Óbuda University John von Neumann Faculty of Informatics	Institute of Software Engineering

Name and code: Web development using PHP/Symfony (NAIWD1SVND)		**Credits:** 4
Computer Science BSc		*Daytime 2020/21 year I. semester*

Subject lecturers: Zsolt Szabó-Resch				
Prerequisites: (with code)				
Weekly hours:	Lecture: 2	Seminar: 0	Lab. hours: 2	Consultation: 0
Way of assessment:	Examination			

Course description

Goal: The students will obtain competency in the basics of the PHP language, and they will obtain practice in creating PHP scripts. In addition, they will gain proficiency in industry-level PHP development using the Symfony framework.

Course description: Introduction to the PHP programming language, basic control structures and functions, file and session management, database management, Symfony/Doctrine basics, dependency injection, unit tests

Lecture schedule

Education week	Topic
1	*Practices*: Frontend vs Backend, HTML + CSS *Homework*: XAMPP and Composer and PhpStorm installation
2	*Practices*: Backend vs Framework, PHP/Symfony intro *Homework*: Symfony installation
3	*Practices*: Symfony controller code: primes and fibonacci *Homework*: —
4	*Practices*: PHP Arrays and strings: calculator *Homework*: Song voting
5	*Practices*: Files; Directories; GD *Homework*: File-based "database" exercise (2 weeks)
6	*Practices*: None. Continue the homework *Homework*: — (Continue the previous)
7	*Practices*: Twig, Guestbook *Homework*: Recipe book (2 weeks)
8	*Practices*: Forms, Session, Manual login *Homework*: — (Continue the previous)
9	*Practices*: Forum + Form models *Homework*: Deltopic, register, pwmod
10	*Practices*: Doctrine with votes *Homework*: Add question/choice, del question/choice (2 weeks)
11	*Practices*: Service Layer + Cars *Homework*: — (Continue the previous)
12	*Practices*: — *Homework*: Project topic specification + skeleton on GIT + Add oe_nik_prog user
13	*Practices*: Authentication with Firewall *Homework*: Include authentication in project work
14	*Practices*: API, Menu, Tests *Homework*: Include the menu+bootstrap in project work

Midterm requirements

Signature: The completion of all homeworks is required for the signature.

The completion and the defense of the project work is required for the exam grade.

Midterm Test Scheduling

Education week	Topic
4	Homework: Song votes
5	Homework: File database
7	Homework: Recipe book
9	Homework: Forum extension
10	Homework: Voting extension
12	Homework: Project specification
13	Homework: Project with auth
14	Homework: Project with menu

Midterm grade calculation methods

Method of replacement

If the homeworks are not completed, they have to be completed by the signature retake deadline.

Type of exam

The project work defense is done in the exam date.

Exam grade calculation methods

The grade is created by evaluating the difficulty, the complexity and the quality of the project work; with the punctuality of the homeworks affecting the grade.

References

Obligatory:

Powerpoint presentations that can be downloaded from the webpage or from the Moodle system

SensioLabs: Symfony - The Book (http://symfony.com/doc/current/book/index.html)

http://w3schools.com/HTML/default.asp; http://w3schools.com/PHP/default.asp; http://uk.php.net/

Recommended:

C. Musciano, B. Kennyedy: HTML and XHTML, The Definitive Guide [O'Reilly, 2000, pdf, ISBN 9780596527327]

D. Sklar, A. Trachtenberg: PHP Cookbook [O'Reilly, 2002, pdf, ISBN 9781565926813]

J. Castagnetto, H. Rawat, S. Schumann, C. Scollo, D. Veliath: Professional PHP Programming [Wrox Press Ltd, 1999, pdf, ISBN 1-861002-96-3]

http://symfony.com/doc/current/index.html

Others:

M. Maslakowski: Teach Yourself MySQL in 21 Days [Sams, 2000, pdf, ISBN: 9780672319143]

https://dev.mysql.com/doc/

http://w3schools.com/JS/default.asp; http://w3schools.com/CSS/default.asp