

CONSULT SOLUTIONS CPH

Java
uddannelsesprogram

General information

- **Antal af kursister:** 8-10 deltagere
- **Kursisternes baggrund:** ingen erfaring indenfor IT
- **Uddannelsesprogrammets længde:** 4 ugers før-studie (underviser skal være lidt til rådighed i denne periode) og 12 ugers undervisning (8-16 hver dag)
- **Sprog:** som udgangspunkt foregår undervisningen på dansk, men underviser skal være flydende i engelsk, da pensum er på engelsk og dele af undervisningen kan foregå på engelsk
- **Undervisningens form:** Hybrid og foregår som traditionel undervisning med vekslen mellem teori og praktiske øvelser

Tidslinje for Java program

Launch event	October 31st (kl. 17-18:30)
Pre-studies	November 1st - November 25th
Program	November 28th - March 3th
Graduation	March 3rd, 2023

Krav til undervisere



Har en solid forståelse af og erfaring med Java



Har erfaring med og er komfortable i at undervise i allerede eksisterende undervisningsmateriale



Kan undervise i Java sprog på et basis niveau (kursisterne opnår ikke ekspertviden efter endt uddannelsesprogram, men har opnået generelle kompetencer indenfor Java, som kan anvendes i arbejdet som junior konsulent)



Der er behov for ca. 3-5 Java undervisere, afhængigt af deres ekspertise (tematikkerne for pensum står på kommende slides)

Overall content for Java Program

4 weeks prior the program	5 days	1 day	2 days
Prestudies	Java introduction	Scrum	UX
5 days	5 days	10 days	5 days
Java Intermediate	GIT & Java mini project	Java Web Applications	Databases
5 days	7 days	2 days	1 day
Java Database Integration	Front end	AWS & DevOps	Java advanced
1 day	10 days		
Presentation techniques	Graduation project		

JAVA

- Java history
- Output & input
- Solutions
- Types & variables
- Operators & type conversion
- Conditional execution
- Repeated execution
- Arrays
- String (text) manipulation
- Methods
- Exception & error handling
- Enumeration
- Enums

JAVA ADVANCED

- AnonymousClasses & Lambda
- Functional Programming
- Streams

AWS & DEVOPS

- Introduction to DevOps
- Introduction to AWS
 - AWS account & setup
 - AWS toolkit for IntelliJ IDEA
 - AWS CodeCommit

DATABASE

- Intro to databases
- Database design
- Database modelling
- Microsoft SQL Server
- SQL
- Join
- Keys
- GroupBY
- Chinook 01 & Chinook 02
- Normalization
- Index
- Views
- Trigger
- Stored procedures
- Constraints
- Sub-queries

JAVA DATABASE INTEGRATION

- JDBC
- JPA

USER EXPERIENCE

- How to plan out your layout and how to accommodate different devices through responsive design and adaptive design
- Touch base on ergonomics and inclusive design
- Look at what "design" and "brand identity" are and mean in practice

PROJECT MANAGEMENT

- Version management using git & GitHub
- Scrum
 - Defined process control
 - Agile manifesto
 - Empiricism
 - Adaptive process control
- Scrum roles

PRESENTATION SKILLS

- Gantt-chart
- Road map
- Personas

JAVA WEB APPLICATIONS

- Spring & Spring Boot
- Spring MVC
- Spring Security
- Pagination
- Master detail
- Web development
- HTTP
- Java webapps
- Handling requests
- XMLJSON
- Stateful webapp
- Command objects
- Webapp security
- REST API 1 & REST API 2
- Integration test
- LayersInApplications

JAVA INTERMEDIATE

- OOP
- Methods & Encapsulation
- Constructors
- Collections
- Inheritance
- Polymorphism
- Interface
- TDD
- Exceptions

WEB-FRONTEND

- What, why and when do you use frontend
- HTML
- CSS
- Flexbox
- Grid
- Media queries
- Absolut and fixed positioning
- JavaScript
- Fronted development
- Bootstrap
- Vanilla JS
- Simple-component
- React (JavaScript framework)
 - JSX, components & props
 - Managing state and Lifecycle
- Routing
- Handling events
- Basics of Redux