Symfony Framework

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Symfony Topics

General Discussions
PHP Final Reflection Quiz

- What is MVC?
- Why use a PHP framework?
- Modern PHP Frameworks

Composer basics
 - What is a composer?
 - and how to use it

Symfony framework
 - What is Symfony?
 - How to install and use Symfony?

Symfony installation and setup
  - Check your environment
    - Computer, IDE, Terminal
    - Git
    - PHP > 7.3
    - Composer (to manage dependencies)
    - Symfony CLI

MVC - What is it?
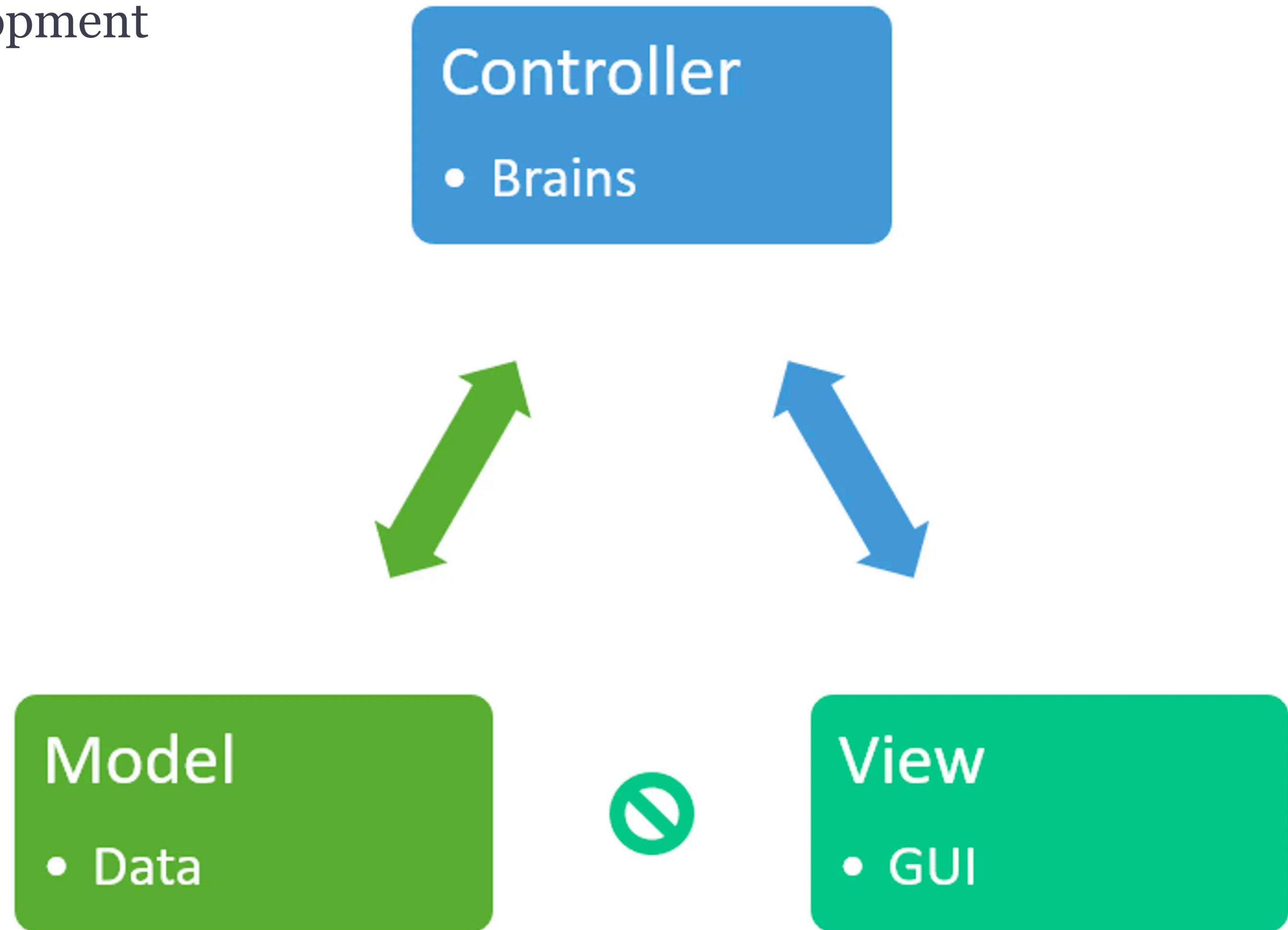
MVC - MODEL VIEW CONTROLLER

software design patterns for app and web development

Model: stores & manages data

View: Graphical User Interface

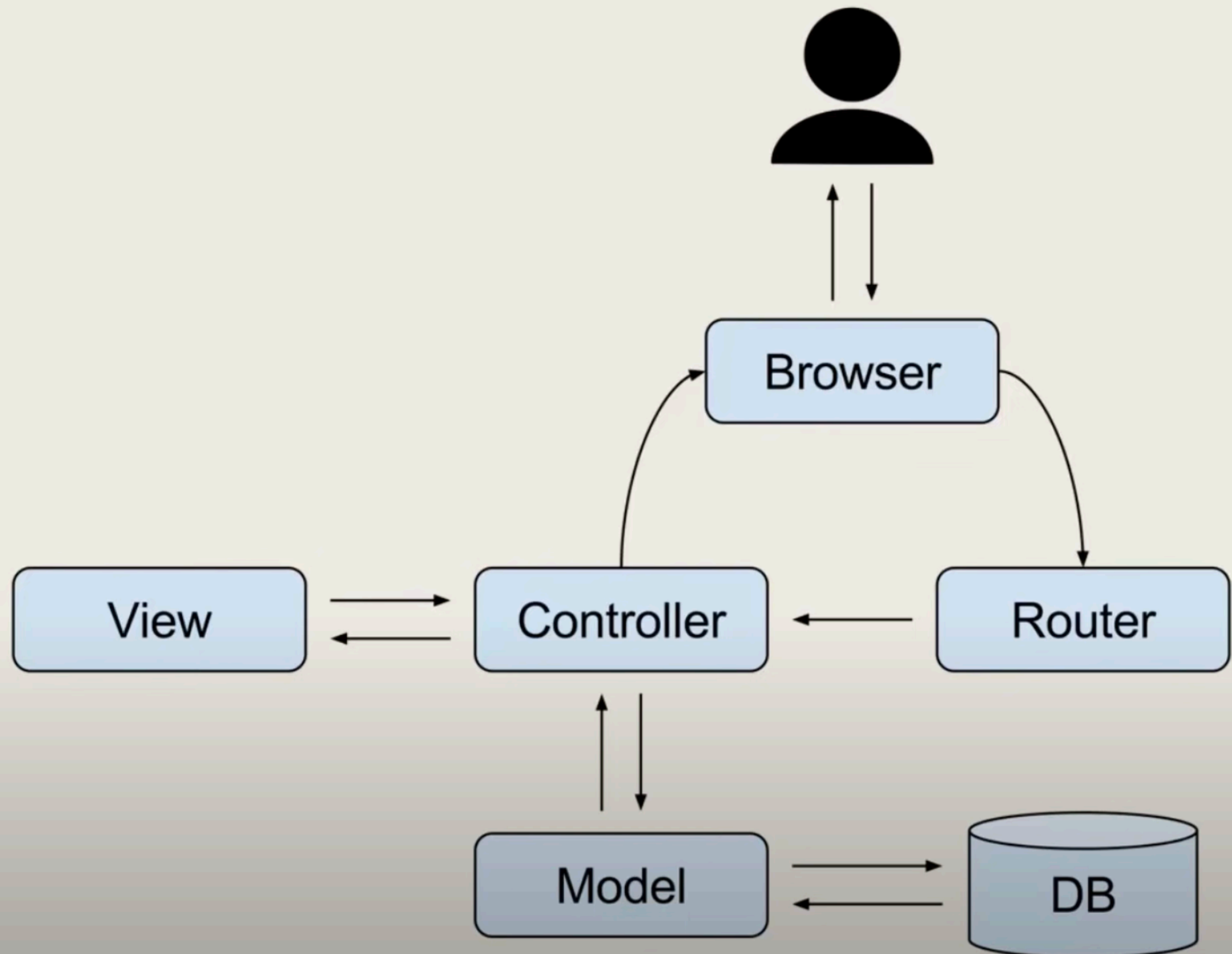**Controller:** Brains of the application

Some web frameworks that use MVC Concepts

- Ruby on Rails (Ruby)

- Sinatra (Ruby)

- Laravel (PHP)

- Codeigniter (PHP)

- Zend (PHP)

- Express (JS)

- Backbone (JS)

- Angular (JS)

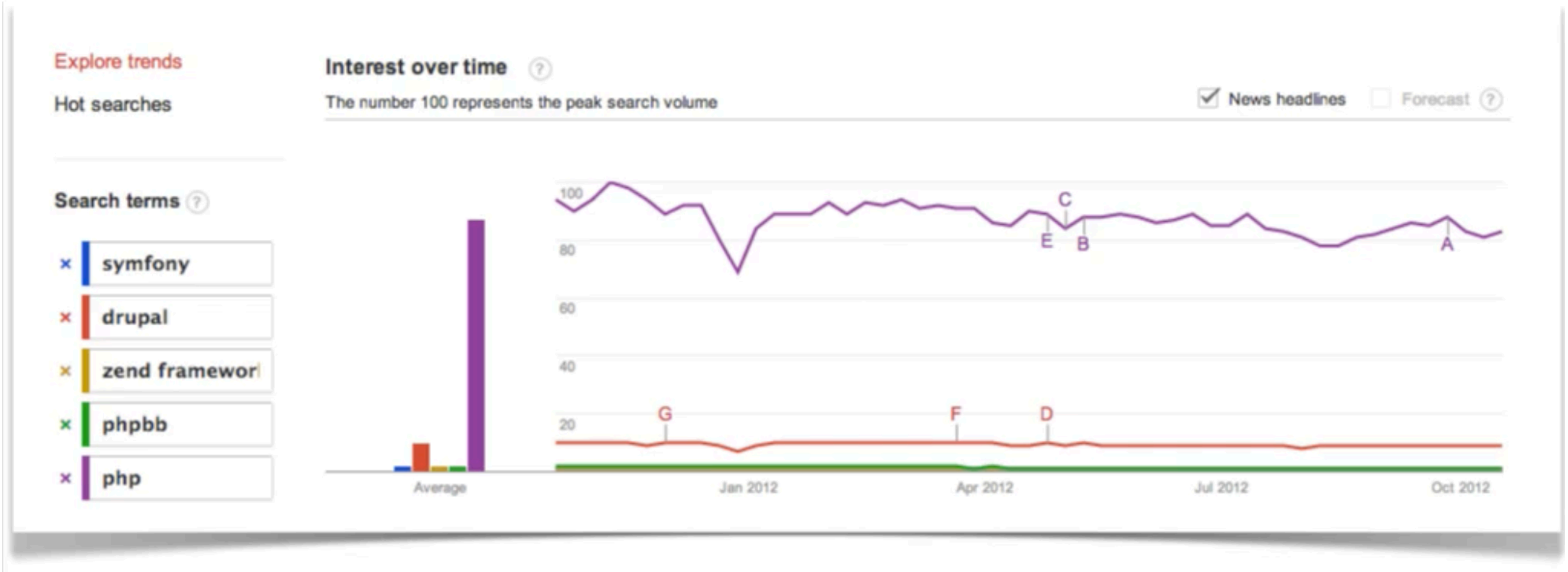- Django (Python)

- Flask (Python)

Also, **Symfony (PHP)**

MVC - Flow

Why use PHP Framework?

- Fast development
- Less code to write
- Collaboration and Teamwork
- Easier to maintain
- Secure

Communities inside PHP

https://bit.ly/trends-php-groups

https://unelma.io/nilk3

https://trends.google.com/home

Modern PHP Frameworks

Most popular
- Laravel   https://laravel.com/
- Symfony   https://symfony.com/
- CodeIgniter   https://codeigniter.com/

Less popular
- Yii framework
- Cake PHP

Lesser-known
- Utopia-PHP   https://github.com/utopia-php/framework
- RhinoPHP-framework (who created this one, any guess?)
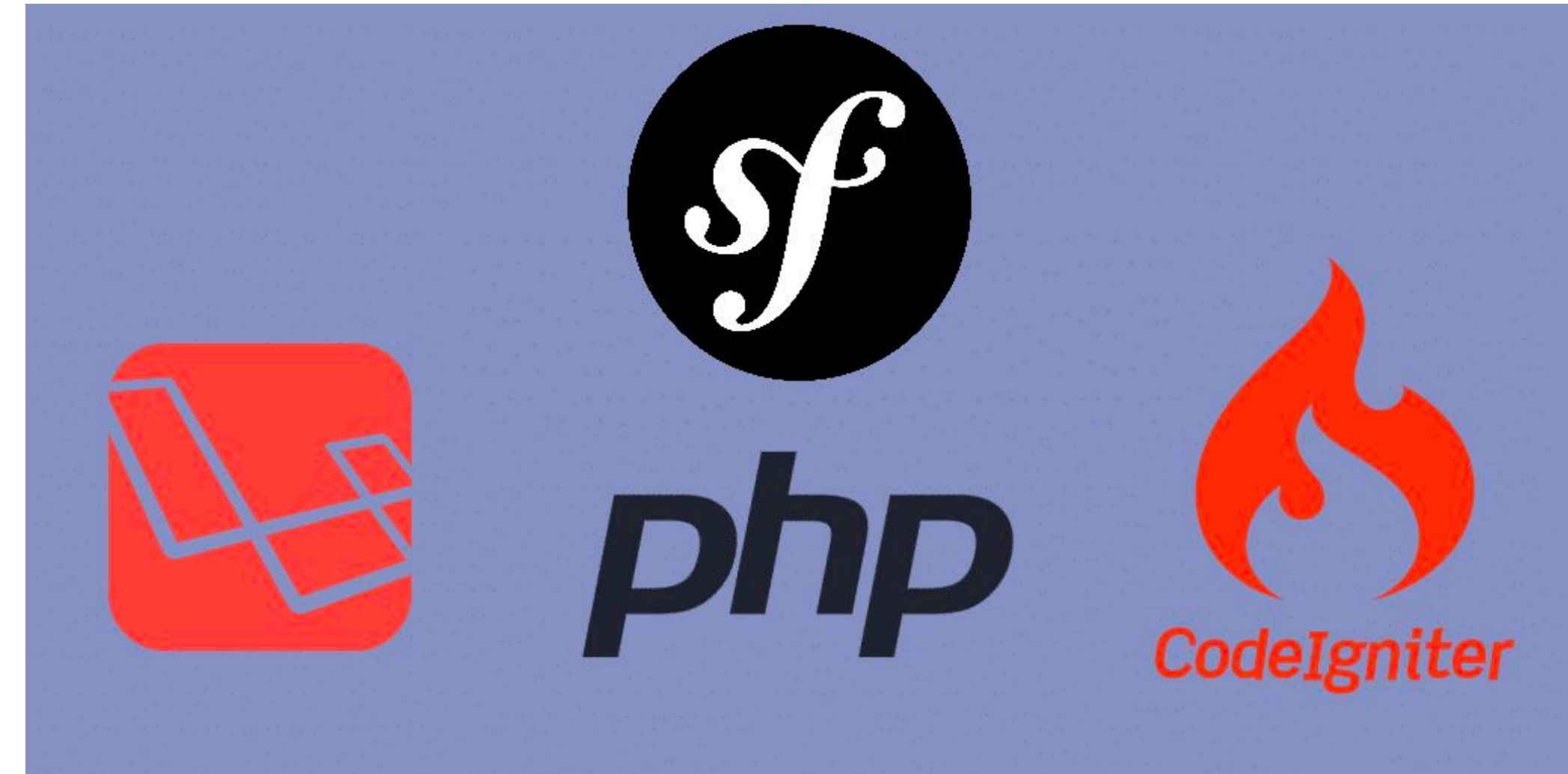
Some websites that use Laravel framework

- BBC
- Pfizer
- 9GAG
- Unelma.IO

Some websites that use Symfony framework

- Spotify
- Dailymotion
- Vogue France / Netherland
- Doc Planner
- BlaBlaCar

https://www.etondigital.com/popular-symfony-projects/

https://codelabs.rocks/blog/applications-of-symfony-php

VS Code Extensions (optional)

- PHPDoc Comment
- PHP Namespace Resolver
- HTML Snippets
- JavaScript (ES6) code Snippets
- Symfony code snippets And Twig Support & Yaml
- Symfony for VSCode
- Twig Language
- Twig
- Twig Language 2
- Emmet Live

Composer - What is it?

A dependency manager for PHP

https://getcomposer.org/

Composer - Installation

Go to GetComposer.org, click "Download", then copy one of the two code blocks depending if you have `curl` installed.

```
$ curl -s https://getcomposer.org/installer | php
```

Browse packages

https://packagist.org/

You can search for many packages (just like in npm)

Go and search for "rhinophp"

Composer - Walkthrough

Create an empty folder e.g.

mkdir composer-learning

`cd composer-learning/`

`Go to ->` https://packagist.org/

Search "rhinophp" and download it by executing the following command:

```
composer require rhinophp/rhinophp
```

Open the composer-learning folder in VS Code

Browse through the folders and files

Composer - Walkthrough

Search "skeleton" and download it by executing the following command:

```
composer require symfony/skeleton
```

Open the composer-learning folder in VS Code

Browse through the folders and files

See how the vendor folder has changed!

See composer.json file

```json
{
    "require": {
        "rhinophp/rhinophp": "^1.0",
        "symfony/skeleton": "^6.0"
    }
}
```

What is Symfony?

Symfony is a set of reusable PHP components and a PHP **framework** to build web applications, APIs, microservices and web services.

https://en.wikipedia.org/wiki/Symfony

Who created Symfony?

Original author: Fabien Potencier
Symfony community

https://github.com/fabpot

Symfony - Installation

Download

https://symfony.com/download

Homebrew

$ brew install symfony-cli/tap/symfony-cli

Symfony - Let's check if we have a Symfony installed

Open terminal

`symfony`

`symfony list`

Symfony - Let's start a brand new Symfony App

Open terminal

```
symfony new myfirstapp
```

myfirstapp - name of our project

Open the myfirstapp project in VS Code and browse

So what did that `symfony new` command do?

Symfony - Let's start a brand new Symfony App

Open terminal / Go to your new topsecret project

```
git status
```

```
git log
```

Our entire project is very small actually, try this command:

```
git show --name-only
```

-       How many files do you have?
-       Not a lot of code actually

If you want to start fully-featured project, you can do that by running:
```
symfony new myfirstfullapp --webapp
```

Symfony - Let's start a brand new Symfony App

Open terminal / Go to your new topsecret project

`Checking Symfony requirements`

`symfony check:req`

Starting the local development server

`symfony serve -d`

Moment of truth! Copy the URL, spin over to your browser, hold your breath and woo!

Refresh the page few times

Symfony - Let's start a brand new Symfony App

Symfony - project structure

- config/ - Contains all configuration files such as routes, services and packages

- **migrations/** - Contains all doctrine migration class files

- src/ - Contains all PHP code

- **templates/** - Contains all Twig templates

- bin/ - Contains files for the bin/console command. Ex: php bin/console <command>

- var/ - Contains all automatically-created files like cache files and logs

- vendor/ - Contains all third-party libraries. These are downloaded via the Composer package manager

- public/ - It is the document root of the project where any publicly accessible files are contained

Symfony - how it works
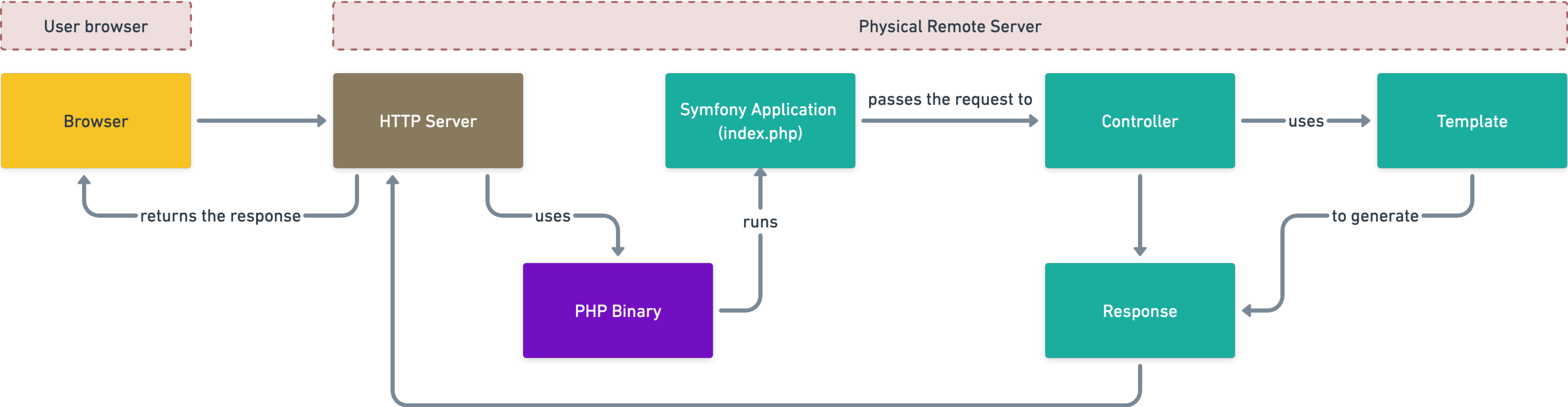
Symfony-MAMP (useful later)

Symfony-MAMP is a set of docker images that include a starter kit for a MAMP stack

Steps
1. git clone https://github.com/kalwar/Symfony-MAMP
2. Follow installation instructions
3. cd Symfony-MAMP
4. Delete "web" folder, **rm -rf /web**
5. Create a new fresh symfony project i.e. symfony new web
6. **cp .env.example .env && cp web/.env.example web/.env**
7. **docker-compose up —build**
8. Check docker desktop
9. Check phpmyAdmin and Symfony 7