GOSS Forms Level 3

Skill Level: Advanced

Technical Skills: Attendees are required to have developer-level experience of HTML and JavaScript and have completed the GOSS Forms Levels 1 and 2.

Overview

How will I benefit?

The level three forms course is aimed at developers and iCM users who already have a working knowledge of JavaScript. The course will equip delegates with the skills to script advanced functions that interact with the iCM API, create and understand the use of iCM EndPoints and how they can be used to deliver advanced functionality to other, less technical forms developers.

What will I learn?
- Review the key Helper Library functions and how to call them
- The concept behind, and practical use of, Object-backed forms
- Invoking the iCM API Server
- EndPoints
    - What are they and why use them
    - How to write them
    - How to interact with them in forms

Outcomes

By the end of this course delegates will be able to write JavaScript functions that interact with the iCM API and, ultimately, the data stored in the iCM database. Delegates will be able to expand upon example EndPoints and write their own. While the whole Helper Library is too large to cover in detail, delegates will understand the key constructs used in the Library and be able to make use of published Forms Helper documentation.

Agenda

1 Day Duration	
Format for the day	
09:00 - 09:30	Arrival, Set-up

9.30 – 10.00	Working with Data 1 – iCM Objects
	• Defining objects
	• Create an object-backed form
	• Forms data browser
	    ◦ Creating an object
	    ◦ Searching for an object
	
	Exercise: Create an object to represent a vehicle – include number plate, make, model and colour, and a form backed by it.

10.00 – 10.30	Working with Data 2 – SOLR • Quick look at SOLR • Basic searches **Exercise:** Using the forms created earlier input some data and use the SOLR iCM interface do some basic searches against that data.

10.30 – 11.30	Scripting Forms
	    • Why aren't object-backed forms always ideal?
	    • Types of script (default, validation, action, etc)
	    • Helper variables and when to use them
	    • Example design pattern for getting data
	        ○ Get data to search for
	        ○ Do search for object ids
	        ○ Get objects
	        ○ Work with the objects
	    • Example design pattern for setting data
	        ○ Prepare data to save
	        ○ Get the object ID you want to update
	        ○ Update the object
	
	Exercise: Create a form not backed by an object and create a 2-page form to search by number plate. Then on page 2 allow a user to enter a new colour, and save that colour when the form is submitted.

11:30	**Five Minute Break**

11.35- 13.00	Endpoints
	    • Requirements
	    • Writing
	    • Calling
	    • Ajax
	    • Testing with Postman
	
	Exercise: Using the forms from the previous exercises, create a simple server-side endpoint to get the object ID for a given number plate, and a simple client-side endpoint to check that the number plate is unique.

13:00	**Lunch Break**

13.30 – 15.00	Continuing workshop and Q&A from that
	Bringing it all together
	    • Conventions
	    • Debugging
	    • Development approaches
	Security considerations

15:00 – 15.15	Workflow overview
15:15	**Break**
15.30 – 16.15	**Question and Answer Session** As developers, you may already have an idea of what you are going to want to do in the future. Now's the chance to ask for anything specific, or to go over anything you want to again.
16:15 – 16:30	**End of day - Summary**