

PHP Framework: Kohana



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What is a framework?



- ⌘ Allows you to write higher-level code without worrying about lower-level details
- ⌘ Libraries and utilities to eliminate boilerplate code
- ⌘ An architecture for your project (e.g. MVC)
- ⌘ Embodies a set of procedures, rules, and practices
- ⌘ “Inversion of control”

Kohana PHP Framework!



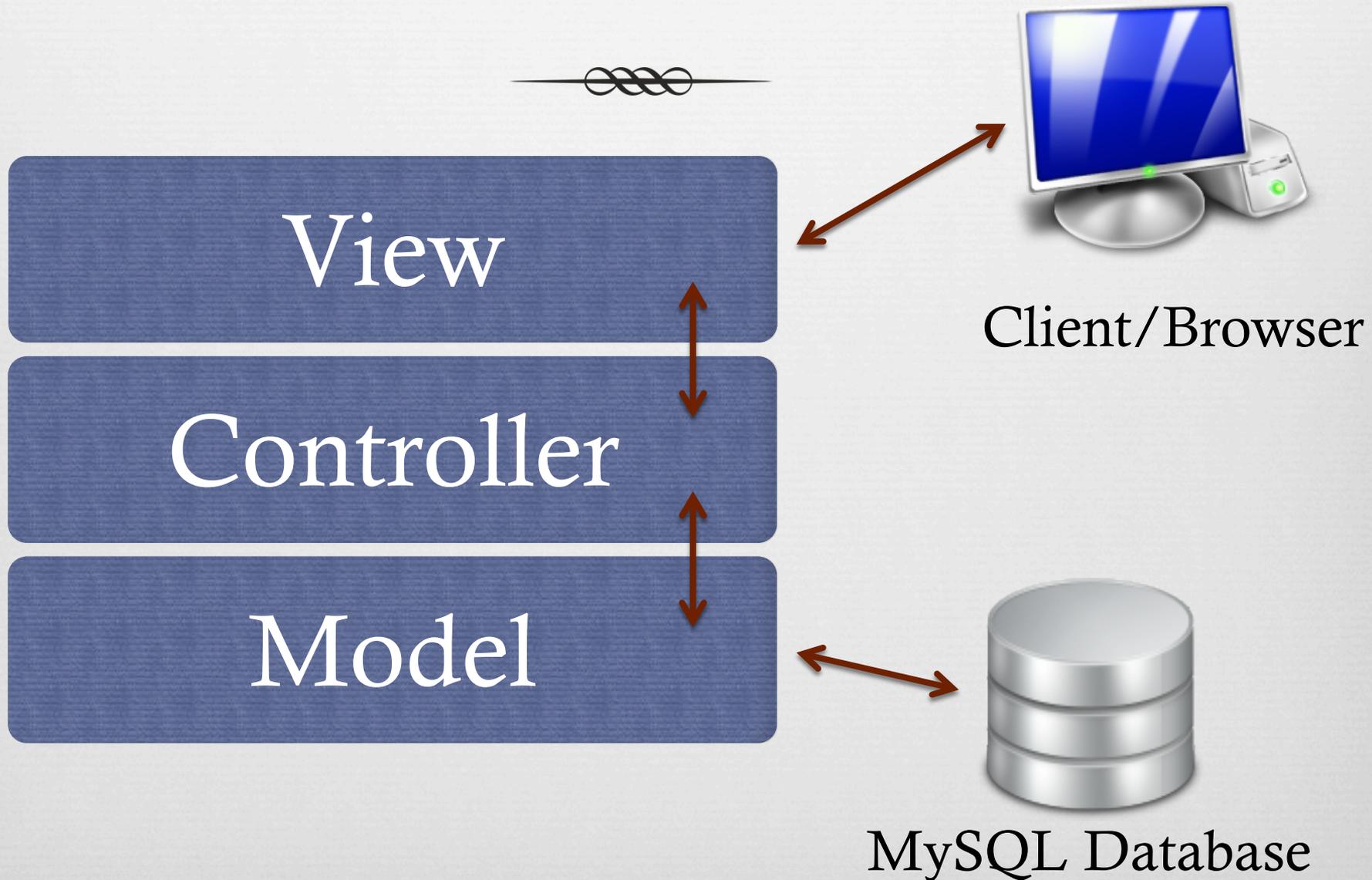
Kohana



- ❧ One of many PHP frameworks
- ❧ Lightweight, gentle learning curve
- ❧ Uses MVC architecture



MVC Architecture



MVC Components



- ❧ **Model:** Database interface and application state
 - ❧ **Controller:** Application logic
 - ❧ **View:** Render the data using a template
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- ❧ **Why?**
 - ❧ Separation of concerns
 - ❧ Code reuse
 - ❧ Don't Repeat Yourself (DRY) code

Let's try it!



☞ We're going to build a very basic blog from scratch!

Routing



- ↻ Matches URLs to controller actions
- ↻ `foo.com/blog/all` will be routed to `Controller_Blog#action_all`
- ↻ URL parts can also be mapped to action parameters!

Controllers



- ❧ Controllers handle application logic
- ❧ Controllers have various actions that handle different things
- ❧ Create separate controllers for separate parts of website (generally one controller per model)

Object-Relational Mapping



- ❧ Representing database rows as programming objects
- ❧ Preserves relationships between objects
- ❧ Allows you to attach functionality to objects

Post Model



- ⌘ Automatically comes with a lot of pre-built functions!
- ⌘ Can attach additional functions (highly suggested)
- ⌘ Where validations and filtering will happen

Action for all posts



- ❧ We need to:
 - ❧ Grab a list of all the posts
 - ❧ Render a list of all the posts

Views



- ❧ Dynamic views for generating different pages from a single template
- ❧ Separates view code from the rest of the app
- ❧ Plenty of helper functions to help you write code faster!

Action for creating new posts



- ❧ We need to:
 - ❧ Create a form
 - ❧ Check whether we're making a POST request
 - ❧ Create a Post object
 - ❧ Attempt to save it
 - ❧ Display errors if there are any, and keep the old values
 - ❧ Redirect to blog if all goes well

Templates



Add a template for your entire site!

XSS Security



One last thing to be careful of ☺

Resources



- ❧ <http://kohanaframework.org/>
- ❧ <http://kohanaframework.org/3.3/guide>
- ❧ <http://kohanaframework.org/3.3/guide-api>