

Sales force Development

global strategic
consulting partner

Lesson 7: Introducing Business Logic



7.1: Building applications on Force.com platform

Application Building Blocks

Applications
Tabs
Page Layouts
Record Types



User
Interface

Force.com Pages
Web controls
Sites



Workflow
Validation Rules
Approval Processes



**Business
Logic**

Force.com Page Controllers
Force.com code
Web Services API



Objects
Fields
Relationships



Data
Model

Web Services API
Metadata API



Declarative

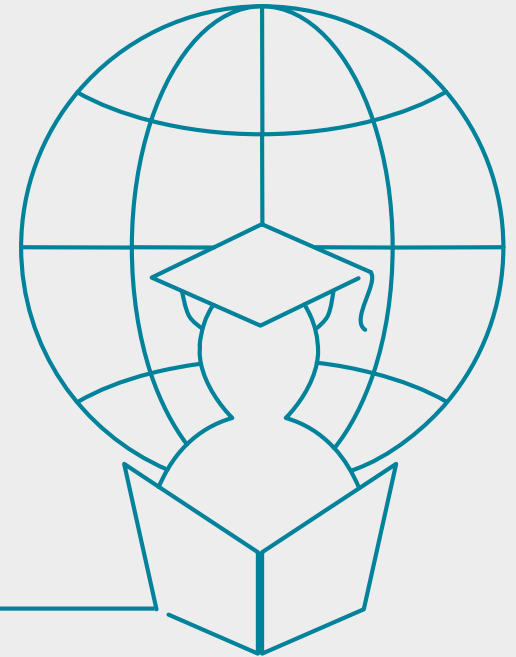
Programmatic

Simplicity + Speed

Control + Flexibility

By the end of this lesson, you will be able to:

- Create a custom formula operating on fields from one object
- Create cross-object formula
- Create a roll-up summary field



7.2: Formula Fields

Custom formula Fields

- “Smart” custom fields that can be used to build business-specific calculations using simple wizards and an Excel-like formula language
- Can reference standard, custom, or other formula fields
- Can reference fields on related objects

Formula Options

Formula Return Type

Decimal Places

Enter your formula and click Check Syntax to check for errors. Click the Advanced Formula subtab to use additional fields, operators, and functions.

Example: [More Examples ...](#)

Quick Tips

[Getting Started](#)

[Operators & Functions](#)

Simple Formula

Advanced Formula

Select Field Type Insert Field

-- Insert Merge Field --

Insert Operator

Value (Currency) =

7.3: Formula Fields

Steps to Write a Formula

Step1: Describe the business requirements



Step 2: Create simple statement



Step 3: Write the formula

7.4: Formula Fields

Steps to Write a Formula

Business case:

- Total of each Line Item is the product of items and price
- Simple Statements:
Total value=Unit Price * Units Sold
- Formula Example:
Unit_Price__c * Units_Sold__c

Lab : Creating a Formula Fields



7.4: Formula Fields

Cross-Object Formulas

- Enable you to incorporate merge fields from multiple objects for calculations and display
- Create formulas that reference fields on parent or grandparent object (up to 10 levels)
- Are limited to ten unique relationships per object across all formulas and rules for that object
- Display fields from related objects on detail pages, list views, reports etc.
- Use a simple wizard to browse across objects and insert fields in formulas

Lab : Creating a Cross-Object Formulas



7.5: Roll-Up Summary Fields

Roll-Up Summary Fields

- Roll-up summary fields are read-only formula fields that can display the sum, min, or max value or record count of a field in a related list
 - For all custom master-detail relationships
 - For limited standard relationships (Account-Opportunity and Opportunity-Product)
- There is an option to include all records in the roll-up or just records that meet certain criteria

Select Object to Summarize	
Master Object	Invoice Statement
Summarized Object	Line Items

Select Roll-Up Type	
<input type="radio"/> COUNT	
<input checked="" type="radio"/> SUM	Field to Aggregate <input type="text" value="Value"/>
<input type="radio"/> MIN	
<input type="radio"/> MAX	

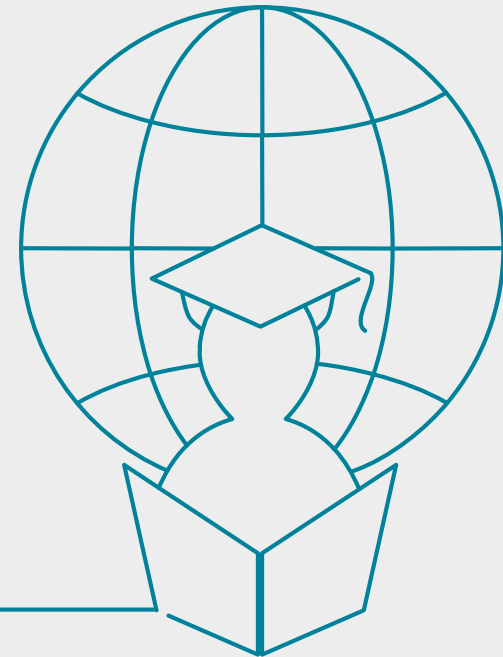
Filter Criteria
<input checked="" type="radio"/> All records should be included in the calculation
<input type="radio"/> Only records meeting certain criteria should be included in the calculation

Lab : Creating a Roll-Up Summary Fields



In this lesson, you have learnt:

- Custom formula Fields
- Cross-Object Formulas
- Roll-Up Summary Fields



- **Question 1:** Give an example of cross-object formula that we created during this section.
- **Question 2:** What are the ways to make a field required?

