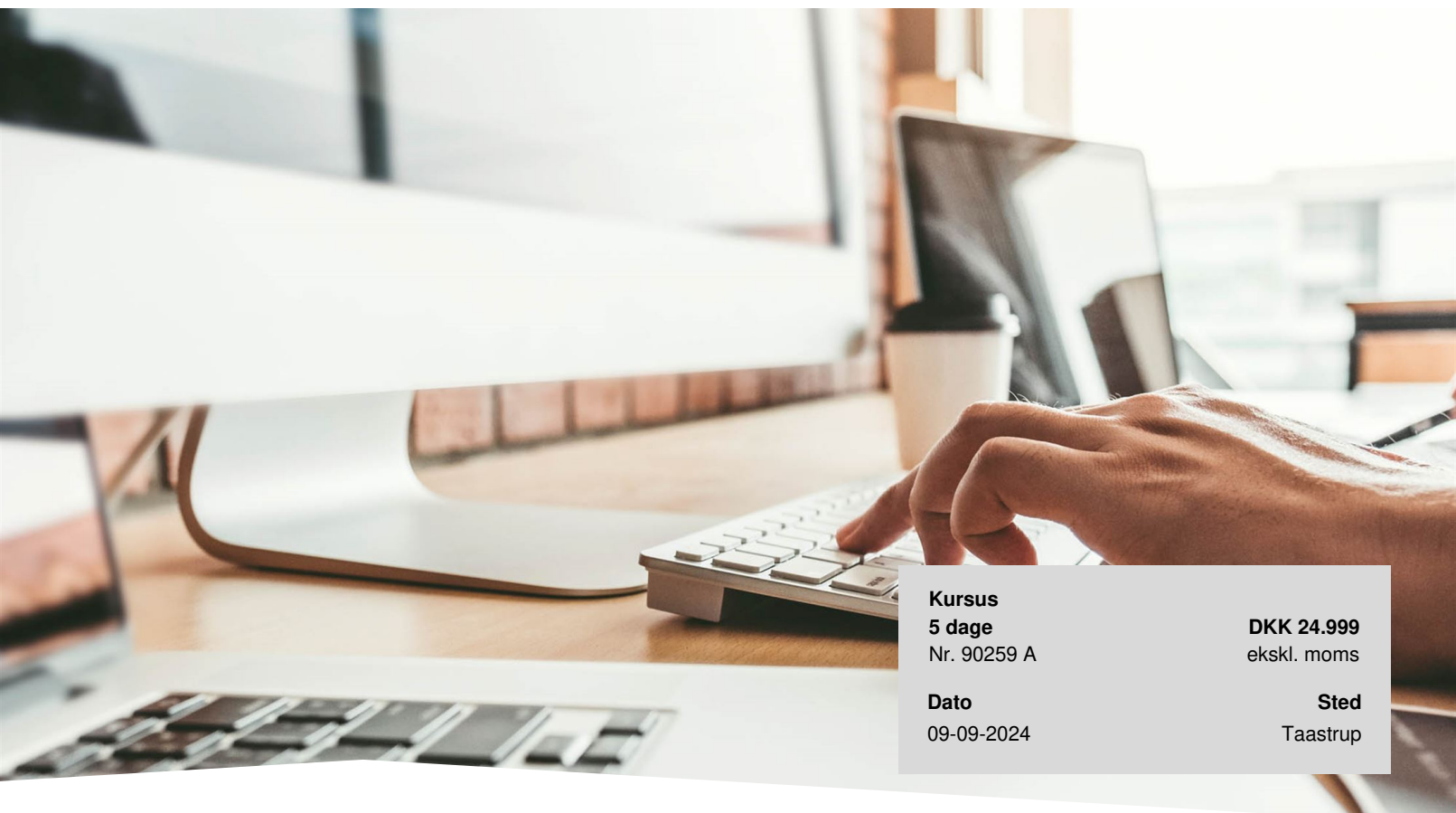




Kursus
5 dage
Nr. 90259 A

DKK 24.999
ekskl. moms

Dato
09-09-2024

Sted
Taastrup

Learn Modern Web Development: HTML, CSS, asynchronous JavaScript and PWA

Lær at skabe moderne, hurtige og fleksible webapplikationer til mobilenheder og computere, der er baseret på de nyeste teknologier. Kurset gennemgår de mest populære og succesfulde webmønstre og teknologier, og der kigges på ydeevne, debugging og tests samt tilgængelighed og video. Kurset opdateres jævnligt for at holde trit med det sidste nye. Undervisningen foregår på engelsk.

Skriv apps, der er bygget på moderne webteknologier

På kurset lærer du grundprincipperne i HTML, CSS og JavaScript. Derudover gennemgås mere avancerede emner som transpilere, udskudt indlæsning, destrukturering af JSON og asynkron programmering.

Du lærer at oprette apps, som dynamisk tilpasser sig skærmstørrelser med CSS Flexbox, CSS Grid, CSS-variabler, relative skrifttypestørrelser og responsive billeder.

Kurset dækker også alle PWA-teknologier, herunder opbevaring af data i browseren, cachelagring af filer, betalings-API'er og andre krav til en rigtig app. PWA'er er sikre og installerbare. De kan køre offline og vise systemmeddelelser, selv når appen ikke kører.

Deltagerprofil

Kurset er beregnet til alle udviklere med minimum 6 måneders erfaring, som ønsker at skrive webapplikationer og mobile webapplikationer med HTML, JavaScript og CSS.

Forudsætninger

Kendskab til ethvert moderne programmeringssprog.

Udbytte

- Bliv i stand til at skabe moderne webapplikationer til mobil og computere
- Få et grundigt kendskab til grundprincipperne i HTML, CSS og JavaScript
- Gå i dybden med flere funktioner, der forbedrer dine webapplikationer
- Lær om det sidste nye inden for webudvikling

Det får du på arrangementet

- Kursusbevis
- Erfaren underviser
- Maks. 10 deltagere
- Fuld forplejning
- Gratis parkering
- Materiale på engelsk
- Undervisning på engelsk

Indhold

JavaScript 202X(ECMAScript)

- We'll cover basic syntax as well as useful new additions to the language. Most notable: Variable declarations with let, var and const; Class syntax; Modules; Template strings; Arrow functions; Default parameters in functions; for..of loops; Promises and async/await asynchronous function handling; Destructuring; Rest and Spread operators for quick array and object manipulations; Maps (key-value pairs) and Sets (unique values); Modules and Lazy Loading.

CSS 202X

- Explaining CSS precedence. Both well known and the latests selectors, pseudo classes and pseudo elements are discussed as well as style attributes. Techniques to adjust to the screen size are responsive images as well as Web Fonts and flexible font sizes. CSS Flexbox (1 dimension layout), CSS Grid (2 dimension layout) and CSS Custom Properties will be covered. The Grid allows for layouts that were previously impossible or could only be achieved with JavaScript. Grid also surpasses Bootstrap in possibilities, flexibility and has a simpler markup.

HTML 5.X and beyond

- Basics like the Document Object Model (DOM) and manipulation thereof as well as the working of the event system are covered. We'll dive deeper into handling both touch and mouse event to work with all types of devices, not only desktops. HTML Forms input types and validation methods are covered.

Progressive WebApps

- Progressive Web Apps (PWA) is a set of technologies you can use to enhance a website with application behaviour:
 - Installable: The website can be added to the home screen of the device.
 - Web App Manifest: Defining the icon, home screen title, splash screen, background color and home page.
 - Fetch: Simple and powerful API to fetch resources (successor of XMLHttpRequest).
 - Offline and online behaviour: No matter if there is a network connection, the app will work using Service Workers to control requests and returning responses to requests offline using the Cache API, Web Storage or IndexedDB.
 - Notifications. Send updates from the server to the app with the Push API and use the Notification API to generate system notifications even if the app is not running.



- Safe: Only https (orlocalhost for development).
- Progressive: Use the above technologies if they are available, but the page (app) will work if the device's browser is less capable.
- Stores: PWA can even be published to the Microsoft Store and become Windows Apps.
- Payment: How to integrate payments
- Share API: Share data with other apps

Storage

- Data storage within the browser are covered with 3 techniques:
 - Storage API, Local & Session storage when you don't want to store too much data.
 - IndexedDB API (version 2), is an object database with more capacity.
 - Cache API for use with Progressive Web Apps.

Accessibility

- Explaining techniques to keep your designs accessible for the visual impaired.

Performance

- Subjects:
 - Compression and minification of images, scripts, css, etc.
 - To inline or not to inline?
 - Async loading of scripts.
 - How to measure performance?

Debugging

- Explaining how to use the developer tools in the browser:
 - Setting breakpoints in code or when events happen
 - Using the console
 - Dynamically making changes for immediate feedback
 - Debugging CSS specificity and computed styles.
 - Storybook

Testing

- Browsers offer support to test on devices with different capabilities like screen sizes and connection speeds. We'll also cover writing JavaScript unit tests.

Video & Audio

- Answers: How to add video & audio elements? How to create subtitles and picture-in-picture video?



UNDERVISER

Rick Beerendonk

Rick er seniorkonsulent og underviser fra Holland. Han har over 25 års professionel erfaring med at arbejde i små og store organisationer. Hans passion er enkelhed, velskrevet kode og teamdynamik. Han er specialiseret i front-end-teknologier, og han taler ofte om disse emner ved internationale begivenheder. Rick holder af at kode i JavaScript, TypeScript, C# og Clojure.

Har du faglige spørgsmål så kontakt

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