Xcode Overview

Development and Debugging

What We'll Cover

1. Introduction

2. Key Features

3. Workspace Overview

4. Debugging Tools

Foundational Concepts

Introduction

1. Apple's integrated development environment (IDE)

2. Used for developing software for macOS, iOS, iPadOS, watchOS, and tvOS

3. Comprehensive testing and debugging capabilities

4. Latest version: Xcode 16

Key Features

1. Interface Builder

2. Source Code Editor

3. Asset Management

4. Testing Tools

5. Simulators

6. Version Control

Workspace Overview

1. Navigator Area (left)

2. Editor Area (centre)

3. Utilities Area (right)

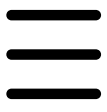4. Debug Area (bottom)

5. Toolbar (top)

Workspace Overview

Debugging

1. Breakpoints

2. Variables Inspection

3. Console Output

4. LLDB Commands

5. Exception Breakpoints

6. Symbolic Breakpoints

7. View Debugging

8. Memory Debugging

Debugging Tools

1. Instruments for profiling

2. Network Link Conditioner

3. Energy Log

4. Thread Sanitizer

5. Address Sanitizer