

201-C: Pivotal 5.9 Toolkit Customization – Pivotal Agents

Overview

This five-day classroom course teaches students to build on their solid Toolkit customization skills to construct Pivotal Agents. Students will learn how to enforce Business Rules in the Windows Access Interface using Pivotal Agents. Issues and challenges that Customizers may face when working on their own customization projects will be discussed.

Audience

Customizers

Prerequisites

Required: Courses [200-C: Pivotal 5.9 Toolkit Customization](#) and [203-eT: Pivotal 5.9 Toolkit Customization – Windows Access Interface](#).

Topics Covered

Database Design and eRelationship

- Describe the underlying structure of relational databases and the implications of that structure for eRelationship systems.
- Define the term 'database'.
- Use relational database terminology.

eRelationship Systems

- Identify structure and create components within the eRelationship system.
- Differentiate between the various components in an eRelationship system.
- Explain the roles of the three components.
- Explain how the components interact.
- Describe the different eRelationship systems.
- Outline the advantage to the eRelationship architecture.
- Create a Customization System.

Introduction to Agents

- Identify where an agent can be attached and when it will fire.
- Stop a running agent.
- Create a system agent.
- Explain general functionality of agent components.

- Locate further information on agents.
- Troubleshoot agent logic and syntax.
- Run an end user eRelationship system in debug mode.

Form Action Agents

- Fire on certain actions of a particular form.
- Use a Form component.
- Link to an already open form.
- Disable fields on a form.
- Change values of fields on a form.
- Test values of fields on a form.
- Use a Note component.
- Display error messages to end users.

List Level Agents

- Attach an agent to a specific list.
- Determine when a list level agent is fired.
- Use a Test component.
- Use run-time properties to identify the selected record.
- Use a Record component.
- Use a Form component.
- Position a form where desired on the workspace.

Topics Covered, Cont'd.

Table Level Agents

- Attach an agent to a table.
- Identify when a table level agent is fired.
- Explain why a table level agent is referred to as a form agent.
- Describe the differences between a table level agent and a list level agent.
- Add navigation buttons to a form opened with a table level agent.

Functions

- Use Query functions.
- Explain the limitations of some query functions.
- Decide the best way to retrieve data from the database.
- Explain the common functions.
- Access help for functions.

Field Exit Agents

- Attach an agent to a field on a form.
- Explain why an agent should not be attached to a field on a secondary grid.
- Indicate when a field exit will fire.
- Enable fields on a form.
- Construct a dynamic prompt.

Using Queries in Agents

- Create open parameter target queries and subqueries that can be used by an agent.
- Pass parameters from an agent to queries.
- Use an agent to perform date math in a query.

Login Agents

- Create a login agent.
- Open the Calendar interface in an agent.
- Create an embedded agent with multiple exits.
- Properly use a shortcut to a component.

Pivotal Cache

- Explain when and how the Pivotal Cache is used.
- Indicate which components use the Pivotal Cache.

Importing Data

- Import data into eRelationship with an agent.
- Decide when to use Import component vs. Bulk Import component.
- Use static lists within a target agent.
- Determine in which order tables should have data imported to them.

Parameter Passing

- Explain when to use a Call component and when to use an embedded Agent component.
- Call one agent from another.
- Pass parameters to and receive values from an agent.

Obtaining User Input

- Use a form to obtain free-form user input.
- Discuss the considerations of obtaining user input in this manner.

Looping Through Record Sets

- Traverse records in an entire table.
- Traverse subset of records.
- Traverse records displayed on a secondary grid on a form.
- Traverse records displayed on a list.

Establish Many-to-Many Relationships

- Establish a many-to-many relationship between two tables.
- Decide when to use the many-to-many relationship.
- Explain the concept of a bridge table.
- Using List level agent.

Establish One-to-One Relationships

- Define what is meant by a one-to-one relationship.
- Determine when it is necessary or useful to have a one-to-one relationship between two tables.
- Establish a one-to-one relationship.

Pivotal Resources

- Review the resources available to you.