

Designing Dynamic Interfaces with QML



Overview

This course provides a rapid and comprehensive dive into the QML language led by industry experts. You'll immerse yourself in hands-on exercises to become familiar with the syntax and gain insights into what defines a well-structured QML application. Learn from their experiences to avoid common pitfalls and develop the mindset needed to tackle complicated tasks with confidence.

Length: 2 Days

Software: QtCreator

ENROLL NOW

Course Objectives

After completing this course, you:

- Will be able to build responsive good-looking UIs for PCs and Smartphones.
- Will learn how to structure your code for best productivity.
- Will be able to debug and analyze your code.

Target Audience

This course is designed for students, engineers, new programmers, and anyone curious about QML and mobile applications in general. It starts from the basics and incrementally builds upon them. Through hands-on practice on each topic, you'll solidify your newly acquired techniques.

Teaching Methodology

- Instructional strategies include lectures, discussions, demonstrations, and workshop-based learning which are used to convey information, facilitate learning, and promote understanding.
- Learning activities include exercises and projects designed to engage students in the learning process actively.

Course Outlines

DAY 1

Introduction to QML

- ◊ How to Create and Run the QtQuick Application

Basics of UI Design with QML

- ◊ Arrangement of Items on the Page by Anchors, Columns, Rows and Grid
- ◊ Signals, Functions and Properties
- ◊ Gradients, Animations, and State Transitions
- ◊ Loader and Components

Case Study

Creating a Tic Tak Toe game

Advanced UI

- ◊ QtQuick and QtQuick.Windows Libraries
- ◊ QtQuick.Controls Library
- ◊ User-Defined Controls
- ◊ Styling QML Applications

Case Study

Creating UI of a Lunch Ordering App

DAY 2

Use JavaScript in QML

- ◊ Connect to Databases
- ◊ Connect to Webservers

Connect QML to C++

- ◊ Different Ways to Connect C++ and QML
- ◊ Connecting C++ Models to QML Views
 - Visualize XML File in a TreeView

Case Study

Completing the Lunch Ordering App