

Web Programming with The Laravel Framework

#0 - Introduction

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**Programming Languages Research Group
Tuebingen University**

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Praktikum

- Title: Web Programming With The Laravel Framework [INF3213]
- ECTS: 6
- Time: every Wednesday (20.04.22 - 27.07.22) 10:15am - 11:45am
- Room: A302 (Informatik/Astronomie)
- Project submission deadline: 21th of August 2022
- Project Presentation: 22nd to 25th of August 2022 (tentative)



Lecturer

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Class Arrangement

To pass this Praktikum, you must:

- Complete three of four homework (15%). You are allowed to submit it late but only four (4) days after the due date, and It will deduct 20% per day from the total point you got.
- Talk (presentation, demo, and lead discussion) 1 Laravel's topic (see list of topics) (20%).
- Submit 15 (75% of total presentations) summary reports about your friends' presentation topic in one full paper A4. This is mandatory as a passport to submit your final project. (15%).
- Complete one project (see suggested topics) (50%)



Main Topic

- Introduction to Web Application
- Programming in PHP
- The MVC (Model-View-Controller)
- The Laravel Framework:
 - 1 Routing
 - 2 Middleware
 - 3 Securing request with CSRF

- 4 Controller
- 5 Request
- 6 Response
- 7 Template
- 8 URL Generation
- 9 Session
- 10 Validation
- 11 Error handling
- 12 Logging
- 13 Model (Database)
- 14 Helper



Presentation Topic

Topics are taken from the advanced topic in Laravel (see this category in the documentation: Digging Deeper, Security, Database, Eloquent ORM, Testing).

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|--|---------------------------------------|---|
| 1 Artisan Console | 7 Authorization | 15 Notifications |
| 2 Query Builder and Pagination (Database) | 8 Broadcasting | 16 Queues |
| 3 Migrations and Seeding (Database) | 9 Cache and Rate Limiting | 17 Task Scheduling |
| 4 Eloquent ORM (Getting started) | 10 Compiling Assets | 18 Encryption, Hashing, and Password Reset |
| 5 Authentication | 11 Events | 19 Browser Tests |
| 6 HTTP Testing | 12 File Storage | 20 Mocking |
| | 13 Localization | |
| | 14 Mail and Email verification | |



Project Topic

Suggested topic but not limited to.

- Web API (Application Programming Interface) with Laravel Passport
- Full-text search with Laravel Scout
- CRUD+ (Create, Read, Update, Delete, +) - Web application
- or, build application using one package of Laravel



Material and Assignment

- All materials are available on
<https://github.com/steven-lolong/WPwTLF-SS2022>
- Submit assignment via email to:
steven.lolong@uni-tuebingen.de

