Coroutines in Kotlin

Prerequisites

This seminar was developed for software developers with extensive experience in Kotlin.

Duration

This seminar includes 8 academic hours.

Premium Training

This seminar can be delivered either in Hebrew or in English. It can be delivered either online, or in a Hybrid way that allows the participants to choose whether to attend the meeting room where the training takes place or to join online.

The Lecturer

This seminar is delivered by Haim Michael, an experienced well-known software development trainer with more than 25 years of experience in software development training.

The Topics

This seminar covers the following topics:

Introduction

What is Coroutine

The kotlinx.coroutine Library

Light Weight Threads

The GlobalScope

The launch Builder Function

The delay Function

The runBlocking Builder Function

Structured Coroutines

The coroutineScope Function

The suspend Modifier

Suspending Functions

Global Coroutines as Daemon Threads

Coroutine Cancellation

The join Method

The finally Block

Coroutine Timeout

The withTimeout Function

The withTimeoutOrNull Function

Composing Suspending Functions

The async Function

Lazy Invocation of the async Function

Async Style Functions

Structured Concurrency

Coroutine Contexts and Dispatchers

Unconfined Dispatchers

Debugging Coroutines and Threads

Moving from One Thread to another

The Job Object

Coroutines Childs

Naming Our Coroutines

Context Elements Combining

Coroutine Scope

Sequence Flow

Asynchronous Flow

Channels

Closing Channels

Exceptions Handling