# Development: Implementing Business Processes

## Lesson 13: Preserving Data Quality

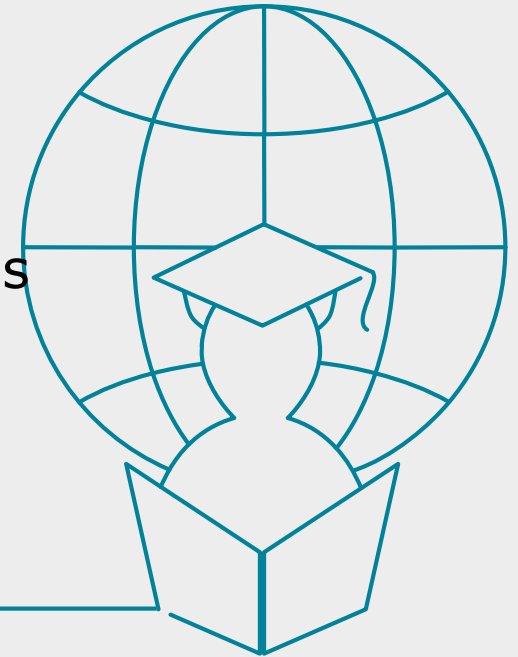# Lesson Objectives

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

- Create a validation rule to enforce conditional required behavior

- Create a validation rule using the REGEX function to enforce proper data format

- Create a validation rule with VLOOKUP to enforce data consistency

- Create a validation rule that prevents records from being added or deleted

Validation Rules verify that the data a user enters in a record meets the standard you specify before the record is saved

A validation rule contains a formula or expression that evaluates the data in one or more fields and returns a value of True or False

Validation Rules also include an error message to display to the user when the rule returns a value of True due to an invalid value

- **Error message can be displayed directly below field or at top of the page**

▪ Multiple error message may be displayed at one time

# 13.1: Enforcing Conditionally Required Fields Validation Rules

Standard and custom User merge fields for the current user are also available, allowing user-and profile-specific validation rules

IsChanged(field) function allows validation to be conditional based on whether a specific field value has changed

PriorValue(field) allows access to previous value of field

- IsNew() **allows different validation rules for create vs. update actions**

# 13.2: Enforcing Proper Data Format
## Enforcing Proper Data Format

Validation rules can be used to enforce proper data format.

For example:

US phone numbers should have 10 digits

Zip codes should follow the format 99999 or 99999-9999

Billing state in the US and Canada should be valid postal codes (2 letter, capitalized abbreviations)

Drivers license numbers should follow the proper format for their state
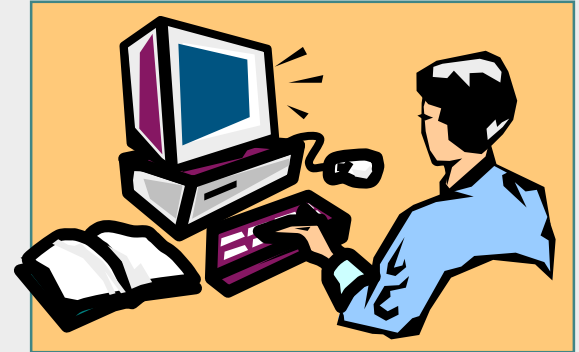
Credit card number should follow the appropriate format for their type

# Demo

Creating Validation Rules

Building Rules to Enforce Conditionally Required Fields

Building Validation Rules to Enforce Data Format

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# 13.3: Enforcing Consistency
## Enforcing Data Consistency

Validation rules in combination with the vlookup function can be used to enforce the consistency of data in Salesforce

For example:

Ensure that zip code and state entered on a record match

Ensure that the city and state entered on a record match (i.e that the city exists within the state that was entered)
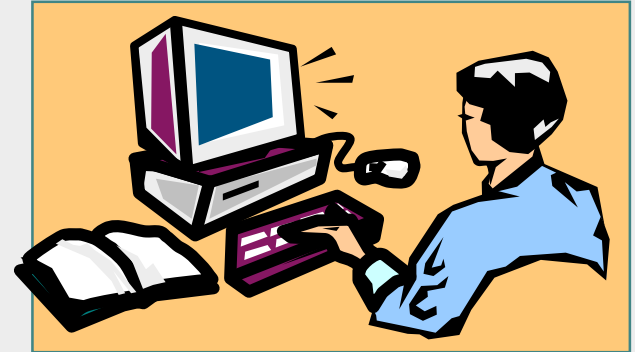
# Preventing Data Loss

Validation rules can be used to prevent users from adding or deleting records

In this case, validation rules are used in conjunction with a Roll-up Summary Field (RSF)

- First build a RSF on the parent object that sums the number of child records
- Then create a validation rule on the parent object that conditionally prevents changes to the number listed in the RSF
- If user tries to add or delete a record, the validation rule will fire and prevent users from adding or deleting
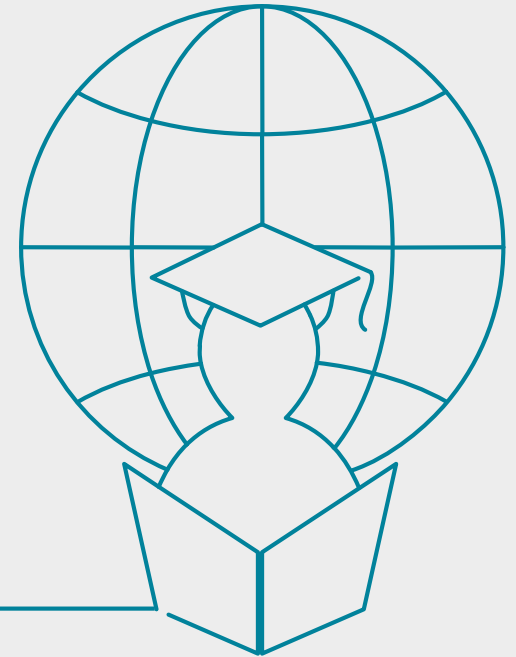
# Demo

Building Rules to Enforce Consistency
Creating Validation Rules to Prevent Data
Loss

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# Summary

Validation Rules
Enforcing Proper Data Format
Enforcing Data Consistency
Preventing Data Loss

# Module Review

When are validation rules applied?
When setting up a validation rule, developer must write
Validation rules are enforced through the API
        True or False
List use cases for utilizing validation rules

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