

End exercise Bootcamp training

Files to use

You will need the following files in this exercise:

- **BasicConnector - TwoFiles.zip**
- **Cases.csv**
- **Events.csv**
- **User.csv**
- **Supplier.csv**

Tips and tricks

- Think about visibility of attributes.
- Use clear names and commit messages!
- Commit steps, not everything at once.
- Put attributes in groups for clarity.
- To add new attributes into ApplicationOne follow these steps:
 1. Open ApplicationOne with the data set which contains the new attributes.
 2. Double-click the input table which should contain these attributes.
 3. Press OK.
 4. Press No when it asks if you want to reload data
 5. Press Yes when it asks if you want to add new attributes.

Getting started

Step	Action
1	Create a new branch and workspace.
2	Upload the BasicConnector - TwoFiles to your workspace.
3	Locate the Exam folder in the Server Data. It holds the data used throughout this exam.
4	Load the tables Cases.csv and Events.csv in the Connector. (Hint: for CSV files think of the delimiter)

Transform and clean data

Step	Action
1	Filter out cases without proper Case ID in Cases_input . (Hint: Case IDs that are empty and duplicates)
2	Map attributes and fix all errors in attributes in Cases_input and Events_input .
3	Replace Case ID in Events with an expression to remove prefix. (Hint: Replace all uses of the old Case ID with the new expression)

Demonstrate data in AppOne

Step	Action
1	Show the results by exporting the output dataset and opening this dataset in AppOne

Add extra tables and join tables

Step	Action
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1	<ul style="list-style-type: none"> Create an extra table for User.csv. (Hint: think of table scope and delimiter)
2	<ul style="list-style-type: none"> Create an extra table for Supplier.csv. (Hint: think of table scope and delimiter)
3	<ul style="list-style-type: none"> Join Supplier table. (Hint: Think of visibility of the attributes.)
4	<ul style="list-style-type: none"> Join User table, for each user there are multiple rows, handle them correctly. (Hint: Think of visibility of the attributes.)

Add business logic

Step	Action
1	Add the following business logic: <ul style="list-style-type: none"> Reasonable amount group Activity type Default period Is open activity, is close activity Check for more attributes

Demonstrate data in AppOne

Step	Action
1	Show the results by exporting the output dataset and opening this dataset in AppOne

Add Tags

Step	Action								
1	Create the following Tags: <table border="1"> <thead> <tr> <th>Tag name</th><th>Description</th></tr> </thead> <tbody> <tr> <td>Inefficiency</td><td>The second "Check contract conditions" took longer than the first.</td></tr> <tr> <td>Violation</td><td>Invoice over value of 750,000 is paid but not approved.</td></tr> <tr> <td>SoD</td><td>Paid and approved by the same user (User who performed both check and pay invoice)</td></tr> </tbody> </table>	Tag name	Description	Inefficiency	The second "Check contract conditions" took longer than the first.	Violation	Invoice over value of 750,000 is paid but not approved.	SoD	Paid and approved by the same user (User who performed both check and pay invoice)
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Add Due Dates

Step	Action
1	Create the following Due date : Pay employee reimbursement is done within 12 hours after receiving the invoice

Add Reference Model

Step	Action
1	Create a few reference models.

Advanced data engineering

Step	Action
1	Create a table containing the Archived column of the Cases table as events
2	Union the table created above with the Events table
3	Check the result in ApplicationOne