



Pemrograman Web2

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Pemrograman Web2 : 3 SKS

Kehadiran 5%

UTS : 25%

Tugas & Quiz : 40%

UAS : 30%

Prerequisite:

- Pemrograman Web1
- Basis Data

CPMK01: Memiliki pengetahuan dalam mengembangkan algoritma/metode yang diimplementasikan dalam perangkat lunak berbasis komputer

CPMK02: Mempunyai kemampuan mengembangkan dan mengevaluasi algoritma/metode berbasis komputer

Portofolio Project:

1. Project 1 : Individu
2. Project 2 : Kelompok

1. Pengantar Server Side Programming
2. Server Side Programming -1
3. Server Side Programming -2
4. Server Side Programming -3
5. Web - SQL Database Connection
6. Object Oriented Programming -1
7. Object Oriented Programming -2
8. Pengantar Web Framework
9. MVC – Web Framework -1
10. MVC – Web Framework -2
11. MVC – Web Framework -3
12. MVC – Web Framework -4
13. Web Session & Management User
14. Web Service

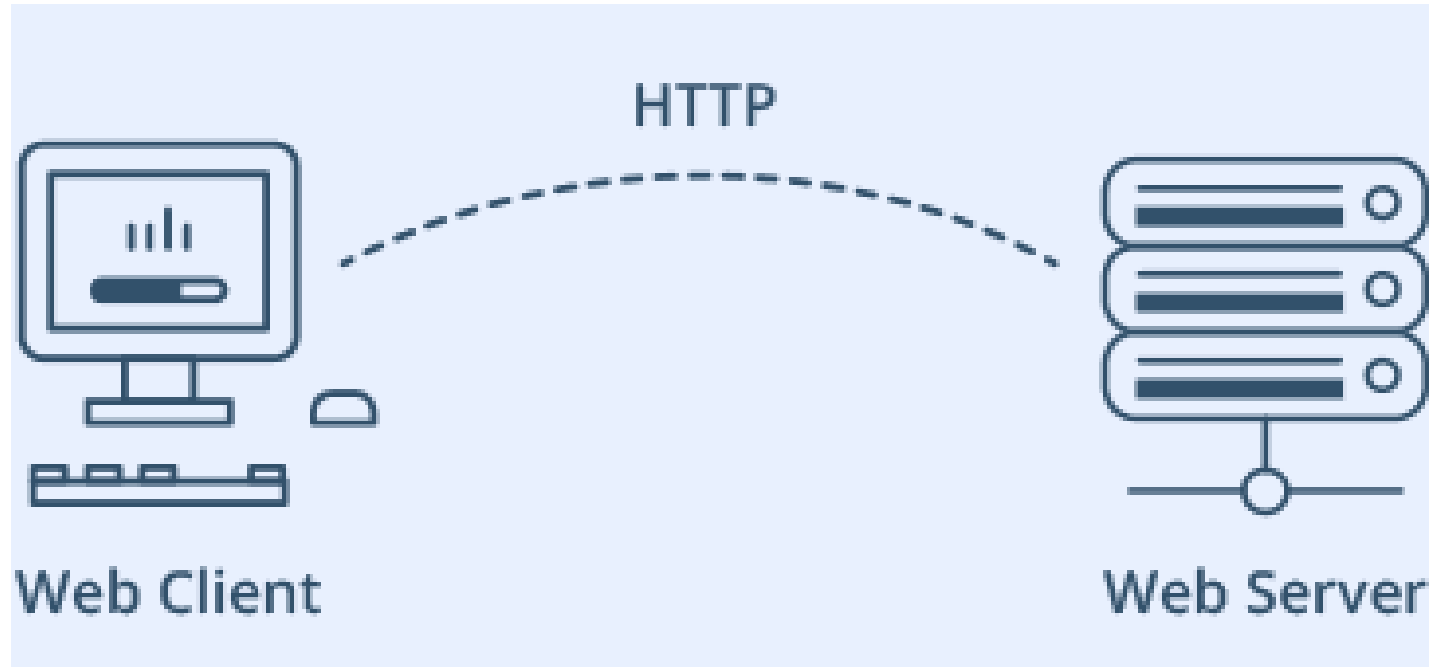
UTS

UAS

Pengantar Server Side Programming

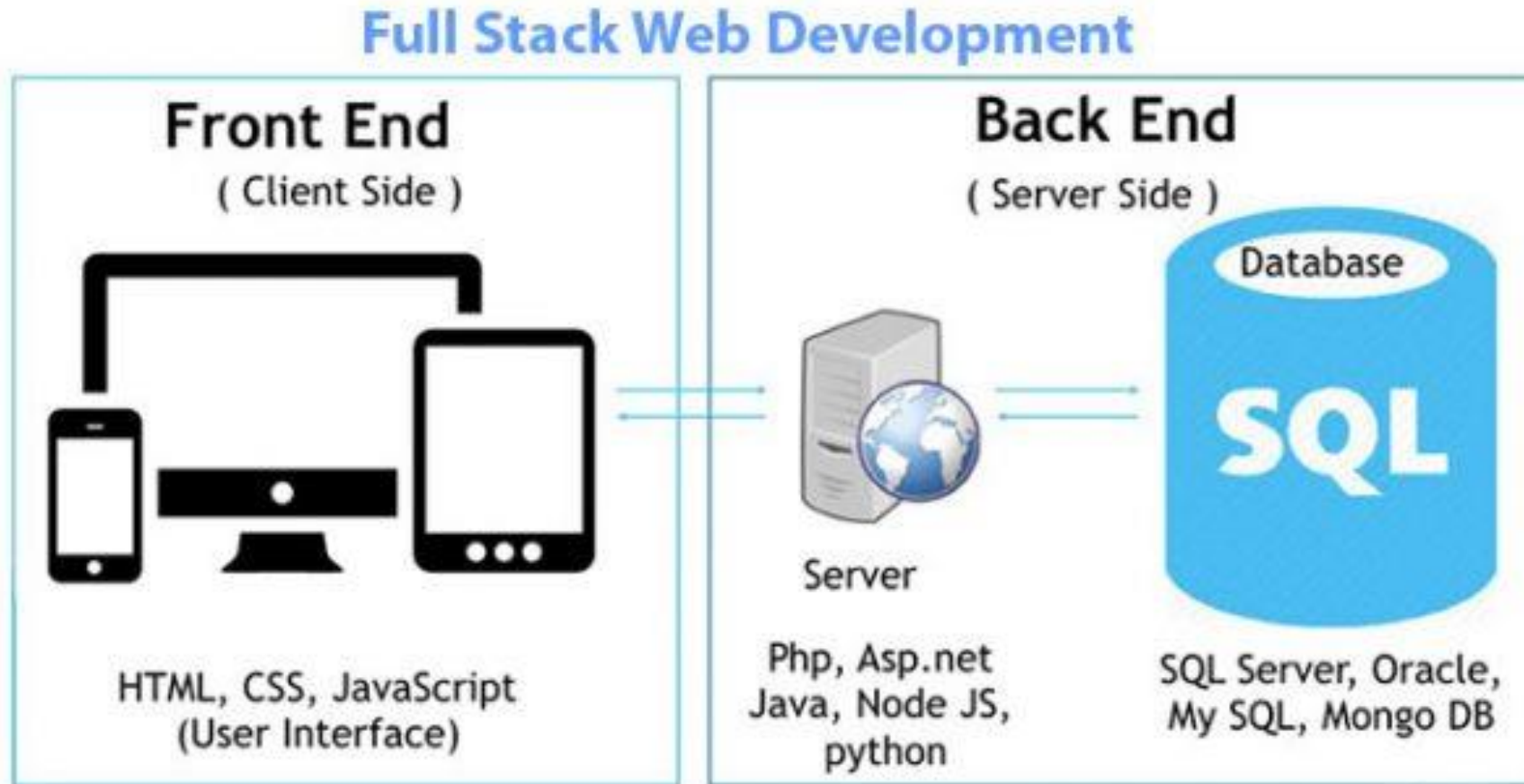
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Client - Server



- HTTP: Protokol network yang digunakan oleh aplikasi web untuk bertukar informasi
- Karakteristik HTTP:
 - Client – Server
 - Request – Response
 - Sessionless

Full Stack Web Development

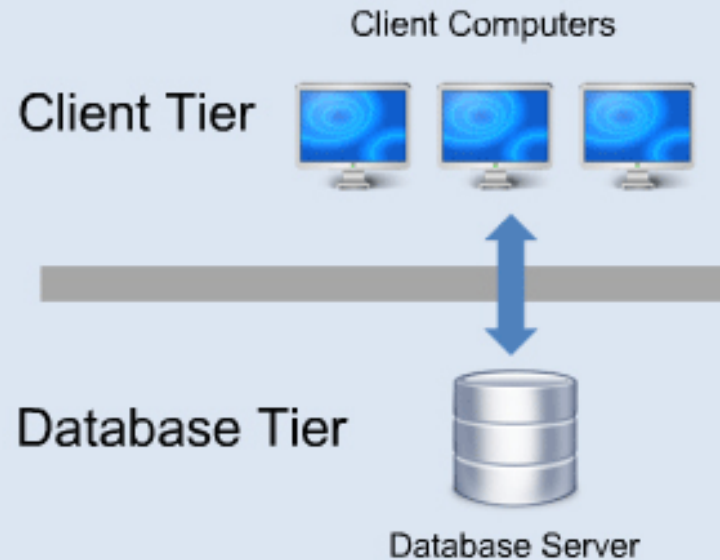


Arsitektur Lapisan Aplikasi

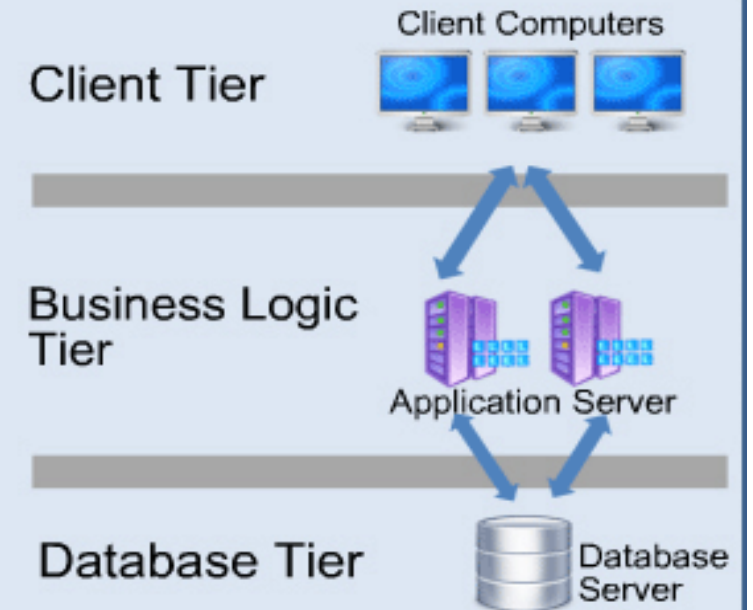
1-Tier Architecture



2-Tier Architecture

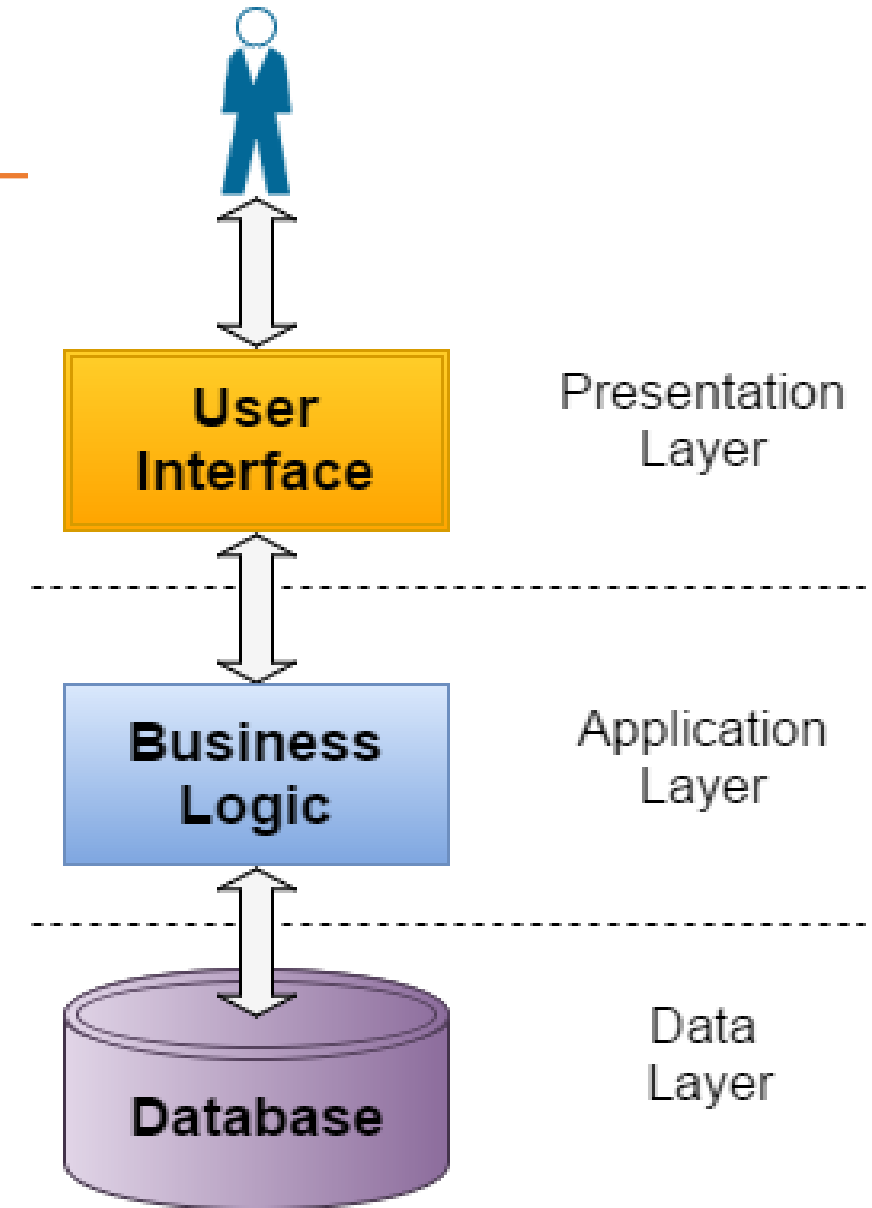


3-Tier Architecture



3-Tier Architecture

- ✚ Presentation Layer :
UI/UX (User Interface/User Experience) :
Antar muka aplikasi
- ✚ Application Layer :
BL (Business Logic) : Logika bisnis aplikasi
- ✚ Data Layer :
DB (Database) : Penyimpanan data aplikasi



What Next ?

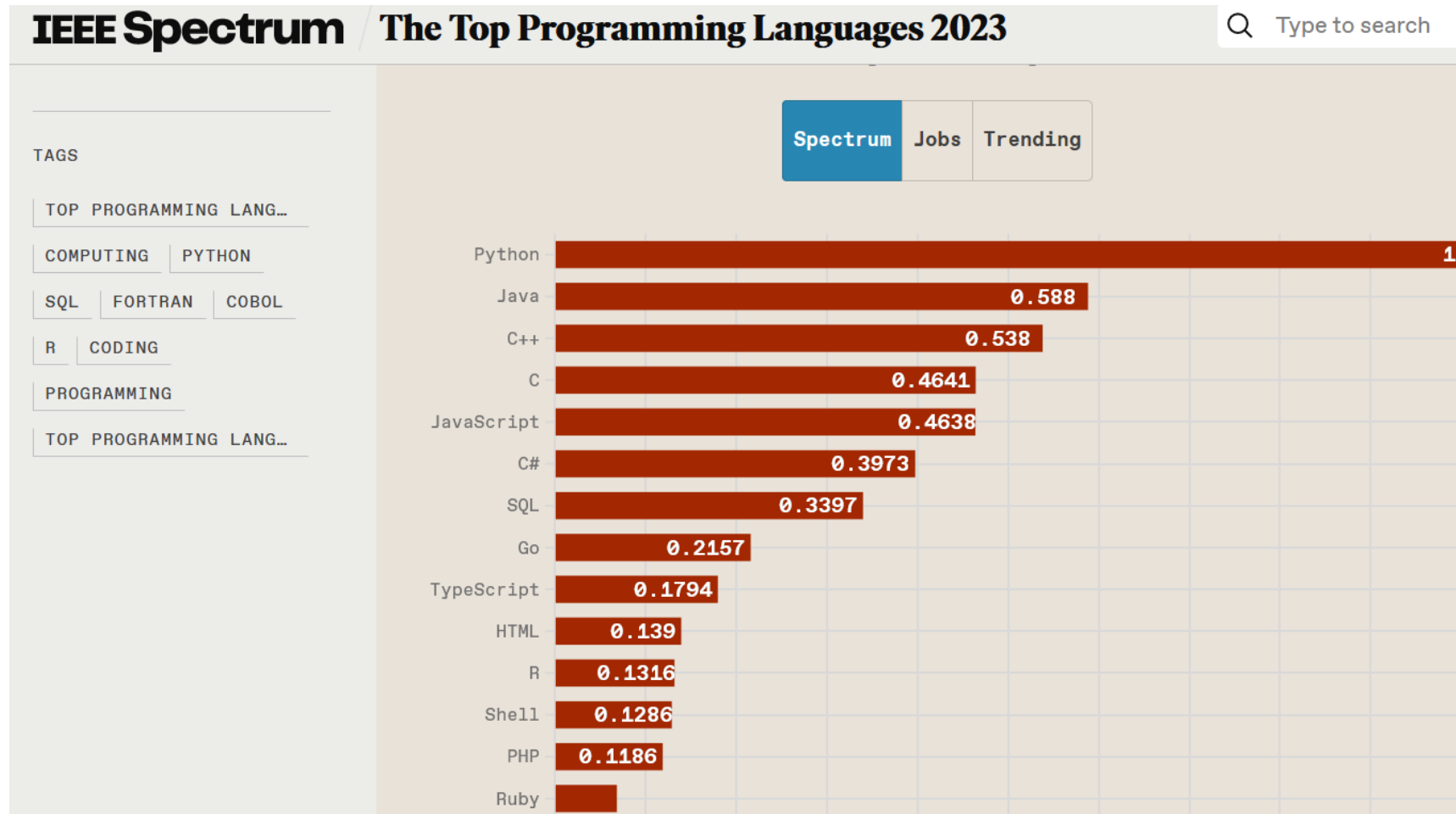


- ✚ Frontend HTML/CSS Framework:
bootstrap, foundation, ..
- ✚ Server Side Language :
PHP, Ruby , JSP (Java), ASP.NET (C#), python ..
- ✚ JavaScript Framework:
React, Angular, Vue.js, ..
- ✚ Database
MySQL, PostgreSQL, MongoDB..

Server Side Programming

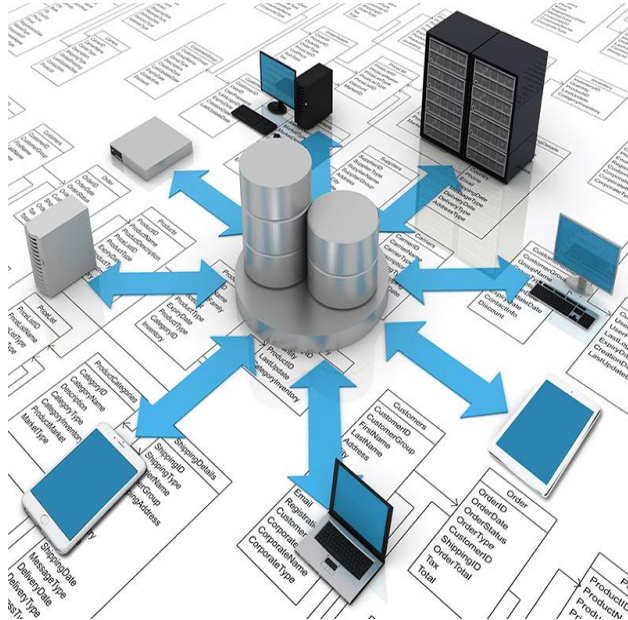
- ✚ PHP : bukan yang terbaik namun cukup solid
- ✚ Node.js : baru , powerful dan menarik untuk dipelajari
- ✚ Ruby On Rails : Framework bagus (sedang menurun)
- ✚ Python : Mudah dipelajari
- ✚ Servlet/JSP (Java) : Konsep OOP harus kuat
- ✚ ASP.NET + C# : Konsep OOP harus kuat

Top Programming Language – IEEE Spectrum 2023



<https://spectrum.ieee.org/the-top-programming-languages-2023>

Server Side Programming - Database



Relational Database

- MySQL
- PostgreSQL
- Oracle
- SQL Server

NoSQL

- MongoDB
- CouchDB

- ✓ Pilih satu dan focus:
 - ✓ PHP | MySQL
 - ✓ Node.js | MongoDB



JavaScript Framework

- React [Flux, Redux]
- Angular 2
- Vue.js
- Express (backend)

PHP Framework

- Laravel
- Yii2
- CodeIgniter**

Ruby On Rails

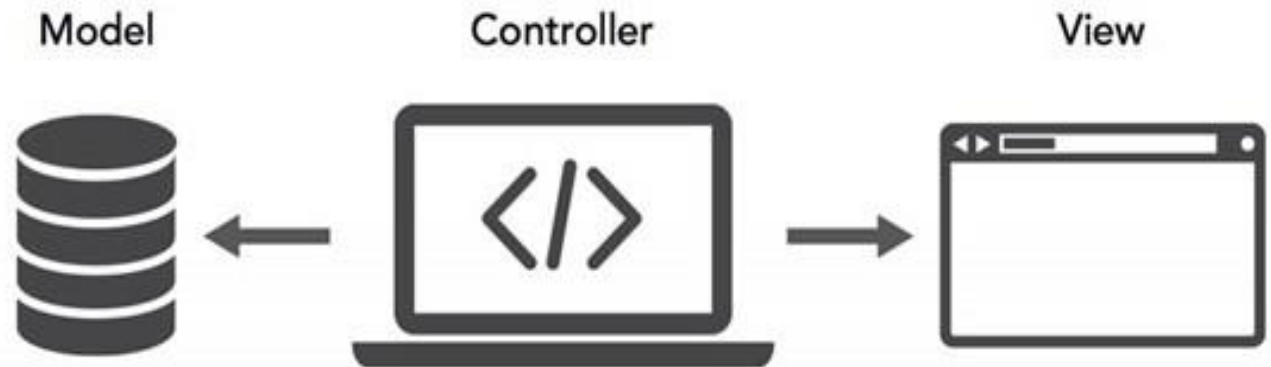
Java Web Framework

- Spring MVC
- JSF
- Vaadin

Python

- Django
- CubicWeb
- Zope2

- Memahami Object Oriented Programming
- Model - View - Controller
 - Routing
 - Database Mapping
 - Helpers
 - Data Binding
 - Template & UI



Sumber:

- Web Development 2017 : channel youtube:
<https://www.youtube.com/watch?v=9hDKfBKuXjI>