ThriveDX™

IOS swift

TDXMD-100
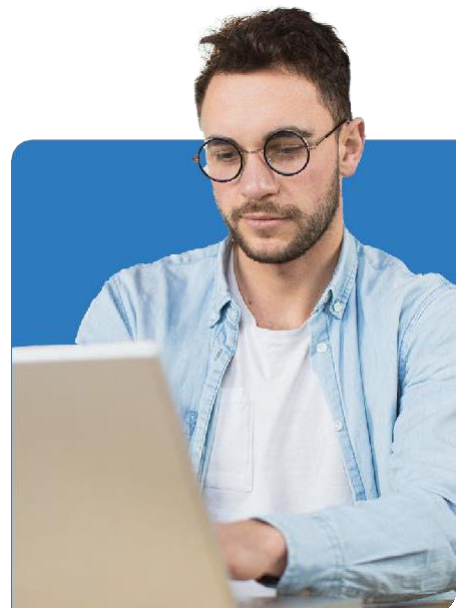
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Time Commitment	Skill Level	Course Category
6 days (total of 48 hours / 8 hours per day)	Professional Level	Mobile & Development

This course will give you an understanding of Swift 4 and will lead you naturally into app development where you can focus on the key frameworks, techniques and tool used to develop apps for those platforms. We explore IOS as a platform then build up from the chore architecture of an IOS app through to a fully working version with data, location, animation and even asynchronous cloud access. This course is hands on and you will build everything you see. By the end you will be able to incorporate many IOS's most advanced features into your own apps.
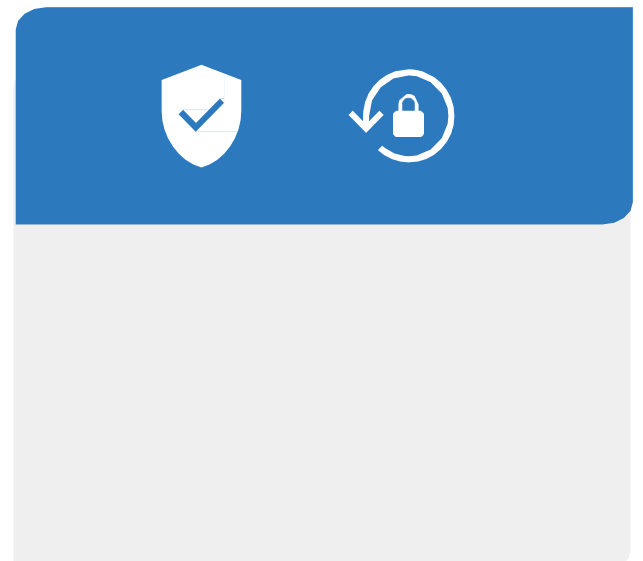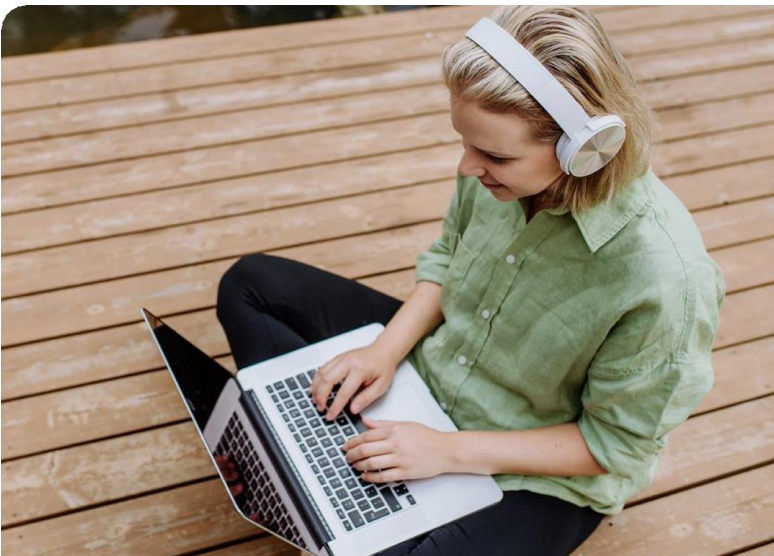
Objectives

On completing this course, delegates will be able to:

- Develop a fully functional (business logic and UI) IOS app using Xcode and Swift.

Prerequisites

Extensive experience with OOP language and UI event driven program-ming.

Program Structure

Module 1: Language Fundamentals

- Introduction to Swift and Playgrounds
- Constants, Variables, and Data Types
  - Strong type inference in Swift
  - Let vs. Var
  - Functions as objects
  - Optionals and Nil
- Strings
- Operators
- Control Flow
  - Loops
- Functions
  - Create and call functions
  - Function overloading in Swift
  - Default values for parameters
  - Local and external parameter names
  - Tuples and variadic parameters
- Types Casting and Inspection
- Guard
- Constant and Variables Scope
- Structures
- Enumerations Classes, Inheritance Base
  - classes Subclasses
  - Stored and Computed Properties
  - By-reference semantics
  - init method
  - Convenience methods
  - Overriding methods
- Error Handling (throw, try-catch)
- Swift Standard Library
- Collections
- Protocols

Module 2 : Xcode

- Xcode
  - Building
  - Running
  - Debugging
  - Interface Builder Basics
- Introduction to UIKit
- Display Data
- Controls – Action

Module 3: Xcode - Hands on - Creating an app

- Students will create an app and practice:
- View Controllers Life Cycle
- App Life Cycle
- Students will create an app and practice:
- Auto Layout
- Stack Views
- Segues and Navigation Controllers
- Tab Bar Controllers
- TableView / CollectionView / ScrollView
- Using Rest API to get data from the web
- MVC
- MVVM

Module 4: More - Optional (If time permits)

- Higher Order Functions
- Closures
- Returning Closures
- Consuming Closures
- Custom Operators
- Capture Lists
- Map
- Filter
- Reduce
- FlatMap
- Functors and Monads
- Result

The ThriveDX Advantage

1 Handcrafted Training Programs

2 State-Of-The-Art Learning Materials

3 Israel's Premier Training Center

4 Fueled by Industry Leading Experts

5 Over 20 Years of Proven IT Education Success

ThriveDX

We empower individuals to thrive in digital age.