Here, you will learn how to use **Git** and **Heroku** to deploy your Sinatra applications.

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If you are new to Git, you can consider buying RubyLearning's <u>easy-to-follow guide</u> to learn the essential features of both **Git and GitHub** that you'll end up using every day. Price: **US\$ 7** only.

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#### Heroku



**Heroku** is a new approach to deploying web applications. Forget about servers; the fundamental unit is the app. Develop locally on your machine just like you always do. When you're ready to deploy, use the Heroku client gem to create your application in our cloud, then deploy with a single git push. Heroku has full support for Sinatra applications. Signup for a free a/c here.

# Steps to deploy to Heroku

Please ensure that you are connected to the internet and then:

- 1. Create an account on Heroku (obviously do this only once) if you don't have one. I have provided you the link above, to signup at Heroku.
- 2. Install the Heroku gem file:
- \$ gem install heroku
- 3. Open a Bash shell in folder sinatrafb and upload your public key (do it only once):
- \$ heroku keys:add

You'll be prompted for your username and password the first time you run a heroku command; they'll be saved on  $\sim$ /.heroku/credentials so you won't be prompted on future runs. It will also upload your public key to allow you to push and pull code.

**4.** In order for Heroku to know what to do with your Sinatra app, create a config.ru (ru stands for Rack up) in the *root-directory*. The contents are:

```
require './day2 1 e2.rb'
```

```
run Sinatra::Application
```

The key line is require './day2\_1\_e2.rb' (we are going to use the program <code>day2\_1\_e2.rb</code>). Be sure to change that to whatever your application's name is. This line helps to load rubygems, Sinatra, rack and everything that we need. Heroku sets <code>RACK\_ENV</code> to production for you. Finally we tell rack to run our Sinatra application with the line

```
run Sinatra::Application
```

(this will run "day2\_1\_e2" in our case).

5. We will now install bundler. To do that, go to the folder sinatrafb and open a command window and type:

```
$ gem install bundler
```

Next, we will install the required gems via bundler. In the already open Git Bash shell for foldersinatrafb type:

\$ bundle init

Edit the created **Gemfile** with your preferred text editor to let it look like this:

```
source "http://rubygems.org"
```

```
gem 'sinatra'
```

Now we need to tell Bundler to check if we're missing the gems our application depends on, if so, tell it to install them. In your open Bash shell type:

\$ bundle check
The following gems are missing
 \* rack (1.2.1)
 \* tilt (1.1)
 \* sinatra (1.1.0)
Install missing gems with `bundle install`
Finally in the open Bash shell, type:
\$ bundle install

This will ensure all gems specified on Gemfile, together with their dependencies, are available for your application. Running "bundle install" will also generate a "Gemfile.lock" file. The Gemfile.lock ensures that your deployed versions of gems on Heroku match the version installed locally on your development machine.

**6.** Set up your local app to use Git (if you aren't already using it). I have the **day2\_1\_e2.rb** and**config.ru** files already in **sinatrafb** folder:

Now type the following:

```
$ git init
$ git add .
$ git commit -m "day2_1_e2 first commit"
Note: The location of the config.ru file is not $HOME, but the top directory (where you ran git init).
```

# 7. Create the app on heroku:

```
$ heroku create
Creating still-savannah-8491... done, stack is cedar
http://still-savannah-8491.herokuapp.com/ | git@heroku.com:still-savannah-8491.git
Git remote heroku added
```

The final line of output from the create command will be different for each one of you.

The app has been created and two URLs are provided. One is for the web face of your new app i.e. <a href="http://still-savannah-8491.herokuapp.com/">http://still-savannah-8491.herokuapp.com/</a> If you visit that URL now, you'll see a standard welcome page, until you push your application up. The other one is for the Git repository that you will push your code to. Normally you would need to add this as a git remote; the "heroku create" command has done this for you automatically.

### 8. Deploy your code:

```
$ git push heroku master
```

The app is now deployed to Heroku.

9. Open the deployed app in your browser. You should see Welcome from RubyLearning again! in the browser window.

Congrats, you have successfully deployed your first Sinatra app.

**Note**: If you want, at this stage you can rename your app by: \$ heroku rename app\_newname

#### Exercise

Write a Sinatra app (I am calling it  $day3\_e1.rb$ ) and deploy it to Heroku. When the app is called, it should display something like this in my browser window:

The time now is: 2012-08-13 15:12:15 +0530

I want each one of you to post the URL of your deployed app as comments to this page. Come on let's see your shiny apps!!

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## Links to the courseware

- Back to the <u>Beginning of the course</u>
- Back to <u>Day 2.2</u>
- Forward to <u>Day 4</u>

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