Course PM

Course name:	Applied web architecture	LADOK:	TAWK17
Course manager:	Johan Kohlin	Credits:	15
Grades:	U, 3, 4,5	Year:	2017

Pingpong name:	Applied Web Architecture - TAWK17 - A17
Pingpong password:	TAWK17A1734

Contents

Teachers

Johan Kohlin

Examinator, Course Manager, Teaches Wordpress

Contact

E-mail: johan.kohlin@ju.se
Phone: 0704-67 29 15

Jasmin Jakupovic

Teaches PHP

Contact

E-mail: jasmin.jakupovic@ju.se
Phone: 036-10 12 16

Feedback

Feedback on labs

To show that you have understood and completed each lab assignments you need to visit your lab session physically and show your solution to a grading teacher. This is also an opportunity to get feedback on your solution.

Feedback on project work

During project presentation, you will get direct feedback from the grading teacher. You can also appoint a meeting before the presentation to get tutoring and feedback on your current state.

Course evaluation

We are constantly striving to get better at what we do. To do that we need your help. A survey will be available by the end of the course with a few questions regarding the course. Please let us know what was good and what needs improvement.
The survey is anonymous.

Dialogue

Apart from the course evaluation, which is filled out at the end of the course, you are encouraged to contact the course manager with any thoughts on the teaching or administration/organization of the course at any time during the course. That way we will have a chance to make adjustments to better help you in reaching the learning outcomes of the course.

Learning outcomes

To achieve the learning outcomes of this course you should be present and actively participating in labs, seminars, lectures and workshops. Active participation means join in on a conversation at a seminar, but also to ask questions when there is something you don't understand. Besides exams, labs or projects, the only way for teachers to know you need help understanding is to raise your hand and ask us to explain it differently.

Skills and abilities

-demonstrate ability to develop a basic web application using server side programming and a relational database.
- demonstrate ability to use a version control system for collaboration on a web application project.
- demonstrate ability to install and configure a web server
- demonstrate skills in installing and configuring a content management system
- demonstrate skills in creating custom web templates for a content management system.

Knowledge and understanding

- display an understanding for multitier architecture.
- demonstrate knowledge of the response- and request cycle on the internet.
- demonstrate basic knowledge of data modelling and relational databases.
- be familiar with some common web application security issues.
- demonstrate knowledge of information design principles for hierarchical taxonomies.
- demonstrate knowledge and comprehension of systems integrations.
- display an understanding for the REST architectural style

FAQ

Question: I'm going away on a trip and will miss one week of lectures and labs. Is that OK?

Answer: There is no mandatory attendance except for examinations. But neither is there any support for distance education. If you are absent from lectures, labs and seminars you silently decline aid to achieve the learning outcomes.

Question: Why can't I do my group project alone?

Answer: Primarily this is a resource issue. If we were to allow solo projects we risk getting too many projects to assess. The resources for the course are limited and we would then need to cut down on lectures, labs and tutoring.

Examinations

In brief

- PHP project
- Wordpress project
- Written exam
- Labs

Specific requirements about each project can be found further down.

Deadlines

Missing deadlines means missing the chance to get a higher grade for that examination. This is part of the assignments, to be able to deliver on time, and it is fairer since those who wait longer than deadline, have more time to do it better.

- Labs December 11[1]
- PHP Project hand-in October 29[2]
- PHP-project presentation December 13
- Wordpress project hand-in December 14
- Wordpress project presentation December 19
- Written exam December 9-17 (see *Written Exam* further down)

Projects hand-in and presentation

All hand-ins will be done via PingPong and presentations will be conducted as a group in front of the teacher. The group is responsible for booking a presentation with the teacher before the presentation deadline (see above). The presentation should be no longer than 15 minutes and during that time, all members should demonstrate that they understand the project code.

The project is graded as a whole, but we reserve the right to adjust grades for individuals based on their performance within the team and presented knowledge during presentation.

If you miss the deadline for a project hand in or get the grade U, there will be 2 additional opportunities to hand in and present your group project this academic year, namely the re-exam periods in week **2** or week **33**.

If there are any problems within a group you are advised to contact the teaching staff. The sooner the problem is resolved the sooner you can continue with your work. If a group is satisfied with the group members but feels like a certain group member contributed less than others they are welcome to address the issue either privately or as a group and grades will be adjusted accordingly.

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[1] December 11 will be your last chance to show your lab(s) this semester. Your next chance is to book a meeting during the re exam period in week 2.

[2] This is the deadline for uploading your project files to pingpong.

PHP Project

You will work in groups of 2-4 students to create a functional PHP web application (website).

The complexity of the project depends on two factors:

- **Amount of people in your group** – more students mean more work needs to be completed
- **Grade you are aiming for** – each grade has specific requirements that need to be fulfilled

You create the groups on your own, but if you are not in a group by 2017-09-11 you will be assigned a group.

Proposal approval

Each group hands in a project proposal (email as pdf attachment to a teacher) where you describe:

- Purpose of their application
- Complexity of their application (what grade you are aiming to achieve)
- Functionalities the application covers

You may use your projects from the JavaScript course as a base and work further on them to build a PHP application/website as well.

The teaching staff will then review your proposal and either approve or suggest changes. The sooner your project is approved the sooner you can start working on your project.

Grading

The project is graded with **5, 4, 3** or **U** where "U" represents a fail and requires rework of the project. To accomplish a certain grade your project needs to fulfil certain requirements. For grading requirements see below.

Grade Requirements:

NOTE: If your think your project is good enough for a higher grade but does not conform to the requirements below, address it with the teaching staff. They will estimate the complexity and either agree or disagree with you. Some projects e.g. don't need many database-tables but have a lot of other functionalities and this is considered OK as long as the complexity justifies it.

Grade 3: To receive a **3** you will have to fulfill some basic requirements within your project. To be specific you would have to create a website/web application that incorporates the following:

- Database with at least 4 tables
- Usage of CRUD operations
- Sessions
- Cookies
- Basic security
- Acceptable UI/UX

Grade 4: To receive a **4** you will have built on the above listed and include the following:

- More complicated database with 6+ tables
- Including and reusing headers/footers
- Appropriate security to match the needs of the application
- Moderate UI/UX

Grade 5: To receive a **5** you will have to work outside the scope of what you were taught during your lectures and workshops. It is expected that you use your knowledge and understanding to incorporate new functionalities. Building on the requirements for grade 4 you will have to:

- Advanced UX/UI
- Advanced security (if project requires so)
- Incorporate JavaScript

Wordpress project

The project

The task is to create a Wordpress website for an organisation or a company. I have a few suggestions that will be posted to pingpong, otherwise find your own company. It could be a brand-new website or a redesign of an existing one.

You will create a custom theme (don't use a starter theme) for the client but also help with information architecture, decide if you need to install any plugins and if so, how many and what plugins.

Groups

You will work in groups of 2-4 students depending on the scale of your project (see proposal approval below).

You create the groups on your own (join one of the premade groups in pingpong), but if you are not in a group (or alone in your group) by October 25 you will be assigned a group of three other students.

Proposal approval

Each group hands in a project proposal (email as pdf attachment to a teacher) where you describe:

- What Company or organisation you will build the website for.
- Complexity of the website (what grade you are aiming to achieve)

The teaching staff will then review your proposal and either approve or suggest changes. The sooner your project is approved the sooner you can start working on your project.

Grading

Basic requirements (3)

–You create a custom Wordpress theme to build a website for a client.

–You can describe the code and motivate your solutions.

Grade 4 and 5

The grades 4 and 5 require a couple of extra deliverables.

–A project documentation[3] where you motivate the choices you made to create the website, including technical decisions in the theme but also which plugins you use and why.

–A handoff for the client where you describe to them how they maintain the website; add and edit content, keep plugins and WP up to date etc. Could be a screencast or a pdf manual.

We also look at your solution and assess how modular it is and how easy it is to maintain for the client.

[3] No minimum or maximum number of pages. Be concise.

Written exam

All written exams are scheduled by University Services. They plan where and when your exam will take place. If you have the JU app, it should notify you when it is time to apply for the exam, and show you where and when you are supposed to write it. This information is also available at Ladok web services.

What the exam will include

Multiple choice

The exam will show how much you as an individual understand PHP and the Wordpress framework.

The test will consist of multiple choice questions where correct answers award 1, 3 or 5 points depending on the difficulty of the question.

Incorrect answers will be punished with -0.5, -1.5 or -2.5 points.

Coding

There will also be a coding part for those students who get at least 70% from the multiple-choice questions. To solve the problem, you may use a website similar to https://www.tutorialspoint.com/execute_php_online.php to debug your code before submitting it.

Important notice regarding exams

- You must bring your student card and identification.
- Electronic devices of any kind are prohibited. You can hand them over to an exam supervisor before the exam begins.
- You may bring physical books, but no notes.

Grade levels

Score percentage	**Grade**
71-100% plus 2 correct programming solutions	5
71-100% plus 1 correct programming solution	4
50-70%	3

Labs

Each week there will be a lab assignment. The labs are iterative, meaning they build up, week by week to a finished product. Each week we practice on a specific topic. You may show your code to a teacher during your lab session to get feedback and help.

For the first half of the course your labs will end up with a small CRUD application with a specific set of requirements (these will be detailed in the last lab).

For the second part of the course you will eventually create a portfolio theme for Wordpress with specific requirements (these will be detailed in the last lab).

To pass the course, both of these final lab assignments need to be uploaded to pingpong and then presented (explained) to a teacher at a lab session.

Plagiarism

1. As with all examinations at the university, everything you hand in to be assessed for an examination needs to be an original product. As soon as a student work has been approved, assessed and graded it is expired and can never be used again.

2. In some courses you hand in illustrations, in some course you hand in an essay. In this course, you will write code. And the way you solve problems using code is what is being graded. You may use code not written by yourself as a part of your solution, but those snippets of code need to be clearly referenced using code comments[4]. Failing to do so will be considered plagiarism.

3. The written exam needs to be performed in the designated location provided by the university. Viewing, or participating the exam under any other circumstance, will be considered an attempt to cheat.

Remember, if you want to help a fellow student, don't give them your code, sit behind them as they code and explain what they need to do. Giving your code away may lead to you being summoned by the Disciplinary and Expulsion Committee to explain why your code looks like another student's code. And even if you are found innocent, your name will show up in the official records from the Disciplinary and Expulsion Committee.

[4] Follow these guidelines: https://integrity.mit.edu/handbook/writing-code