Qt for Automotive Development

Based on Qt 5.9, created on January 30, 2018

The Qt, OpenGL and C++ Experts
- Introduction to Wayland
- Writing a Wayland Compositor
- Qt Virtual Keyboard module
  - Introduction
  - Building Qt Virtual Keyboard module
  - How to use Qt Virtual Keyboard
  - Add new keyboard (language) layout
  - Custom keyboard styles

- Presenting Data
  - Arranging Items
  - Simple Data Models
  - Views
- Animations
- States and Transitions
  - States
  - Transitions
- WebEngine
  - Introduction
  - Using WebEngineView in QtQuick
  - JavaScript
  - Tooling
  - Features for Browsers

- Application Architecture & Development
- Layouts
- QtQuick Controls 2
  - Introduction
  - QML Elements
  - Styling
  - Ongoing Development
  - Comparison Between Controls 1 & 2
- Multi-page applications in QtQuick
  - Simple multi-page application
  - Multi-page application controlled from C++
  - Multi-page application controlled from QML
  - Driving multi-page applications via state-machines
  - Animating page transitions
  - Popup content
- Qt SCXML
  - Introduction to SCXML
  - Qt Build Time Support
  - Dynamic Loading at Runtime
  - SCXML Editor

- Advanced C++/QML integration
- Integrating QML with C++
  - Exporting Data and Functions to QML
  - Creating New QML Elements
  - Advanced Custom Property Types
  - Tips and Tricks
- Advanced Component Creation
  - QML C++ Singletons
    - Registering a C++ Singleton to QML
Development Tools

- Qt Debugging Aids
  - GammaRay
    - Core and Widgets
    - Qt Quick
    - Qt3D Geometry
    - State Machines
    - Tips and Tricks
    - Qt Creator Integration
- QTestLib
  - Testing C++ Code
  - Benchmarking C++ Code
  - Testing and Benchmarking QML
- QML Profiling
  - Introduction
  - QML Profiler
  - Scene Graph Profiling
  - Perf Integration

 Supplementsal Topics

C++ Topics
- Objects in Qt
- Variants
- QJSValue
- qmlRegisterType

QML Topics
- Introduction to Qt Quick
- Composing User Interfaces
- User Interaction
- Components and Dynamic Loading
- Declarative State Machines
- Painting and Effects
- JavaScript in QML

Supplemental Topics (cont'd)

Integrating 2D and 3D Content
- Integrating OpenGL and Qt Quick 2