PHP Verwendung https://w3techs.com/technologies/details/pl-php

Version Control: thomas2019pragmatic (data1)

1 Symfony

1.1 Controller

Routing

1.2 Serializer

XML

CSV

SQL-Insert

1.3 Console

1.4 Template-Engine Twig

1.5 Http Foundation

Request

Response

StreamedResponse

1.6 HttpClientInterface

Download

1.7 File System

1.8 UUID

2 Backend

2.1 Setup-XML

2.2 Konsole

2.3 Doctrine

2.4 Datenbank / MySQL

3 Frontend

3.1 Webpack / Node.js

3.2 Bootstrap

Layout, Nav-Tabs, Modal, Icons

3.3 SCSS

3.4 Tooltips

4 AJAX

Modal

BfArM/Dimdi Links

5

Model-View-Controller (Voorhees, 2020, Seite 176f)

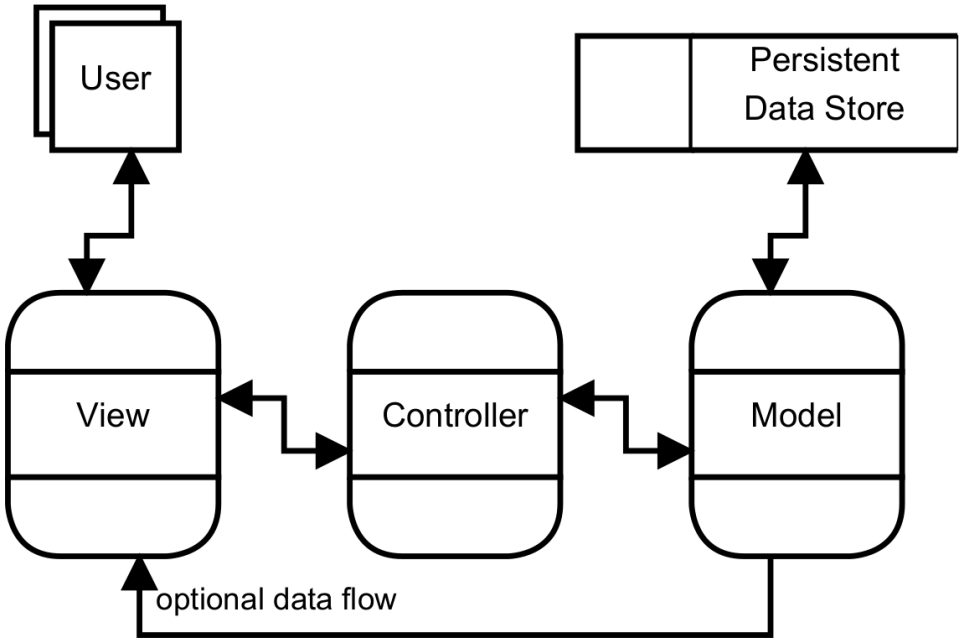

Abbildung 1: (Voorhees, 2020, Seite 177)

Abstraction and Decoupling

Symfony (Potencier, 2022)

Dependency Injection (Seemann and van Deursen, 2019)

When to stream? (Braaksma, 2014)

CSS Flexbox (Coyier)

Programming Languages Harmful (Janssens et al., 2017)

6 Anonyme Funktionen

Callback

Zum Schreiben der ConceptMap

Data-Preprocessing

InsertEncoder

https://dev.mysql.com/doc/refman/en/insert-optimization.html

Literatur

A. Braaksma, "Streaming design patterns or: How i learned to stop worrying and love the stream," *XML LONDON 2014*, pp. 24–52, 2014. [Online]. Available: http://xmllondon.com/2014/xmllondon-2014-proceedings.pdf

C. Coyier, *CSS Flexbox Layout Guide*. [Online]. Available: https://css-tricks.com/snippets/css/a-guide-to-flexbox/

S. Janssens, U. P. Schultz, and V. Zaytsev, *Can Some Programming Languages Be Considered Harmful?*, 2017. [Online]. Available: https://grammarware.net/text/2017/harmful.pdf

F. Potencier, *Symfony 6: The Fast Track*. Symfony SAS, 2022. [Online]. Available: https://symfony.com/doc/6.4/the-fast-track/en/index.html

M. Seemann and S. van Deursen, *Dependency Injection Principles, Practices, and Patterns*. Manning, 2019.

D. Voorhees, *Guide to Efficient Software Design: An MVC Approach to Concepts, Structures, and Models*, ser. Texts in Computer Science. Springer International Publishing, 2020.