

Ruby advance

`bundle gem hyper_card_builder`

bob 2025/11/23

use scaffolding

```
# initialize
▶ bundle gem hyper_card_builder --test=minitest --exe
Creating gem 'hyper_card_builder'
cat Gemfile
```

```
MIT License enabled in # frozen_string_literal: true
Code of conduct enable
Changelog enabled in c source "https://rubygems.org"
```

```
Initializing git repo # Specify your gem's dependencies in hyper_card_builder.gemspec
create hyper_card_builder.gemspec
```

```
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create hyper_card_builder.gemspec
create hyper_card_builder.gemspec
```

```
▶ bundle update
Fetching gem metadata from https://rubygems.org/
Resolving dependencies...
```

```
Fetching date 3.5.0
Fetching erb 6.0.0
Fetching io-console 0.8.1
Fetching stringio 3.1.8
Fetching tsort 0.2.0
Fetching prettyprint 0.2.0
Fetching minitest 5.26.2
```

```
Gem 'hyper_card_builder' installed
https://bundler.io/guides/creating_gem.html
```

```
Installing erb 6.0.0 with native extensions
Installing io-console 0.8.1 with native extensions
Installing date 3.5.0 with native extensions
Installing stringio 3.1.8 with native extensions
Installing tsort 0.2.0
Installing prettyprint 0.2.0
Installing minitest 5.26.2
Fetching pp 0.6.3
Installing pp 0.6.3
Fetching reline 0.6.3
Installing reline 0.6.3
Fetching psych 5.2.6
Installing psych 5.2.6 with native extensions
Fetching rdoc 6.15.1
Installing rdoc 6.15.1
Fetching irb 1.15.3
Installing irb 1.15.3
Bundle updated!
```

```
▶ tree -C
```

```
.
├── bin
│   ├── console
│   ├── setup
│   ├── CHANGELOG.md
│   ├── CODE_OF_CONDUCT.md
│   ├── exe
│   └── hyper_card_builder
├── Gemfile
├── Gemfile.lock
├── hyper_card_builder.gemspec
├── lib
│   ├── hyper_card_builder
│   │   └── version.rb
│   └── hyper_card_builder.rb
├── LICENSE.txt
├── Rakefile
├── README.md
├── sig
│   └── hyper_card_builder.rbs
└── test
    ├── test_helper.rb
    └── test_hyper_card_builder.rb
```

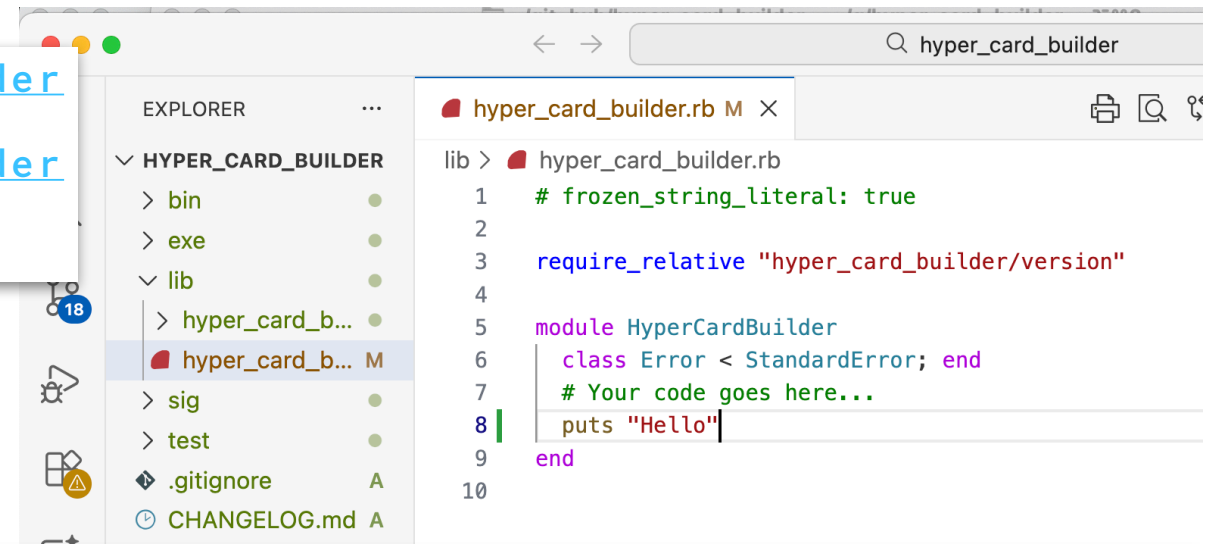
7 directories, 16 files

first step

[# chat](#) ▶ [shell comms](#)

▶ [code edit](#)

```
▶ bundle exec exe/hyper_card_builder
▶ code .
▶ bundle exec exe/hyper_card_builder
Hello
```



```
> code hyper_card_builder.gemspec
File: hyper_card_builder.gemspec
1 | # frozen_string_literal: true
2 |
3 | require_relative "lib/hyper_card_builder/version"
4 |
5 |
6 |
7 |
8 |
9 |
10 |
11 |
12 |
13 |
14 |
15 |
16 |
17 |
18 |
19 |
20 |
21 |
22 |
23 |
24 |
25 |
26 |
27 |
28 |
29 |
30 |
31 |
32 |
33 |
34 |
35 |
36 | spec.add_dependency "thor"
37 |
38 |
39 |
40 | spec.add_development_dependency "minitest"
41 | spec.add_development_dependency "minitest-reporters"
42 | spec.add_development_dependency "minitest-hooks"
```

```
▶ rake test
Hello
Run options: --seed 178

# Running:
```

..

Finished in 0.000256s, 7812.4974 runs/s, 7812.4974 assertions/s.

2 runs, 2 assertions, 0 failures, 0 errors, 0 skips

colorful report

[# chat](#)



[shell comms](#)



[code edit](#)

```
▶ rake test
Hello
Run options: --seed 178

# Running:

..

Finished in 0.000256s, 7812.4974 runs/s, 7812.4974 assertions/s.

2 runs, 2 assertions, 0 failures, 0 errors, 0 skips
```

[# minitest](#)の出力をcolorfullに見やすくするように修正

GitHub Copilot: `minitest-reporters` を使ってカラフルな出力にできます。
`test_helper.rb` に以下を追加してください。

```
````ruby
...existing code...
require "minitest/reporters"
Minitest::Reporters.use! Minitest::Reporters::SpecReporter.new
...existing code...
````
```

これで `rake test` の出力がカラフルで見やすくなります。



[bundle exec rake test](#)

```
Hello
Started with run options --seed 42050

TestHyperCardBuilder
  test_it_does_something_useful          PASS (0.00s)
  test_exe_outputs_hello                 PASS (0.06s)
  test_that_it_has_a_version_number      PASS (0.00s)

Finished in 0.06135s
3 tests, 4 assertions, 0 failures, 0 errors, 0 skips
```

red, green, refactor

chat ▶ shell comms

[bundle exec exe/hyper_card_builder](#)
helloで"Hello."と返るテストを作成。

```
▶ bundle exec rake test
TestHyperCardBuilderTest
  test_it_does_something_useful PASS (0.00s)
  ...

Finished in 0.12164s
4 tests, 5 assertions,
1 failures, 0 errors, 0 skips
rake aborted!
```

[Thorを使ってcommand cliでhelloを受け取るように修正](#)

```
▶ bundle exec rake test
/Users/bob/.rbenv/versions/3.4.4/lib/
ruby/3.4.0/bundled_gems.rb:82:in
'Kernel.require': cannot load such file
-- thor (LoadError)
```

```
▶ bat hyper_card_builder.gemspec
36 ~ | spec.add_dependency "thor"
```

```
▶ bundle update
Fetching gem metadata from https://rubygems....
Resolving dependencies...
Bundle updated!
```

[ThorのCLIが起動するように修正](#)

```
▶ bundle exec rake test
Started with run options --seed 27872

TestHyperCardBuilderTest
  test_it_does_something_useful PASS
  test_that_it_has_a_version_number PASS
  test_exe_hello_outputs_hello_dot PASS

Finished in 0.06452s
3 tests, 4 assertions, 0 failures, 0 errors, 0 skips
```

▶ code edit

```
▶ bat test/test_hyper_card_builder.rb
1 | # frozen_string_literal: true
2 |
3 | require "test_helper"
4 |
5 | ~ class TestHyperCardBuilderTest < Minitest::Test
6 | ~   def test_exe_hello_outputs_hello_dot
7 | ~     require "open3"
8 | ~     output, status = Open3.capture2(
9 | ~       "bundle exec exe/hyper_card_builder",
10 | ~     assert_equal "Hello.\n", output
11 | ~     assert status.success?
12 | ~   end
13 | ~ end
```

```
▶ bat lib/hyper_card_builder.rb
1 | # frozen_string_literal: true
2 |
3 | require_relative "hyper_card_builder/version"
4 | + require "thor"
5 |
6 | module HyperCardBuilder
7 |   class Error < StandardError; end
8 |
9 |   class CLI < Thor
10 | ~     desc "hello", "Prints Hello."
11 | ~     def hello
12 | ~       puts "Hello."
13 | ~     end
14 | ~   end
15 | end
```

```
▶ bat exe/hyper_card_builder
1 | #!/usr/bin/env ruby
2 |
3 | require "hyper_card_builder"
4 | +
5 | + HyperCardBuilder::CLI.start(ARGV)
```

puts_sample_yaml

chat ▶ shell comms

[hyper_card_builder](#) puts_hc_arrayでhc_array.yamlを出力するテストを作成.

```
▶ bundle exec rake test
Started with run options --seed 72293

TestHcArrayYaml
Could not find command "puts_hc_array".
```

[Could not find command "puts_hc_array".](#)
なので, [hyper_card_builder.rb](#)が
[そのコマンドを受け付けるように修正](#)

```
▶ bundle exec rake test
Started with run options --seed 59575

TestHcArrayYaml
bundler: failed to load command:
  exe/hyper_card_builder (exe/hyper_card_builder)
/Users/bob/git_hub/hyper_card_builder/lib/hyper_card_builder.rb:26:in 'block in
HyperCardBuilder::CLI#puts_hc_array':
  undefined method 'to_yaml' for an instance of Hash (NoMethodError)
```

```
File.open("hc_array.yaml", "w") { |f| f.write(hc_array.to_yaml) }
```

...を修正

```
▶ bundle exec rake test
Started with run options --seed 33318

TestHyperCardBuilderTest
  test_that_it_has_a_version_number
  test_it_does_something_useful
  test_exe_hello_outputs_hello_dot

TestHcArrayYaml
  test_puts_hc_array_outputs_expected_yaml
```

```
PASS (0.00s)
PASS (0.00s)
PASS (0.07s)
```

```
PASS (0.07s)
```

▶ code edit

```
▶ bat test/test_hc_array_yaml.rb
1 | File: test/test_hc_array_yaml.rb
2 | # frozen_string_literal: true
4 | require "test_helper"
5 | require "yaml"
  | require "fileutils"
```

```
▶ bat lib/hyper_card_builder.rb
16 ~ | desc "puts_hc_array", "Outputs hc_array."
17 ~ | def puts_hc_array
18 ~ |   hc_array = {
19 ~ |     source_file: "./linux_basic.pdf",
```

```
▶ bat lib/hyper_card_builder.rb
4 + | require "thor"
5 + | require "yaml" # ← 追加
```



```

▶ bat test/test_hc_array_yaml.rb
1  # frozen_string_literal: true
2
3  require "test_helper"
4  require "yaml"
5  require "fileutils"
6
7  class TestHcArrayYaml < Minitest::Test
8    GENERATED_FILE = "hc_array.yaml"
9    EXPECTED_YAML = {
10     source_file: "./lin
11     target_dir: "./linu
12     toc: [
13       { no: nil, init:
14       { no: "s0", init:
15       { no: "sf", init:
16     ]
17   }
18
19   def setup
20     FileUtils.rm_f(GENERATED_FILE)
21   end
22
23   def teardown
24     FileUtils.rm_f(GENERATED_FILE)
25   end
26
27   def test_puts_hc_array_outputs_expected_yaml
28     require "open3"
29     output, status = Open3.capture2("bundle exec exe/hyper_card_builder puts hc_array")
30     assert status.success?, "Command failed: #{output}"
31
32     assert File.exist?(GENERATED_FILE), "Expected #{GENERATED_FILE} to be generated"
33
34     actual_yaml = YAML.load_file(GENERATED_FILE)
35     assert_equal EXPECTED_YAML, actual_yaml
36   end
37 end

```

```

▶ bat lib/hyper_card_builder.rb
16 ~ | desc "puts_hc_array", "Outputs hc_array.yaml"
17 ~ |
18 ~ | def puts_hc_array
19 ~ |   hc_array = {
20 ~ |     source_file: "./linux_basic.pdf",
21 ~ |     target_dir: "./linux_basic",
22 ~ |     toc: [
23 ~ |       { no: nil, init: 1, fin: nil, head: "title" },
24 ~ |       { no: "s0", init: 2, fin: nil, head: "commands" },
25 ~ |       { no: "sf", init: 8, fin: 8, head: "summary" }
26 ~ |     ]
27 ~ |   }
28 ~ |   File.open("hc_array.yaml", "w")
29 ~ |     { |f| f.write(hc_array.to_yaml) }
30 ~ |   puts "hc_array.yaml generated."
31 ~ | end

```

```

# def puts_hc_array

# TestHcArrayYaml

```

in test_env

▶ bat test/test_hc_array_yaml.rb

```
1  # frozen_string_literal: true
2
3  require "test_helper"
4  require "yaml"
5  require "fileutils"
6
7  class TestHcArrayYaml
8    GENERATED_FILE = "hc_array.yaml"
9    EXPECTED_YAML = {
10      source_file: "./linux_basic.pdf",
11      target_dir: "./linux_basic",
12      toc: [
13        { no: nil, init: 1, fin: nil, head: "title" },
14        { no: "s0", init: 2, fin: nil, head: "commands" },
15        { no: "sf", init: 8, fin: 8, head: "summary" }
16      ]
17    }
18
```

▶ bat lib/hyper_card_builder.rb

```
16 ~ | desc "puts_hc_array", "Outputs hc_array.yaml"
17 ~ | def puts_hc_array
18 ~ |   hc_array = {
19 ~ |     source_file: "./linux_basic.pdf",
20 ~ |     target_dir: "./linux_basic",
21 ~ |     toc: [
22 ~ |       { no: nil, init: 1, fin: nil, head: "title" },
23 ~ |       { no: "s0", init: 2, fin: nil, head: "commands" },
24 ~ |       { no: "sf", init: 8, fin: 8, head: "summary" }
25 ~ |     ]
26 ~ |   }
27 ~ |   File.open("hc_array.yaml", "w")
28 ~ |     { |f| f.write(hc_array.to_yaml) }
29 ~ |   puts "hc_array.yaml generated."
30 ~ | end
```

```
19  def setup
20    FileUtils.rm_f(GENERATED_FILE)
21  end
22
23  def teardown
24    FileUtils.rm_f(GENERATED_FILE)
25  end
26
27  def test_puts_hc_array_outputs_expected_yaml
28    require "open3"
29    output, status = Open3.capture2("bundle exec exe/hyper_card_builder puts hc_array")
30    assert status.success?, "Command failed: #{output}"
31
32    assert File.exist?(GENERATED_FILE), "Expected #{GENERATED_FILE} to be generated"
33
```


test_split_pdf_wo_pages

```
▶ ruby -Ilib:test test/test_split_pdf_wo_pages.rb
```

```
Started with run options --seed 58979
```

```
TestSplitPDFwoPages
```

```
qpdf: operation succeeded with warnings; resulting file may have some problems
```

```
"/linux_basic/title.pdf"
```

```
qpdf ./linux_basic.pdf --pages . 1-1 -- ./linux_basic/title.pdf
```

```
"/linux_basic/s0_commands.pdf"
```

```
qpdf ./linux_basic.pdf --pages . 2-2 -- ./linux_basic/s0_commands.pdf
```

```
"/linux_basic/sf_summary.pdf"
```

```
qpdf ./linux_basic.pdf --pages . 8-8 -- ./linux_basic/sf_summary.pdf
```

```
test_split_linux_basic_pdf_by_yaml PASS (0.10s)
```

```
Finished in 0.09615s
```

```
1 tests, 5 assertions, 0 failures, 0 errors, 0 skips
```