

## Composer & Frameworks

How they make development easier

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#### About me

- 25 years
- Student @ Fontys Venlo
- 4th Semester Software-Engineering
- https://github.com/lukeelten

## Frameworks - Do not reinvent the wheel

### What is a Framework?

[...] a software framework is an abstraction in which software providing generic functionality [...]

- Wikipedia (Software framework)

### What is a Framework?

- Reusable code (DRY)
- Design pattern applied
- Server-side / Client-side

## Why should I use a Framework?

- + Faster Coding
- + Security Functions included
- + Tested and frequently used
- + ORM

### But ...

- Time to learn
- Forced application structure
- Multiple files to load

#### Some Frameworks in detail

## Symfony







## Contao





## **CakePHP**





Massachusetts Institute of Technology



## **Flow**



## Other important frameworks

- Laravel
- Horde Framework
- Yana Framework
- Yii Framework

# Composer - Dependency Management for PHP

## What is Dependency Management?

## Dependency Management in other languages

- Maven (Java)
- gem / bundler (Ruby)
- pip (Python)
- npm / bower (Javascript)

## Why composer makes your life easier

## Important files

- composer.json
- composer.lock
- vendor/autoload.php

## composer.json

```
{
    "name": "vendorName/projectName",
    "require": {
        "important/package": "2.*",
    }
}
```

## **Versioning Schema**

## **Common mistakes**

Workshop

## Installing composer

#### **OSX**

brew install composer

#### Linux

Package Manager: composer or php-composer

Download .phar at https://getcomposer.org/download

#### **Windows**

Installation package on https://getcomposer.org/download

Existing PHP Installation required (e.g. XAMPP)

## Using composer

#### **General command**

composer OR php composer.phar

### Create project

composer create-project vendor/projectname target\_dir

### Install package

composer require [--dev] package\_name

## Use existing project

composer install

composer update

## **Start CakePHP Project**

#### **Create Project**

composer create-project --prefer-dist cakephp/app AppName

Thank you for your attention.

Any Questions?

This talk is freely available on GitHub.

https://github.com/lukeelten/typo3camp2016

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#### **Sources**

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- http://cakephp.org
- http://bakery.cakephp.org
- https://en.wikipedia.org/wiki/Software\_framework
- http://flow.typo3.org