NEWTON ESSENTIALS 2.0

Description:
Learn how to develop applications for Newton using the state-of-the-art object-oriented development environment, Newton Toolkit, in combination with a very powerful, small, robust, object-oriented, and dynamic language, Newtonscript. The use of Newton Toolkit lets you interactively develop your applications without having to execute sequential edit, compile and link cycles. In addition, human interface guidelines for developing on PDAs are discussed.

Facts:
> Leader-led
> 5 days
> $1500

Target Audience:
This course is aimed at Macintosh and Windows developers who are new to Newton programming.

Prerequisites:
This course assumes application development experience in an object-oriented programming language and basic familiarity with the use of a Macintosh computer and a Newton MessagePad.

Course Outline:
Day 1

I. Newton 2.0 System Overview
> A. Devices
> B. Systems
> C. Operating Systems
> D. Creating an Application

II. Introduction to NewtonScript
> A. NewtonScript goals
> B. Frames and slots
> C. NewtonScript basic types
> D. NewtonScript functions
> E. Variable scope
> F. Garbage Collections

III. More NewtonScript
> A. Symbols
> B. Path expressions
> C. Reference types

IV. Structure of an Application
        A. Memory
        B. Packages
        C. Templates

V. Newton Toolkit

Day 2
VI. Understanding Inheritance
        A. Inheritance and the view system
        B. Proto inheritance
        C. Parent inheritance

VII. Protos

VIII. Programming with NewtApp
        A. Introduction
        B. The Four Layers
        C. Newt Protos without NewtApp

 Lab Time

Day 3
IX. The View System and Justification
        A. viewCObject
        B. stepChildren vs. viewChildren
        C. System messages
        D. childViewFrames
        E. Declaring to parent
        F. Setting an application's viewBounds
        G. Scrolling and overview
        H. Opening and closing views
        I. Hiding and showing views
Lab Time

Lunch with DTS

Lab Time

Day 4
X. Debugging and Tools
       A. Error codes
       B. Using the Inspector
       C. Print statements
       D. Tracing
       E. Stack tracing
       F. Using breakpoints

XII. Soups and Stores
       A. Stores, Soups and Entries
       B. Union Soups
       C. Indexes
       D. Queries and Cursors
       E. Creating, storing and querying a soup

XIII. Rich Strings

Lab Time

Day 5
XIV. Stationery
       A. Introduction
       B. DataDefs
       C. ViewDefs
       D. Registering and Unregistering
       E. Utilities
       F. Extending your App with Stationery

XV. Routing
       A. Routing Action button
       B. Routing frame
       C. Integrating basic routing
       D. Title and action scripts
       E. Delete, Duplicate, Move/Copy
       F. Beam

Lab Time