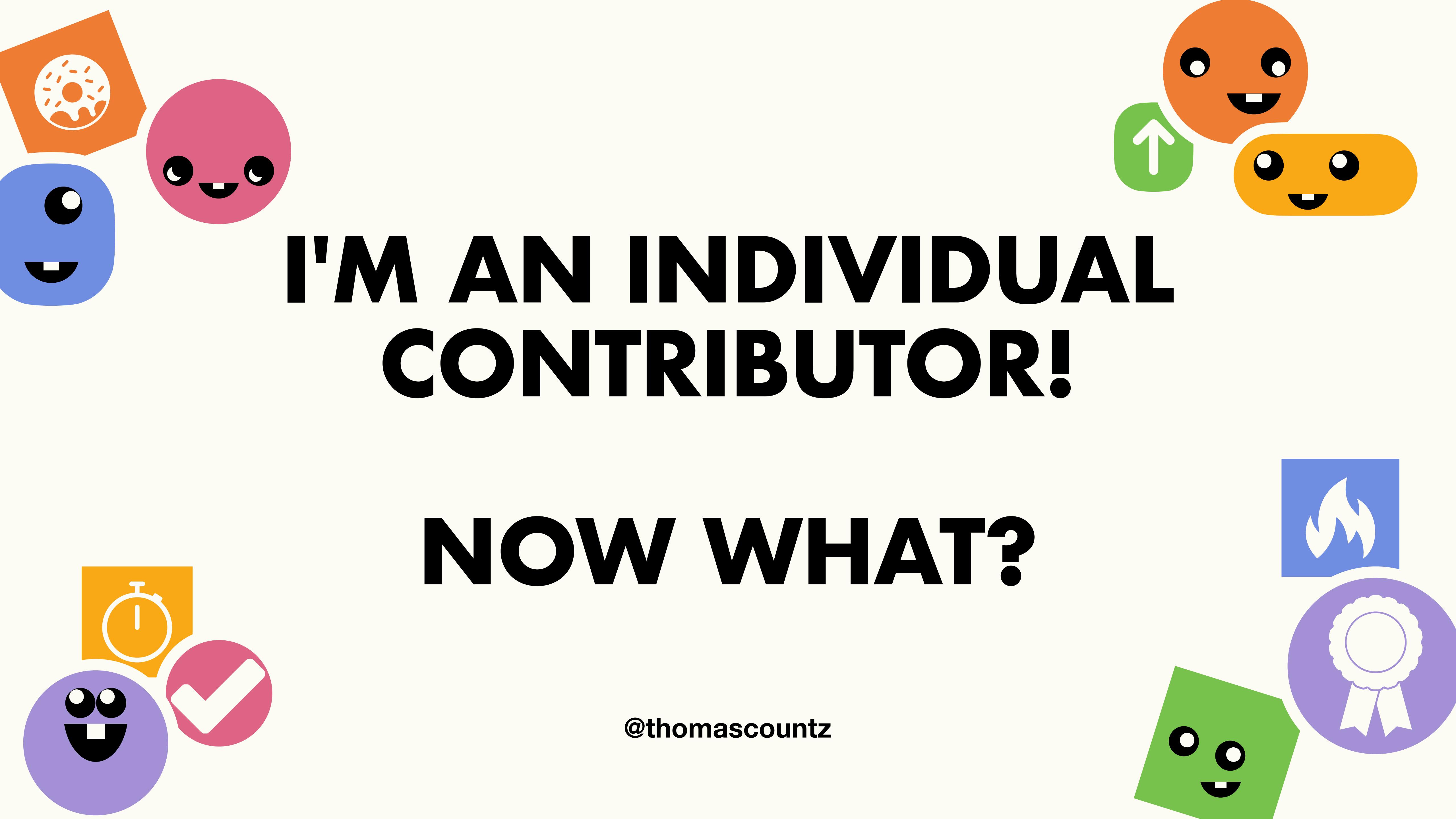


LEVELING UP FROM PLANNING TO PRODUCTION

@thomascountz



zendesk

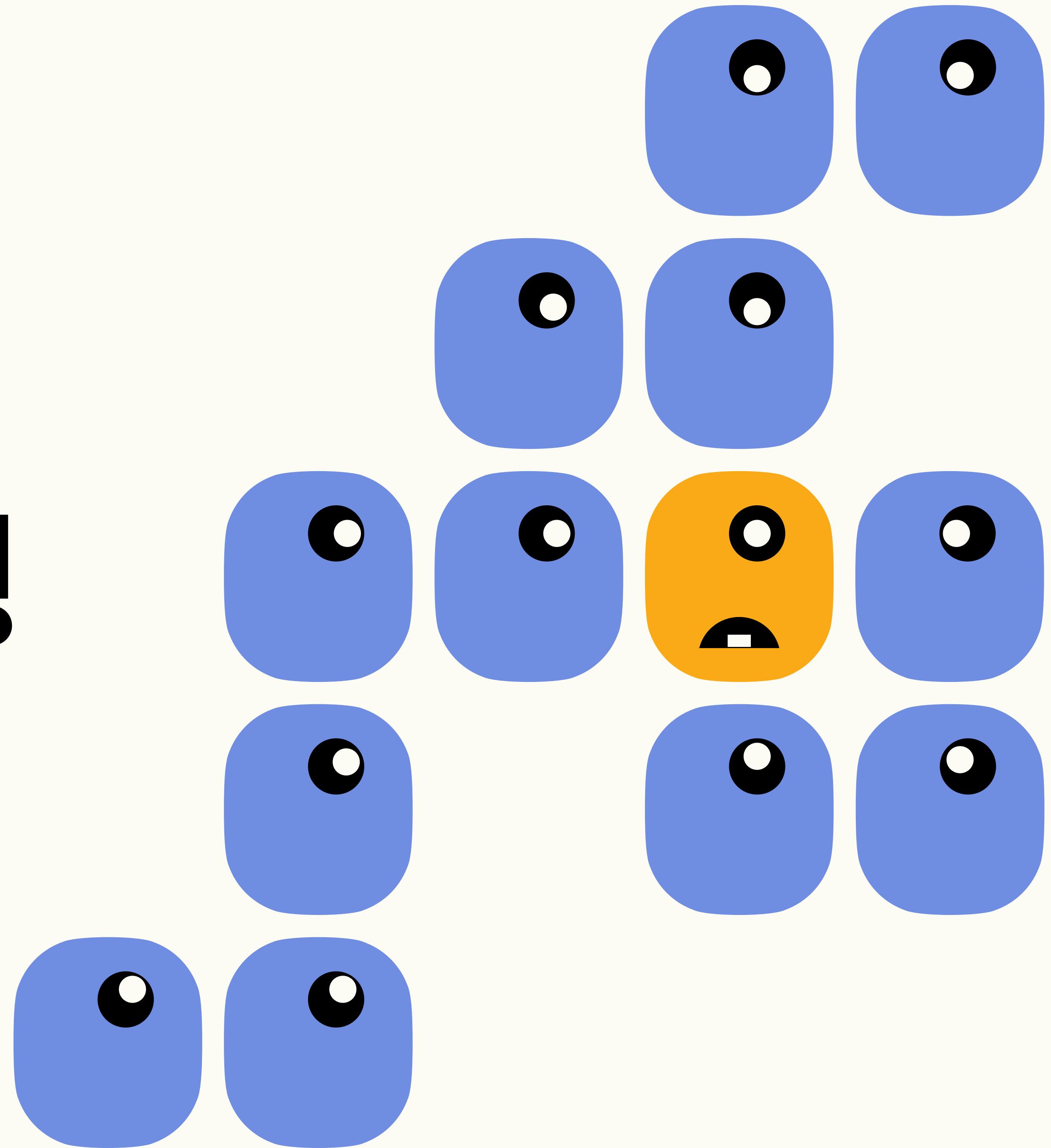


I'M AN INDIVIDUAL CONTRIBUTOR!

NOW WHAT?

@thomascountz

IMPOSTER!



BIG IDEA.

Give structure to **curiosity** and
collaboration in order to get things
done.

ASK FIRST; SOLVE LATER

SHARE YOUR FINDINGS AS YOU DISCOVER THEM

MAKE CODE EXECUTABLE FOR BETTER FEEDBACK

PREPARE FOR POST-DEPLOYMENT

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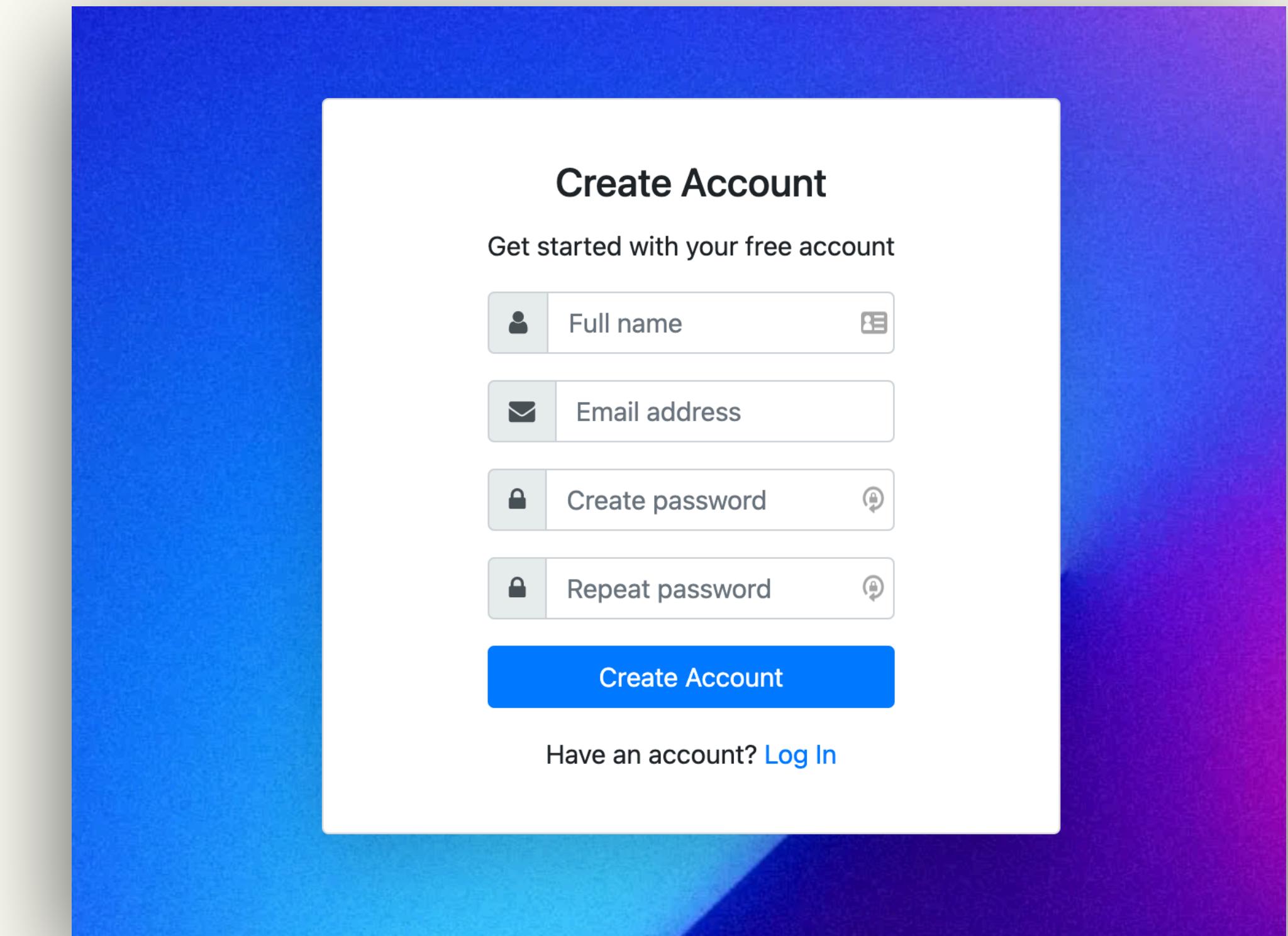
MAKE CODE EXECUTABLE FOR BETTER FEEDBACK

PREPARE FOR POST-DEPLOYMENT

ASK FIRST; SOLVE LATER - SHARE YOUR FINDINGS - MAKE CODE EXECUTABLE - PREPARE FOR POST-DEPLOYMENT



 **YOU HAVE A NEW TASK!** 



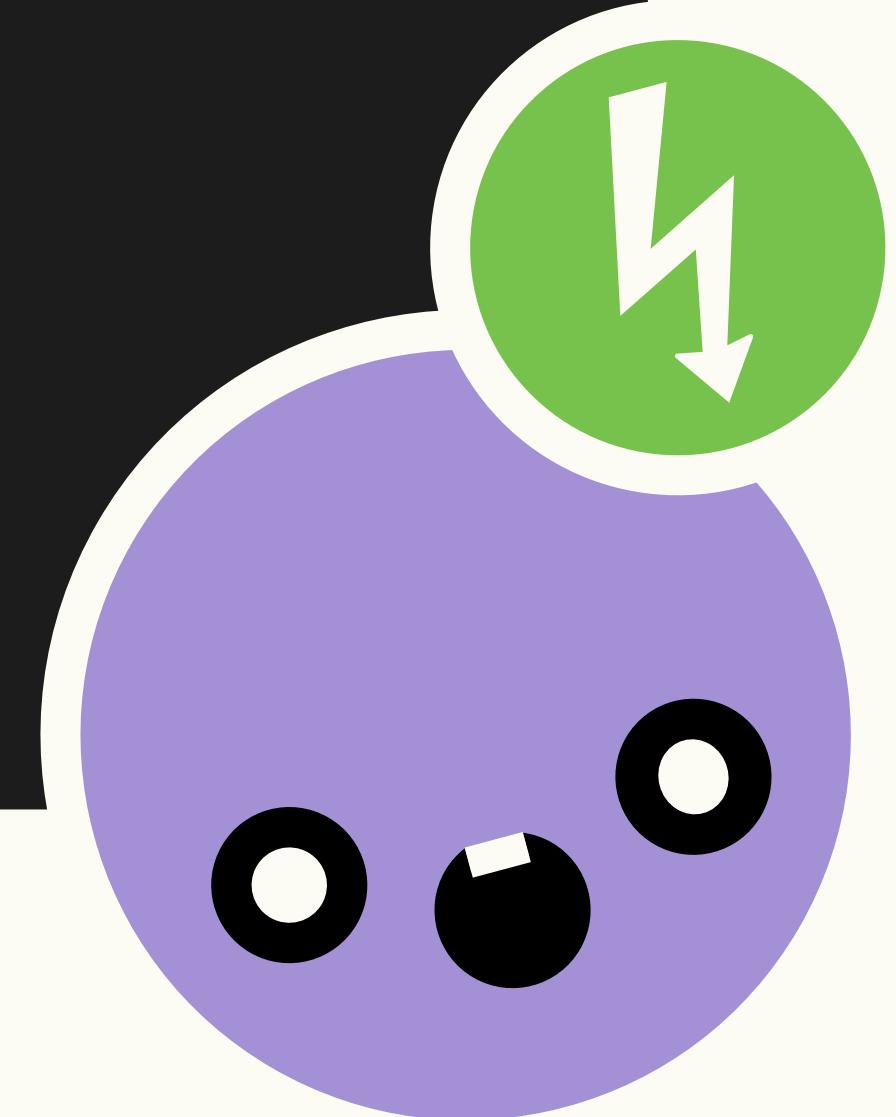


```
ActiveRecord::Schema.define do
  create_table "users", id: do |t|
    t.string "email"
    t.string "first_name"
    t.string "last_name"
  end
end
```



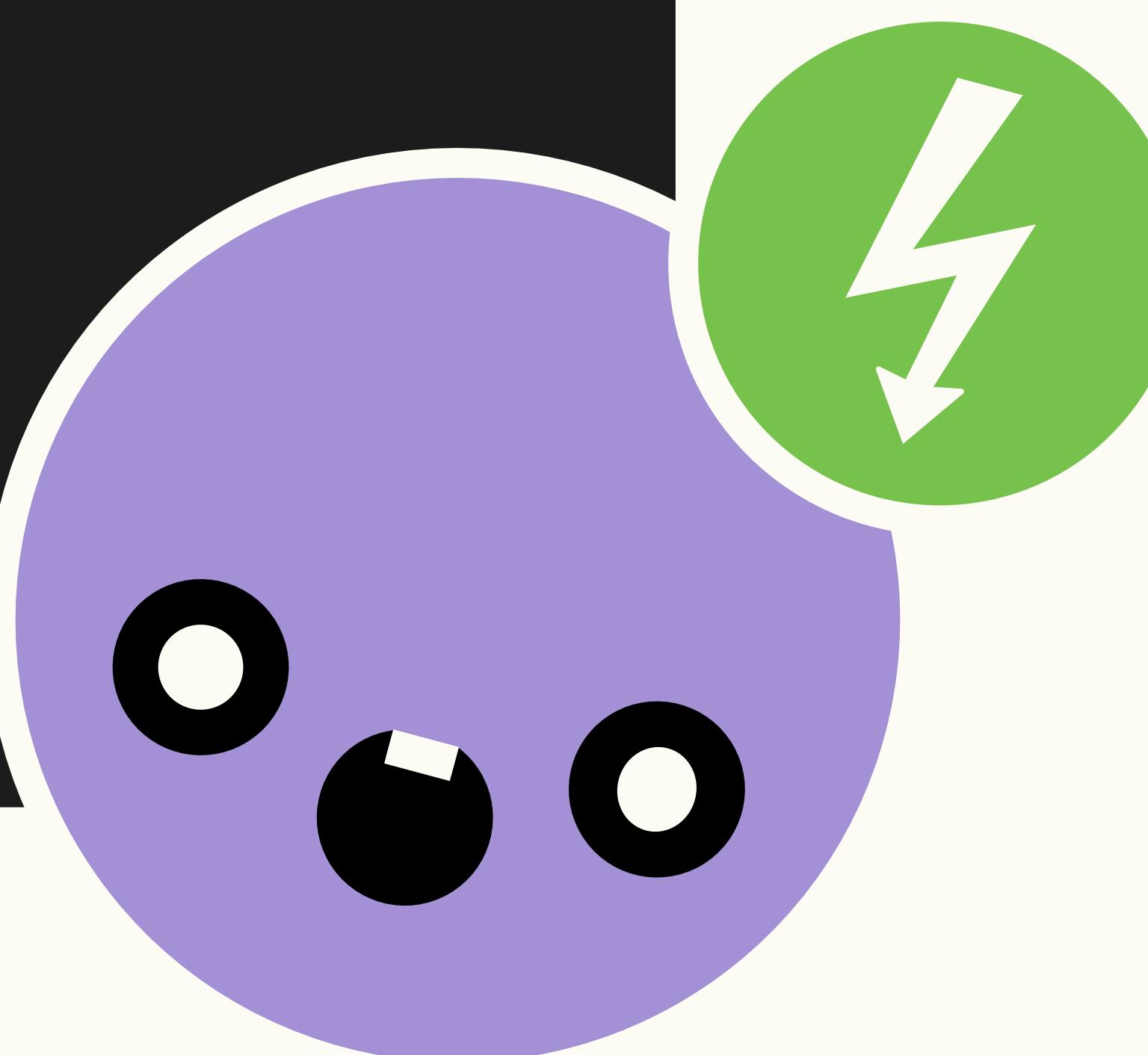
ASK FIRST; SOLVE LATER - SHARE YOUR FINDINGS - MAKE CODE EXECUTABLE - PREPARE FOR POST-DEPLOYMENT

```
> user = User.first  
=> #<User:0x00007f84c6c253b0  
    id: 1,  
    first_name: "Grace Richie",  
    last_name: nil>
```



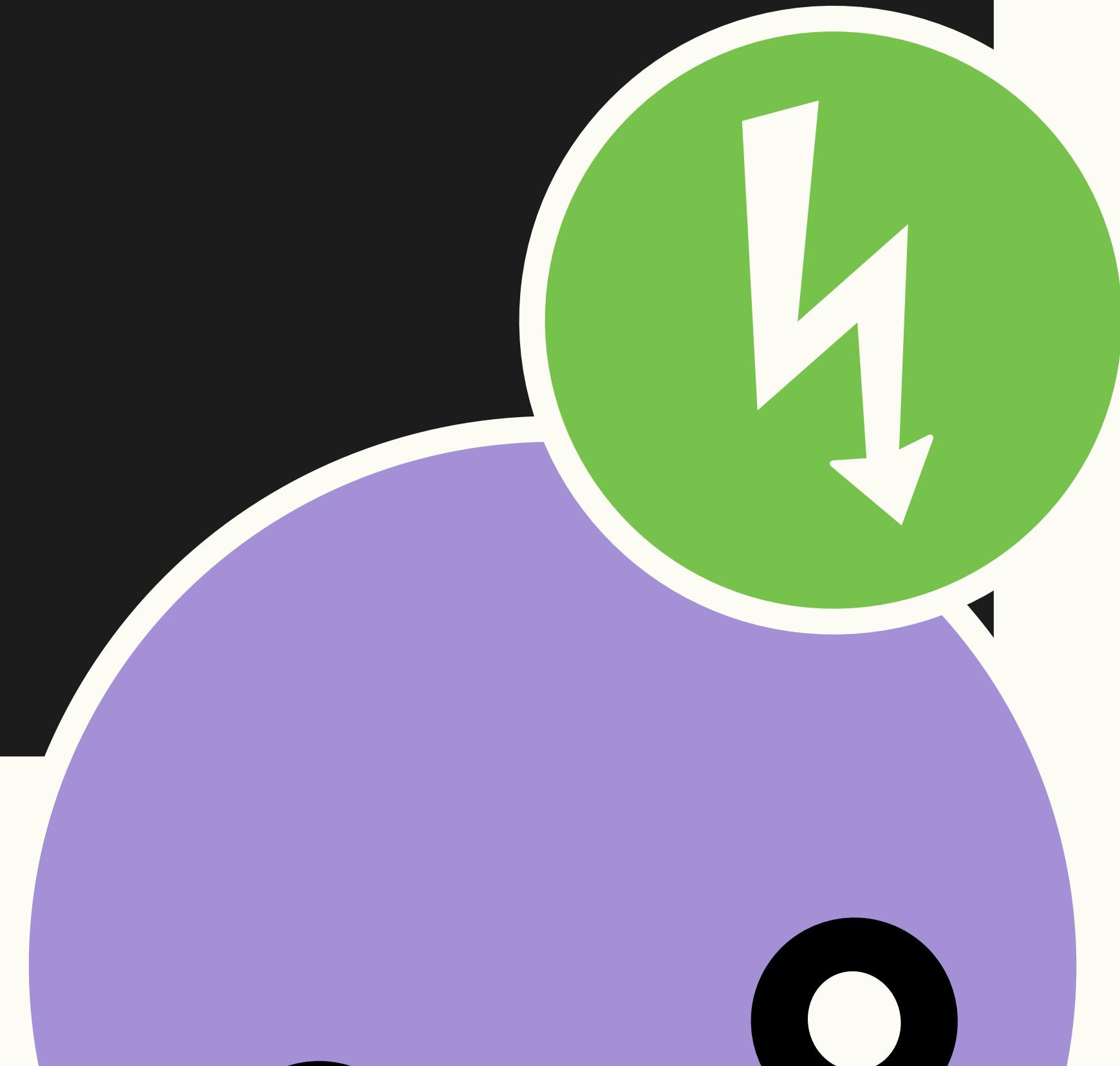
ASK FIRST; SOLVE LATER - SHARE YOUR FINDINGS - MAKE CODE EXECUTABLE - PREPARE FOR POST-DEPLOYMENT

```
> user = User.second  
=> #<User:0x00007f84a4b28b1e  
    id: 2,  
    first_name: "Mary",  
    last_name: "Wayne">
```



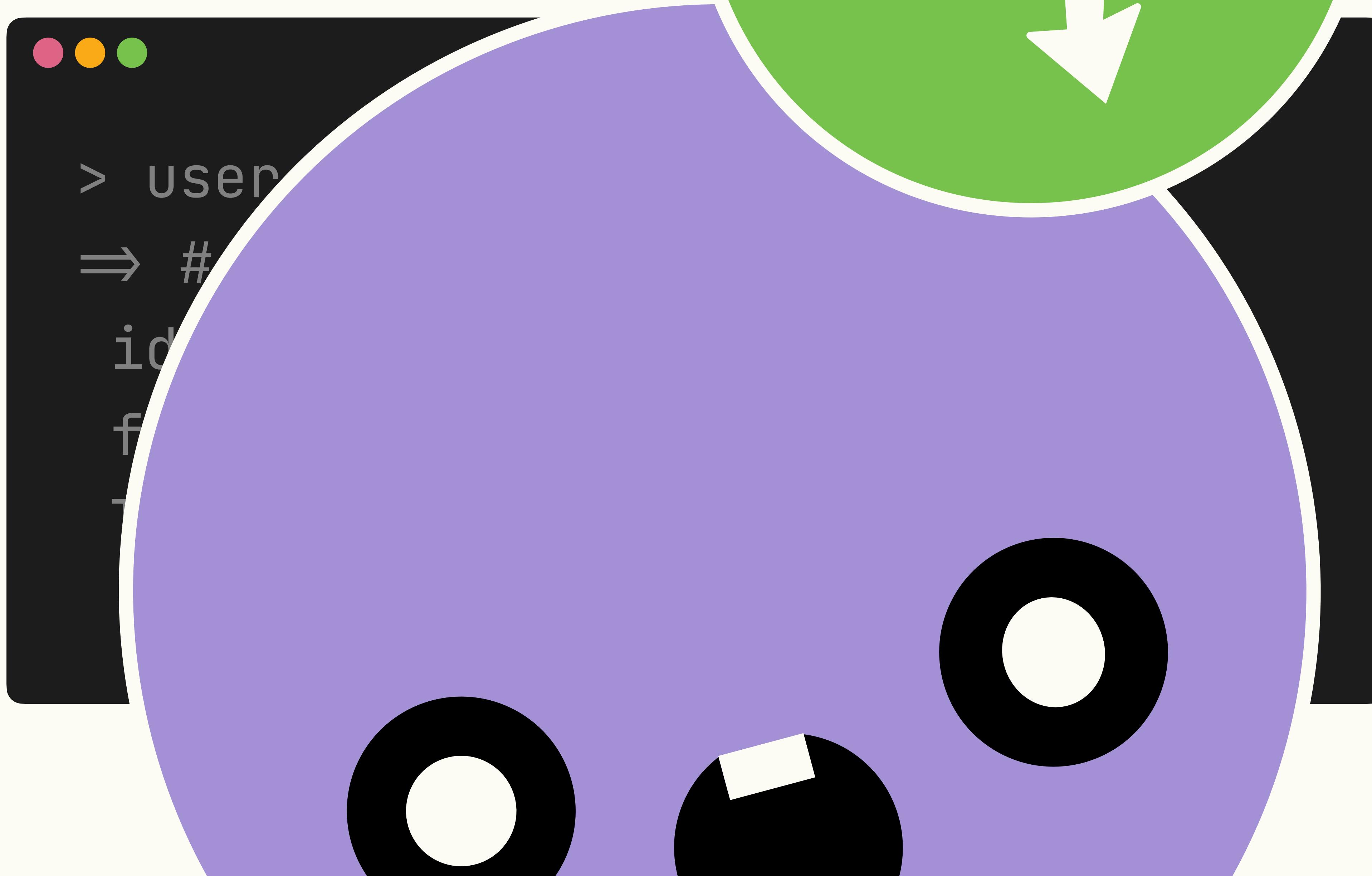
ASK FIRST; SOLVE LATER - SHARE YOUR FINDINGS - MAKE CODE EXECUTABLE - PREPARE FOR POST-DEPLOYMENT

```
<%= form_for(@user) do |f| %>  
  
  <%= f.text_field :first_name, placeholder: "Full name" %>  
  
  # ...  
  
  <%= f.submit "Create Account" %>  
  
<% end %>
```



```
<%= form_for(@user) do |f| %>  
  
  <%= f.text_field :first_name, placeholder: "First name" %>  
  
  <%= f.text_field :last_name, placeholder: "Last name" %>  
  
  # ...  
  
  <%= f.submit "Create Account" %>  
  
<% end %>
```

ASK FIRST; SOLVE LATER - SHARE YOUR FINDINGS - MA





Start with questions.

- ```
Users have first and last names
```
1. How do new users sign up?
  2. How do we store users' information?



```
Users have first and last names
1. How do new users sign up? - important!
2. How do we store users' information? - important!
```

**Is this blocking?**



# Users have first and last names

1. How do new users sign up? - **important!**
2. How do we store users' information? - **important!**
3. What about multiple given names? - **can wait**



# Users have first and last names

1. How do new users sign up? - **important!**
2. How do we store users' information? - **important!**
3. What about multiple given names? - **can wait**
4. Didn't Sarah look at something similar last quarter? - **maybe irrelevant**



2. How do we store users' information? - **important!**

```
ActiveRecord::Schema.define do
 create_table "users", id: do |t|
 t.string "email"
 t.string "first_name"
 t.string "last_name"
 end
end
```



**ASK FIRST; SOLVE LATER - SHARE YOUR FINDINGS - MAKE CODE EXECUTABLE - PREPARE FOR POST-DEPLOYMENT**

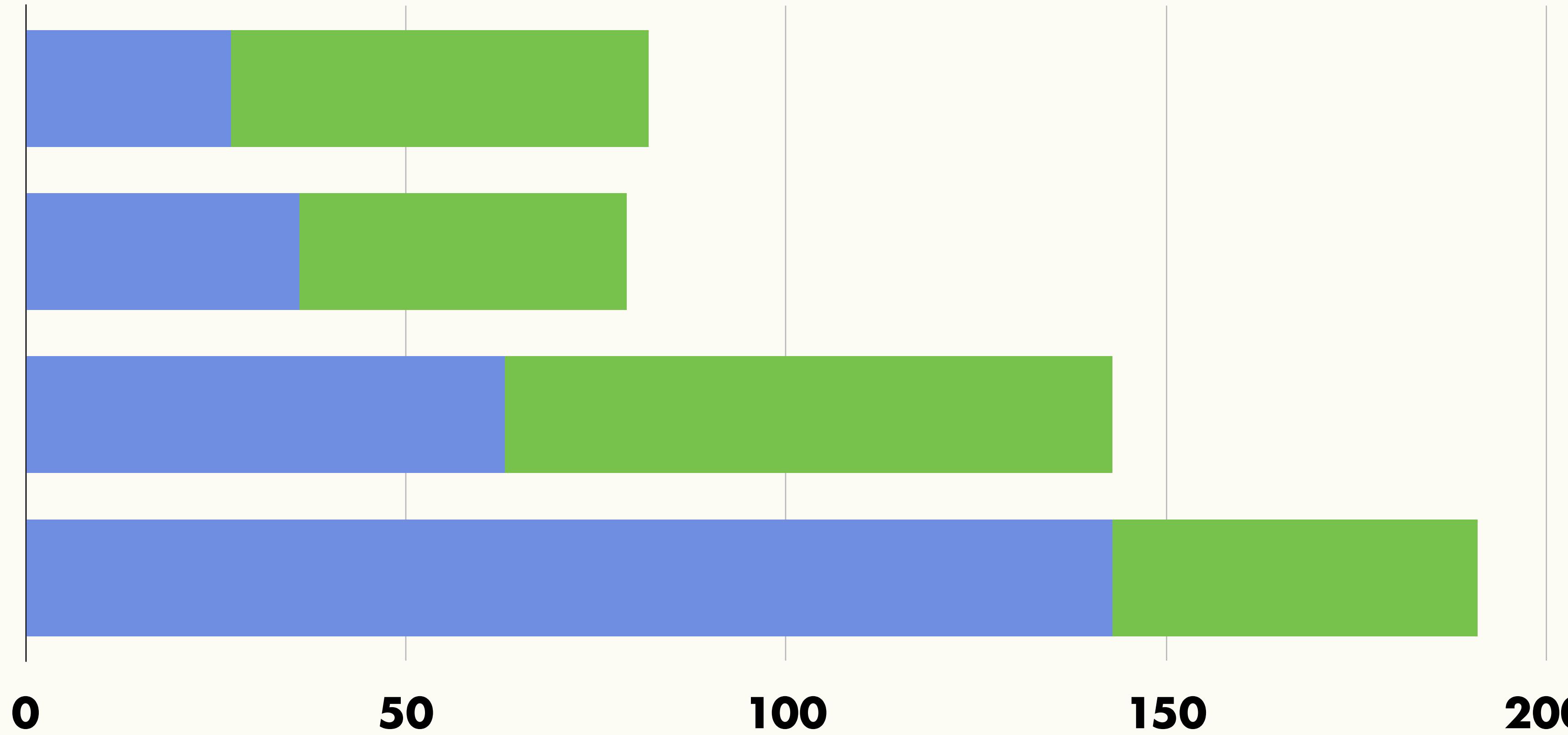


**April**

**May**

**June**

**July**





# **ASK FIRST; SOLVE LATER**

- Start by breaking down questions—not solutions
- No hidden work
- Asking questions is a valuable part of a programmer's job—encourage others!

**ASK FIRST; SOLVE LATER**

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```
> user = User.first
=> #<User:0x00007f84c6c253b0
 id: 1,
 first_name: "Grace Richie",
 last_name: nil>
```

ASK FIRST; SOLVE LATER - **SHARE YOUR FINDINGS** - MAKE CODE EXECUTABLE - PREPARE FOR POST-DEPLOYMENT



```
<%= form_for(@user) do |f| %>

 <%= f.text_field :first_name, placeholder: "Full name" %>

 # ...

 <%= f.submit "Create Account" %>

<% end %>
```



```
> all_users = User.count
=> 5134712
```

```
> nil_last_name_users = User.where(last_name: nil).count
=> 5131694
```

```
> nil_last_name_users/all_users.to_f
=> 0.9994122357787545
```



```
$ grep -r "shared/user_form" .

./app/views/users/new.html.erb: render "shared/user_form"

./app/views/users/edit.html.erb: render "shared/user_form"

$ grep -r "shared/user_form_2" .
```

ASK FIRST; SOLVE LATER - **SHARE YOUR FINDINGS** - MAKE CODE EXECUTABLE - PREPARE FOR POST-DEPLOYMENT



```
$ git --no-pager blame app/views/shared/_user_form_2.html.erb
```

```
9aed2e724e28 (2013-09-05 09:16:32 1) <%= form_for(@user) do |f| %>
```

```
9aed2e724e28 (2013-09-05 09:16:32 2) <%= f.text_field :first_name, placeholder: "First name" %>
```

```
72c3c5169135 (2013-09-10 16:45:07 3) <%= f.text_field :last_name, placeholder: "Last name" %>
```

```
72c3c5169135 (2013-09-10 16:45:07 4) # ...
```

```
9aed2e724e28 (2013-09-05 09:16:32 5) <%= f.submit "Create Account" %>
```

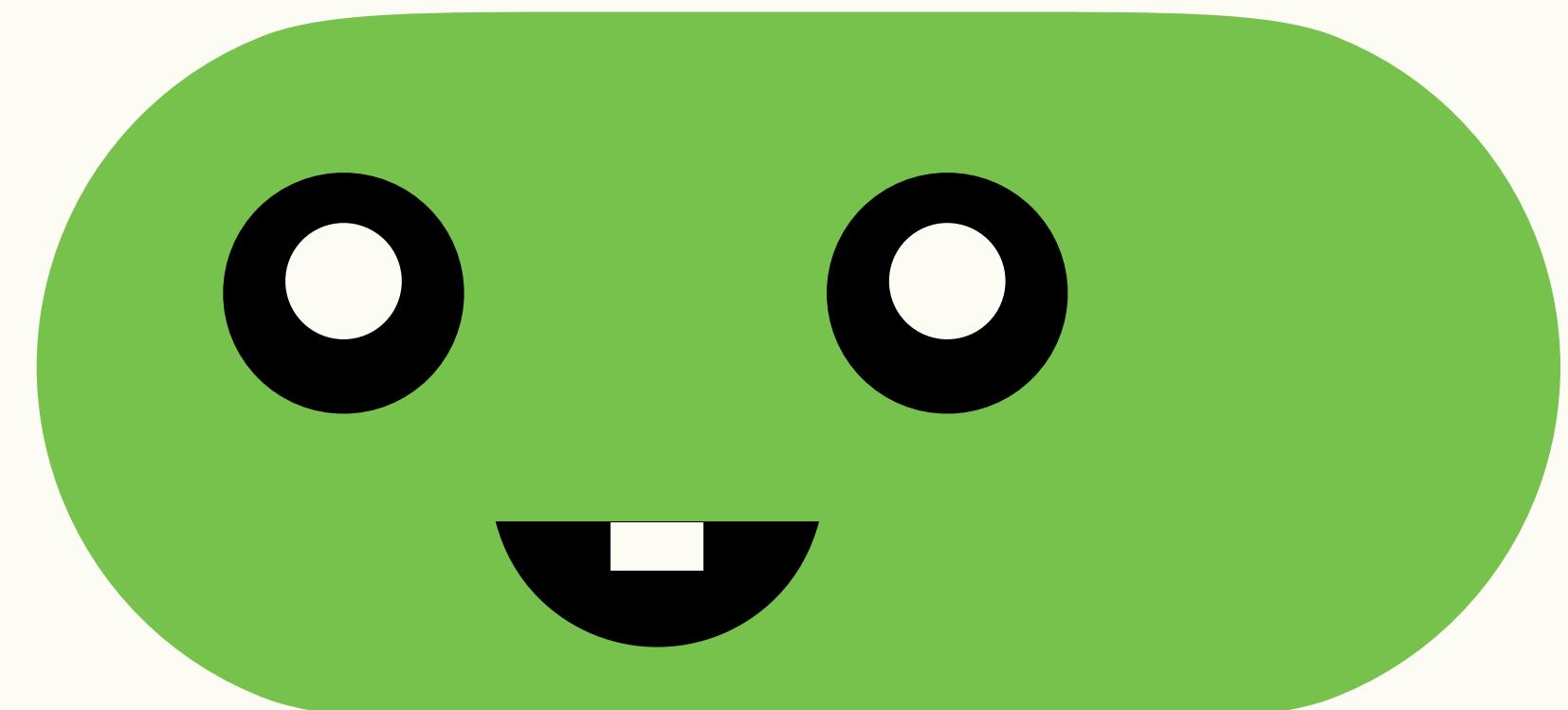
  

```
9aed2e724e28 (2013-09-05 09:16:32 6) <% end %>
```



I'm still investigating inconsistencies in the users table, but after two weeks, I finally figured out why we have two forms!

Oh, Zilphia and I added that form last year. It was for the Test team only. Let's delete the old form since they use an API now.



**ASK FIRST; SOLVE LATER - SHARE YOUR FINDINGS - MAKE CODE EXECUTABLE - PREPARE FOR POST-DEPLOYMENT**



**ASK FIRST; SOLVE LATER - SHARE YOUR FINDINGS - MAKE CODE EXECUTABLE - PREPARE FOR POST-DEPLOYMENT**



ASK FIRST; SOLVE LATER - **SHARE YOUR FINDINGS** - MAKE CODE EXECUTABLE - PREPARE FOR POST-DEPLOYMENT

### Users Have First and Last Names

...

|                                                                                      |                          |                          |                          |                          |                                     |     |     |
|--------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|-----|-----|
| <input type="checkbox"/> Users Have First and Last Names                             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ... | ... |
| <input type="checkbox"/> How are we storing user' information?                       | <input type="checkbox"/>            | ... | ... |
| <input type="checkbox"/> How do new users sign up?                                   | <input type="checkbox"/>            | ... | ... |
| <input type="checkbox"/> Did <b>@sarah</b> work on something like this last quarter? | <input type="checkbox"/>            | ... | ... |
| <input type="checkbox"/> What about multiple given names?                            | <input type="checkbox"/>            | ... | ... |
| <input checked="" type="checkbox"/> <del>How do we open a migration ticket?</del>    | <input type="checkbox"/>            | ... | ... |
| + Add Task                                                                           |                          |                          |                          |                          |                                     |     |     |

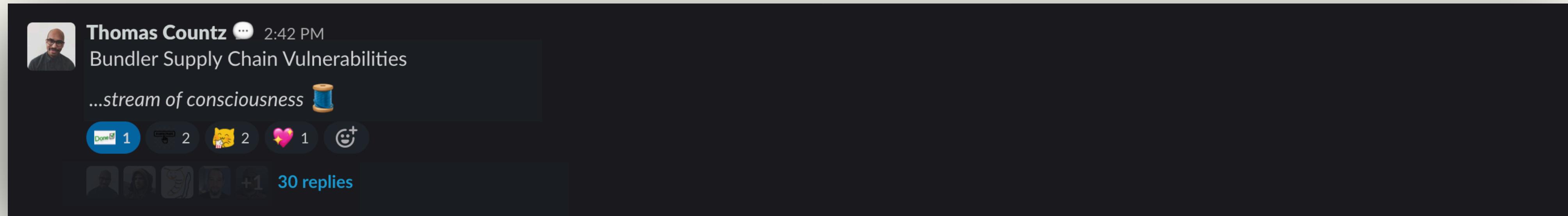
[users\\_have\\_first\\_and\\_last\\_names.md](#) [Raw](#)

# Users have first and last names

## 2. How do we store users' information? - !important

- Look at `db/schema.rb`
  - Are we already storing first and last name?? - !important
    - Poke around in the console
    - How do I access the console in staging? - !important
      - ...
    - No, when I created a new user, we stored the "Full Name" into the `first_name` column and setting `last_name` to `null` - See: screenshot
- Are all user forms only populating `first_name`? - !important
  - Find all usages of `User#update`
    - Edit page
      - Only has "Full Name" field to update `first_name`
    - API
      - `POST /users` exposes both `first_name` and `last_name`
- How many `last_name` values are there? - Curious
- When and why did we introduce `last_name`? - Curious

ASK FIRST; SOLVE LATER - **SHARE YOUR FINDINGS** - MAKE CODE EXECUTABLE - PREPARE FOR POST-DEPLOYMENT



Thomas Countz 2:42 PM  
Bundler Supply Chain Vulnerabilities

*...stream of consciousness* 

 1  2  2  1 

 +1 30 replies

ASK FIRST; SOLVE LATER - **SHARE YOUR FINDINGS** - MAKE CODE EXECUTABLE - PREPARE FOR POST-DEPLOYMENT

Thomas Countz 2:42 PM  
Bundler Supply Chain Vulnerabilities  
*...stream of consciousness*

Done 1 Done 2 🎉 2 ❤️ 1 😊  
30 replies

30 replies

Thomas Countz

Thomas Countz

Thomas Countz

Thomas Countz

ASK FIRST; SOLVE LATER - SH



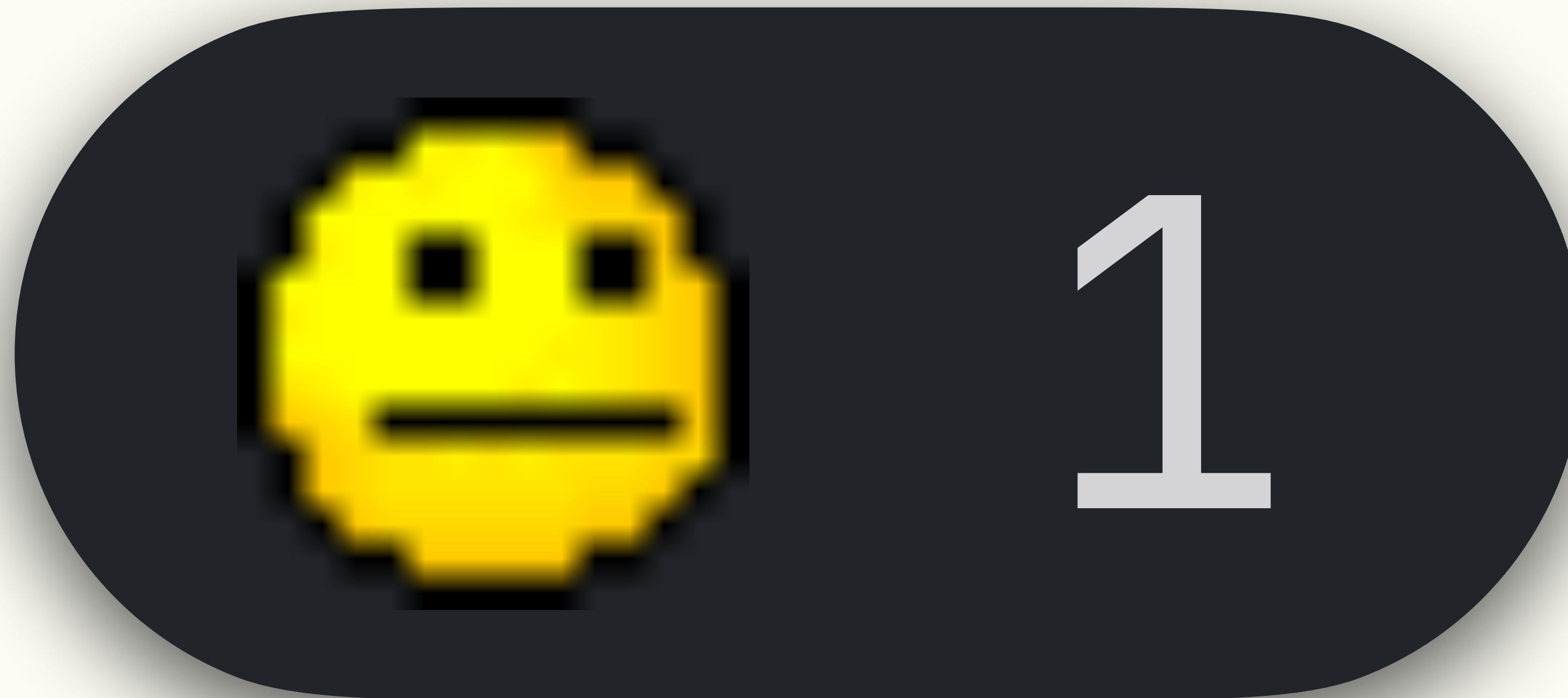
Thomas Countz 

 1 



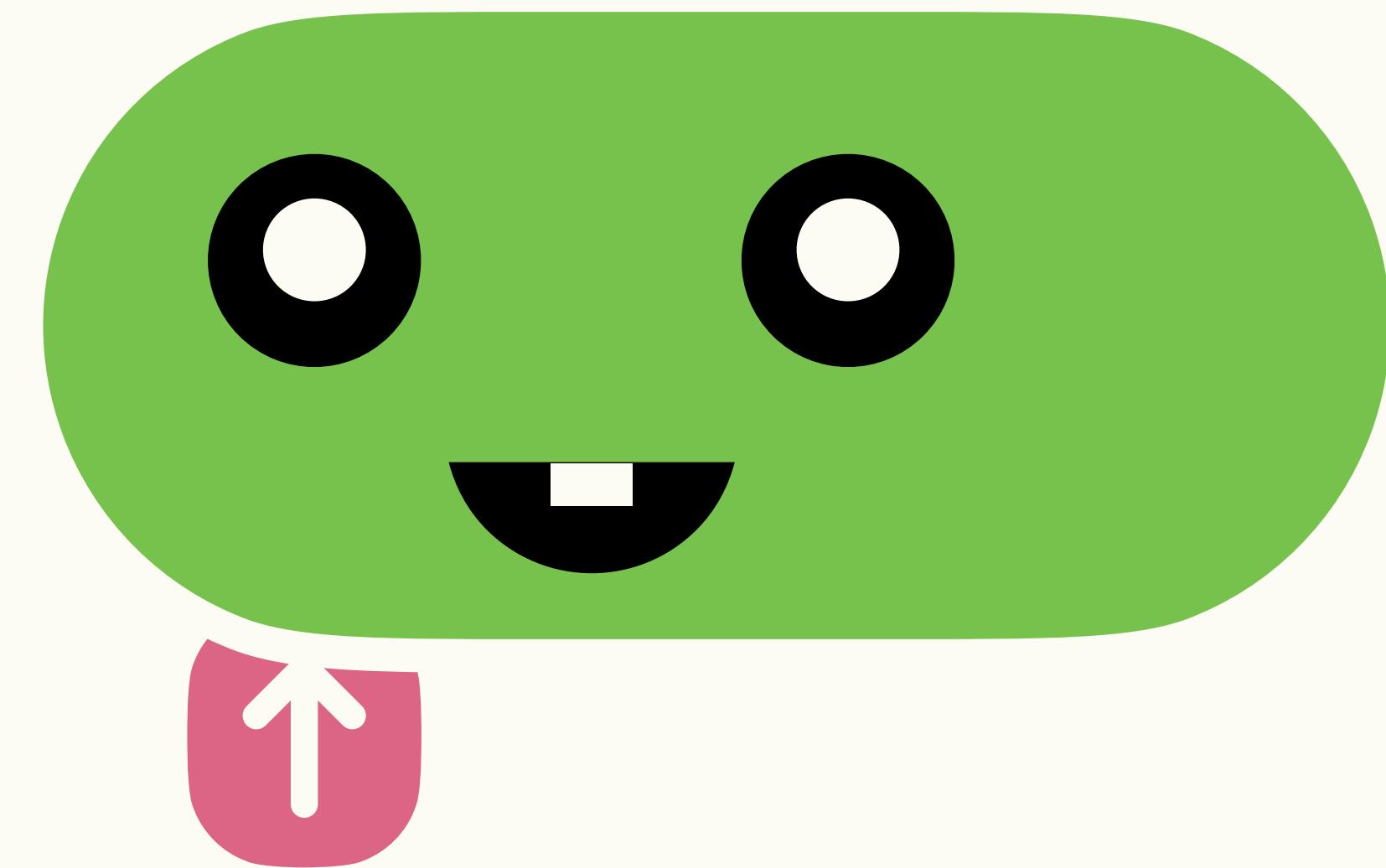
Thomas Countz 

ASK FIRST; SOLVE LATER - **SHARE YOUR FINDINGS** - MAKE CODE EXECUTABLE - PREPARE FOR POST-DEPLOYMENT



## **SHARE YOUR FINDINGS AS YOU DISCOVER THEM**

- Tap into your team's expertise and experience
- Organically document the system
- Turn knowledge into value
- Just get started—there's no wrong way



**ASK FIRST; SOLVE LATER**

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**PREPARE FOR POST-DEPLOYMENT**



```
> user = User.first
=> #<User:0x00007f84c6c253b0
 id: 1,
 first_name: "Grace Richie",
 last_name: nil>
```



```
> user = User.first
=> #<User:0x00007f84c6c253b0
 id: 1,
 first_name: "Grace",
 last_name: "Richie">
```



```
def User < ActiveRecord::Base
 def split_names!
 return self if !last_name.nil?
 names = first_name.split(/\s+/)
 tap do |user|
 user.first_name = names[0]
 user.last_name = names[1]
 end
 end
end
```



```
def User < ActiveRecord::Base
 def split_names!
 return self if !last_name.nil?
 names = first_name.split(/\s+/)
 tap do |user|
 user.first_name = names[0]
 user.last_name = names[1]
 end
 end
end
```



```
def User < ActiveRecord::Base
 def split_names!
 return self if !last_name.nil?
 names = first_name.split(/\s+/)
 tap do |user|
 user.first_name = names[0]
 user.last_name = names[1]
 end
 end
end
```



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def User < ActiveRecord::Base
 def split_names!
 return self if !last_name.nil?
 names = first_name.split(/\s+/)
 tap do |user|
 user.first_name = names[0]
 user.last_name = names[1]
 end
 end
end
```



```
def User < ActiveRecord::Base
 def split_names!
 return self if !last_name.nil?
 names = first_name.split(/\s+/)
 tap do |user|
 user.first_name = names[0]
 user.last_name = names[1]
 end
 end
end
```



```
def User < ActiveRecord::Base
 def split_names!
 return self if !last_name.nil?
 names = first_name.split(/\s+/)
 tap do |user|
 user.first_name = names[0]
 user.last_name = names[1]
 end
 end
end
```

```
class User
 def initialize; end
 def split_names!; end
end
```

```
User.new(first_name: "Isaiah Lee").split_names!
⇒ #<User:0x00007fa92232bea0
 first_name: "Isaiah",
 last_name: "Lee">
```

```
class User < ActiveRecord::Base
 def split_names!; end
end
```

```
RSpec.describe User do
 describe "#split_names!" do
 it "splits the first_name into first_name & last_name"
 end
end
```

ASK FIRST; SOLVE LATER - SHARE YOUR FINDINGS - **MAKE CODE EXECUTABLE** - PREPARE FOR POST-DEPLOYMENT

```
#!/usr/bin/env ruby
puts "Hello, World!"
```

```
$ chmod +x hello.rb
$./hello.rb
"Hello, World"
```



```
require 'bundler/inline'

gemfile do
 source 'https://rubygems.org'

 gem 'null_gem', require: true
end
```

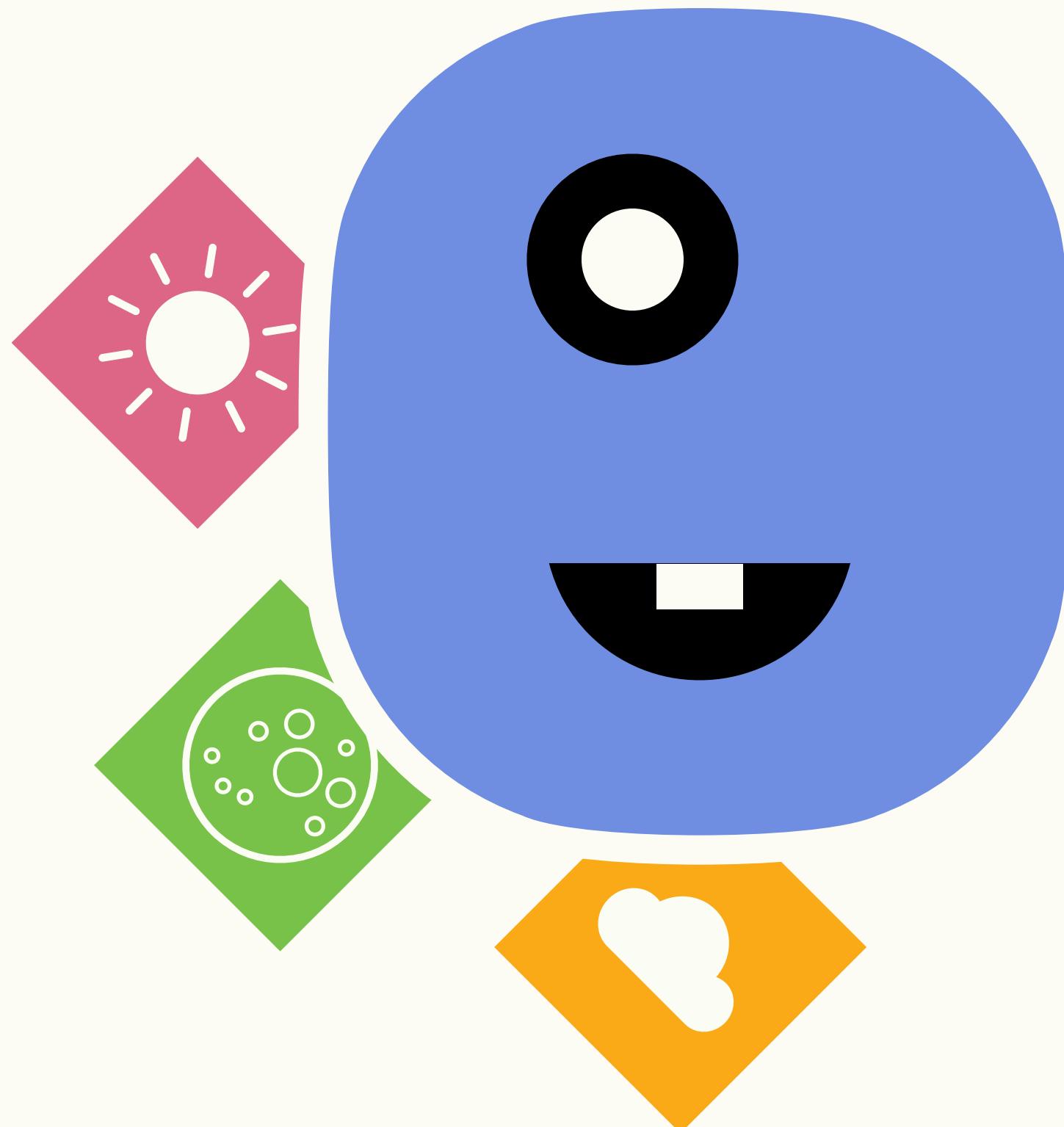


```
ActiveRecord::Base.establish_connection(
 adapter: 'sqlite3',
 database: ':memory:'
)
```



<https://bit.ly/3lhk00S>

```
def split_names!
 return self if !last_name.nil?
 names = first_name.split(/\s+/)
 tap do |user|
 user.first_name = names[0]
 user.last_name = names[1]
 end
end
```



## **MAKE CODE EXECUTABLE FOR BETTER FEEDBACK**

- Rubyists love writing tests
- Executing code is less ambiguous
- The less others have to keep in their heads,  
the better their feedback can be

**ASK FIRST; SOLVE LATER**

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**ASK FIRST; SOLVE LATER**

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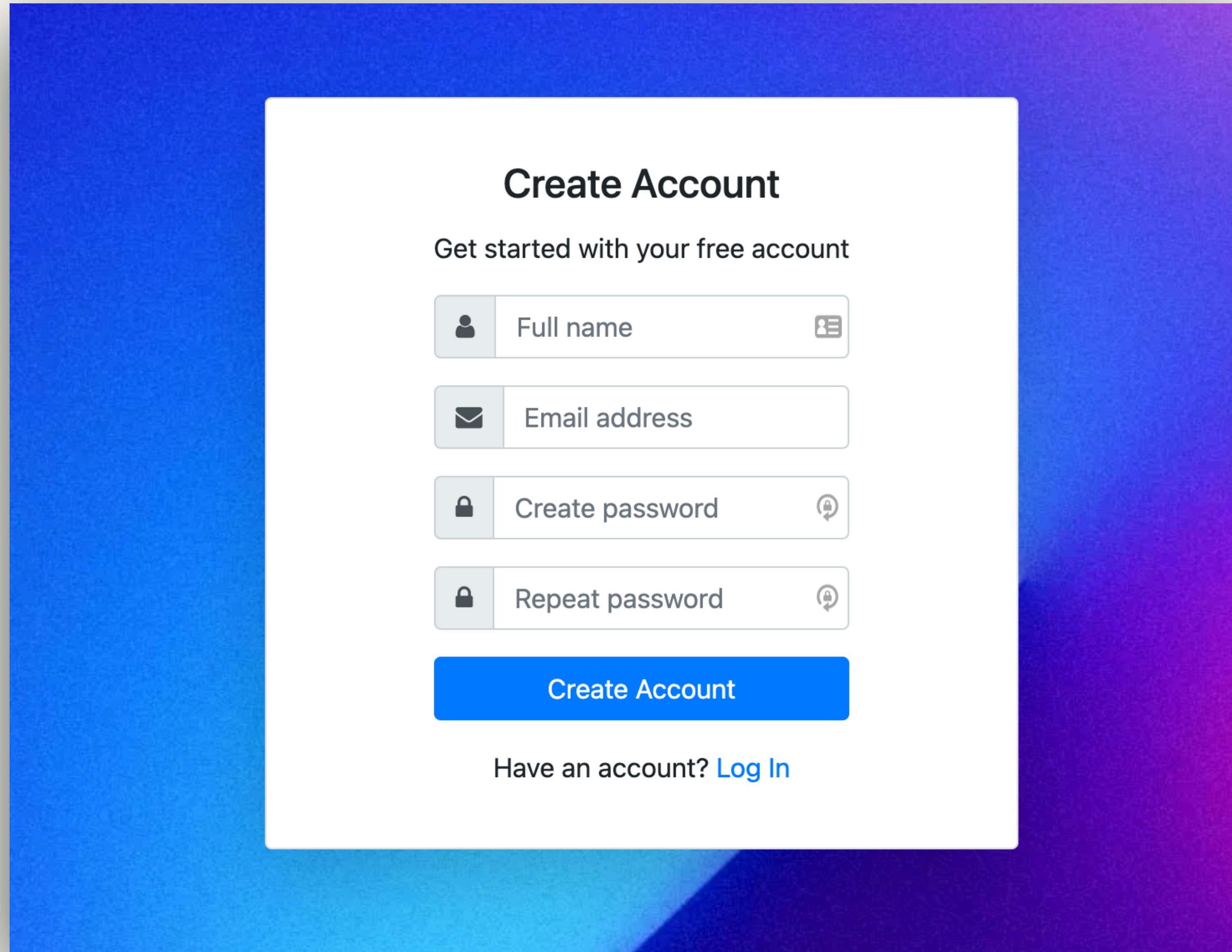
**MAKE CODE EXECUTABLE FOR BETTER FEEDBACK**

**PREPARE FOR POST-DEPLOYMENT**



```
> user = User.first
=> #<User:0x00007f84c6c253b0
 id: 1,
 first_name: "Grace Richie",
 last_name: nil>
```

ASK FIRST; SOLVE LATER - SHARE YOUR FINDINGS - MAKE CODE EXECUTABLE - **PREPARE FOR POST-DEPLOYMENT**



ASK FIRST; SOLVE LATER - SHARE YOUR FINDINGS - MAKE CODE EXECUTABLE - **PREPARE FOR POST-DEPLOYMENT**



```
<%= form_for(@user) do |f| %>

<%= f.text_field :first_name, placeholder: "Full name" %>

...

<%= f.submit "Create Account" %>

<% end %>
```



```
> user = User.last
=> #<User:0x00007f84c6c253b0
 id: 42,
 first_name: "Thomas Countz",
 last_name: nil>
```

```
<%= form_for(@user) do |f| %>

<%= f.text_field :first_name, placeholder: "First name" %>

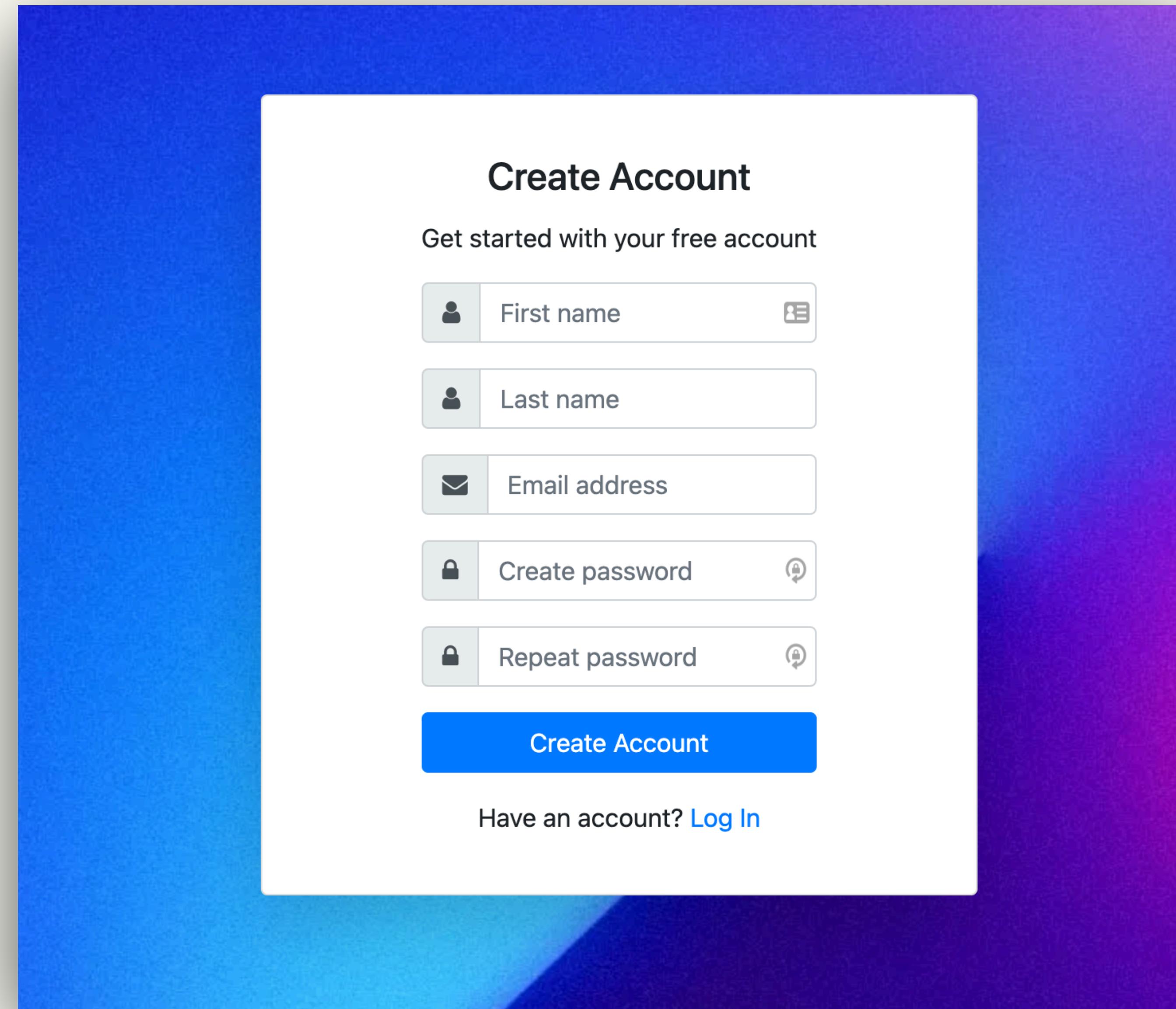
<%= f.text_field :last_name, placeholder: "Last name" %>

...

<%= f.submit "Create Account" %>

<% end %>
```

**ASK FIRST; SOLVE LATER - SHARE YOUR FINDINGS - MAKE CODE EXECUTABLE - PREPARE FOR POST-DEPLOYMENT**





```
> user = User.last
=> #<User:0x00007f84c201bbae
 id: 43,
 first_name: "Thomas",
 last_name: "Countz">
```

 **All checks have passed** [Hide all checks](#)

4 successful checks

---

  **build** Successfully in 59s — build

---

  **test** Successfully in 59s — build

---

  **publish** Successfully in 59s — build

---

 **This branch has no conflicts with the base branch**  
Merging can be performed automatically.

---

**Merge pull request** ▾ You can also [open this in GitHub Desktop](#) or view [command line instructions](#).

**ASK FIRST; SOLVE LATER - SHARE YOUR FINDINGS - MAKE CODE EXECUTABLE - PREPARE FOR POST-DEPLOYMENT**

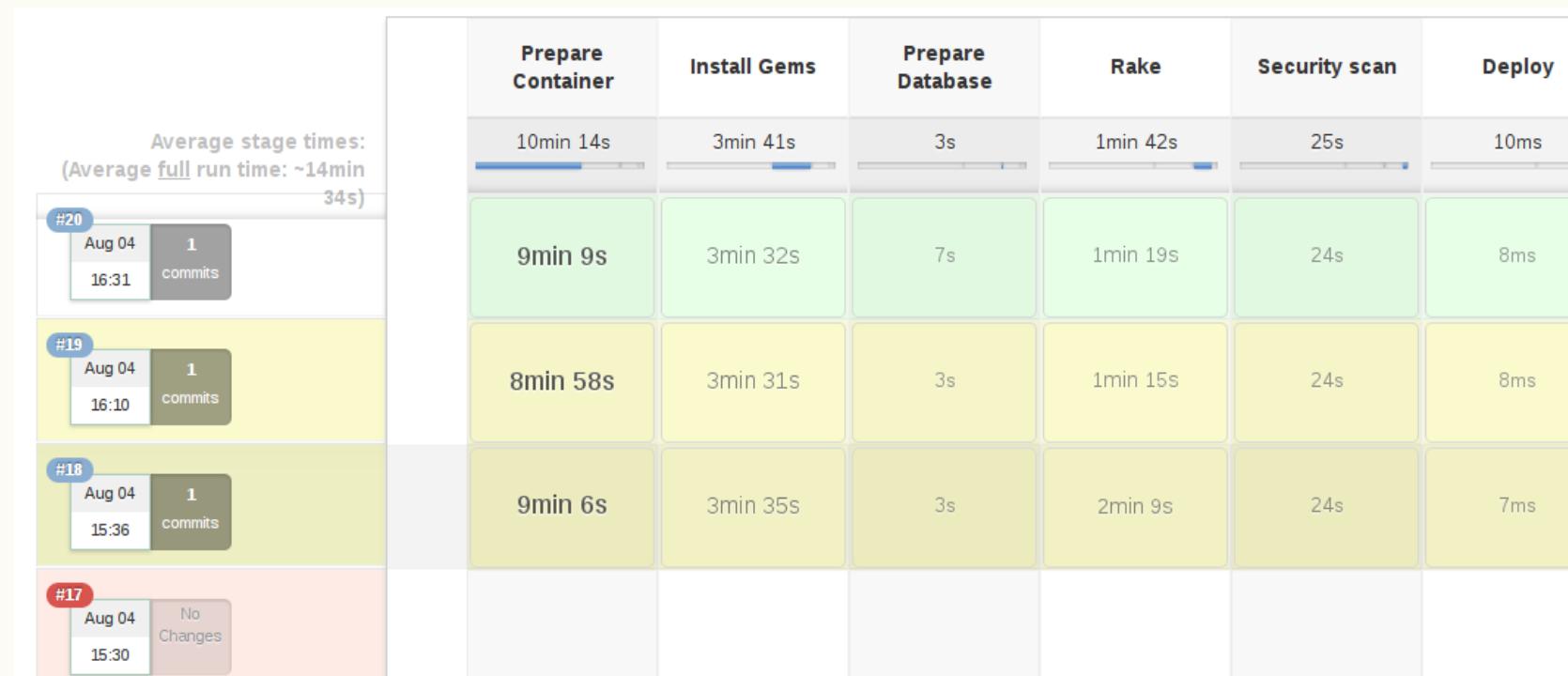


**ASK FIRST; SOLVE LATER - SHARE YOUR FINDINGS - MAKE CODE EXECUTABLE - PREPARE FOR POST-DEPLOYMENT**



ASK FIRST; SOLVE LATER - SHARE YOUR FINDINGS - MAKE CODE EXECUTABLE - PREPARE FOR POST-DEPLOYMENT

This pipeline thing is all green!!



ASK FIRST; SOLVE LATER - SHARE YOUR FINDINGS - MAKE CODE EXECUTABLE - PREPARE FOR POST-DEPLOYMENT

**I'm sure the code is working just fine!**



ASK FIRST; SOLVE LATER - SHARE YOUR FINDINGS - MAKE CODE EXECUTABLE - PREPARE FOR POST-DEPLOYMENT

**I don't think I see any issues...?**



ASK FIRST; SOLVE LATER - SHARE YOUR FINDINGS - MAKE CODE EXECUTABLE - PREPARE FOR POST-DEPLOYMENT

**...I think it's working...?**



ASK FIRST; SOLVE LATER - SHARE YOUR FINDINGS - MAKE CODE EXECUTABLE - PREPARE FOR POST-DEPLOYMENT

**HOW IS OUR  
CODE DOING  
NOW THAT IT'S IN  
PRODUCTION?**



**ASK FIRST; SOLVE LATER - SHARE YOUR FINDINGS - MAKE CODE EXECUTABLE - PREPARE FOR POST-DEPLOYMENT**

**ASK FIRST; SOLVE LATER - SHARE YOUR FINDINGS - MAKE CODE EXECUTABLE - PREPARE FOR POST-DEPLOYMENT**

split name field on user registration page

Write Preview H B I E <> ⌂ ⌂ 1/2 ☑ @ ⌂ ⌂ ↵

## ## Post-Deploy

<details>

<summary>Database Check</summary>

No new ``null`` ``last\_name`` records should be created.

```
SELECT COUNT(*) FROM users WHERE last_name IS NULL;
```

</details>

Attach files by dragging & dropping, selecting or pasting them. M↓

Create pull request ▾

split name field on user registration page

Write Preview

H B I E <> ⌂ ☰ 1/2 @ ⌂ ↵

## ## Post-Deploy

<details>

<summary>Metrics</summary>

The `app.user.registration.\*` metrics will show success and failure counts for new registrations.

[Link](metrics.acme.co?q=app.user.registration)

</details>

Attach files by dragging & dropping, selecting or pasting them.

Create pull request ▾

ⓘ Remember, contributions to this repository should follow its contributing guidelines.

split name field on user registration page

Write Preview

H B I E <> L 1/2 ☑ @ ↗ ↙

## ## Post-Deploy

<details>

<summary>Errors</summary>

**There should be no increase in `400` or `500` status codes coming from any `/user\*` endpoints.**

[Link](dashboard.acme.co/errors)

</details>

Attach files by dragging & dropping, selecting or pasting them.

M

Create pull request ▾

**ASK FIRST; SOLVE LATER - SHARE YOUR FINDINGS - MAKE CODE EXECUTABLE - PREPARE FOR POST-DEPLOYMENT**



**The input validations are working on  
the registration form.**



**All new users have a non-nil value for  
"last name" in the database.**



**The metrics show consistent counts of successful user registrations.**



ASK FIRST; SOLVE LATER - SHARE YOUR FINDINGS - MAKE CODE EXECUTABLE - PREPARE FOR POST-DEPLOYMENT

**...And there are no increases in errors!**

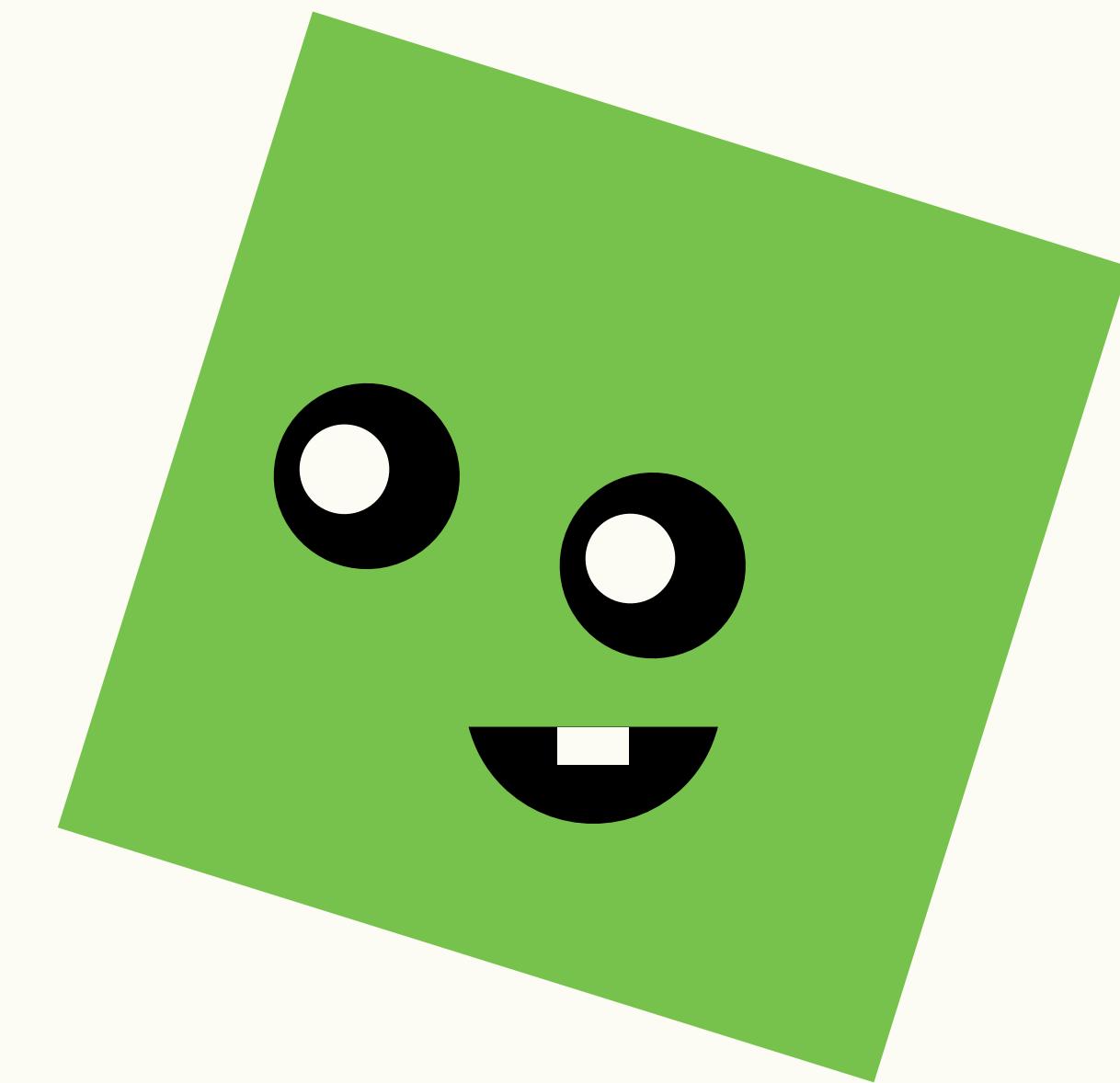


**ASK FIRST; SOLVE LATER - SHARE YOUR FINDINGS - MAKE CODE EXECUTABLE - PREPARE FOR POST-DEPLOYMENT**



## **PREPARE FOR POST- DEPLOYMENT**

- Your job doesn't end when the code is deployed
- Use feedback loops in production just like with test-driven development



**ASK FIRST; SOLVE LATER**

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# Users have first and last names

1. How do new users sign up? - **important!**
2. How do we store users' information? - **important!**
3. What about multiple given names? - **can wait**
4. Didn't Sarah look at something similar last quarter? - **maybe irrelevant**

ASK FIRST; SOLVE LATER - **SHARE YOUR FINDINGS** - MAKE CODE EXECUTABLE - PREPARE FOR POST-DEPLOYMENT

Thomas Countz 2:42 PM  
Bundler Supply Chain Vulnerabilities  
*...stream of consciousness*

Done 1 Done 2 🎉 2 ❤️ 1 😊  
30 replies

30 replies

Thomas Countz

Thomas Countz

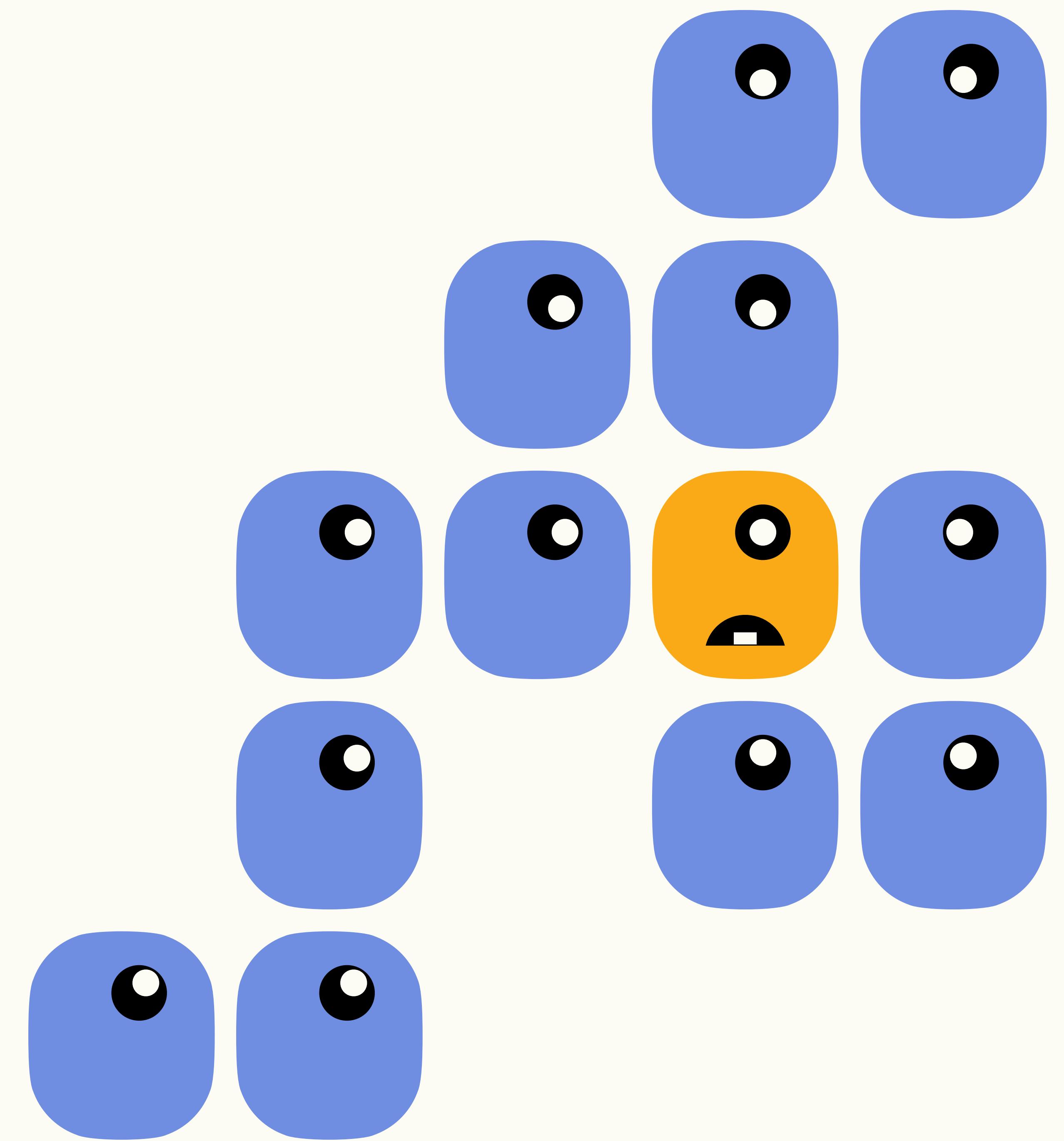
Thomas Countz

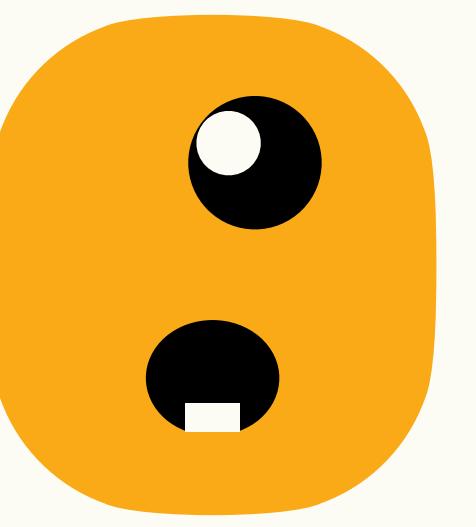
```
class User < ActiveRecord::Base
 def split_names!; end
end
```

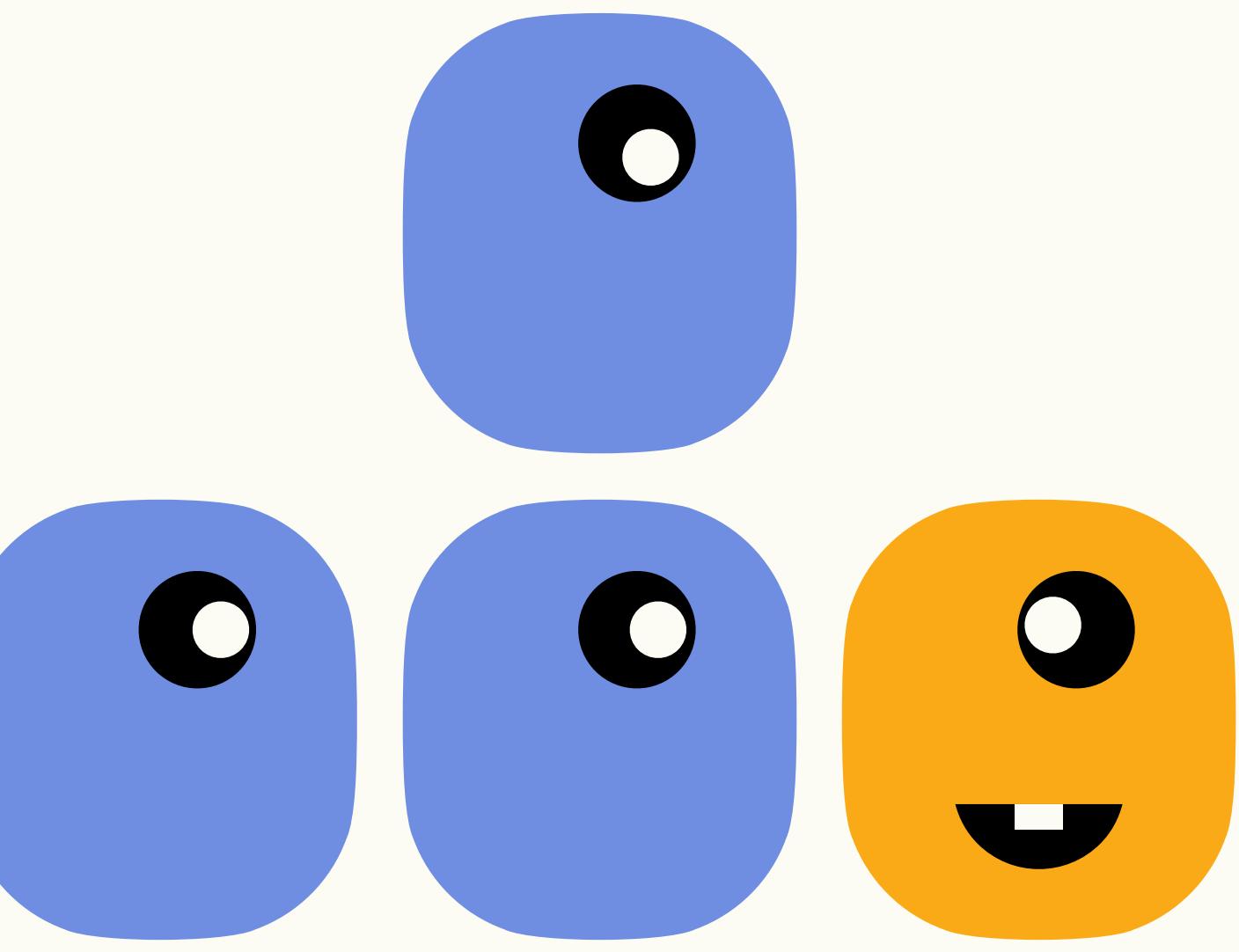
```
RSpec.describe User do
 describe "#split_names!" do
 it "splits the first_name into first_name & last_name"
 end
end
```

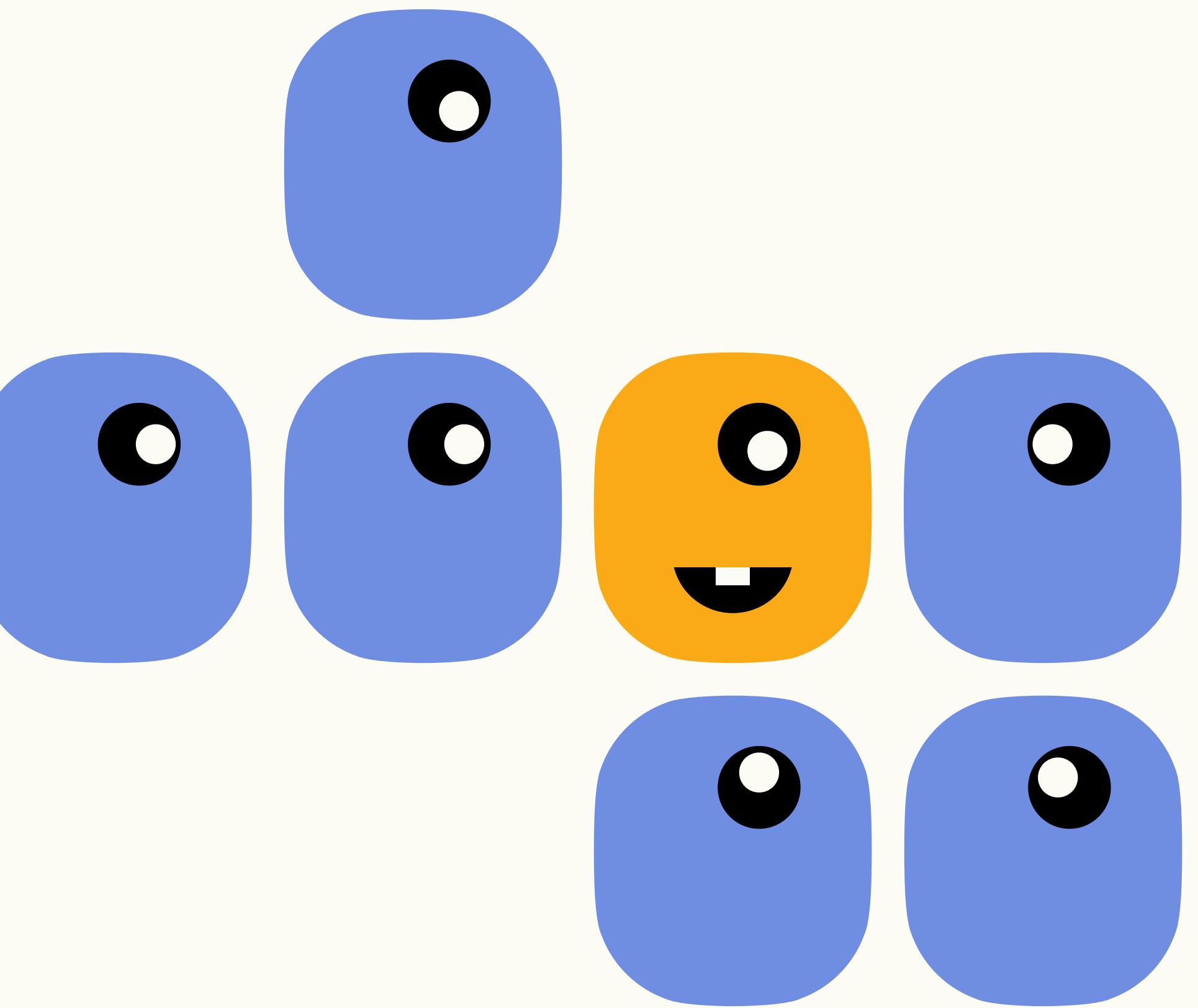
**ASK FIRST; SOLVE LATER - SHARE YOUR FINDINGS - MAKE CODE EXECUTABLE - PREPARE FOR POST-DEPLOYMENT**

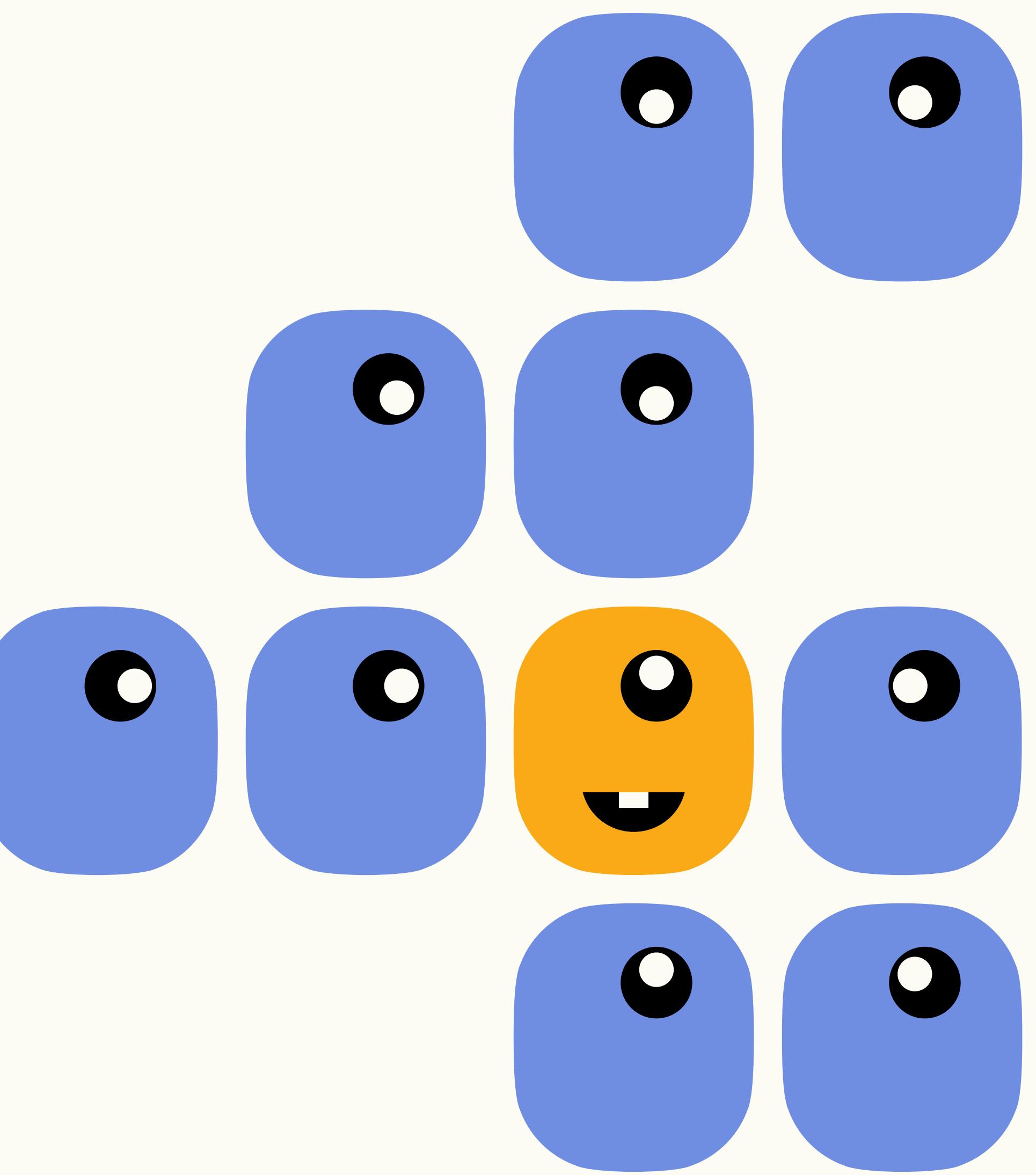


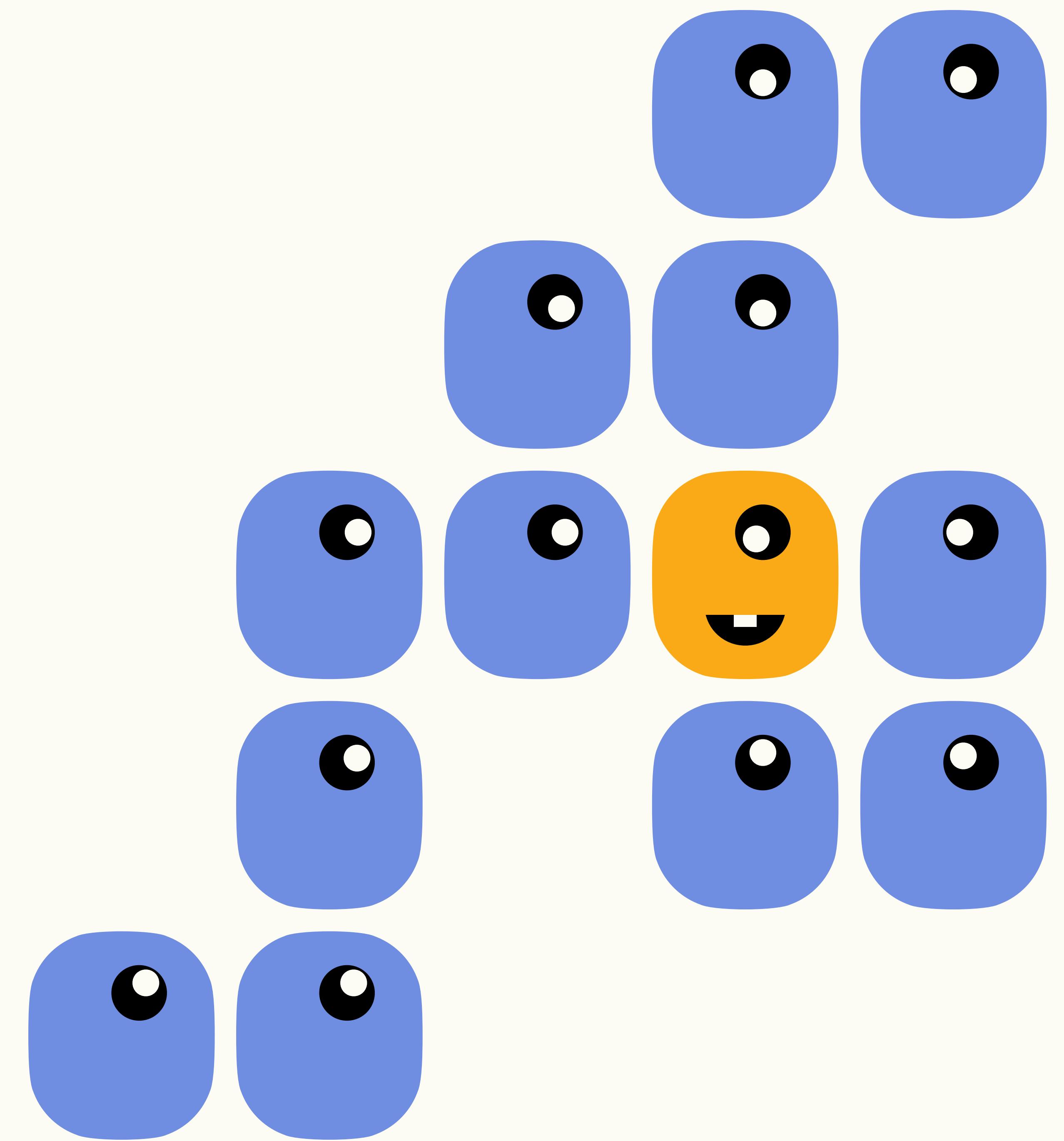








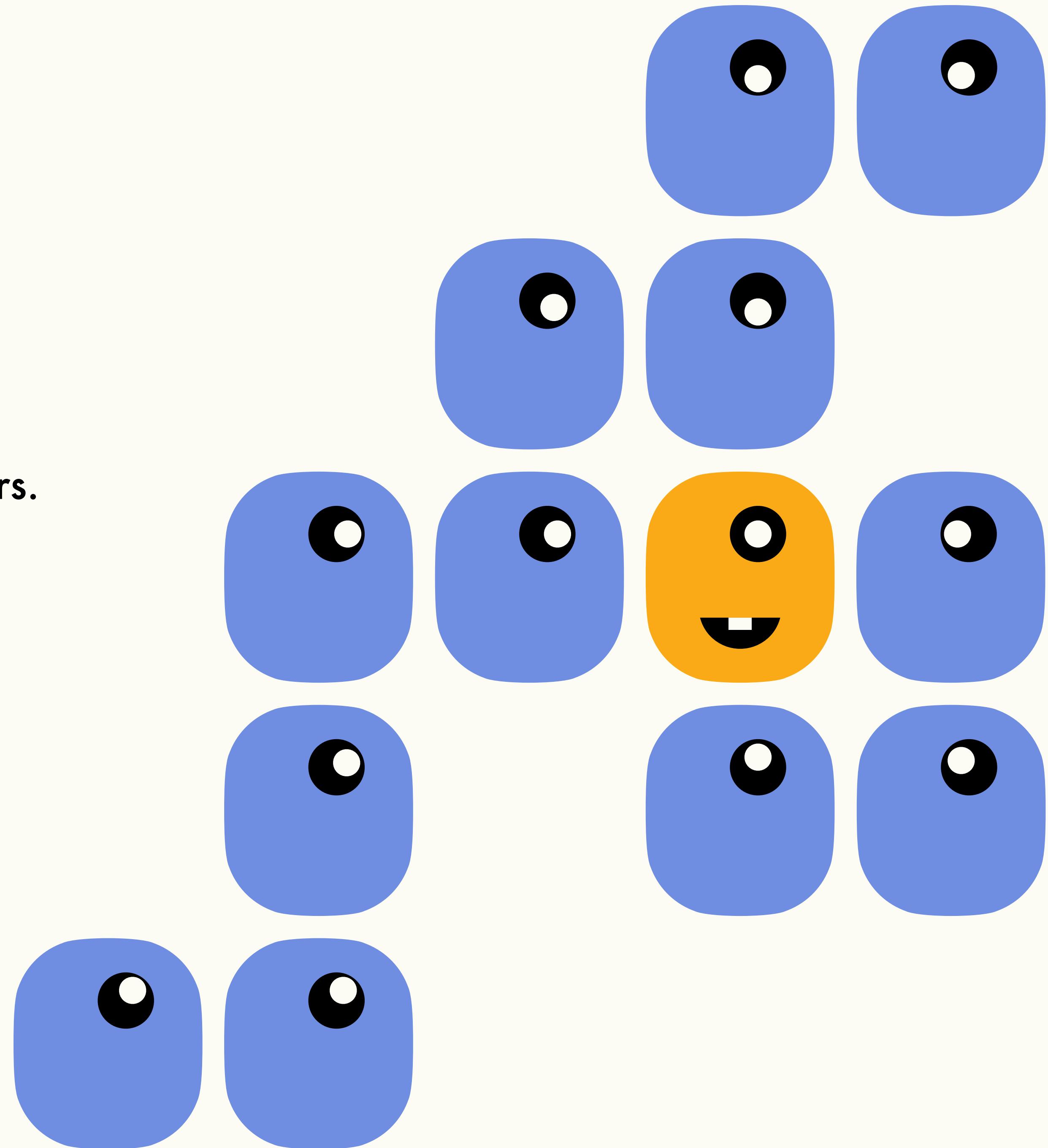




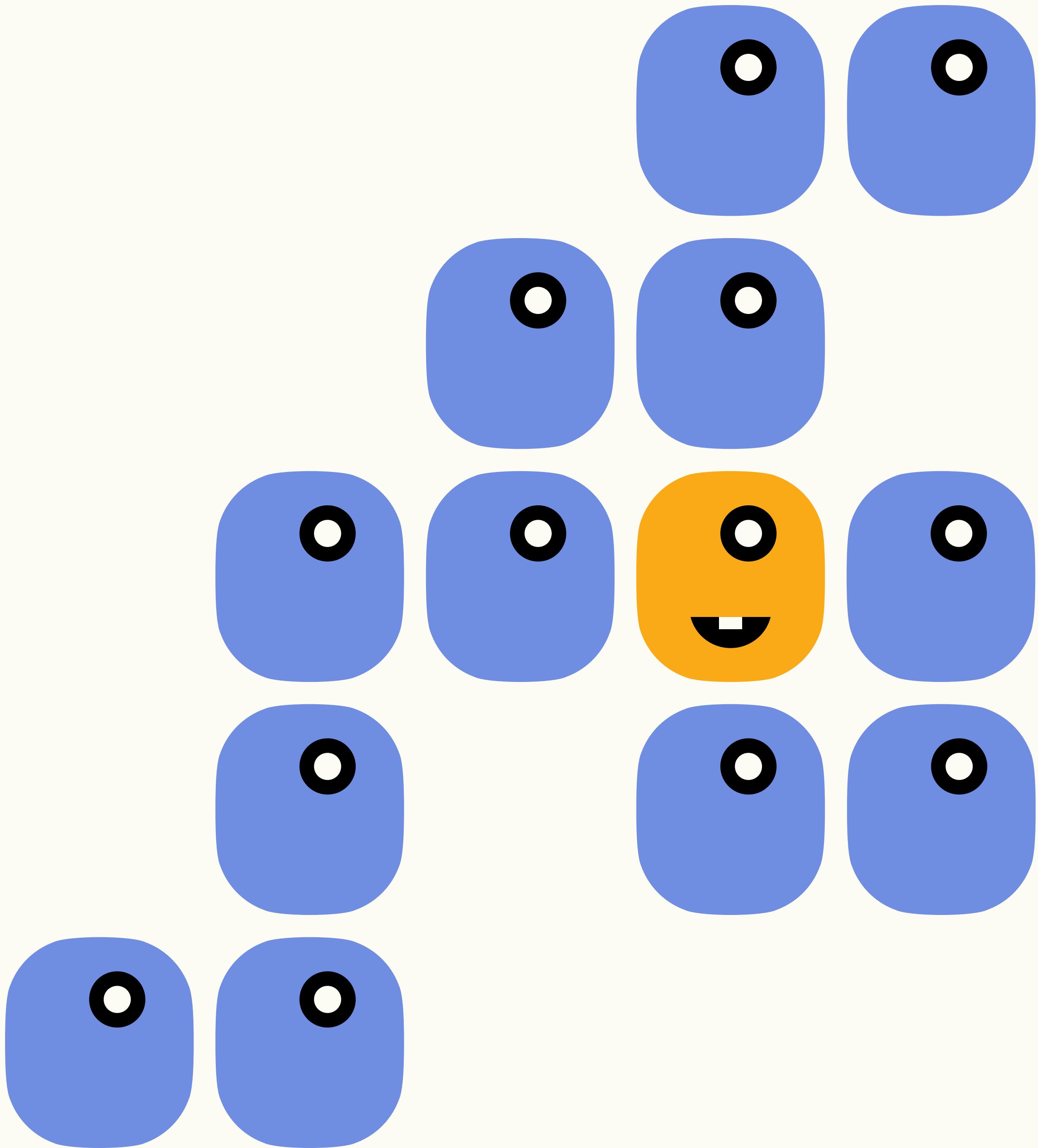
**Software engineers never have all of the answers.**

**They're good at being curious.**

**I bet you're good at being curious, too!**



# THANKS!



LEVELING UP FROM PLANNING TO PRODUCTION

## ASK FIRST; SOLVE LATER

SHARE YOUR FINDINGS AS YOU DISCOVER THEM

MAKE CODE EXECUTABLE FOR BETTER FEEDBACK

PREPARE FOR POST-DEPLOYMENT

@thomascountz