



Temario de Cursos Suite SemanticWebBuilder

SWB Platform – Programación Semántica



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Curso: SWB Platform - Programación orientada a la Semántica

Objetivo del curso:

Que los participantes adquieran las habilidades necesarias para el desarrollo de recursos mediante programación semántica.

Dirigido a:

Personal técnico dedicado a la programación.

Conocimientos previos

Los participantes deberán tener un conocimiento avanzado en:

- JAVA
- JEE
- HTML
- XML
- JSP
- Servlets
- Desarrollo de aplicaciones web (web applications)

Temario del curso:

- Development paradigms evolution (OOP - MDD - SOP)
 - What does "meaning" means? Describing objects in terms of other related objects
 - How to tell the machine what I mean? Knowledge representation techniques
 - Graph based techniques (topic maps, semantic networks, conceptual graphs, ontologies)
 - Ontologies: What I know is what exists (OWL as a layer on top of RDF)
 - ¿What is RDF? Representing graphs as triples
 - Exercise: Describe a blog in terms of other objects (in paper) - unify
- I. OWL & RDF Modeling tolos
- Protege
 - Topbraid composer (Free Edition)
 - Introduction to topbraid
 - Creating a new ontology
 - Base URI and prefix
 - Creating clases
 - Adding properties to classes
 - Creating sub-clases
 - Creating Class Instances
 - Model Imports
 - Excercise: Model a blog in topbraid
- II. Semantic Resources for SWB
- What is a Semantic Resource?

- Which layers of SWB uses a Semantic Resource?
 - Semantic Resources Development process (circular cycle)
 - Resource modeling phase
 - SWB Core ontology
 - SWB Main clases
 - SWB Main interfaces
 - Adding display objects to properties
 - Code generation specific properties
 - Adding package for code generation
 - Excercise: model a blog in topbraid using SWB core ontology
 - Code generation phase
 - Levels mapping of a Semantic Resource (from model to Java class based on semantic Class and Semantic Object, from Java class to RDF triples)
 - (OWL - SemanticClass - SemanticObject - TripleStore)
 - CodeGeneration project
 - Code generation script
 - Include owl file in web.properties
 - Generated java files (base class and top class)
 - Exercise: generate code for blog resource
 - Resource specific programming phase (Using the Semantic API)
 - Diferences between Semantic resources and traditional resources
 - Main clases
 - GenericSemResource
 - SemanticManager
 - SemanticVocabulary
 - SemanticObject
 - SemanticClass
 - SemanticProperty
 - GenericObject
 - Exercise: Add code to manage blog (Add post, Add comments, List posts)
- III. PlayTime
- Create a semantic comments resource
 - Create a semantic events resource
 - Create a semantic wiki resource

Duración del Curso:

16 horas

Mínimo personas para abrir grupo:

8 personas

Material incluido:

Manuales en línea en sitio www.semanticwebbuilder.org.mx

Costo del curso:

A público abierto por persona: \$ 5,200.00

Capacitación Privada en grupos de 8 a 12 personas: \$ 35,000.00