

# Práctica Calificada 1

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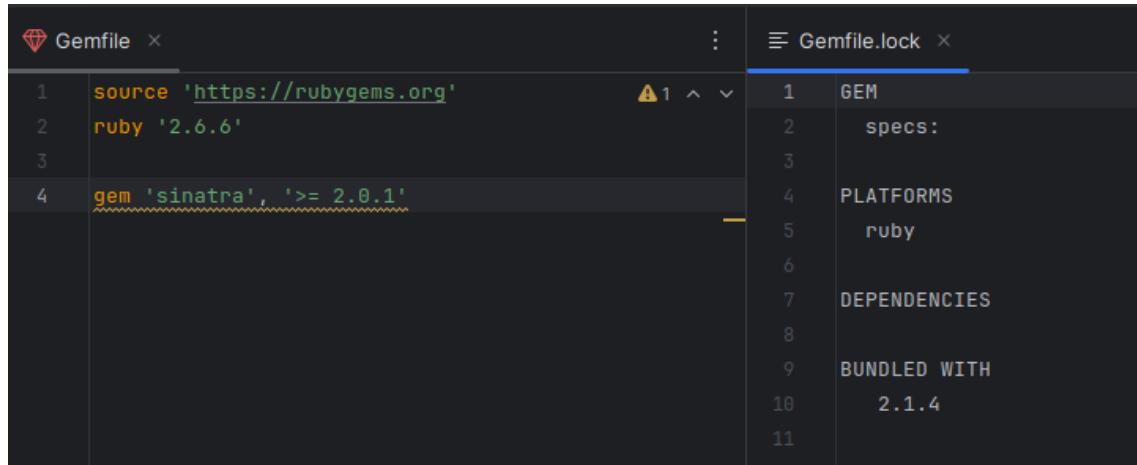
## Introducción

### Creación y versionado de una aplicación SaaS sencilla

Creamos el archivo Gemfile que aparece en el siguiente apartado y añadimos con git para su versionado.

### Correr el Bundler

Aquí tenemos nuestros archivos Gemfile y Gemfile.lock antes de ejecutar el comando bundle.



The screenshot shows two code editor panes side-by-side. The left pane is titled 'Gemfile' and contains the following code:

```
1 source 'https://rubygems.org'  
2 ruby '2.6.6'  
3  
4 gem 'sinatra', '>= 2.0.1'
```

The right pane is titled 'Gemfile.lock' and contains the following structure:

```
1 GEM  
2   specs:  
3  
4     PLatformS  
5       ruby  
6  
7     DEPENDENCIES  
8  
9     BUNDLED WITH  
10      2.1.4  
11
```

```
$ bundle  
# Your Ruby version is 2.7.0, but your Gemfile specified 2.6.6  
$ source ~/.rvm/scripts/rvm  
$ bundle  
# ... (Gem::GemNotFoundException)  
# To install the missing version, run `gem install bundler:2.1.4`  
$ gem install bundler:2.1.4  
# ... 1 gem installed  
$ bundle  
# ... Bundle complete! 1 Gemfile dependency, 7 gems now installed.
```

El Gemfile.lock cambió:

```
1 GEM
2   remote: https://rubygems.org/
3   specs:
4     mustermann (3.0.0)
5       |    ruby2_keywords (~> 0.0.1)
6     rack (2.2.8)
7     rack-protection (3.1.0)
8       |    rack (~> 2.2, >= 2.2.4)
9     ruby2_keywords (0.0.5)
10    sinatra (3.1.0)
11      |    mustermann (~> 3.0)
12      |    rack (~> 2.2, >= 2.2.4)
13      |    rack-protection (= 3.1.0)
14      |    tilt (~> 2.0)
15      |    tilt (2.3.0)
16
17 PLATFORMS
18   ruby
```

**Pregunta.** ¿Cuál es la diferencia entre la finalidad y el contenido de Gemfile y Gemfile.lock? ¿Qué archivo se necesita para reproducir completamente las gemas del entorno de desarrollo en el entorno de producción?

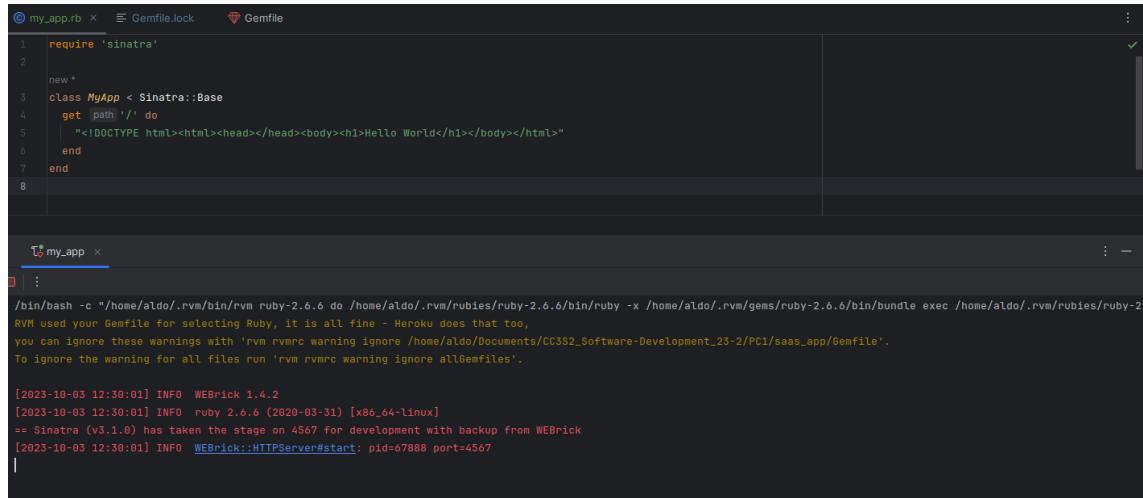
**Respuesta.** El archivo Gemfile especifica las gemas que necesitas (p. e. `gem 'sqlite3'`) y, en algunos casos, las restricciones sobre qué versión(es) son aceptables (p. e. `gem 'puma', '>= 1.2', '< 2.0'`). Gemfile.lock registra las versiones reales encontradas, no solo de las gemas que especificaste explícitamente, sino también de cualquier otra gema de la que dependen, por lo que es el archivo utilizado por tu entorno de producción para reproducir las gemas disponibles en tu entorno de desarrollo.

**Pregunta.** Después de ejecutar `bundle`, ¿por qué hay gemas listadas en Gemfile.lock que no estaban listadas en Gemfile?

**Respuesta.** Porque esas otras gemas que no están en el Gemfile son gemas de las que dependen las gemas que sí están en el Gemfile. Son el resultado de la búsqueda recursiva que hace Bundler para que a ninguna gema le falte una gema de la que aquella depende. En el Gemfile.lock la identación nos indica las gemas usadas por otras gemas. Por ejemplo, ni Rack ni Tilt figuran en el Gemfile, pero el Gemfile.lock indica que Sinatra usa las gemas Rack y Tilt como dependencias.

## Crea una aplicación SaaS sencilla con Sinatra

Ejecutamos nuestra aplicación, y se instancia un servidor de aplicación que escucha a través del puerto 4567:



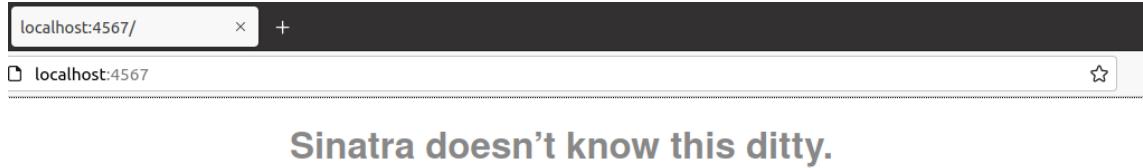
The screenshot shows a code editor with two tabs: `my_app.rb` and `my_app`. The `my_app.rb` tab contains Ruby code for a Sinatra application:my\_app.rb

```
require 'sinatra'

new *
class MyApp < Sinatra::Base
  get '/' do
    "<!DOCTYPE html><html><head></head><body><h1>Hello World</h1></body></html>"
  end
end
```

The `my_app` tab shows the terminal output of running the application:/bin/bash -c "/home/aldo/.rvm/bin/rvm ruby-2.6.6 do /home/aldo/.rvm/rubies/ruby-2.6.6/bin/ruby -x /home/aldo/.rvm/gems/ruby-2.6.6/bin/bundle exec /home/aldo/.rvm/rubies/ruby-2.6.6/bin/webrick -p 4567" RVM used your Gemfile for selecting Ruby, it is all fine - Heroku does that too, you can ignore these warnings with 'rvm rvmrc warning ignore /home/aldo/Documents/CC3S2\_Software-Development\_23-2/PC1/saas\_app/Gemfile'. To ignore the warning for all files run 'rvm rvmrc warning ignore allGemfiles'.[2023-10-03 12:30:01] INFO WEBrick 1.4.2  
[2023-10-03 12:30:01] INFO ruby 2.6.6 (2020-03-31) [x86\_64-linux]  
-- Sinatra (v3.1.0) has taken the stage on 4567 for development with backup from WEBrick  
[2023-10-03 12:30:01] INFO WEBrick::HTTPServer#start: pid=67888 port=4567

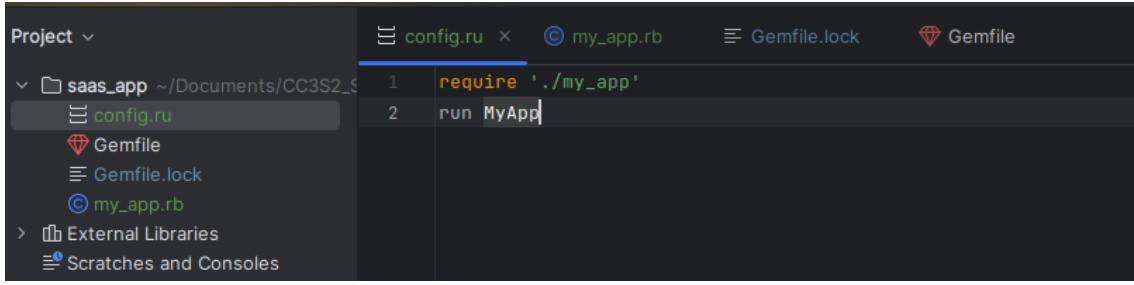
Pero tenemos un problema con el servidor:



Try this:

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

El problema es que no hemos creado el archivo config.ru para configurarlo:

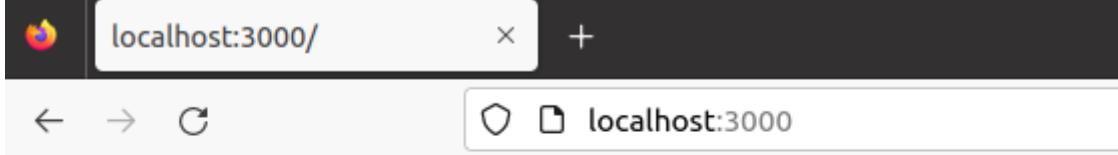


The screenshot shows a code editor with a project structure on the left. The current file is config.ru, which contains the following code:

```
require './my_app'  
run MyApp
```

Con esta configuración ahora el servidor de aplicación ya se puede conectar a nuestra aplicación y mostrar el breve contenido HTML de saludo en el método `get /` de nuestra app. Solo ejecutamos el siguiente comando:

```
bundle exec rackup --port 3000
```



## Hello World

**Pregunta.** ¿Qué sucede si intentas visitar una URL no raíz como <https://localhost:3000/hello> y por qué? (la raíz de tu URL variará)

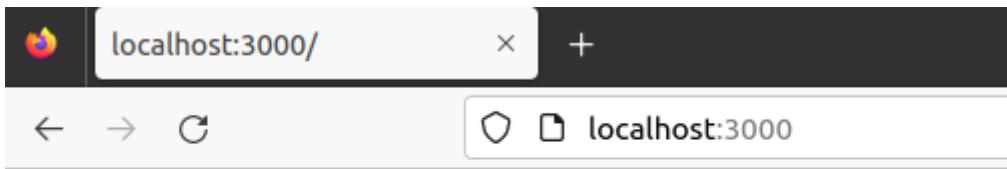
**Respuesta.** Nos sale el mismo error de antes, pero esta vez es porque no tenemos una ruta para el método get /hola .

### Modifica la aplicación

Modificamos la aplicación para que muestre el texto Goodbye World, pero al recargar la página que nos conecta con el servidor local, seguimos viendo lo mismo. Para ver los cambios tenemos que detener el servidor con Ctrl+C y volverlo a correr con `bundle exec rackup --port 3000`:

```
aldo@aldo:~/Documents/CC3S2_Software-Development_23-2/PC1/saas_app$ bundle exec rackup --port 3000
[2023-10-03 19:13:52] INFO  WEBrick 1.4.2
[2023-10-03 19:13:52] INFO  ruby 2.6.6 (2020-03-31) [x86_64-linux]
[2023-10-03 19:13:52] INFO  WEBrick::HTTPServer#start: pid=70044 port=3000
127.0.0.1 - - [03/Oct/2023:19:14:00 -0500] "GET / HTTP/1.1" 200 75 0.0324
^C[2023-10-03 19:14:09] INFO  going to shutdown ...
[2023-10-03 19:14:09] INFO  WEBrick::HTTPServer#start done.
aldo@aldo:~/Documents/CC3S2_Software-Development_23-2/PC1/saas_app$ bundle exec rackup --port 3000
[2023-10-03 19:14:31] INFO  WEBrick 1.4.2
[2023-10-03 19:14:31] INFO  ruby 2.6.6 (2020-03-31) [x86_64-linux]
[2023-10-03 19:14:31] INFO  WEBrick::HTTPServer#start: pid=70054 port=3000
127.0.0.1 - - [03/Oct/2023:19:14:35 -0500] "GET / HTTP/1.1" 200 76 0.0242
```

Ahora sí vemos los cambios:



## Goodbye World

[Implementar en Heroku](#)

## Parte 1: Wordguesser

### Desarrollando Wordguesser usando TDD y Guard

Clonamos un repositorio mediante el comando **git clone**

<https://github.com/saasbook/hw-sinatra-saas-wordguesser> y ejecutamos el comando **bundle** para asegurarnos de que las gemas estén instaladas y presentes en el entorno de desarrollo de nuestra aplicación:

```
stdu@stdu:~/Documents/CSS2_S01/CHAPTER_23-2/PC1/part1_wordguesser$ bundle
Fetching gem metadata from https://rubygems.org/.....
Fetching ZenTest 4.11.2
Installing ZenTest 4.11.2
Fetching public_suffix 3.0.3
Installing public_suffix 3.0.3
Fetching addressable 2.5.2
Installing addressable 2.5.2
```

Corremos el comando **bundle exec autotest**

```
_23-2/PC1/part1_wordguesser/hw-sinatra-saas-wordguesser/spec/wordguesser_game_spec.rb"
Run options: exclude {:pending=>true}

All examples were filtered out

Finished in 0.00086 seconds (files took 2.15 seconds to load)
0 examples, 0 failures
```

Eliminamos el segmento , **:pending => true** de la línea 12...

```
11
12 >> describe 'new' do
13 >   it "takes a parameter and returns a WordGuesserGame object" do
14     @game = WordGuesserGame.new( word 'glorp' )
15     expect(@game).to be_an_instance_of(WordGuesserGame)
16     expect(@game.word).to eq('glorp')
17     expect(@game.guesses).to eq('')
18     expect(@game.wrong_guesses).to eq('')
19   end
20 end
```

... y, como Rubymine está configurado con la opción de autosave, vemos inmediatamente que autotest detecta que hay una prueba y que falla:

```

11
12 >> describe 'new' do
13 >   it "takes a parameter and returns a WordGuesserGame object" do
14     @game = WordGuesserGame.new( word: 'glorp' )
15     expect(@game).to be_an_instance_of(WordGuesserGame)
16     expect(@game.word).to eq('glorp')
17     expect(@game.guesses).to eq('')
18     expect(@game.wrong_guesses).to eq('')
19   end
20 end

```

**Pregunta.** Según los casos de prueba, ¿cuántos argumentos espera el constructor de la clase de juegos (identifica la clase) y, por lo tanto, cómo será la primera línea de la definición del método que debes agregar a **wordguesser\_game.rb**?

**Respuesta.** El constructor de la clase de juegos **WordGuesserGame** espera solo un argumento (en este caso "glorp"). Cuando tratamos de pasar argumentos al método **new** para crear un nuevo objeto a partir de una clase, debemos definir un método en dicha clase llamado *initialize* al cual le pasemos los argumentos. Por eso la primera línea será **def initialize(word)**.

**Pregunta.** Según las pruebas de este bloque *describe*, ¿qué variables de instancia se espera que tenga **WordGuesserGame**?

**Respuesta.** Se espera que un objeto **WordGuesserGame** tenga las variables de instancia **@word**, **@guesses** y **@wrong\_guesses**, de las cuales Rubymine solo detecta la existencia de una: **@word**.

## Depuración

```

new *
27   def guess(new_guess)
28     byebug
29     if @word.include? new_guess
30       guesses << new_guess
31     else
32       wrong_guesses.include? new_guess
33     end
34
(byebug) s
[25, 34] in /home/aldo/Documents/tC3S2_Software-Development_23-2/PC1/part1_wordguesser/hw-sinatra-saas-wordguesser/lib/wordguesser_game.rb
25:   }
26: end
27: def guess(new_guess)
28:   byebug
29:   if @word.include? new_guess
=> 30:     guesses << new_guess
31:   else
32:     wrong_guesses.include? new_guess
33:   end
34:
(byebug) new_guess
"a"

```

```
aldo@aldo:~/Documents/parti_wordguesser/hw-sinatra-saas-wordguesser$ curl --data '' http://randomword.saasbook.info/RandomWord  
tightfistedaldo@aldo:~/Documents/parti_wordguesser/hw-sinatra-saas-wordguesser$ curl --data '' http://randomword.saasbook.info/RandomWord  
stripedaldo@aldo:~/Documents/parti_wordguesser/hw-sinatra-saas-wordguesser$ █
```

## Parte 2: RESTful para Wordguesser

```
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ bundle exec rerun -- rackup -port 3000 --host 0.0.0.0
[2023-10-05 16:31:04] INFO Hw-sinatra-saas-wordguesser launched
[2023-10-05 16:31:04] INFO WEBrick 1.4.2
[2023-10-05 16:31:04] INFO ruby 2.6.6 (2020-03-31) [x86_64-linux]
[2023-10-05 16:31:04] INFO WEBrick::HTTPServer#start: pid=27572 port=3000
[2023-10-05 16:31:06] INFO Hw-sinatra-saas-wordguesser Watching . for **/*.{rb,js,coffee,css,scss,sass,erb,html,haml,ru,yml,slim,md} using Linux adapter
```



```
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ bundle exec rerun -- rackup -port 3000 --host 0.0.0.0
[2023-10-05 16:31:04] INFO Hw-sinatra-saas-wordguesser launched
[2023-10-05 16:31:04] INFO WEBrick 1.4.2
[2023-10-05 16:31:04] INFO ruby 2.6.6 (2020-03-31) [x86_64-linux]
[2023-10-05 16:31:04] INFO WEBrick::HTTPServer#start: pid=27572 port=3000
[2023-10-05 16:31:06] INFO Hw-sinatra-saas-wordguesser Watching . for **/*.{rb,js,coffee,css,scss,sass,erb,html,haml,ru,yml,slim,md} using Linux adapter
127.0.0.1 - - [05/Oct/2023:16:31:27 -0500] "GET / HTTP/1.1" 302 - 0.0143
127.0.0.1 - - [05/Oct/2023:16:31:27 -0500] "GET /new HTTP/1.1" 200 949 0.0074
```

localhost:3000/new

## Sinatra doesn't know this ditty.



Try this:

```
# in app.rb
class WordGuesserApp
  post '/new' do
    "Hello World"
  end
end
```

```
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ bundle exec rerun -- rackup -port 3000 --host 0.0.0.0
[2023-10-05 16:31:04] INFO WEBrick 1.4.2
[2023-10-05 16:31:04] INFO ruby 2.6.6 (2020-03-31) [x86_64-linux]
[2023-10-05 16:31:04] INFO WEBrick::HTTPServer#start: pid=27572 port=3000
16:31:06 [rerun] Watching . for **/*.rb,js,coffee,css,scss,sass,erb,html,haml,ru,yml,slim,md} using Linux adapter
127.0.0.1 - - [05/Oct/2023:16:31:27 -0500] "GET / HTTP/1.1" 302 - 0.0143
127.0.0.1 - - [05/Oct/2023:16:31:27 -0500] "GET /new HTTP/1.1" 200 949 0.0074
127.0.0.1 - - [05/Oct/2023:16:31:47 -0500] "POST /new HTTP/1.1" 404 505 0.0065
[2023-10-05 16:31:47 -0500] POST /new HTTP/1.1 404 505 0.0065
^Z
[3]+  Detenido                  bundle exec rerun -- rackup --port 3000 --host 0.0.0.0
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ lsof -i :3000
COMMAND   PID   USER   FD   TYPE DEVICE SIZE/OFF NODE NAME
firefox  1999 miguelubuntu  41u  IPv4 437678      0t0  TCP localhost:48874->localhost:3000 (ESTABLISHED)
ruby    27572 miguelubuntu    5u  IPv4 437665      0t0  TCP *:3000 (LISTEN)
ruby    27572 miguelubuntu    8u  IPv4 434488      0t0  TCP localhost:3000->localhost:48874 (ESTABLISHED)
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ kill -9 27572
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ lsof -i :3000
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ 
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ git branch
* master
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ ls
app.rb config.ru  docs  features  Gemfile  Gemfile.lock  lib  Procfile  README.md  spec  views
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ 
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ bundle install
Using ZenTest 4.11.2
Using public_suffix 3.0.3
Using addressable 2.5.2
Using builder 3.2.3
Using bundler 1.17.3
Using columnize 0.9.0
Using byebug 5.0.0
Using mini_mime 1.0.1
Using mini_portile2 2.3.0
Using nokogiri 1.8.4
Using rack 2.0.5
Using rack-test 0.6.3
```

```

Bundle complete! 15 Gemfile dependencies, 53 gems now installed.
Bundled gems are installed into `./bundle`
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ git status
En la rama master
Tu rama está actualizada con 'origin/master'.

Cambios no rastreados para el commit:
  (usa "git add <archivo>..." para actualizar lo que será confirmado)
  (usa "git restore <archivo>..." para descartar los cambios en el directorio de trabajo)
    modificados:   lib/wordguesser_game.rb
    modificados:   spec/wordguesser_game_spec.rb

sin cambios agregados al commit (usa "git add" y/o "git commit -a")
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ git add .
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ git status
En la rama master
Tu rama está actualizada con 'origin/master'.

Cambios a ser confirmados:
  (usa "git restore --staged <archivo>..." para sacar del área de stage)
    modificados:   lib/wordguesser_game.rb
    modificados:   spec/wordguesser_game_spec.rb

miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ git commit -m "Listo para Heroku!"
[master 6730098] ¡Listo para Heroku!
 2 files changed, 59 insertions(+), 20 deletions(-)
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ heroku login -i
heroku: Enter your login credentials
Email [miguel.vega.s@uni.pe]: miguel.vega.s@uni.pe
Password: ****
Logged in as miguel.vega.s@uni.pe

miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ git remote -v
origin https://github.com/saasbook/hw-sinatra-saas-wordguesser (fetch)
origin https://github.com/saasbook/hw-sinatra-saas-wordguesser (push)

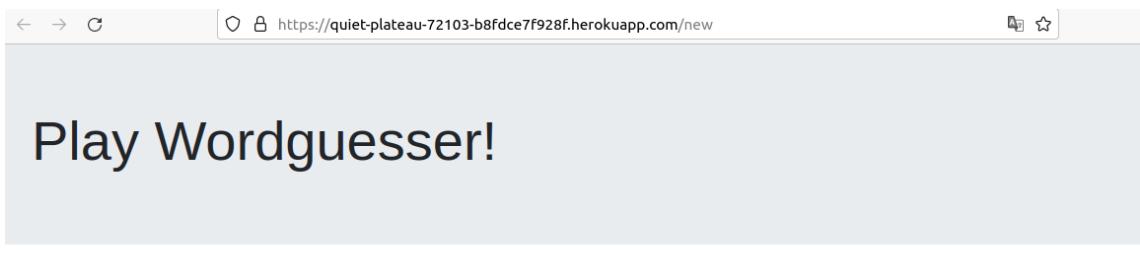
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ heroku create
Creating app... done, ⚡ quiet-plateau-72103
https://quiet-plateau-72103-b0fdce7f928f.herokuapp.com/ | https://git.heroku.com/quiet-plateau-72103.git
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ git remote -v
heroku https://git.heroku.com/quiet-plateau-72103.git (fetch)
heroku https://git.heroku.com/quiet-plateau-72103.git (push)
origin https://github.com/saasbook/hw-sinatra-saas-wordguesser (fetch)
origin https://github.com/saasbook/hw-sinatra-saas-wordguesser (push)

miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ git push heroku master
Enumerando objetos: 51, lista.
Contando objetos: 100% (51/51), listo.
Comprisión delta usando hasta 8 hilos.
Comprimiendo objetos: 100% (42/42), listo.
Escribiendo objetos: 100% (51/51), 35.64 KiB | 17.82 MiB/s, listo.
Total 51 (delta 4), reusado 37 (delta 0)
remote: Updated 36 paths from e3fdc5f
remote: Compressing source files... done.
remote: Building source:
remote:
remote: -----> Building on the Heroku-22 stack
remote: -----> Determining which buildpack to use for this app
remote: -----> Ruby app detected
remote: -----> Installing bundler 1.17.3
remote: -----> Removing BUNDLED WITH version in the Gemfile.lock
remote: -----> Compiling Ruby/Rack
remote:   Command: 'set -o pipefail; curl -L --fail --retry 5 --retry-delay 1 --connect-timeout 3 --max-time 30 https://heroku-buildpack-ruby.s3.us-east-1.amazonaws.com/heroku-22/ruby-2.6.6.tgz -s -o - | tar zxf -' failed on attempt 1 of 3.
remote:   Command: 'set -o pipefail; curl -L --fail --retry 5 --retry-delay 1 --connect-timeout 3 --max-time 30 https://heroku-buildpack-ruby.s3.us-east-1.amazonaws.com/heroku-22/ruby-2.6.6.tgz -s -o - | tar zxf -' failed on attempt 2 of 3.
remote:
remote: !     The Ruby version you are trying to install does not exist on this stack.
remote: !     You are trying to install ruby-2.6.6 on heroku-22.
remote: !     Ruby ruby-2.6.6 is present on the following stacks:
remote: !     - heroku-20
remote: !     Heroku recommends you use the latest supported Ruby version listed here:
remote: !     https://devcenter.heroku.com/articles/ruby-support#supported-runtimes
remote:

miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ git branch -M main
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ git branch
* main
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ git status
En la rama main
Tu rama está adelantada a 'origin/master' por 1 commit.
  (usa "git push" para publicar tus commits locales)

```

```
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ heroku stack:set heroku-20
Setting stack to heroku-20... done
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ git push heroku main
Enumerando objetos: 51, listo.
Contando objetos: 100% (51/51), listo.
Comprimiendo objetos: 100% (42/42), listo.
Escribiendo objetos: 100% (51/51), 35.64 KiB | 35.64 MiB/s, listo.
Total 51 (delta 4), reusado 37 (delta 0)
remote: Updated 36 paths from e3fdc5f
remote: Compressing source files... done.
remote: Building source:
remote:
remote: -----> Building on the Heroku-20 stack
remote: -----> Determining which buildpack to use for this app
remote: -----> Ruby app detected
remote: -----> Installing bundler 1.17.3
remote: -----> Removing BUNDLED WITH version in the Gemfile.lock
remote: -----> Compiling Ruby/Rack
remote: -----> Using Ruby version: ruby-2.6.6
remote: -----> Installing dependencies using bundler 1.17.3
remote:   Running: BUNDLE_WITHOUT='development:test' BUNDLE_PATH=vendor/bundle BUNDLE_BIN=vendor/bundle/bin BUNDLE_DEPLOYMENT=1 BUNDLE_GLOBAL_PATH_APPENDS_RUBY_SCOPE=1 bundle install -j4
remote:   Fetching gem metadata from https://rubygems.org/....
remote:   Using bundler 1.17.3
remote:   Fetching rack 2.0.5
remote: Verifying deploy... done.
To https://git.heroku.com/quiet-plateau-72103.git
 * [new branch]      main  -> main
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ heroku open
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$
```



**Pregunta.** Enumera el mínimo estado del juego que debe mantenerse durante una partida de Wordguesser.

**Respuesta.** La palabra secreta, la lista de letras que han sido adivinadas correctamente y la lista de letras que han sido adivinadas incorrectamente. Estos componentes del estado del juego ya están codificados como variables de instancia de la clase WordGuesserGame, con lo cual esta clase encapsula el estado.

## El juego como recurso RESTful

**Pregunta.** Enumera las acciones del jugador que podrían provocar cambios en el estado del juego.

**Respuesta.** Hay dos acciones que pueden cambiar el estado del juego: adivinar una letra y empezar una nueva partida. Adivinar una letra o bien modifica la lista de letras adivinadas correcta o incorrectamente, o bien resulta en ganar o perder el juego. Por su parte, empezar una nueva partida desencadena la elección de una nueva palabra secreta y vacía las listas de letras adivinadas correcta e incorrectamente.

## Asignación de rutas de recursos a solicitudes HTTP

**Pregunta.** Para un buen diseño RESTful, ¿cuáles de las operaciones del recurso deben ser manejadas por HTTP GET y cuáles por HTTP POST?

**Respuesta.** Hasta el momento contemplamos tres operaciones: show, Las operaciones manejadas con GET no deberían tener efectos secundarios en el recurso, así que mostrar puede ser manejado por un GET, pero crear y adivinar (que modifican el estado del juego) deberían usar POST. (De hecho, en una verdadera arquitectura orientada a servicios también podemos optar por utilizar otros verbos HTTP como PUT y DELETE, pero no cubriremos eso en esta tarea).

**Pregunta.** ¿Por qué es conveniente que la nueva acción utilice GET en lugar de POST?

**Respuesta.** El uso de GET para la nueva acción es apropiado porque solo implica presentar un formulario al jugador, permitiéndole enviarlo, sin causar ninguna alteración inherente al estado del sistema.

**Pregunta.** Explique por qué la acción GET /nuevo no sería necesaria si su juego Wordguesser fuera llamado como un servicio en una verdadera arquitectura orientada a servicios.

**Respuesta.** En una auténtica Arquitectura Orientada a Servicios (SOA), el servicio que interactúa con Wordguesser sería capaz de generar directamente una petición HTTP POST. En una configuración de este tipo, la acción GET /new se hace innecesaria, ya que su propósito principal es facilitar a los usuarios la generación de esta solicitud. En un entorno SOA puro, este paso intermedio para la interacción humana se omite.

## Parte 3: Conexión de WordGuesserGame a Sinatra

**Pregunta.** ¿@game en este contexto es una variable de instancia de qué clase?

**Respuesta.** Es importante tener en cuenta que, en este contexto particular, la variable de instancia "@game" está asociada con la clase WordGuesserApp, que se encuentra en el archivo app.rb. Puede ser un poco difícil de discernir porque estamos tratando con dos clases Ruby separadas aquí. Una de ellas es WordGuesserGame, responsable de encapsular la lógica central del juego. Por otro lado, WordGuesserApp gestiona la lógica necesaria para ofrecer el juego como una aplicación Software as a Service (SaaS). Esencialmente, se puede pensar en WordGuesserApp como un controlador que abarca la lógica y la capacidad de renderizar vistas utilizando erb.

## La sesión

**Pregunta.** ¿Por qué esto ahorra trabajo en comparación con simplemente almacenar esos mensajes en el hash de **sesion []?**

**Respuesta:** La diferencia de funcionalidad proviene de la duración de la persistencia de los datos. Cuando almacenamos algo en el hash `session[]`, permanece allí hasta que decidimos eliminarlo manualmente. Esto es apropiado cuando los datos necesitan persistir a través de múltiples peticiones. Sin embargo, si la intención es mostrar un mensaje solo una vez, especialmente después de una redirección, el hash `flash[]` de la gema `sinatra-flash` proporciona una clara ventaja. No solo retiene el mensaje para la petición en curso, sino que también lo elimina automáticamente después de la siguiente petición, que suele ser una redirección. Este comportamiento se adapta a situaciones en las que se requieren mensajes de corta duración, asegurando que se muestran precisamente cuando se necesitan y se borran rápidamente de la memoria.

## Ejecutando la aplicación Sinatra

**Pregunta.** Segundo el resultado de ejecutar este comando, ¿cuál es la URL completa que debes visitar para visitar la página New Game?

**Respuesta.** Para acceder a la página New Game, se necesita usar la URL `http://localhost:3000/new`, ya que la sección de código Ruby en `app.rb` marcada por `get '/new'` do... es responsable de renderizar esta página específica.

**Pregunta.** ¿Dónde está el código HTML de esta página?

**Respuesta.** El código HTML de la página New Game se encuentra en el archivo `views/new.erb`. Es un archivo que se procesa en HTML a través de la directiva `erb :new`, permitiendo la correcta visualización de la página.

## Parte 4: Cucumber

```
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ bundle install
Using ZenTest 4.11.2
Using public_suffix 3.0.3
Using addressable 2.5.2
Using builder 3.2.4
Using bundler 1.17.3
Using columnize 0.9.0
Using byebug 5.0.0
Using mini_mime 1.0.1
Using mini_portile2 2.3.0
Using nokogiri 1.8.4
Using rack 2.0.5
Using rack-test 0.6.3
Using xpath 3.1.0
Using capybara 3.1.0
Using hitimes 1.3.0
Using timers 4.0.4
Using celluloid 0.16.0
Using safe_yaml 1.0.4
Using crack 0.4.3
Using multi_json 1.15.0
Using gherkin 2.12.2
Using cucumber-core 1.1.3
Using diff-lcs 1.5.0
Using multi_test 1.1.0
Using cucumber 2.0.0
Using extlib 0.9.16
Using highline 2.0.0
Using templatizer 1.0.0
Using cucumber-sinatra 0.5.0

miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ cucumber features/start_new_game.feature
Feature: start new game

  As a player
    So I can play Wordguesser
    I want to start a new game

  Scenario: I start a new game          # features/start_new_game.feature:7
    Given I am on the home page        # features/step_definitions/game_steps.rb:61
    And I press "New Game"            # features/step_definitions/game_steps.rb:74
      Then I should see "Guess a letter" # features/step_definitions/game_steps.rb:76
        expected to find text "Guess a letter" in "Not Found" (RSpec::Expectations::ExpectationNotMetError)
        ./features/step_definitions/game_steps.rb:73:in `/(?:|I )should see "(?:^|[^\"]*)\"(?: within \"([^\"]*)\")?$/'
        features/start_new_game.feature:1:in `Then I should see "Guess a letter"'
      And I press "New Game"           # features/step_definitions/game_steps.rb:74
      Then I should see "Guess a letter" # features/step_definitions/game_steps.rb:76

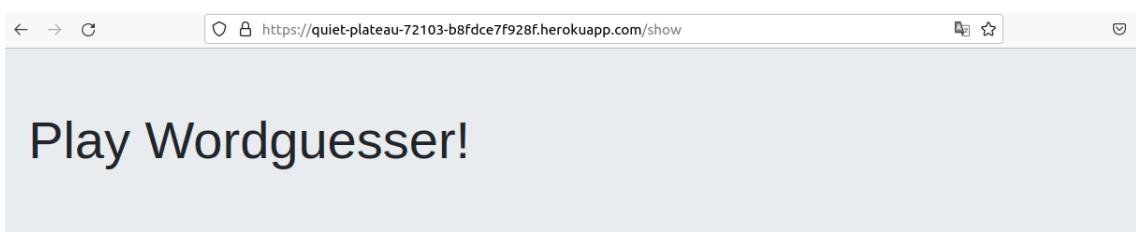
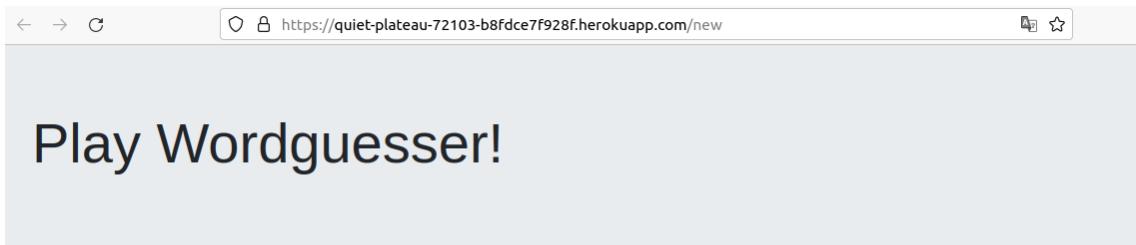
  Failing Scenarios:
  cucumber features/start_new_game.feature:7 # Scenario: I start a new game

  1 scenario (1 failed)
  5 steps (1 failed, 2 skipped, 2 passed)
  0m0.041s
Coverage report generated for Cucumber Features to /home/miguelubuntu/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser/coverage
. 11480 / 23787 LOC (48.26%) covered.
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ █
```

```
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser/views$ cat new.erb
<!-- This form is incomplete--it needs a destination URL as well as a method: -->
<div method="post">
  <div class="form-row py-3 border-top">
    <input type="submit" value="New Game" class="col-md-2 offset-md-5 btn btn-primary form-control"/>
  </div>
</form>

miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser/views$ nano new.erb
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser/views$ cat new.erb
<!-- This form is incomplete--it needs a destination URL as well as a method: -->
<form method="post" action="/create">
  <div class="form-row py-3 border-top">
    <input type="submit" value="New Game" class="col-md-2 offset-md-5 btn btn-primary form-control"/>
  </div>
</form>

miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser/views$ git commit -m "modifica
ndo new.erb"
[main ea16a51] modificando new.erb
 1 file changed, 1 insertion(+), 1 deletion(-)
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser/views$ git push heroku main
Enumerando objetos: 7, listo.
Contando objetos: 100% (7/7), listo.
Comprimiendo objetos: 100% (4/4), listo.
Escribiendo objetos: 100% (4/4), 365 bytes | 365.00 KiB/s, listo.
Total 4 (delta 3), reusado 0 (delta 0)
remote: Updated 36 paths from 990c260
remote: Compressing source files... done.
remote: Building source:
remote: -----> Building on the Heroku-20 stack
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser/views$ heroku open
```



```
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC352/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ cucumber features/start_new_game.feature
Feature: start new game

As a player
So I can play Wordguesser
I want to start a new game

Scenario: I start a new game
  Given I am on the home page          # features/start_new_game.feature:7
  And I press "New Game"              # features/step_definitions/game_steps.rb:61
  Then I should see "Guess a letter" # features/step_definitions/game_steps.rb:74
  And I press "New Game"              # features/step_definitions/game_steps.rb:70
  Then I should see "Guess a letter" # features/step_definitions/game_steps.rb:70

1 scenario (1 passed)
5 steps (5 passed)
0m0.070s
Coverage report generated for Cucumber Features to /home/miguelubuntu/Escritorio/CC352/Wordguesser_Parte1/hw-sinatra-saas-wordguesser/coverage
. 11316 / 22906 LOC (49.4%) covered.

miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC352/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ cucumber features/guess.feature

4 scenarios (4 failed)
13 steps (4 failed, 1 skipped, 8 passed)
0m0.119s
Coverage report generated for Cucumber Features to /home/miguelubuntu/Escritorio/CC352/Wordguesser_Parte1/hw-sinatra-saas-wordguesser/coverage
. 11748 / 23800 LOC (49.36%) covered.

post '/guess' do
# Extrae la letra enviada en el formulario
letter = params[:guess].to_s[0]

# Utiliza esa letra para adivinar el juego actual
result = @game.guess(letter)

# Verifica si la conjectura fue repetida o inválida y configura un mensaje de flash en consecuencia
if result == :repeated
  flash[:message] = "You have already used that letter."
elsif result == :invalid
  flash[:message] = "Invalid guess."
end

# Redirige a la acción show para que el jugador pueda ver el resultado de su adivinación
redirect '/show'
end
```

```
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ cucumber features/guess.feature
Feature: guess correct letter

As a player playing Wordguesser
So that I can make progress toward the goal
I want to see when my guess is correct

Scenario: guess correct letter that occurs once # features/guess.feature:7
  Given I start a new game with word "garply"      # features/step_definitions/game_steps.rb:9
  When I guess "r"                                # features/step_definitions/game_steps.rb:16
  Then I should see "r" within "span.word"         # features/step_definitions/game_steps.rb:70

Scenario: guess correct letter that occurs multiple times # features/guess.feature:13
  Given I start a new game with word "animal"       # features/step_definitions/game_steps.rb:9
  When I guess "a"                                  # features/step_definitions/game_steps.rb:16
  Then I should see "a---a" within "span.word"       # features/step_definitions/game_steps.rb:70

Scenario: guess incorrect letter # features/guess.feature:19
  Given I start a new game with word "xylophone"     # features/step_definitions/game_steps.rb:9
  When I guess "a"                                  # features/step_definitions/game_steps.rb:16
  Then I should see "a" within "span.guesses"        # features/step_definitions/game_steps.rb:70

Scenario: multiple correct and incorrect guesses # features/guess.feature:25
  Given I start a new game with word "foobar"        # features/step_definitions/game_steps.rb:9
  When I make the following guesses: a,z,x,o          # features/step_definitions/game_steps.rb:22
  Then the word should read "-oo-a-"                 # features/step_definitions/game_steps.rb:38
  And the wrong guesses should include: z,x           # features/step_definitions/game_steps.rb:42

4 scenarios (4 passed)
13 steps (13 passed)
0m0.110s
Coverage report generated for Cucumber Features to /home/miguelubuntu/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser/coverage
. 11451 / 22924 LOC (49.95%) covered.
```

```
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ git commit -m "modificando app.rb"
[main 6d8ba1f] modificando app.rb
 2 files changed, 19 insertions(+), 7 deletions(-)
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ git push heroku main
Enumerando objetos: 7, listo.
Contando objetos: 100% (7/7), listo.
Comprimiendo delta usando hasta 8 hilos
Comprimiendo objetos: 100% (4/4), listo.
Escribiendo objetos: 100% (4/4), 690 bytes | 690.00 KiB/s, listo.
Total 4 (delta 3), reusado 0 (delta 0)
```

```
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ heroku open
```

Play Wordguesser!

Wrong Guesses: i

Word so far: u-a--ou--a--e

Guess a letter:

**Guess!**

**New Game**

# Play Wordguesser!

Wrong Guesses: irgmkh

Word so far: unaccountable

Guess a letter:

Guess!

[New Game](#)

```
get '/show' do
  if @game.check_win_or_lose == :win
    redirect '/win'
  elsif @game.check_win_or_lose == :lose
    redirect '/lose'
  else
    erb :show
  end
end
```

```
miguelubuntu@miguelubuntu-HP-Laptop-15-dyixxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ cucumber features/game_over.feature
Feature: game over

As a player playing Wordguesser
So I can get back to my life
I want to know when the game is over

Scenario: game over because I guess the word # features/game_over.feature:7
  Given I start a new game with word "foobar" # features/step_definitions/game_steps.rb:9
  When I make the following guesses: f,o,b,a,r # features/step_definitions/game_steps.rb:22
  Then I should see "You Win!" # features/step_definitions/game_steps.rb:70

Scenario: game over because I run out of guesses # features/game_over.feature:13
  Given I start a new game with word "zebra" # features/step_definitions/game_steps.rb:9
  When I make the following guesses: t,u,v,w,x,y # features/step_definitions/game_steps.rb:22
  And I guess "d" # features/step_definitions/game_steps.rb:16
  Then I should see "Sorry, you lose!" # features/step_definitions/game_steps.rb:70

2 scenarios (2 passed)
7 steps (7 passed)
0m0.110s
Coverage report generated for Cucumber Features to /home/miguelubuntu/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser/coverage
. 11404 / 22915 LOC (49.77%) covered.

miguelubuntu@miguelubuntu-HP-Laptop-15-dyixxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ git add .
miguelubuntu@miguelubuntu-HP-Laptop-15-dyixxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ git commit -m "modificando app.rb en get /show para game_over.feature"
[main 5f32181] modificando app.rb en get /show para game_over.feature
 1 file changed, 7 insertions(+), 2 deletions(-)
miguelubuntu@miguelubuntu-HP-Laptop-15-dyixxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ git push heroku main
Enumerando objetos: 5, listo.
Contando objetos: 100% (5/5), listo.
Comprimiendo objetos: 100% (3/3), listo.
Escribiendo objetos: 100% (3/3), 404 bytes | 404.00 KiB/s, listo.
Total 3 (delta 2), reusado 0 (delta 0)
remote: Updated 36 paths from 1ed38b1
remote: Compressing source files... done.
remote: Building source:
```

# Play Wordguesser!

Wrong Guesses: abiolh

Word so far: -e-ete--

Guess a letter:

s

Guess!

New Game

# Play Wordguesser!

Sorry, you lose!

The word was: cemetery

New Game

# Play Wordguesser!

Wrong Guesses: oumpls

Word so far: defia-t

Guess a letter:

n

Guess!

New Game

# Play Wordguesser!

You Win!

The word was defiant.

New Game

```
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ cucumber features/cheating.feature
Feature: gain access to the word without guessing it

As a adversary playing Wordguesser
So that I can see the word without ever entering a letter
I want to navigate to a ending page and see the word

Scenario: navigate to lose page # features/cheating.feature:7
Given I start a new game with word "snake" # features/step_definitions/game_steps.rb:9
When I try to go to the URL "/lose" # features/step_definitions/game_steps.rb:57
Then I should be on the show page # features/step_definitions/game_steps.rb:65

expected: "/show"
got: "/lose"

(compared using eql?)
(RSpec::Expectations::ExpectationNotMetError)
./features/step_definitions/game_steps.rb:67:in `/^(?:|I )should be on (.+)$/
features/cheating.feature:10:in `Then I should be on the show page'
And the word should read "----" # features/step_definitions/game_steps.rb:38

Scenario: navigate to win page # features/cheating.feature:13
Given I start a new game with word "snake" # features/step_definitions/game_steps.rb:9
When I try to go to the URL "/win" # features/step_definitions/game_steps.rb:57
Then I should be on the show page # features/step_definitions/game_steps.rb:65

expected: "/show"
got: "/win"

(compared using eql?)
(RSpec::Expectations::ExpectationNotMetError)
./features/step_definitions/game_steps.rb:67:in `/^(?:|I )should be on (.+)$/
features/cheating.feature:16:in `Then I should be on the show page'
And the word should read "----" # features/step_definitions/game_steps.rb:38

And the word should read "----" # features/step_definitions/game_steps.rb:38

Failing Scenarios:
cucumber features/cheating.feature:7 # Scenario: navigate to lose page
cucumber features/cheating.feature:13 # Scenario: navigate to win page

2 scenarios (2 failed)
8 steps (2 failed, 2 skipped, 4 passed)
0m0.084s
Coverage report generated for Cucumber Features to /home/miguelubuntu/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser/coverage
, 11548 / 23809 LOC (48.5%) covered.
```

```
get '/win' do
  if @game.check_win_or_lose == :win
    erb :win
  else
    redirect '/show'
  end
end

get '/lose' do
  if @game.check_win_or_lose == :lose
    erb :lose
  else
    redirect '/show'
  end
end
```

```
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ cucumber features/cheating.feature
Feature: gain access to the word without guessing it

As a adversary playing Wordguesser
So that I can see the word without ever entering a letter
I want to navigate to a ending page and see the word

Scenario: navigate to lose page # features/cheating.feature:7
Given I start a new game with word "snake" # features/step_definitions/game_steps.rb:9
When I try to go to the URL "/lose" # features/step_definitions/game_steps.rb:57
Then I should be on the show page # features/step_definitions/game_steps.rb:65
And the word should read "----" # features/step_definitions/game_steps.rb:38

Scenario: navigate to win page # features/cheating.feature:13
Given I start a new game with word "snake" # features/step_definitions/game_steps.rb:9
When I try to go to the URL "/win" # features/step_definitions/game_steps.rb:57
Then I should be on the show page # features/step_definitions/game_steps.rb:65
And the word should read "----" # features/step_definitions/game_steps.rb:38

2 scenarios (2 passed)
8 steps (8 passed)
0m0.068s
Coverage report generated for Cucumber Features to /home/miguelubuntu/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser/coverage
, 11337 / 22932 LOC (49.44%) covered.
```

```
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ cucumber features/invalid_guess.feature
Feature: guess invalid inputs
```

```

2 scenarios (2 failed)
10 steps (2 failed, 6 skipped, 2 passed)
0m0.056s
Coverage report generated for Cucumber Features to /home/miguelubuntu/Escritorio/CC352/Wordguesser_Parte1/hw-sinatra-saas-wordguesser/coverage
. 11351 / 22919 LOC (49.53%) covered.

post '/guess' do
# Extrae la letra enviada en el formulario
letter = params[:guess].to_s[0]

begin
# Utiliza esa letra para adivinar el juego actual
result = @game.guess(letter)

# Verifica si la conjetura fue repetida y configura un mensaje de flash en consecuencia
if result == :repeated
flash[:message] = "You have already used that letter."
end

rescue ArgumentError
# Maneja la excepción si la conjetura es inválida y configura un mensaje de flash apropiado
flash[:message] = "Invalid guess."
end

# Redirige a la acción show para que el jugador pueda ver el resultado de su adivinación
redirect '/show'
end

```



```

miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:/Escritorio/CC352/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ cucumber features/start_new_g
ame.feature
Feature: start new game

As a player
So I can play Wordguesser
I want to start a new game

Scenario: I start a new game
  Given I am on the home page
  And I press "New Game"
  Then I should see "Guess a letter"
  And I press "New Game"
  Then I should see "Guess a letter"
# features/start_new_game.feature:7
# features/step_definitions/game_steps.rb:61
# features/step_definitions/game_steps.rb:70
# features/step_definitions/game_steps.rb:74
# features/step_definitions/game_steps.rb:70

1 scenario (1 passed)
5 steps (5 passed)
0m0.070s
Coverage report generated for Cucumber Features to /home/miguelubuntu/Escritorio/CC352/Wordguesser_Parte1/hw-sinatra-saas-wordguesser/coverage
. 11316 / 22906 LOC (49.4%) covered.

miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:/Escritorio/CC352/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ cucumber features/guess.feature

4 scenarios (4 failed)
13 steps (4 failed, 1 skipped, 8 passed)
0m0.119s
Coverage report generated for Cucumber Features to /home/miguelubuntu/Escritorio/CC352/Wordguesser_Parte1/hw-sinatra-saas-wordguesser/coverage
. 11748 / 23800 LOC (49.36%) covered.

```

```

post '/guess' do
  # Extrae la letra enviada en el formulario
  letter = params[:guess].to_s[0]

  # Utiliza esa letra para adivinar el juego actual
  result = @game.guess(letter)

  # Verifica si la conjetura fue repetida o inválida y configura un mensaje de flash en consecuencia
  if result == :repeated
    flash[:message] = "You have already used that letter."
  elsif result == :invalid
    flash[:message] = "Invalid guess."
  end

  # Redirige a la acción show para que el jugador pueda ver el resultado de su adivinación
  redirect '/show'
end

```

```

miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC352/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ cucumber features/guess.feature
Feature: guess correct letter

As a player playing Wordguesser
So that I can make progress toward the goal
I want to see when my guess is correct

Scenario: guess correct letter that occurs once # features/guess.feature:7
  Given I start a new game with word "garply"      # features/step_definitions/game_steps.rb:9
  When I guess "r"                                # features/step_definitions/game_steps.rb:16
  Then I should see "r" within "span.word"          # features/step_definitions/game_steps.rb:70

Scenario: guess correct letter that occurs multiple times # features/guess.feature:13
  Given I start a new game with word "animal"        # features/step_definitions/game_steps.rb:9
  When I guess "a"                                  # features/step_definitions/game_steps.rb:16
  Then I should see "a---" within "span.word"        # features/step_definitions/game_steps.rb:70

Scenario: guess incorrect letter # features/guess.feature:19
  Given I start a new game with word "xylophone"     # features/step_definitions/game_steps.rb:9
  When I guess "a"                                  # features/step_definitions/game_steps.rb:16
  Then I should see "a" within "span.guesses"         # features/step_definitions/game_steps.rb:70

Scenario: multiple correct and incorrect guesses # features/guess.feature:25
  Given I start a new game with word "foobar"        # features/step_definitions/game_steps.rb:9
  When I make the following guesses: a,z,x,o        # features/step_definitions/game_steps.rb:22
  Then the word should read "-oo-a-"                # features/step_definitions/game_steps.rb:38
  And the wrong guesses should include: z,x          # features/step_definitions/game_steps.rb:42

4 scenarios (4 passed)
13 steps (13 passed)
0m0.110s
Coverage report generated for Cucumber Features to /home/miguelubuntu/Escritorio/CC352/Wordguesser_Parte1/hw-sinatra-saas-wordguesser/coverage
. 11451 / 22924 LOC (49.95%) covered.

```

```

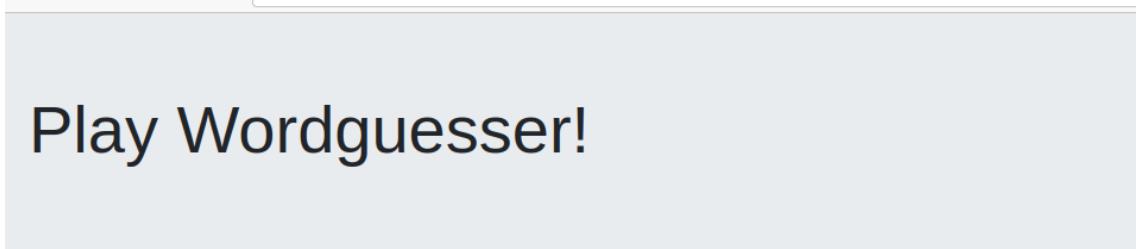
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC352/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ git commit -m "modificando app.rb"
[main 6d8ba1f] modificando app.rb
2 files changed, 19 insertions(+), 7 deletions(-)
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC352/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ git push heroku main
Enumerando objetos: 7, listo.
Contando objetos: 100% (7/7), listo.
Comprimiendo objetos: 100% (4/4), listo.
Comprimiendo objetos: 100% (4/4), listo.
Escribiendo objetos: 100% (4/4), 690 bytes | 690.00 KiB/s, listo.
Total 4 (delta 3), reusado 0 (delta 0)

```

```

miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC352/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ heroku open

```



Wrong Guesses: i

Word so far: u-a--ou--a--

Guess a letter:

Guess!

New Game

# Play Wordguesser!

Wrong Guesses: irgmkh

Word so far: unaccountable

Guess a letter:

Guess!

[New Game](#)

```
get '/show' do
  if @game.check_win_or_lose == :win
    redirect '/win'
  elsif @game.check_win_or_lose == :lose
    redirect '/lose'
  else
    erb :show
  end
end
```

```
miguelubuntu@miguelubuntu-HP-Laptop-15-dyixxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ cucumber features/game_over.feature
Feature: game over
  As a player playing Wordguesser
  So I can get back to my life
  I want to know when the game is over

  Scenario: game over because I guess the word # features/game_over.feature:7
    Given I start a new game with word "foobar" # features/step_definitions/game_steps.rb:9
    When I make the following guesses: f,o,b,a,r # features/step_definitions/game_steps.rb:22
    Then I should see "You Win!" # features/step_definitions/game_steps.rb:70

  Scenario: game over because I run out of guesses # features/game_over.feature:13
    Given I start a new game with word "zebra" # features/step_definitions/game_steps.rb:9
    When I make the following guesses: t,u,v,w,x,y # features/step_definitions/game_steps.rb:22
    And I guess "d" # features/step_definitions/game_steps.rb:16
    Then I should see "Sorry, you lose!" # features/step_definitions/game_steps.rb:70

2 scenarios (2 passed)
7 steps (7 passed)
0m0.110s
Coverage report generated for Cucumber Features to /home/miguelubuntu/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser/coverage
. 11404 / 22915 LOC (49.77%) covered.

miguelubuntu@miguelubuntu-HP-Laptop-15-dyixxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ git add .
miguelubuntu@miguelubuntu-HP-Laptop-15-dyixxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ git commit -m "modificando app.rb en get /show para game_over.feature"
[main 5f32181] modificando app.rb en get /show para game_over.feature
 1 file changed, 7 insertions(+), 2 deletions(-)
miguelubuntu@miguelubuntu-HP-Laptop-15-dyixxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ git push heroku main
Enumerando objetos: 5, listo.
Contando objetos: 100% (5/5), listo.
Comprimiendo objetos: 100% (3/3), listo.
Escribiendo objetos: 100% (3/3), 404 bytes | 404.00 KiB/s, listo.
Total 3 (delta 2), reusado 0 (delta 0)
remote: Updated 36 paths from 1ed38b1
remote: Compressing source files... done.
remote: Building source:
remote: 
remote: Verifique el estado de su aplicación en https://heroku.com/deploy/000000000000000000000000
miguelubuntu@miguelubuntu-HP-Laptop-15-dyixxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ heroku open
```

# Play Wordguesser!

Wrong Guesses: abiolh

Word so far: -e-ete--

Guess a letter:

s

Guess!

New Game

# Play Wordguesser!

Sorry, you lose!

The word was: cemetery

New Game

# Play Wordguesser!

Wrong Guesses: oumpls

Word so far: defia-t

Guess a letter:

n

Guess!

New Game

# Play Wordguesser!

You Win!

The word was defiant.

New Game

```
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ cucumber features/cheating.feature
Feature: gain access to the word without guessing it

As a adversary playing Wordguesser
So that I can see the word without ever entering a letter
I want to navigate to a ending page and see the word

Scenario: navigate to lose page # features/cheating.feature:7
Given I start a new game with word "snake" # features/step_definitions/game_steps.rb:9
When I try to go to the URL "/lose" # features/step_definitions/game_steps.rb:57
Then I should be on the show page # features/step_definitions/game_steps.rb:65

expected: "/show"
got: "/lose"

(compared using eql?)
(RSpec::Expectations::ExpectationNotMetError)
./features/step_definitions/game_steps.rb:67:in `/^(?:|I )should be on (.+)$/
features/cheating.feature:10:in `Then I should be on the show page'
And the word should read "----" # features/step_definitions/game_steps.rb:38

Scenario: navigate to win page # features/cheating.feature:13
Given I start a new game with word "snake" # features/step_definitions/game_steps.rb:9
When I try to go to the URL "/win" # features/step_definitions/game_steps.rb:57
Then I should be on the show page # features/step_definitions/game_steps.rb:65

expected: "/show"
got: "/win"

(compared using eql?)
(RSpec::Expectations::ExpectationNotMetError)
./features/step_definitions/game_steps.rb:67:in `/^(?:|I )should be on (.+)$/
features/cheating.feature:16:in `Then I should be on the show page'
And the word should read "----" # features/step_definitions/game_steps.rb:38

And the word should read "----" # features/step_definitions/game_steps.rb:38

Failing Scenarios:
cucumber features/cheating.feature:7 # Scenario: navigate to lose page
cucumber features/cheating.feature:13 # Scenario: navigate to win page

2 scenarios (2 failed)
8 steps (2 failed, 2 skipped, 4 passed)
0m0.084s
Coverage report generated for Cucumber Features to /home/miguelubuntu/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser/coverage
, 11548 / 23809 LOC (48.5%) covered.
```

```
get '/win' do
  if @game.check_win_or_lose == :win
    erb :win
  else
    redirect '/show'
  end
end

get '/lose' do
  if @game.check_win_or_lose == :lose
    erb :lose
  else
    redirect '/show'
  end
end
```

```
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ cucumber features/cheating.feature
Feature: gain access to the word without guessing it

As a adversary playing Wordguesser
So that I can see the word without ever entering a letter
I want to navigate to a ending page and see the word

Scenario: navigate to lose page # features/cheating.feature:7
Given I start a new game with word "snake" # features/step_definitions/game_steps.rb:9
When I try to go to the URL "/lose" # features/step_definitions/game_steps.rb:57
Then I should be on the show page # features/step_definitions/game_steps.rb:65
And the word should read "----" # features/step_definitions/game_steps.rb:38

Scenario: navigate to win page # features/cheating.feature:13
Given I start a new game with word "snake" # features/step_definitions/game_steps.rb:9
When I try to go to the URL "/win" # features/step_definitions/game_steps.rb:57
Then I should be on the show page # features/step_definitions/game_steps.rb:65
And the word should read "----" # features/step_definitions/game_steps.rb:38

2 scenarios (2 passed)
8 steps (8 passed)
0m0.068s
Coverage report generated for Cucumber Features to /home/miguelubuntu/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser/coverage
, 11337 / 22932 LOC (49.44%) covered.
```

```
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ cucumber features/invalid_guess.feature
Feature: guess invalid inputs
```

```

2 scenarios (2 failed)
10 steps (2 failed, 6 skipped, 2 passed)
0m0.056s
Coverage report generated for Cucumber Features to /home/miguelubuntu/Escritorio/CC352/Wordguesser_Parte1/hw-sinatra-saas-wordguesser/coverage
. 11351 / 22919 LOC (49.53%) covered.

post '/guess' do
# Extrae la letra enviada en el formulario
letter = params[:guess].to_s[0]

begin
# Utiliza esa letra para adivinar el juego actual
result = @game.guess(letter)

# Verifica si la conjetura fue repetida y configura un mensaje de flash en consecuencia
if result == :repeated
flash[:message] = "You have already used that letter."
end

rescue ArgumentError
# Maneja la excepción si la conjetura es inválida y configura un mensaje de flash apropiado
flash[:message] = "Invalid guess."
end

# Redirige a la acción show para que el jugador pueda ver el resultado de su adivinación
redirect '/show'
end

```

```

miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC352/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ cucumber features/invalid_guess.feature
Feature: guess invalid inputs
As a player playing Wordguesser
So that I can try and break the app
I want to see when my guess is invalid

Scenario: guess an empty guess # features/invalid_guess.feature:8
  Given I start a new game with word "snake" # features/step_definitions/game_steps.rb:9
  When I guess "" # features/step_definitions/game_steps.rb:16
  Then the server should not respond with status 500 # features/step_definitions/game_steps.rb:30
  And the server should respond with status 200 # features/step_definitions/game_steps.rb:30
  And I should see "Invalid guess." # features/step_definitions/game_steps.rb:70

Scenario: guess a noncharacter guess # features/invalid_guess.feature:15
  Given I start a new game with word "snake" # features/step_definitions/game_steps.rb:9
  When I guess "@" # features/step_definitions/game_steps.rb:16
  Then the server should not respond with status 500 # features/step_definitions/game_steps.rb:30
  And the server should respond with status 200 # features/step_definitions/game_steps.rb:30
  And I should see "Invalid guess." # features/step_definitions/game_steps.rb:70

2 scenarios (2 passed)
10 steps (10 passed)
0m0.061s
Coverage report generated for Cucumber Features to /home/miguelubuntu/Escritorio/CC352/Wordguesser_Parte1/hw-sinatra-saas-wordguesser/coverage
. 11565 / 23018 LOC (50.24%) covered.

```

```

miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:~/Escritorio/CC352/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ cucumber features/gain_access.feature
Feature: gain access to the word without guessing it

As a adversary playing Wordguesser
So that I can see the word without ever entering a letter
I want to navigate to a ending page and see the word

Scenario: navigate to lose page # features/cheating.feature:7
  Given I start a new game with word "snake" # features/step_definitions/game_steps.rb:9
  When I try to go to the URL "/lose" # features/step_definitions/game_steps.rb:58
  Then I should be on the show page # features/step_definitions/game_steps.rb:66
  And the word should read "-----" # features/step_definitions/game_steps.rb:39

Scenario: navigate to win page # features/cheating.feature:13
  Given I start a new game with word "snake" # features/step_definitions/game_steps.rb:9
  When I try to go to the URL "/win" # features/step_definitions/game_steps.rb:58
  Then I should be on the show page # features/step_definitions/game_steps.rb:66
  And the word should read "-----" # features/step_definitions/game_steps.rb:39

```

```

Feature: game over

As a player playing Wordguesser
So I can get back to my life
I want to know when the game is over

Scenario: game over because I guess the word # features/game_over.feature:7
  Given I start a new game with word "foobar" # features/step_definitions/game_steps.rb:9
  When I make the following guesses: f,o,b,a,r # features/step_definitions/game_steps.rb:23
  Then I should see "You Win!" # features/step_definitions/game_steps.rb:71

Scenario: game over because I run out of guesses # features/game_over.feature:13
  Given I start a new game with word "zebra" # features/step_definitions/game_steps.rb:9
  When I make the following guesses: t,u,v,w,x,y # features/step_definitions/game_steps.rb:23
  And I guess "d" # features/step_definitions/game_steps.rb:17
  Then I should see "Sorry, you lost!" # features/step_definitions/game_steps.rb:71

```

### Feature: guess correct letter

```
As a player playing Wordguesser
So that I can make progress toward the goal
I want to see when my guess is correct

Scenario: guess correct letter that occurs once # features/guess.feature:7
  Given I start a new game with word "garply"      # features/step_definitions/game_steps.rb:9
  When I guess "r"                                # features/step_definitions/game_steps.rb:17
  Then I should see "r" within "span.word"          # features/step_definitions/game_steps.rb:71

Scenario: guess correct letter that occurs multiple times # features/guess.feature:13
  Given I start a new game with word "animal"        # features/step_definitions/game_steps.rb:9
  When I guess "a"                                  # features/step_definitions/game_steps.rb:17
  Then I should see "a---a-" within "span.word"       # features/step_definitions/game_steps.rb:71

Scenario: guess incorrect letter                   # features/guess.feature:19
  Given I start a new game with word "xylophone"    # features/step_definitions/game_steps.rb:9
  When I guess "a"                                  # features/step_definitions/game_steps.rb:17
  Then I should see "a" within "span.guesses"        # features/step_definitions/game_steps.rb:71

Scenario: multiple correct and incorrect guesses # features/guess.feature:25
  Given I start a new game with word "foobar"        # features/step_definitions/game_steps.rb:9
  When I make the following guesses: a,z,x,o        # features/step_definitions/game_steps.rb:23
  Then the word should read "-oo-a-"                # features/step_definitions/game_steps.rb:39
  And the wrong guesses should include: z,x         # features/step_definitions/game_steps.rb:43
```

### Feature: guess invalid inputs

```
As a player playing Wordguesser
So that I can try and break the app
I want to see when my guess is invalid

Scenario: guess an empty guess                   # features/invalid_guess.feature:8
  Given I start a new game with word "snake"      # features/step_definitions/game_steps.rb:9
  When I guess ""                                # features/step_definitions/game_steps.rb:17
  Then the server should not respond with status 500 # features/step_definitions/game_steps.rb:31
  And the server should respond with status 200   # features/step_definitions/game_steps.rb:31
  And I should see "Invalid guess."              # features/step_definitions/game_steps.rb:71

Scenario: guess a noncharacter guess           # features/invalid_guess.feature:15
  Given I start a new game with word "snake"      # features/step_definitions/game_steps.rb:9
  When I guess "@"                               # features/step_definitions/game_steps.rb:17
  Then the server should not respond with status 500 # features/step_definitions/game_steps.rb:31
  And the server should respond with status 200   # features/step_definitions/game_steps.rb:31
  And I should see "Invalid guess."              # features/step_definitions/game_steps.rb:71
```

### Feature: guess repeated letter

```
As a player playing Wordguesser
So that I can avoid wasting guesses on letters I've already tried
I want to be informed when I guess a letter I've already tried

Scenario: guess correct letter that I have already tried # features/repeated_guess.feature:7
  Given I start a new game with word "bumblebee"     # features/step_definitions/game_steps.rb:9
  When I guess "b"                                 # features/step_definitions/game_steps.rb:17
  And I guess "b" again                          # features/step_definitions/game_steps.rb:17
  Then the word should read "b---b---"            # features/step_definitions/game_steps.rb:39
  And I should see "You have already used that letter" # features/step_definitions/game_steps.rb:71

Scenario: guess incorrect letter that I have already tried # features/repeated_guess.feature:15
  Given I start a new game with word "giraffe"        # features/step_definitions/game_steps.rb:9
  When I guess "z"                                 # features/step_definitions/game_steps.rb:17
  And I guess "z" again                          # features/step_definitions/game_steps.rb:17
  Then the word should read "-----"            # features/step_definitions/game_steps.rb:39
  And I should see "You have already used that letter" # features/step_definitions/game_steps.rb:71

Scenario: guessing an incorrect letter does not count towards guesses # features/repeated_guess.feature:23
  Given I start a new game with word "snake"        # features/step_definitions/game_steps.rb:9
  When I guess "z" 30 times in a row               # features/step_definitions/game_steps.rb:50
  Then I should be on the show page               # features/step_definitions/game_steps.rb:66
```

### Feature: start new game

```
As a player
So I can play Wordguesser
I want to start a new game

Scenario: I start a new game                  # features/start_new_game.feature:7
  Given I am on the home page                # features/step_definitions/game_steps.rb:62
  And I press "New Game"                    # features/step_definitions/game_steps.rb:75
  Then I should see "Guess a letter"        # features/step_definitions/game_steps.rb:71
  And I press "New Game"                    # features/step_definitions/game_steps.rb:75
  Then I should see "Guess a letter"        # features/step_definitions/game_steps.rb:71

14 scenarios (14 passed)
56 steps (56 passed)
0m0.326s
Coverage report generated for Cucumber Features to /home/miguelubuntu/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser/coverage
miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$
```

```
miguelubuntu@miguelubuntu-HP-Laptop-15-dyixx:~/Escritorio/CC352/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ cucumber features/invalid_guess.feature
Feature: guess invalid inputs
  As a player playing Wordguesser
  So that I can try and break the app
  I want to see when my guess is invalid

  Scenario: guess an empty guess
    Given I start a new game with word "snake"          # features/invalid_guess.feature:8
    When I guess ""                                     # features/step_definitions/game_steps.rb:9
    Then the server should not respond with status 500 # features/step_definitions/game_steps.rb:16
    And the server should respond with status 200      # features/step_definitions/game_steps.rb:30
    And I should see "Invalid guess."                  # features/step_definitions/game_steps.rb:70

  Scenario: guess a noncharacter guess
    Given I start a new game with word "snake"          # features/invalid_guess.feature:15
    When I guess "@"                                    # features/step_definitions/game_steps.rb:9
    Then the server should not respond with status 500 # features/step_definitions/game_steps.rb:16
    And the server should respond with status 200      # features/step_definitions/game_steps.rb:30
    And I should see "Invalid guess."                  # features/step_definitions/game_steps.rb:70

2 scenarios (2 passed)
10 steps (10 passed)
0m0.061s
Coverage report generated for Cucumber Features to /home/miguelubuntu/Escritorio/CC352/Wordguesser_Parte1/hw-sinatra-saas-wordguesser/coverage
, 11565 / 23018 LOC (50.24%) covered.
```

```
miguelubuntu@miguelubuntu-HP-Laptop-15-dyixx:~/Escritorio/CC352/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ cucumber features/gain_access.feature
Feature: gain access to the word without guessing it

  As a adversary playing Wordguesser
  So that I can see the word without ever entering a letter
  I want to navigate to a ending page and see the word

  Scenario: navigate to lose page
    Given I start a new game with word "snake"          # features/cheating.feature:7
    When I try to go to the URL "/lose"                # features/step_definitions/game_steps.rb:9
    Then I should be on the show page                 # features/step_definitions/game_steps.rb:58
    And the word should read "-----"                 # features/step_definitions/game_steps.rb:39

  Scenario: navigate to win page
    Given I start a new game with word "snake"          # features/cheating.feature:13
    When I try to go to the URL "/win"                 # features/step_definitions/game_steps.rb:9
    Then I should be on the show page                 # features/step_definitions/game_steps.rb:66
    And the word should read "-----"                 # features/step_definitions/game_steps.rb:39
```

```
Feature: game over

  As a player playing Wordguesser
  So I can get back to my life
  I want to know when the game is over

  Scenario: game over because I guess the word
    Given I start a new game with word "foobar"        # features/game_over.feature:7
    When I make the following guesses: f,o,b,a,r       # features/step_definitions/game_steps.rb:9
    Then I should see "You Win!"                      # features/step_definitions/game_steps.rb:71

  Scenario: game over because I run out of guesses
    Given I start a new game with word "zebra"         # features/game_over.feature:13
    When I make the following guesses: t,u,v,w,x,y     # features/step_definitions/game_steps.rb:9
    And I guess "d"                                    # features/step_definitions/game_steps.rb:23
    Then I should see "Sorry, you lose!"              # features/step_definitions/game_steps.rb:17
```

```
Feature: guess correct letter

  As a player playing Wordguesser
  So that I can make progress toward the goal
  I want to see when my guess is correct

  Scenario: guess correct letter that occurs once
    Given I start a new game with word "garply"        # features/guess.feature:7
    When I guess "r"                                    # features/step_definitions/game_steps.rb:9
    Then I should see "r" within "span.word"           # features/step_definitions/game_steps.rb:17
                                                       # features/step_definitions/game_steps.rb:71

  Scenario: guess correct letter that occurs multiple times
    Given I start a new game with word "animal"        # features/guess.feature:13
    When I guess "a"                                    # features/step_definitions/game_steps.rb:9
    Then I should see "a---a-" within "span.word"      # features/step_definitions/game_steps.rb:17
                                                       # features/step_definitions/game_steps.rb:71

  Scenario: guess incorrect letter
    Given I start a new game with word "xylophone"      # features/guess.feature:19
    When I guess "a"                                    # features/step_definitions/game_steps.rb:9
    Then I should see "a" within "span.guesses"         # features/step_definitions/game_steps.rb:17
                                                       # features/step_definitions/game_steps.rb:71

  Scenario: multiple correct and incorrect guesses
    Given I start a new game with word "foobar"         # features/guess.feature:25
    When I make the following guesses: a,z,x,o         # features/step_definitions/game_steps.rb:9
    Then the word should read "-oo-a-"                  # features/step_definitions/game_steps.rb:23
    And the wrong guesses should include: z,x           # features/step_definitions/game_steps.rb:39
                                                       # features/step_definitions/game_steps.rb:43
```

```

Feature: guess invalid inputs
As a player playing Wordguesser
So that I can try and break the app
I want to see when my guess is invalid

Scenario: guess an empty guess
  Given I start a new game with word "snake"          # features/invalid_guess.feature:8
  When I guess ""                                     # features/step_definitions/game_steps.rb:9
  Then the server should not respond with status 500 # features/step_definitions/game_steps.rb:17
  And the server should respond with status 200      # features/step_definitions/game_steps.rb:31
  And I should see "Invalid guess."                  # features/step_definitions/game_steps.rb:71

Scenario: guess a noncharacter guess
  Given I start a new game with word "snake"          # features/invalid_guess.feature:15
  When I guess "@"                                    # features/step_definitions/game_steps.rb:9
  Then the server should not respond with status 500 # features/step_definitions/game_steps.rb:31
  And the server should respond with status 200      # features/step_definitions/game_steps.rb:31
  And I should see "Invalid guess."                  # features/step_definitions/game_steps.rb:71

```

```

Feature: guess repeated letter
As a player playing Wordguesser
So that I can avoid wasting guesses on letters I've already tried
I want to be informed when I guess a letter I've already tried

Scenario: guess correct letter that I have already tried # features/repeated_guess.feature:7
  Given I start a new game with word "bumblebee"        # features/step_definitions/game_steps.rb:9
  When I guess "b"                                      # features/step_definitions/game_steps.rb:17
  And I guess "b" again                                # features/step_definitions/game_steps.rb:17
  Then the word should read "b----b---"                # features/step_definitions/game_steps.rb:39
  And I should see "You have already used that letter" # features/step_definitions/game_steps.rb:71

Scenario: guess incorrect letter that I have already tried # features/repeated_guess.feature:15
  Given I start a new game with word "giraffe"           # features/step_definitions/game_steps.rb:9
  When I guess "z"                                      # features/step_definitions/game_steps.rb:17
  And I guess "z" again                                # features/step_definitions/game_steps.rb:17
  Then the word should read "-----"                  # features/step_definitions/game_steps.rb:39
  And I should see "You have already used that letter" # features/step_definitions/game_steps.rb:71

Scenario: guessing an incorrect letter does not count towards guesses # features/repeated_guess.feature:23
  Given I start a new game with word "snake"             # features/step_definitions/game_steps.rb:9
  When I guess "z" 30 times in a row                   # features/step_definitions/game_steps.rb:50
  Then I should be on the show page                  # features/step_definitions/game_steps.rb:66

```

```

Feature: start new game
As a player
So I can play Wordguesser
I want to start a new game

Scenario: I start a new game          # features/start_new_game.feature:7
  Given I am on the home page       # features/step_definitions/game_steps.rb:62
  And I press "New Game"           # features/step_definitions/game_steps.rb:75
  Then I should see "Guess a letter" # features/step_definitions/game_steps.rb:71
  And I press "New Game"           # features/step_definitions/game_steps.rb:75
  Then I should see "Guess a letter" # features/step_definitions/game_steps.rb:71

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miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:/Escritorio/CC352/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ 

```

```

miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xxx:/Escritorio/CC352/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ cucumber features/invalid_guess.feature
Feature: guess invalid inputs
As a player playing Wordguesser
So that I can try and break the app
I want to see when my guess is invalid

Scenario: guess an empty guess          # features/invalid_guess.feature:8
  Given I start a new game with word "snake"    # features/step_definitions/game_steps.rb:9
  When I guess ""                            # features/step_definitions/game_steps.rb:16
  Then the server should not respond with status 500 # features/step_definitions/game_steps.rb:30
  And the server should respond with status 200      # features/step_definitions/game_steps.rb:30
  And I should see "Invalid guess."            # features/step_definitions/game_steps.rb:70

Scenario: guess a noncharacter guess    # features/invalid_guess.feature:15
  Given I start a new game with word "snake"    # features/step_definitions/game_steps.rb:9
  When I guess "@"                            # features/step_definitions/game_steps.rb:16
  Then the server should not respond with status 500 # features/step_definitions/game_steps.rb:30
  And the server should respond with status 200      # features/step_definitions/game_steps.rb:30
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. 11565 / 23018 LOC (50.24%) covered.

```

```
miguelubuntu@miguelubuntu-HP-Laptop-15-dyixxx:~/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ cucumber features/
```

```
Feature: gain access to the word without guessing it
```

```
As a adversary playing Wordguesser
So that I can see the word without ever entering a letter
I want to navigate to a ending page and see the word

Scenario: navigate to lose page          # features/cheating.feature:7
Given I start a new game with word "snake" # features/step_definitions/game_steps.rb:9
When I try to go to the URL "/lose"      # features/step_definitions/game_steps.rb:58
Then I should be on the show page       # features/step_definitions/game_steps.rb:66
And the word should read "----"         # features/step_definitions/game_steps.rb:39

Scenario: navigate to win page          # features/cheating.feature:13
Given I start a new game with word "snake" # features/step_definitions/game_steps.rb:9
When I try to go to the URL "/win"       # features/step_definitions/game_steps.rb:58
Then I should be on the show page       # features/step_definitions/game_steps.rb:66
And the word should read "----"         # features/step_definitions/game_steps.rb:39
```

```
Feature: game over
```

```
As a player playing Wordguesser
So I can get back to my life
I want to know when the game is over
```

```
Scenario: game over because I guess the word    # features/game_over.feature:7
Given I start a new game with word "foobar"     # features/step_definitions/game_steps.rb:9
When I make the following guesses: f,o,b,a,r   # features/step_definitions/game_steps.rb:23
Then I should see "You Win!"                   # features/step_definitions/game_steps.rb:71
```

```
Scenario: game over because I run out of guesses # features/game_over.feature:13
Given I start a new game with word "zebra"       # features/step_definitions/game_steps.rb:9
When I make the following guesses: t,u,v,w,x,y # features/step_definitions/game_steps.rb:23
And I guess "d"                                # features/step_definitions/game_steps.rb:17
Then I should see "Sorry, you lose!"            # features/step_definitions/game_steps.rb:71
```

```
Feature: guess correct letter
```

```
As a player playing Wordguesser
So that I can make progress toward the goal
I want to see when my guess is correct
```

```
Scenario: guess correct letter that occurs once # features/guess.feature:7
Given I start a new game with word "garply"     # features/step_definitions/game_steps.rb:9
When I guess "r"                               # features/step_definitions/game_steps.rb:17
Then I should see "r" within "span.word"        # features/step_definitions/game_steps.rb:71
```

```
Scenario: guess correct letter that occurs multiple times # features/guess.feature:13
Given I start a new game with word "animal"      # features/step_definitions/game_steps.rb:9
When I guess "a"                                # features/step_definitions/game_steps.rb:17
Then I should see "a---a-" within "span.word"    # features/step_definitions/game_steps.rb:71
```

```
Scenario: guess incorrect letter                # features/guess.feature:19
Given I start a new game with word "xylophone"  # features/step_definitions/game_steps.rb:9
When I guess "a"                                # features/step_definitions/game_steps.rb:17
Then I should see "a" within "span.guesses"     # features/step_definitions/game_steps.rb:71
```

```
Scenario: multiple correct and incorrect guesses # features/guess.feature:25
Given I start a new game with word "foobar"      # features/step_definitions/game_steps.rb:9
When I make the following guesses: a,z,x,o      # features/step_definitions/game_steps.rb:23
Then the word should read "-oo-a-"              # features/step_definitions/game_steps.rb:39
And the wrong guesses should include: z,x       # features/step_definitions/game_steps.rb:43
```

```
Feature: guess invalid inputs
```

```
As a player playing Wordguesser
So that I can try and break the app
I want to see when my guess is invalid
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```
Scenario: guess an empty guess                 # features/invalid_guess.feature:8
Given I start a new game with word "snake"     # features/step_definitions/game_steps.rb:9
When I guess ""                                # features/step_definitions/game_steps.rb:17
Then the server should not respond with status 500 # features/step_definitions/game_steps.rb:31
And the server should respond with status 200  # features/step_definitions/game_steps.rb:31
And I should see "Invalid guess."             # features/step_definitions/game_steps.rb:71
```

```
Scenario: guess a noncharacter guess          # features/invalid_guess.feature:15
Given I start a new game with word "snake"     # features/step_definitions/game_steps.rb:9
When I guess "@"                                # features/step_definitions/game_steps.rb:17
Then the server should not respond with status 500 # features/step_definitions/game_steps.rb:31
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And I should see "Invalid guess."             # features/step_definitions/game_steps.rb:71
```

```

Feature: guess repeated letter
As a player playing Wordguesser
So that I can avoid wasting guesses on letters I've already tried
I want to be informed when I guess a letter I've already tried

Scenario: guess correct letter that I have already tried # features/repeated_guess.feature:7
  Given I start a new game with word "bumblebee"      # features/step_definitions/game_steps.rb:9
  When I guess "b"                                     # features/step_definitions/game_steps.rb:17
  And I guess "b" again                               # features/step_definitions/game_steps.rb:17
  Then the word should read "b---b---"                # features/step_definitions/game_steps.rb:39
  And I should see "You have already used that letter" # features/step_definitions/game_steps.rb:71

Scenario: guess incorrect letter that I have already tried # features/repeated_guess.feature:15
  Given I start a new game with word "giraffe"          # features/step_definitions/game_steps.rb:9
  When I guess "z"                                     # features/step_definitions/game_steps.rb:17
  And I guess "z" again                               # features/step_definitions/game_steps.rb:17
  Then the word should read "-----"                  # features/step_definitions/game_steps.rb:39
  And I should see "You have already used that letter" # features/step_definitions/game_steps.rb:71

Scenario: guessing an incorrect letter does not count towards guesses # features/repeated_guess.feature:23
  Given I start a new game with word "snake"            # features/step_definitions/game_steps.rb:9
  When I guess "z" 30 times in a row                   # features/step_definitions/game_steps.rb:50
  Then I should be on the show page                  # features/step_definitions/game_steps.rb:66

Feature: start new game
As a player
So I can play Wordguesser
I want to start a new game

Scenario: I start a new game      # features/start_new_game.feature:7
  Given I am on the home page    # features/step_definitions/game_steps.rb:62
  And I press "New Game"         # features/step_definitions/game_steps.rb:75
  Then I should see "Guess a letter" # features/step_definitions/game_steps.rb:71
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miguelubuntu@miguelubuntu-HP-Laptop-15-dy1xx:/Escritorio/CC3S2/Wordguesser_Parte1/hw-sinatra-saas-wordguesser$ █

```

**Pregunta.** Lea la sección sobre " Using Capybara with Cucumber" en la página de inicio de Capybara. ¿Qué pasos utiliza Capybara para simular el servidor como lo haría un navegador? ¿Qué pasos utiliza Capybara para inspeccionar la respuesta de la aplicación al estímulo?

**Respuesta.** Las definiciones de pasos que emplean métodos como visit, click\_button y fill\_in simulan activamente el comportamiento de un navegador visitando páginas web, interactuando con formularios y pulsando botones, tal y como lo haría un usuario. Por otro lado, las definiciones de pasos que utilizan have\_content inspeccionan la respuesta de la aplicación buscando contenido específico en las páginas HTML servidas.

**Pregunta.** Mirando features/guess.feature, ¿cuál es la función de las tres líneas que siguen al encabezado "Feature:"?

**Respuesta:** Las tres líneas que siguen al título "Feature:" sirven como comentarios que aclaran el propósito y los actores implicados en el reportaje concreto. Proporcionan una breve descripción sobre de qué trata la función y a quién implica. Es importante tener en cuenta que Cucumber no ejecutará estas líneas; simplemente proporcionan contexto y documentación para la característica.

**Pregunta.** En el mismo archivo, observando el paso del escenario Given I start a new game with word "garply", ¿qué líneas en game\_steps.rb se invocarán cuando Cucumber intente ejecutar este paso y cuál es el papel de la cadena "garply" en el paso?

**Respuesta:** Cuando Cucumber intenta ejecutar el paso "Given I start a new game with word 'garply'", las líneas 13 a 16 en el archivo `game_steps.rb` serán invocadas. Este paso en particular coincide con una expresión regular, y la cadena "garply" juega el papel de un parámetro o argumento que se pasa a la definición del paso. En este caso, se utiliza para especificar la palabra con la que se debe iniciar el nuevo juego, lo que permite escenarios de prueba dinámicos y personalizables.

### Haz que pase tu primer escenario

**Pregunta.** Cuando el "simulador de navegador" en Capybara emite la solicitud de `visit '/new'`, Capybara realizará un HTTP GET a la URL parcial `/new` en la aplicación. ¿Por qué crees que `visit` siempre realiza un GET, en lugar de dar la opción de realizar un GET o un POST en un paso determinado?

**Respuesta.** El método `visit` de Capybara siempre opta por una petición HTTP GET cuando emite una petición como `visit '/new'`. La razón detrás de esta elección está arraigada en la filosofía de que Cucumber/Capybara está diseñado para emular las acciones de un usuario cuando interactúa con una aplicación web. Como hemos comentado antes, en el ámbito de los navegadores web, un usuario normalmente inicia una petición POST enviando un formulario HTML. Este acto de enviar un formulario se refleja en Capybara usando el método `click_button`. Por lo tanto, la decisión de utilizar GET con `visit` se alinea con la idea de que Capybara debe imitar el comportamiento natural de los usuarios en escenarios de navegación web.

**Pregunta.** ¿Cuál es el significado de usar **Given** versus **When** versus **Then** en el archivo de características? ¿Qué pasa si los cambias? Realiza un experimento sencillo para averiguarlo y luego confirme los resultados utilizando Google.

**Respuesta.** Los términos "Given", "When" y "Then" dentro de un archivo de características de Cucumber representan alias intercambiables para la misma función. Sirven para estructurar escenarios. "Given" establece el contexto inicial, "When" describe la acción que tiene lugar y "When" especifica el resultado esperado. Aunque tenemos la flexibilidad para experimentar con la alteración de su secuencia, el orden convencional es "Given", "When" y "Then" buscando la claridad y la comprensibilidad. Cucumber en sí no impone un orden estricto para estas palabras clave, pero adherirse a la convención mejora la comprensión del escenario tanto para desarrolladores como para no desarrolladores.

## Desarrollar el escenario para adivinar una letra

**Pregunta.** En `game_steps.rb`, mira el código del paso "I start a new game..." y, en particular, el comando `stub_request`. Dada la pista de que ese comando lo proporciona una gema (biblioteca) llamada `webmock`, ¿qué sucede con esa línea y por qué es necesaria? (Utiliza Google si es necesario).

**Respuesta:** La línea que incluye `stub_request` en `game_steps.rb` hace uso de la gema `Webmock` para permitir que nuestras pruebas capturen peticiones HTTP iniciadas por nuestra aplicación y dirigidas a servicios externos. En concreto, intercepta una solicitud POST concreta, similar a la realizada manualmente mediante `curl` anteriormente en esta tarea. Al interceptar la petición,

Webmock nos permite fabricar un valor de respuesta. Esta intercepción y manipulación de la respuesta son vitales por varias razones. En primer lugar, nos permite asegurar un comportamiento consistente y predecible en nuestras pruebas. Esta previsibilidad es crucial para la eficacia de las pruebas. En segundo lugar, evita que nuestras pruebas envíen solicitudes a servidores externos cada vez que se ejecutan, lo que puede ser lento y potencialmente problemático para el servicio externo. Por lo tanto, Webmock es una valiosa herramienta para controlar y mejorar el entorno de pruebas.

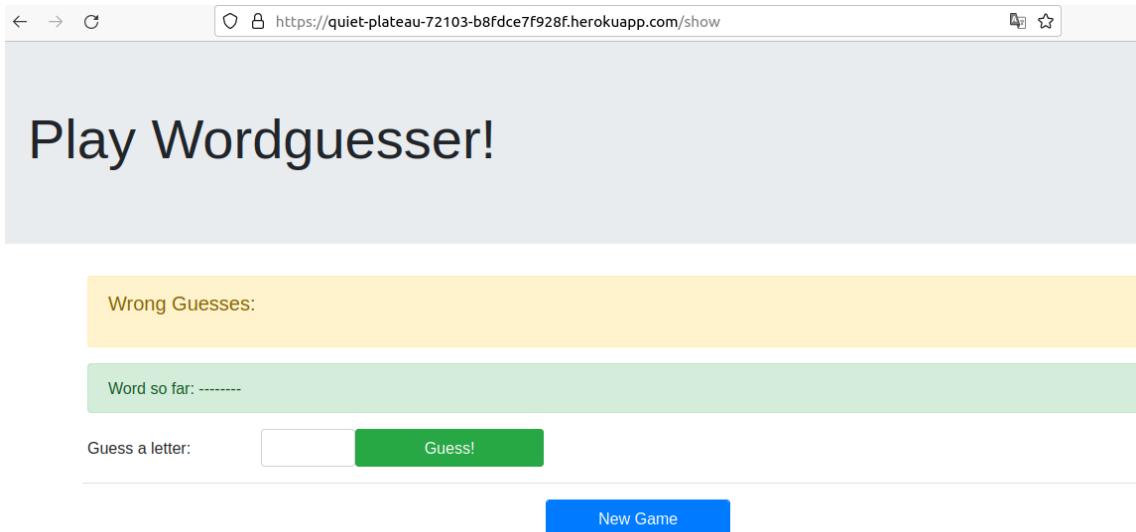
**Pregunta.** En tu código Sinatra para procesar una adivinación, ¿qué expresión usaría para extraer *\*solo el primer carácter\** de lo que el usuario escribió en el campo de adivinación de letras del formulario en **show.erb**?

**Respuesta.** Para extraer sólo el primer carácter de la entrada del usuario en el campo adivinar letra del formulario en show.erb teniendo en cuenta la posibilidad de un campo vacío, se puede utilizar la expresión `params[:guess].to_s[0]` o una variante equivalente. Esta expresión está diseñada para manejar diferentes escenarios de forma sencilla. Si el usuario deja el campo en blanco, utilizamos `.to_s` para convertir el posible valor nulo en una cadena vacía, asegurándonos de que no se produce ningún error. Entonces, se emplemos `[0]` para recuperar el primer carácter, e incluso en el caso de una cadena vacía, devuelve otra cadena vacía, evitando cualquier posible error o excepción.

## Parte 5: Otros casos

**Pregunta.** Mientras juegas, ¿qué sucede si agregas `/win` directamente al final de la URL de tu aplicación?

No se redirige a una página donde se muestra que ha ganado, simplemente se queda en la misma pestaña, es decir, <https://quiet-plateau-72103-b8fdce7f928f.herokuapp.com/show>



## Envío