

Final Project - Altimetrik Salesforce Onboarding

Instructions:

- Build your solution in a [free Salesforce developer org](https://developer.salesforce.com)
- The solution should be built in a Salesforce DX project, using source control and git repository
- Use as many declarative tools as you'd like

Scenario - Custom Sales Territory Management

Sun Motors Inc. is experiencing exponential sales growth after releasing their *Model F* solar powered sports car.

They employ a Sales team that sells vehicles to auto dealers across the United States. Each sales representative has a territory of one or more zip codes. Sales reps own the relationship with all auto dealers in their zip code territories.

Sun Motors Inc. currently uses Salesforce to track their sales activities, including:

- Accounts: Each account represents an automobile dealer.
- Opportunities: A sale of vehicles to an automobile dealer.
- Contacts: Automobile dealer employees.

The Sales Operations team uses a combination of Salesforce and spreadsheets to manage each sales rep's territory. They are manually setting the *Account Owner* field to the sales rep's User record when the Account's *Zip Code* belongs to the sales rep. Currently, a list of zip codes and their sales rep is stored in spreadsheet that looks like this:

| Zip Code | Sales Representative |
|----------|----------------------|
| 91000 | John |
| 91001 | John |
| 91002 | John |
| 91002 | Katherine |
| 91010 | Katherine |
| 91020 | Katherine |

| | |
|-------|--------|
| 92010 | Daniel |
| 92020 | Ben |

Since Sun Motors Inc.'s sales team has tripled in size in the past year, the Sales Operations team is having trouble keeping up with all the sales territory changes. This process must be automated!

Requirements

Requirement #1: Recreate the Zip Code spreadsheet as a custom *Territory* object. The custom object should have the following custom fields:

| Field Name | Field Type | Description |
|------------|---------------|---|
| Zip Code | Text | The standard name field. Each record will be named after its specific zip code. |
| Owner | Lookup (User) | The standard owner field. The sales rep assigned to this territory |

Note: All fields should have field history tracking turned on.

Requirement #2: When an Account's *BillingPostalCode* (aka Zip Code), is changed,

- Change the Account *Owner* to the sales representative assigned to the new zip code
- Change the *Owner* field of all the Account's *Contacts* to the same sales rep
- Change the *Owner* field of all the Account's *Open Opportunities* to the same sales rep

Note:

- The logic should run *only* when the Account's zip code *is changed* or populated for the first time
- If no matching Territories are found, do nothing

Requirement #3: Multiple sales representatives can be assigned to the same zip code territory. If this is the case, use a random function to select one of the assigned sales representatives.

Requirement #4: Three sales representatives at most can be assigned to a single zip code. Display an error if a user attempts to associate another sales representative to a zip code.

Requirement #5: Create an *Assignment History* custom object with the following fields:

| Field Name | Field Type | Description |
|--------------------|-------------------------|---|
| Previous Owner | Lookup (User) | The prior sales rep assigned to this Account |
| New Owner | Lookup (User) | The new sales rep assigned to this Account |
| Previous Territory | Lookup (Territory__c) | The matching Territory__c record for the prior zip code |
| New Territory | Lookup (Territory__c) | The matching Territory__c record for the new zip code |
| Account | Master-Detail (Account) | The related Account record |
| Changed By | Lookup (User) | The user who changed the BillingPostalCode |

Requirement #6: Create an *Assignment_History__c* record whenever an Account's *BillingPostalCode* is changed or populated for the first time. All fields should be populated.

Requirement #7: If a *Territory__c* record's sales representative is changed (and only when it is changed), repeat Requirement #2's logic for all Accounts associated with the Territory.

Requirement #8: When an account owner is changed, send an email to both the previous and the new owner notifying them of the change.

Requirement #9: Every day at midnight, check that all accounts are assigned to the proper owner. All accounts that do not belong to the right owner should be fixed (including the relevant contacts and opportunities).

Requirement #10: At least 90% test code coverage.
