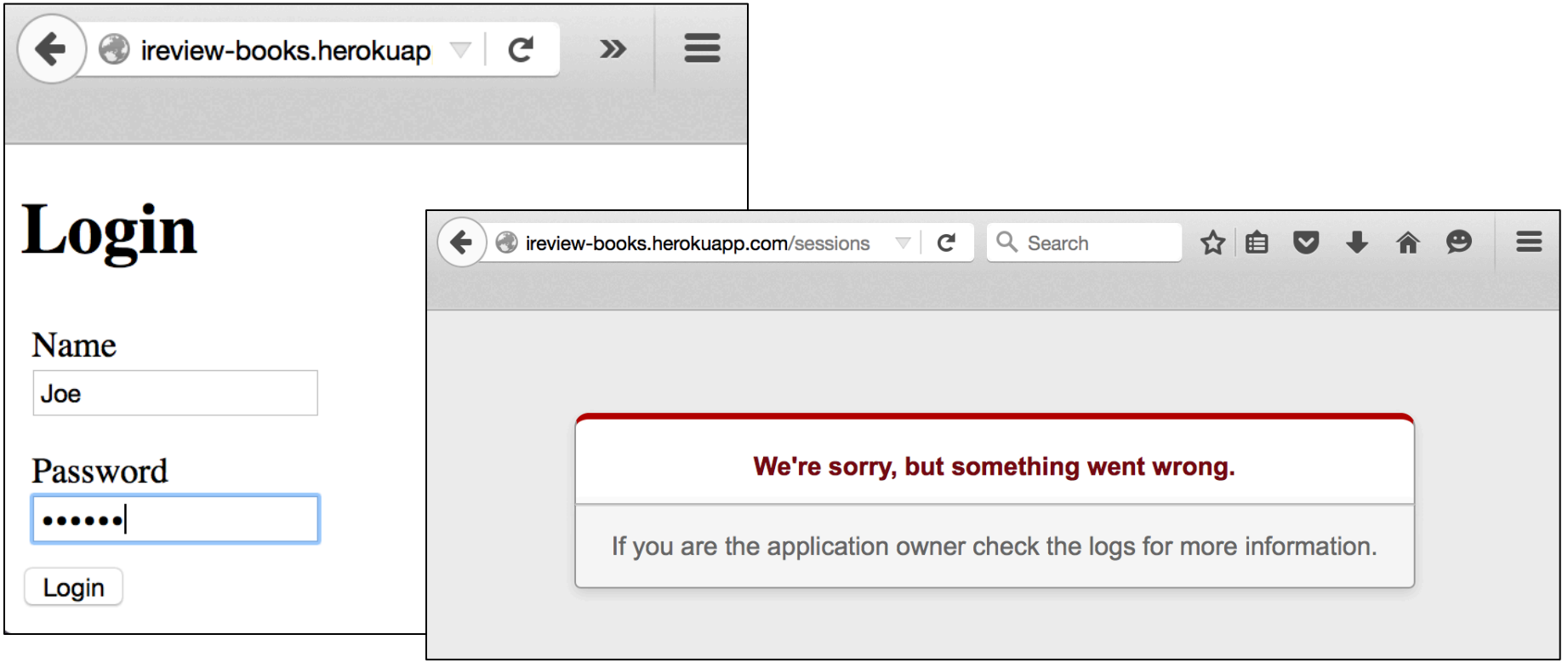
Heroku Deployment

```
~/sandbox/i_reviewed$ git push heroku master
Counting objects: 177, done.
Delta compression using up to 8 threads.
Compressing objects: 100% (159/159), done.
Writing objects: 100% (177/177), 29.72 KiB | 0 bytes/s, done.
Total 177 (delta 51), reused 0 (delta 0)
remote: Compressing source files... done.
remote: Building source:
remote:
remote: -----> Ruby app detected
remote: -----> Compiling Ruby/Rails
remote: -----> Using Ruby version: ruby-2.0.0
remote: -----> Installing dependencies using bundler 1.9.7
remote:        Running: bundle install --without development:test
```

Heroku Deployment

```
remote: -----> Discovering process types
remote:        Procfile declares types -> (none)
remote:        Default types for Ruby  -> console, rake, web, worker
remote:
remote: -----> Compressing... done, 29.4MB
remote: -----> Launching... done, v5
remote:        https://ireview-books.herokuapp.com/ deployed to Heroku
remote:
remote: Verifying deploy.... done.
To https://git.heroku.com/ireview-books.git
 * [new branch]      master -> master
```

Heroku Deployment



Wait For Me…

- We deployed the app, but what about the database?
- `$heroku run rake db:migrate`
- `$heroku run rake db:seed`

Migrations And Seeding On Heroku

```
~/sandbox/i_reviewed$ heroku run rake db:migrate
Running rake db:migrate on ireview-books... up, run.9261
   (15.3ms)  CREATE TABLE "schema_migrations" ("version" character varying NOT NULL)
   (10.1ms)  CREATE UNIQUE INDEX  "unique_schema_migrations" ON "schema_migrations"  ("version")
  ActiveRecord::SchemaMigration Load (2.5ms)  SELECT "schema_migrations".* FROM "schema_migrations"
Migrating to CreateReviewers (20151015232312)
   (1.4ms)  BEGIN
== 20151015232312 CreateReviewers: migrating ==================================
-- create_table(:reviewers)
   (23.2ms)  CREATE TABLE "reviewers" ("id" serial primary key, "name" character varying, "password_digest" character varying,
 "created_at" timestamp NOT NULL, "updated_at" timestamp NOT NULL)
   -> 0.0288s
== 20151015232312 CreateReviewers: migrated (0.0311s) =========================

  SQL (1.4ms)  INSERT INTO "schema_migrations" ("version") VALUES ($1)  [["version", "20151015232312"]]
   (2.5ms)  COMMIT
Migrating to CreateBooks (20151015232349)
   (1.3ms)  BEGIN
== 20151015232349 CreateBooks: migrating ======================================
-- create_table(:books)
   (18.9ms)  CREATE TABLE "books" ("id" serial primary key, "name" character varying, "author" character varying, "reviewer_id
" integer, "created_at" timestamp NOT NULL, "updated_at" timestamp NOT NULL)
   (11.1ms)  CREATE  INDEX  "index_books_on_reviewer_id" ON "books"  ("reviewer_id")
   (2.8ms)  ALTER TABLE "books" ADD CONSTRAINT "fk_rails_edc0310d15"
FOREIGN KEY ("reviewer_id")
```

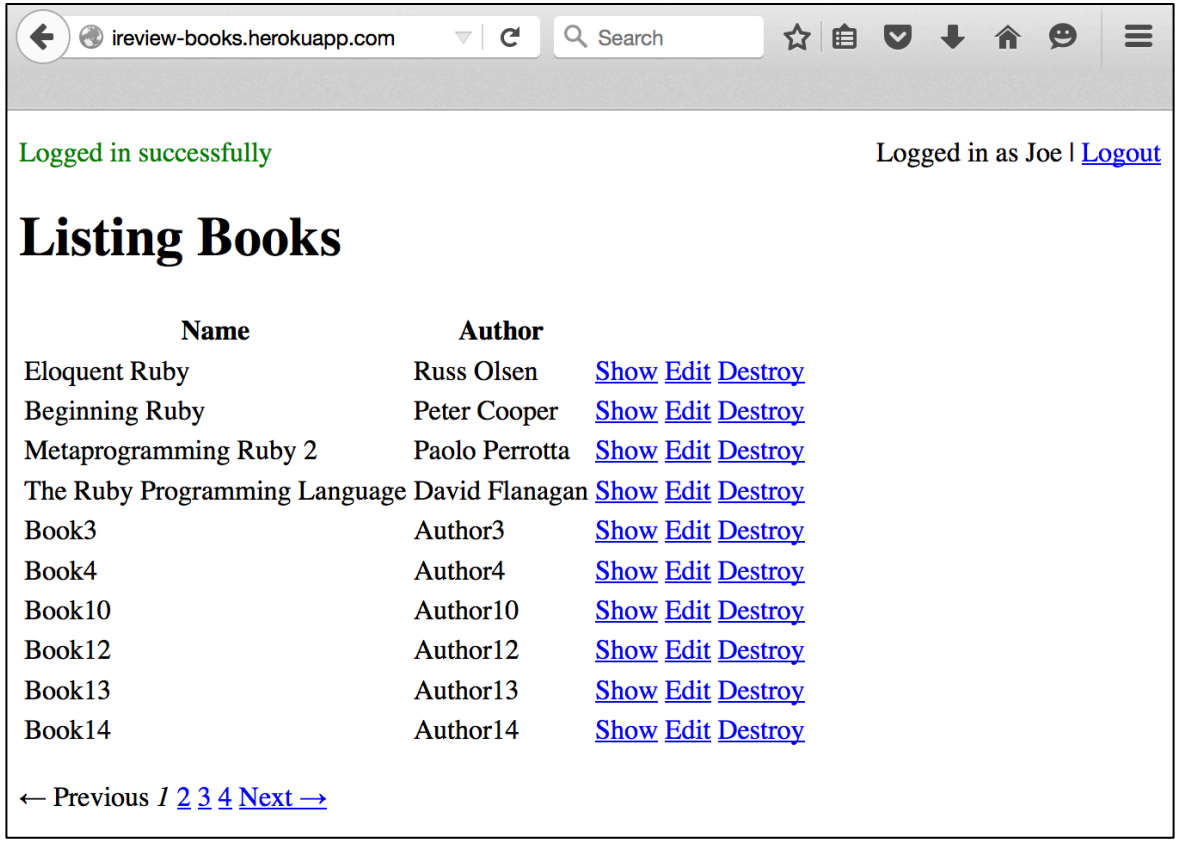
Migrations And Seeding On Heroku

```
~/sandbox/i_reviewed$ heroku run rake db:seed
Running rake db:seed on ireview-books... up, run.2793
  ActiveRecord::SchemaMigration Load (1.0ms)  SELECT "schema_migrations".* FROM "schema_migrations"
  Reviewer Load (4.9ms)  SELECT "reviewers".* FROM "reviewers"
  Book Load (13.0ms)  SELECT "books".* FROM "books"
   (14.6ms)  BEGIN
  SQL (82.7ms)  INSERT INTO "books" ("name", "author", "created_at", "updated_at") VALUES ($1, $2, $3, $4) RETURNING "id"  [["name", "Eloquent Ruby"
], ["author", "Russ Olsen"], ["created_at", "2015-10-22 16:11:36.972204"], ["updated_at", "2015-10-22 16:11:36.972204"]]
   (13.9ms)  COMMIT
   (13.2ms)  BEGIN
  SQL (13.8ms)  INSERT INTO "books" ("name", "author", "created_at", "updated_at") VALUES ($1, $2, $3, $4) RETURNING "id"  [["name", "Beginning Ruby
"], ["author", "Peter Cooper"], ["created_at", "2015-10-22 16:11:37.196688"], ["updated_at", "2015-10-22 16:11:37.196688"]]
   (48.7ms)  COMMIT
   (9.0ms)  BEGIN
  SQL (29.9ms)  INSERT INTO "books" ("name", "author", "created_at", "updated_at") VALUES ($1, $2, $3, $4) RETURNING "id"  [["name", "Metaprogrammin
g Ruby 2"], ["author", "Paolo Perrotta"], ["created_at", "2015-10-22 16:11:37.325074"], ["updated_at", "2015-10-22 16:11:37.325074"]]
   (19.3ms)  COMMIT
   (2.8ms)  BEGIN
  SQL (49.8ms)  INSERT INTO "books" ("name", "author", "created_at", "updated_at") VALUES ($1, $2, $3, $4) RETURNING "id"  [["name", "Design Pattern
s in Ruby"], ["author", "Russ Olsen"], ["created_at", "2015-10-22 16:11:37.462418"], ["updated_at", "2015-10-22 16:11:37.462418"]]
```

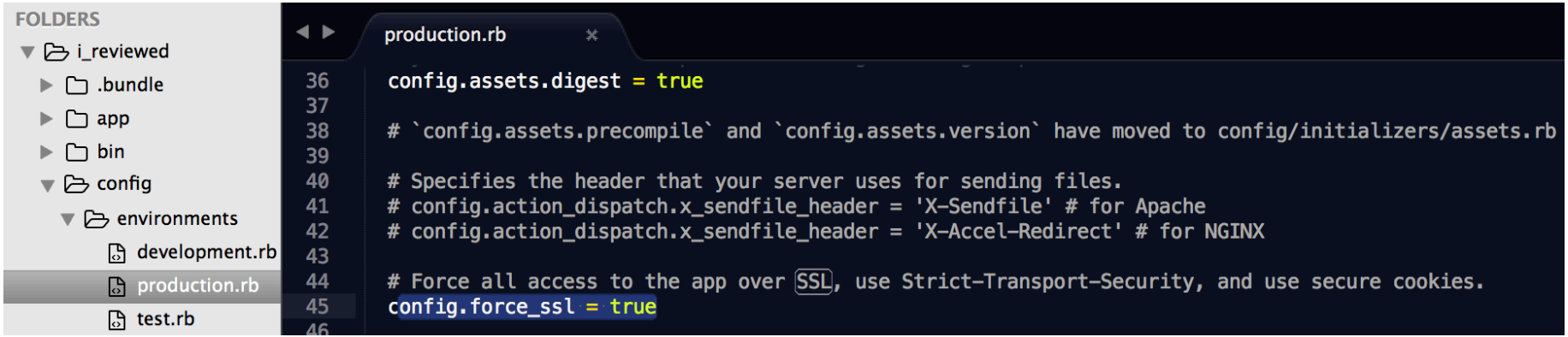
Heroku Logs

```
2015-10-22T16:07:51.833892+00:00 app[web.1]:
2015-10-22T16:07:51.801124+00:00 app[web.1]: Processing by SessionsController#create as HTML
2015-10-22T16:07:51.832898+00:00 app[web.1]: PG::UndefinedTable: ERROR:  relation "reviewers" does not exist
2015-10-22T16:07:51.832900+00:00 app[web.1]: LINE 5:                WHERE a.attrelid = '"reviewers"'::regclass
2015-10-22T16:07:51.832901+00:00 app[web.1]:                                           ^
2015-10-22T16:07:51.832902+00:00 app[web.1]: :              SELECT a.attname, format_type(a.atttypid, a.atttypmod),
2015-10-22T16:07:51.832903+00:00 app[web.1]:                     pg_get_expr(d.adbin, d.adrelid), a.attnotnull, a.atttypid, a.atttypmod
2015-10-22T16:07:51.832904+00:00 app[web.1]:                FROM pg_attribute a LEFT JOIN pg_attrdef d
2015-10-22T16:07:51.832904+00:00 app[web.1]:                  ON a.attrelid = d.adrelid AND a.attnum = d.adnum
2015-10-22T16:07:51.832905+00:00 app[web.1]:               WHERE a.attrelid = '"reviewers"'::regclass
2015-10-22T16:07:51.832906+00:00 app[web.1]:                 AND a.attnum > 0 AND NOT a.attisdropped
2015-10-22T16:07:51.832906+00:00 app[web.1]:               ORDER BY a.attnum
2015-10-22T16:07:51.832907+00:00 app[web.1]:
2015-10-22T16:07:51.833120+00:00 app[web.1]: Completed 500 Internal Server Error in 3ms (ActiveRecord: 1.2ms)
2015-10-22T16:07:51.928494+00:00 heroku[router]: at=info method=POST path="/sessions" host=ireview-books.herokuapp.com request_id=d19918fc-1c0c-43a7
-9a6b-02669d4344c5 fwd="192.12.13.14" dyno=web.1 connect=2ms service=99ms status=500 bytes=1754
2015-10-22T16:09:39.443387+00:00 heroku[api]: Starting process with command `bundle exec rake db:migrate` by kalmanh@gmail.com
2015-10-22T16:09:42.454159+00:00 heroku[run.9261]: Awaiting client
2015-10-22T16:09:42.486496+00:00 heroku[run.9261]: Starting process with command `bundle exec rake db:migrate`
2015-10-22T16:09:42.854498+00:00 heroku[run.9261]: State changed from starting to up
2015-10-22T16:09:47.880649+00:00 heroku[run.9261]: Process exited with status 0
2015-10-22T16:09:47.904400+00:00 heroku[run.9261]: State changed from up to complete
2015-10-22T16:11:26.998612+00:00 heroku[api]: Starting process with command `bundle exec rake db:seed` by kalmanh@gmail.com
2015-10-22T16:11:29.859107+00:00 heroku[run.2793]: Awaiting client
2015-10-22T16:11:29.897069+00:00 heroku[run.2793]: Starting process with command `bundle exec rake db:seed`
```

Happy Ending

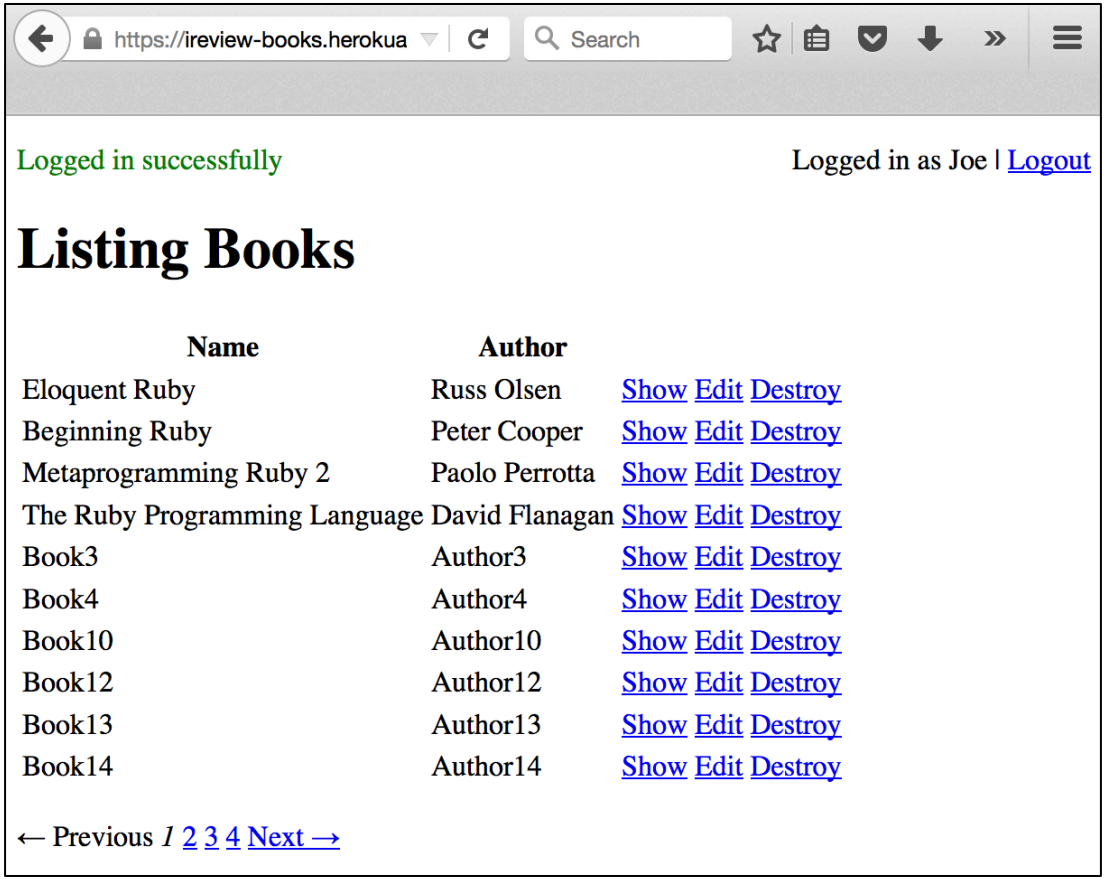


Enabling SSL



Commit the change to git and push to Heroku

Happy Ending with https!



Summary

- Use “`bundle --without production`” if you don’t need or can’t install production gems on your local system
- Don’t forget to run DB commands on the remote server after deployment
- Enable https with `config.force_ssl = true`