

Holistic Web Development

Programming course I

At the general assembly in November 2017 KBHFF decided to invest in the development of a new online platform that should function as member registration, webshop and purchasing system.

For this we need more programmers to help with the development and maintenance of our new IT platform. Within a collaboration between think.dk and KBHFF, we have designed an intensive course for a small number of job seekers (or otherwise interested individuals). The course has the dual goal of educating people in programming and concurrently developing an IT-system for KBHFF.

The course is organized so that the candidates get acquainted with all aspects of web development - and the opportunity to gain specialization within a single area, such as Server Administration, PHP, HTML, CSS, JavaScript or UX, while participating in the development of the new IT platform.

In order to make the candidates qualified for permanent employment or to start as a freelance programmer, the objective of the course is to give the candidates:

- Insight into licensing systems and open source software,
- Insight into Linux and web server installation,
- Training in programming in PHP, HTML, CSS and JavaScript,
- Training in Databases and SQL,
- Knowledge of SEO (Search Engine Optimization),
- Knowledge of UX (User Experience) and prototyping,
- Training in applied development techniques and methods, tools, libraries and frameworks,
- Knowledge of the entire parentNode web stack (project platform, parentnode.dk),
- Respect for design,
- Quality assurance, testing, constructive communication and self-employment training,
- The opportunity to influence something that makes a difference,
- Teamwork - team spirit and responsibility.

While the course is organized for participants of the Primary Course (as described below), it will also be open for less in-depth participation, if you don't have time for full participation. All essential lectures will be held outside normal working hours. The schedule for the secondary course will be defined in accordance with participants.

For more information about the technology used in this course, visit <https://parentnode.dk>.

Primary Course Design

20 hours a week, during 20 weeks

Normal price: 93.500,- *

SPECIAL KBHFF Price: 7.500,-

* Special terms apply for candidates through the Danish Jobcenters, members of think.dk and others. *Get in touch if you are interested in participating and we'll find the right price for you.*

The course starts on Sunday the 21st of January, 2018 and continues until the 7th of June, 2018.

The training classes take place at think.dk (Æbeløgade 4, Østerbro).

The time will be distributed between lectures, assignments and QnA sessions.

Lectures once a week, will be held in outside normal working hours (in the evening or weekends) for broadest possible participation.

Tuesdays will be preferred for the practical training sessions and QnA's.

The final lecture and education plan will be compiled with respect to participants and published as soon as possible.

Homework and home workdays will be part of the process, as it will be a likely also be a part of future employment as developer.

Topics

Week 1 - Open source development

- Introduction to licenses and software ecosystem
- Choosing the license for the KBHFF project

Week 2 - parentNode web stack

- Introduction to the development environment
- Installing the environment on your own computer
- Introduction to Linux

Week 3 - parentNode framework, part 1

- Set up your first project and look under the hood

Week 4 - Detector + browsers

- Install and learn to use browser development tools
- Introduction to browser segmentation, device detection and browser differences

Week 5 - HTML, part 1

- Build your first HTML page
- CSS, part 1 - the style tag

Week 6 - UX and prototyping

- User experience and accessibility
- Information architecture (organising information)
- Prototyping

Week 7 - Design

- What is design?
- Understand and respect the details (collaboration with other creatives)

Week 8 - Templator + SEO + HTML, part 2

- Templator, SEO markup model (parentNode markup model)
- SEO and SEO-testing
- Ranking- og performance optimization tools

Week 9 - CSS, part 2

- Advanced CSS

Week 10-13 - JavaScript

- Functions, objects, conditions
- DOM and window objects
- Events
- Manipulator (parentNode JavaScript library and framework)
- Library + framework

Week 14-17 - PHP and databases

- PHP
- SQL and databases
- Janitor (parentNode PHP library and framework)

Week 18 - Quality assurance and tests

- Documentation
- Unit tests
- Check your own work / what happens when you don't

Week 19 - parentNode framework, part 2

- Working with the whole stack
- Select your specialisation

Week 20 - Next step?

- Test and evaluation
- Preparation for next step

Requirements

The course is suitable for candidates who can work from about 20 hours a week and up.

Candidates for the process must speak and write English, have a computer and at least be an experienced user of the computer. The candidate should want to learn to program, but prior programming experience is not a requirement for the motivated candidate.

It would be an advantage if candidates have:

- existing knowledge of programming.
- a strong idealistic side and a wish that the work also has a positive influence on our society.

Teacher

The course is conducted by Martin Kæstel Nielsen.

A little about Martin:

- has about 20 years of professional experience with development.
- has been responsible for development teams, with up to 20 participants.
- has organised upgrading classes, while working in international web agencies.
- is the main architect of the tools and methods to be taught.

Interested?

If you are interested in participating (full or part time) in the course, please contact Sarah Ettlinger from the IT working group immediately at settlinger@alum.exeter.edu.