



RESOURCE AND PATIENT MANAGEMENT SYSTEM

Intersystems Caché Foundations Course

Announcement and Agenda

October 24 – 28, 2016

Office of Information Technology (OIT)
Anchorage, Alaska

Table of Contents

- 1.0 General Information1**
 - 1.1 About the Course.....1
 - 1.2 Prerequisites.....1
- 2.0 Detailed Agenda2**

1.0 General Information

1.1 About the Course

The Caché Foundations course for product version 2012.2.5 teaches programmers how to use the tools and techniques within the Caché development environment to build high-performance transactional applications. It covers the major features of server-side development. Students master the important features of Caché by building an object-oriented application.

1.2 Prerequisites

- **Essential:** Programming Experience
- **Useful:** Caché ObjectScript, Object-oriented programming, SQL

2.0 Detailed Agenda

Topic
<p>Overview:</p> <ul style="list-style-type: none"> • Caché • Benefits • Platforms • Versions • Features • History
<p>Development Introduction</p> <ul style="list-style-type: none"> • Introduction to classes and methods • Packages • Persistent and serial classes • Errors
<p>Development Setup</p> <ul style="list-style-type: none"> • Development sandbox • Namespace and database setup • Resource and role setup • User setup • ODBC setup • Remote System Access setup
<p>Architecture</p> <ul style="list-style-type: none"> • Namespaces and databases • Globals and routines • System databases • Naming conventions
<p>Classes:</p> <ul style="list-style-type: none"> • OOP/SQL correspondence • Classes revisited • Multiple inheritance • Class compilation • \$System
<p>Properties</p> <ul style="list-style-type: none"> • Properties • Datatypes • Accessor and mutator methods • Reference properties • Implicit joins • Foreign keys • Cloning objects • Computed properties

Topic
Unit Testing <ul style="list-style-type: none"> • Unit testing • Benefits • Framework
Collections <ul style="list-style-type: none"> • Collections • List collections • Array collections • Object collections • Data population
Relationships <ul style="list-style-type: none"> • Relationships • Many-to-many relationships • Performance options
Streams and Files <ul style="list-style-type: none"> • Streams • Files
Queries <ul style="list-style-type: none"> • Sets of results • Embedded SQL • Dynamic SQL • SQL stored procedures • Command line shell • Views • Other SQL features
Indexes and Tuning <ul style="list-style-type: none"> • Indexes • Indexing options • Collation • Index types • Query performance tuning • Index methods
Methods <ul style="list-style-type: none"> • Inherited methods • Scripting languages • Method attributes • OOP callback methods • SQL triggers • ProcedureBlock methods • Code mode • Special method syntax
Debugging <ul style="list-style-type: none"> • Debugging with Studio • Debugging with ZBreak