



FELCO Solutions, Inc.



Windchill Customization

JAVA
JSP
WIZARDS

CLERKS
ACTIONS

JAVASCRIPT
JSTL

```

rmiArgs[4]=group;

URL databaseUrl = new URL("http://p.e-training.pt.com/Windchill");
RemoteMethodServer rms = RemoteMethodServer.getInstance(databaseUrl);
rms.setUserName("wcaadmin");
rms.setPassword("wcaadmin");
System.out.println("The initialization done");

for (String name : items){
    rmiArgs[1]=number+" "+name+" ";
    ie.addGroup((Group)rms.invoke("addGroup", "com.ext.windchill.ExTask",
    System.out.println("Number: "+ie.getGroupXML(group));

    Group gr = ie.getGroupXML();
    for (int i = 0; i < gr.getElementCount(); i++) {
        String number = (String)gr.getAttributeValue(i, "number");
        String ver = (String)gr.getAttributeValue(i, "version");
        String containerName = (String)gr.getAttributeValue(i, "containerName");
        System.out.println("Number: " + number + ";" + ver);
        if (!containerName.equals("Requirements Planning")){
            allItems.addElement(number.toLowerCase());
        }
    } //End of for loop
} catch (ArrayIndexOutOfBoundsException e) {
    System.err.println("\n");
}

```



Windchill Customization Windchill Wizards and the MVC Frame Work

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This course teaches the fundamentals of the Windchill MVC and JCA framework using Windchill various API for developing practical applications. It provides students to understand how to create wizards, tables, trees, data utilities and actions. The student will learn how to customize Windchill using best practices and maintain the customizations. The course explains the Windchill framework in depth in a web development perspective. In the addition, the course teaches the following:

- Developing Wizards and Form Processors
- Understanding the Windchill Javascript API
- Developing Data Utilities
- Developing UI Validators and Filters
- Understanding Java Delegates and Annotations
- Creating Actions and Action Models for Menus
- Creating Preferences and Properties Files
- Creating Tables using JCA
- Creating Trees
- Understand deployment methods

This course may be taken independently and we recommend students to have a good understanding of Java, Java Script, and some web development. After completing this course, students should be able to successfully customize Windchill and maintain the customizations. The course is taught using a Windchill AWS image on the cloud.

Prerequisite: This course is intended for experienced Java programmers or Web Developers.

Training Agenda

Windchill Customization

Day One (30 Tasks)

Welcome and Introduction

Introduction to the Windchill Customization

- Introduction
- What is the Spring MVC Framework?
- What is JCA?
- Windchill Client Architecture Overview
- Windchill Client Common Objects
- What are Tag libraries
- Java Builder Approach
- JSP and Tabs Approach
- Identifying Windchill Instances
- Customization Tools Utilities

Eclipse – Using Eclipse

- Using the Eclipse IDE
- Downloading Eclipse
- Project Workspace
- ✓ *3 Tasks will be completed*

Adding Actions

- Action Definition
- Create Action in Folder Menu
- Create Action in RMB
- Common Action Tags
- ✓ *4 Tasks will be completed*

Windchill Wizards

- Wizard Architecture
- Wizard Fundamentals
- Wizard JSP and Tag Libraries
- Basic Elements of Wizards
- Retrieving Primary Business Objects
- Creating Wizards
- Calling Wizards
- Wizard Form Processors
- Form Processor Beans
- JCA Components
- ✓ *5 Tasks will be completed*

Windchill Client Tables

- Introduction of Component Builder Class
- Creating a Table Builders
- Register Table Builders
- Creating a Table Toolbar
- Create JSP that calls MVC Table
- Creating Table Actions
- ✓ *6 Tasks will be completed*

Windchill Tree Tables

- Implementing Tree Components
- Custom Services Properties Files
- Custom Resource Bundles
- Building Tree Classes
- Configuring Non-Selectable Rows in Tree
- Custom Data Utilities
- ✓ *12 Tasks will be completed*

Day Two (16 Tasks)**Applying Filters and UI Validation**

- Setup Wizard for RMB Actions
- Implementing a Simple Filter
- Registering Filters
- Associating Actions with Filters
- ✓ *5 Tasks will be completed*

Promotion Request BRC Wizard Step

- Define BRC Wizard Action
- Define New Wizard Step
- Introduction of Windchill JavaScript Functions
- Wizard JavaScript Events
- Wizard JavaScript Common Button Functions
- AJAX Request Handlers
- Adding Custom JavaScript to JSP
- Defining Wizard Step Requirements
- Defining JSP Files
- ✓ *7 Tasks will be completed*

Create Custom Preferences

- Resource Bundles
- Preferences Load File
- Defining Preference Types
- Using Preference in Java Code
- Deleting Preferences
- Creating Preferences
- ✓ *1 Tasks will be completed*

Wizard Step Disabling

- Introduction
- Implementing a Filter
- Registering Filters
- Associating Actions with Filters
- ✓ *3 Tasks will be completed*

Managing Customized Files

- Windchill Safe Area
- Scripts for Customized Files
- Storing Customized Files