

## Qt Tutorials Course Outline

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### Qt Core

- **Intermediate**
  - Pointers
    - Parent and Child
    - QPointer
    - QScopedPointer
    - QSharedPointer
    - QWeakPointer
  - Collections
    - QList vs QVector
    - QHash
    - QSet
    - QMap
    - QLinkedList
  - Settings
    - QSettings
    - Saving
    - Loading
    - Searching
  - File System
    - QIODevice
    - QDir
    - QFile
    - QFileInfo
    - QStorageInfo
    - QFileSystemWatcher
    - Qlockfile
    - QTemporaryDir
    - QTemporaryFile
    - QTextStream
    - QDataStream
    - QBuffer
    - Reading Files
    - Writing files
    - Appending files
    - Listing directories
  - Logging
    - qInstallMessageHandler
    - QmessageLogger
    - Making a logger
  - Encoding data

- ASCII
  - UTF-8
  - Base64
- Compression
  - qCompress
  - qUnCompress
- Serialization
  - Simple Objects
  - Complex Objects
  - Lists
  - Maps
  - XML
  - JSON
- Macros
  - qDeleteAll
  - qFill
  - qSort
  - qCopy
  - qFind
  - qSort
- System
  - QSysInfo
  - QProcess
  - Determine OS at run time
- Timer
  - QTimer
  - SingleShot
  - Repeating
- Meta Object System
  - QMetaObject
  - Q\_ClassInfo
  - Invoke Method
  - Return Type
- Design Patterns
  - Parent Child
  - Signals and Slots
  - Singleton patterns
  - Factories
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