Course-Guide

Course name:	Server Side Web development	LADOK:	TPWK16
Coursemanager:	Anders Carstensen	Credits:	9 hp
Grading:	5, 4, 3 or UK (not pass)	Year:	2017

Pingpong-event: Server-side Web Development - TPWK16 - S17

Password(pingpong): TPWK16S1703

Content

Teachers

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Feedback mechanisms

Continuous feedback

Is communicated primarily at lectures and labs. Comments regarding the way the course is performed and need for follow up or clarifications can also be conveyed through the class evaluation representatives.
In case there is time and a need for it diagnostic queries can be posted at lectures. These will be anonymous and will not inflict on the grading it is only a method for settling if the lectures etc. have been clear and that you as a student have learned what has been set out.

Course evaluation

In the end of the course you are invited as student to fill in a course evaluation on ping-pong. The form is opened in the ping-pong activity – Contents – Course evaluation.

Intended learning outcomes

The intended learning outcomes are specified in the course plan, which is available as a pdf-document in the ping-pong event under documents/general information or at the link http://ju.se/en/study-at-ju/courses.html?courseCode=TPWK16&semester=20171&revision=1,000

In order to achieve the intended learning outcomes you as student are encouraged to actively participate in all educational activities offered in the course. Below each intended learning outcome is mapped to teaching events and examination events.

Teaching

The course start week 3 and ends week 13. Teaching events are lectures and lab work. There are two lab groups L1 and L3. Students can, in ping-pong, add themselves to the lab group they want to join. Course events are scheduled in general as follows:

- Lectures Tuesday 08:00 – 09:45 and Friday 13:00 – 14:45
- Lab group L1 Thursday 13:00 – 16:45, L3 Tuesday 13:00 – 16:45. (Both scheduled in E2433)

For the exact dates and location see schedule at https://goo.gl/EDNpNR

Lectures

The following list of lectures is preliminary.

1. Course introduction and introduction to ASP.NET and Model View Controller (MVC)
2. More about MVC
3. Aspects on system development, testing, and deployment environments for web applications
4. Data access – the traditional way.
   Introduction to the Library database to be used in the lab work
5. Data access – using entity framework
6. Security and user management 1
7. Security and user management 2
8. API for web applications
9. Applications and frameworks
10. A guest lecture
11. Repetition

Lab work

There is one introductory lab (lab 0 the first week of the course) with the intension to give some hands-on regarding ASP.NET and MVC. The labs that follow (lab 1 to 5) has a common theme in creating a small system for the administration (of some parts) of a library system. These labs can be done individually or working in pairs. **The labs will in most cases require more time than what is scheduled for supervision.**

Intended learning outcomes mapped to teaching events

Intended learning outcome	**Teaching event**
Display an understanding for three tier web architectures	Lecture 2, 4 and 5; Lab2 and 3
Display an understanding for common web application security issues	Lecture 6 and 7; Lab 4
Display knowledge of performance optimisation in web applications	Lecture 3, 10 (?)
Display knowledge of economic sustainability and maintenance effects that differentiate web applications from traditional software systems, in particular concerning issues like standardisation, vendor/system lock-in, maintenance, and reusability	Lecture 3, 10 (?)
Display the ability to perform investment cost estimates concerning development, testing, and deployment environments for web applications	Lecture 3, 10 (?)
Display the ability to configure development, testing, and deployment environments for web applications	Lecture 3 to 9, 10 (?)
Display the ability to develop and deploy web applications	Lecture 2 to 9; (Lab 5)
Display the ability to analyse and compare different technologies for web development (tools, frameworks, application servers, etc.)	Lecture 8, 9

Course Literature:

In addition to the course literature mentioned in the course plan several links will be provided in the lecture slides.
Other literature:
Pro ASP.NET MVC 5 by Adam Freeman (fifth edition), ISBN 978-1-4302-6529-0 (Available as full text from the library)

Examination

Examination consists of examination of lab work and a written examination in the end of the course. The final grade for the total course is a compilation and weighting of the grade for the written exam (50%) and the grade for the lab work (50%).

Written exam – "Examination" (from course plan)

Theoretical knowledge is tested with a ping-pong examination consisting of both single/multiple choice questions and essay questions. It is examined in a computer lab room.
Is graded: 5, 4, 3 or UK (i.e. "not passed").
No aids are allowed during the examination.
Max credits is generally 50 points, but can be set differently depending on the number of and the type of questions given.

It is scheduled in the end of week 13. Do not forget to register for the examination. Re-examination is done in week 23 and in week 32 (or week 33).

Grading levels in % of maximum points

Level min.	**Grading**
80 %	5
60 %	4
40 %	3

Lab work - "Laboratory and project work" (from course plan)

For acquiring grade 3 it is required that:

- All mandatory parts of labs 1 to 5 are examined by an oral examination during scheduled lab time or in a separate appointment with one of the lab supervisors. The oral examinations of the labs are graded pass (grade 3) or fail (which means rework until pass).
- As mentioned before labs 1 to 5 are built on a common theme this means that before starting a specific lab the previous lab must be passed.
- The developed part of the system (for a specific lab) have been installed on a webserver (need not be kept when a lab is accepted and can be uninstalled directly after course has been finished).

For acquiring a higher grade (4 or 5) it is required to:

- Have fulfilled the requirements for grade 3 (passed all oral examinations of the labs).
- Have done all the extra non-mandatory exercises in labs 1 to 5.
- Upload to Ping-Pong for further examination:
    - The source code (in a zip-file) for the resulting library-system, from labs 1 to 5
    - A short report (as a pdf-file), essentially giving an overview of the work done. In the report, you also need to do a cost estimation for the development and maintenance of the system. A report template will be available through ping-ping.
- Have installed the developed system on a webserver (can be uninstalled directly after examination has been finished). Provide a link, for us to test the system.
- Have done the actions above before the deadline ~~2017-03-31~~ 2017-04-02

Work handed in later than the deadline ~~2017-03-31~~ 2017-04-02will only be examined for grade 3 and are handled week 32/33 and week 7 (2018). Re-examination for acquiring grade 4 or 5 can then only be done the next time the course is given.