



# BEWD – Forms & Validation

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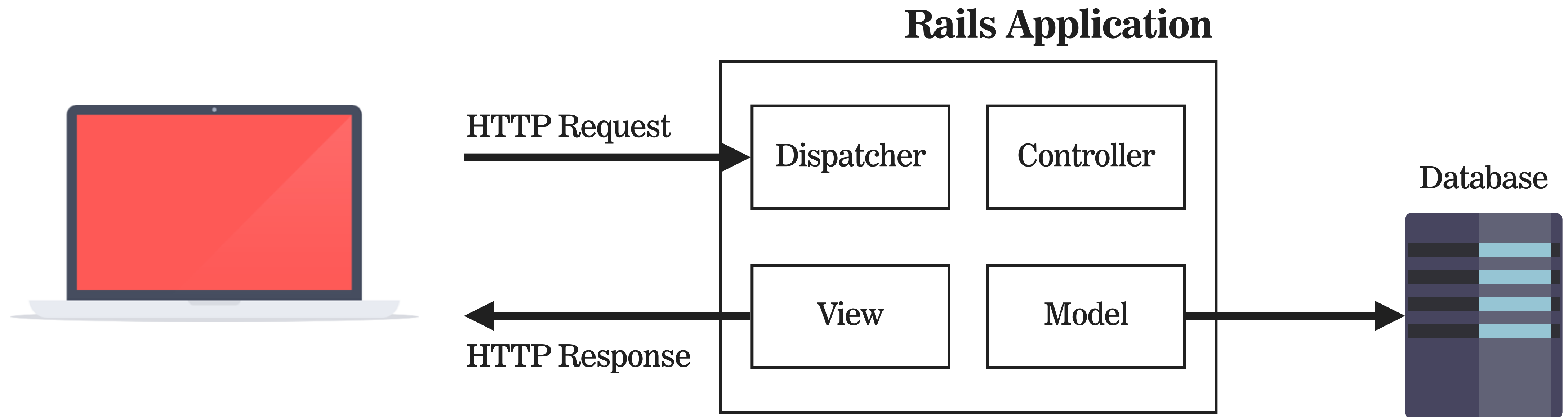
# AGENDA

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- » Review
- » Forms
  - » Search Forms, Create Forms, Partials
- » Validations
- » Lab Time

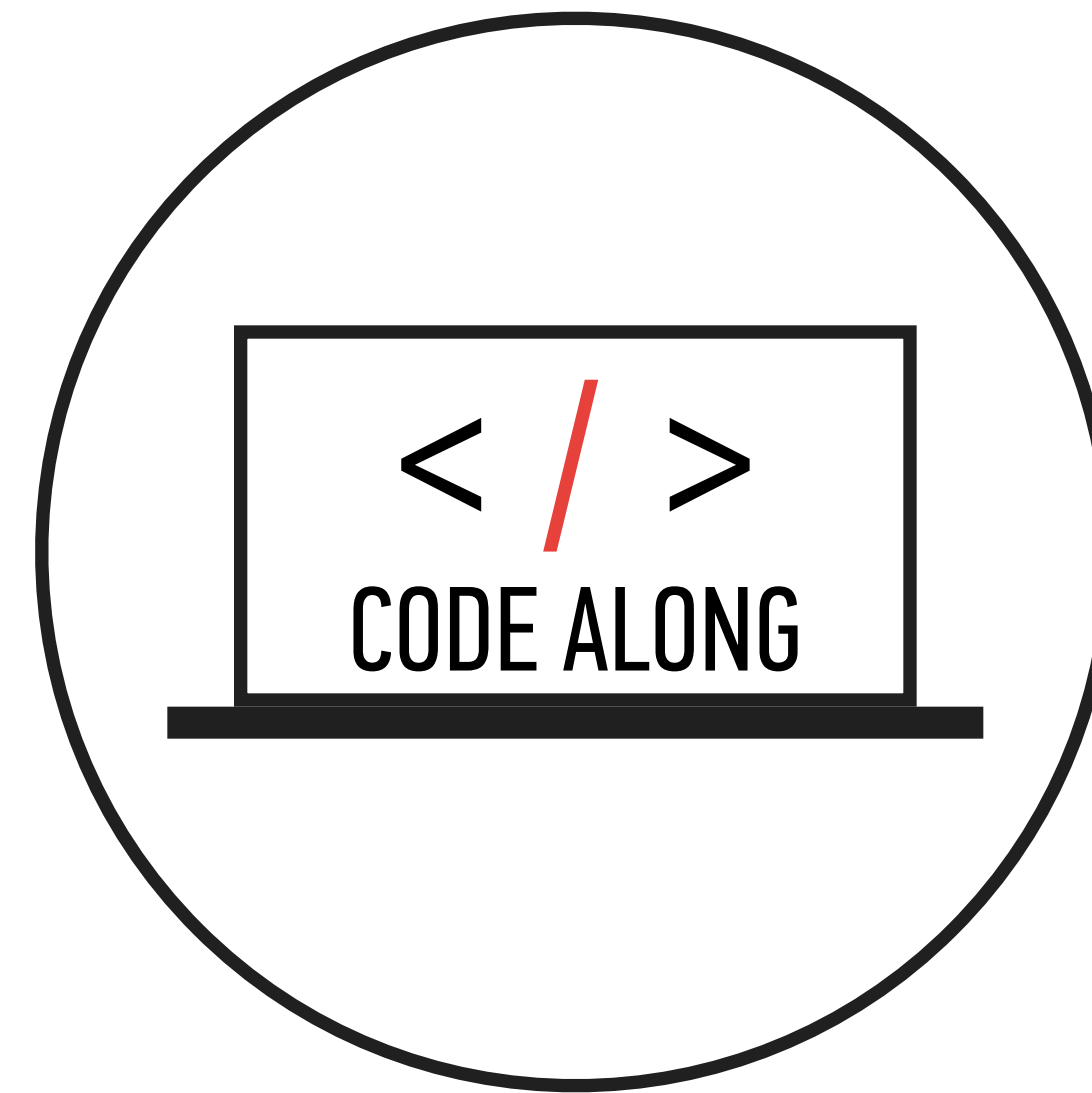
# REVIEW

ROUTES, MODEL, VIEW, CONTROLLER



# T-Shirt Management App

## Controllers & Views



# FORMS

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## ADDING FORMS TO VIEWS

» Used to collect input from the user

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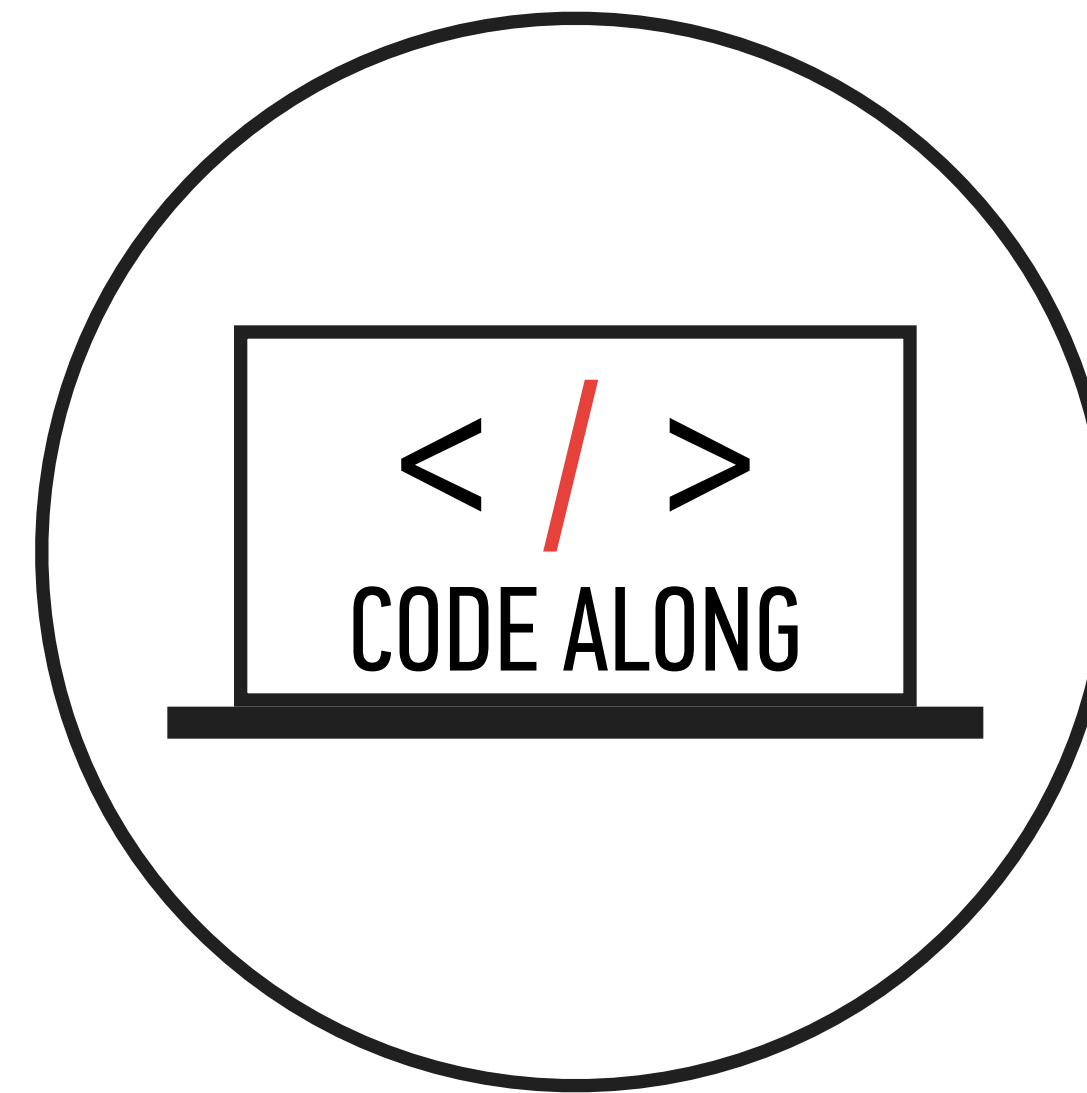
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## T-Shirt Management App Search Form

- » As a user I want to be able to search for a specific t-shirt in my collection.



# RECAP

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## SEARCH FORMS

When a user clicks 'Search'

1. Goes to the Shirts controller index action.
2. Sends the query as a querystring parameter (params[:q])
3. Filters results by the query
4. Searches shirts by name or description fields

# RECAP

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## PARTIALS

- » File name starts with an underscore
- » Inserted into page using the "render" keyword
- » Have access to instance variables
- » Forms are great candidates for partials
- » Rails magically handles the methods for us if we use model objects



# RECAP

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## QUERIES

» Search database with the keywords "where" & "LIKE"

```
where('name LIKE :query OR description  
LIKE :query', query: "%#{query}%")
```

» Searches the Shirt table's name and description fields.

# RECAP

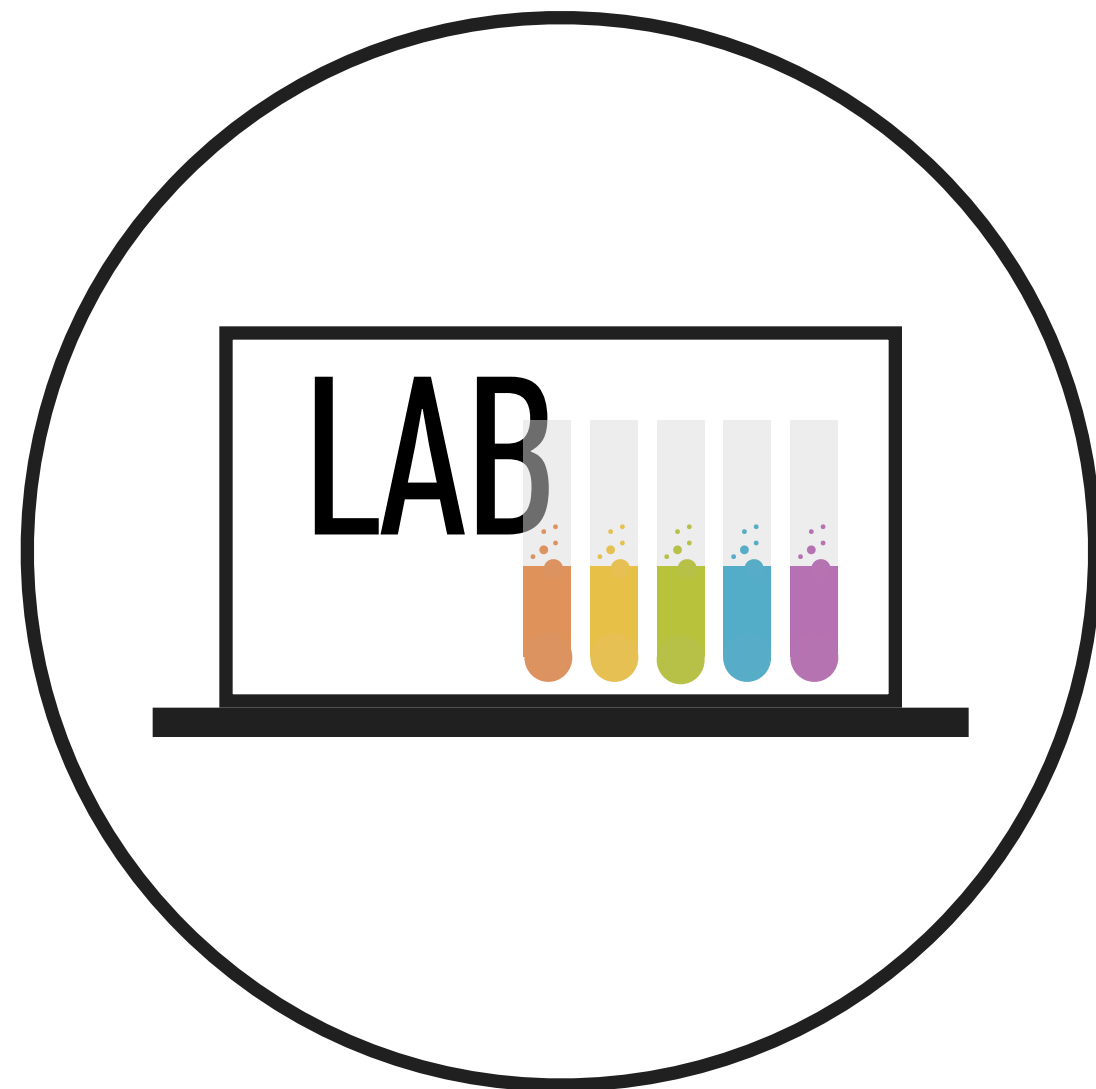
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## REFACTORING

- » Changing the structure of your code without changing its behaviour
- » Move all complex data queries to the model

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## MOVIE APP - SEARCH



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- » Create a search box that will search for a term in the movie's title, description and the year
  - » Create partials for the search box
  - » Move all complex data queries to the model

# FORMS

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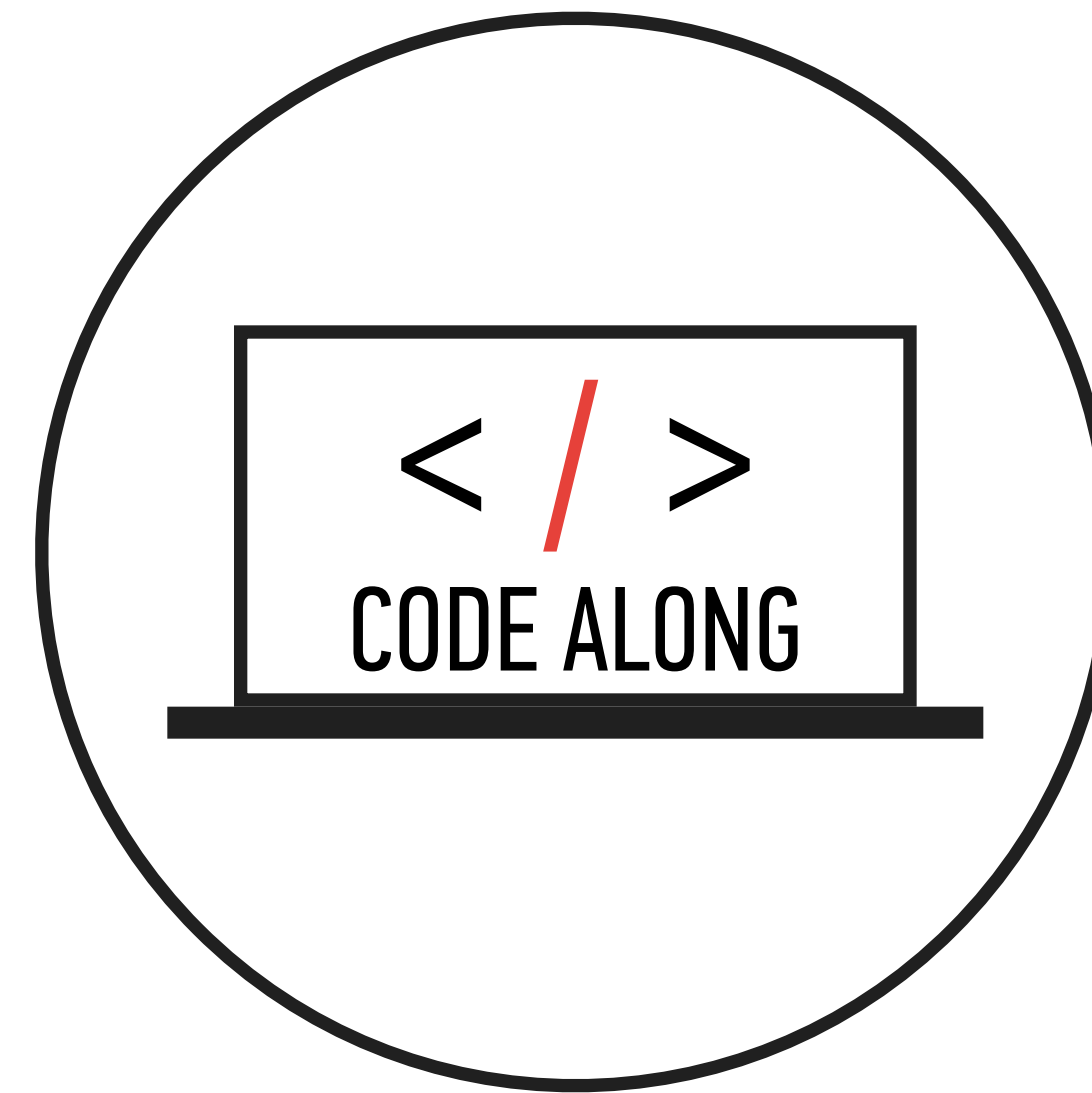
## ADDING TO THE DATABASE

- » We saw how a user can search the database with a form, but how does a user add to the database using forms?

## T-Shirt Management App

### Create & Edit Forms

- » As a user I want to add t-shirts to the database
- » As a user I want to edit t-shirts.



# RECAP

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## REST

- » REpresentational State Transfer
- » Architecture style
- » Stateless, Client-Server, Cacheable communications using the HTTP protocol
- » Defined in Chapter 5 of Roy Fielding's doctoral dissertation (UC Irvine, 2000)

[http://www.ics.uci.edu/~fielding/pubs/dissertation/rest\\_arch\\_style.htm](http://www.ics.uci.edu/~fielding/pubs/dissertation/rest_arch_style.htm)

# RECAP

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## REST

- » `:resources` in the routes file gives us LOTS (7) of routes
- » Perfect for managing "Resources"  
(Things in your domain, like Shirts and Movies)

# RECAP

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## FORM BUILDERS

» Form Builders are awesome!

» You MUST create an empty object in the controller for the magic to work

```
<%= form_for @shirt do |f| %>
```

```
  ...
```

```
<% end %>
```



# RECAP

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## STRONG PARAMETERS

- » Rails Controllers require you to whitelist which fields a form can send, and will be accepted by your application.
- » Used to protect from nasty attacks. Github got bitten by one a while back.

# RECAP

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## VALIDATION

- » Ensures that we are saving accurate information in the database
- » If our validation fails, don't add record to the database table
- » If our validation fails let the user know it failed

# RECAP

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## PRIVATE METHODS

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» Not routable, or callable from the outside world

# RECAP

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## FLASH

- » Used to send messages to the user
- » Good for letting them know something succeeded
- » Use `flash[:notice]` and `flash[:error]`
- » Put checks in the layout to always show messages

# HOMEWORK

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Complete and submit the Movies app (due next week)