

Project Spend Lab - Instructions

Learning Objective

Use DAX calculated tables and DAX table functions to solve a typical issue in finance. The lab will use these functions:

- ADDCOLUMNS()
- SELECTCOLUMNS()
- GENERATE()
- GENERATESERIES()
- and helper functions such as EDATE() and variables.

Background

The data for this lab is a list of projects and some details:

- The Start Date is when the project is scheduled to start.
- The Project Duration is the length of the Project in months.
- The Monthly Spend is the £ value of the cost of the project at the end of each month on the monthly anniversary of the start date.

The data looks like this.

Project Name	Start Date	Project Duration	Monthly Spend
Alpha	16/01/2023	10	20
Bravo	06/02/2023	7	25
Charlie	12/03/2023	8	10
Delta	05/05/2023	5	15
Echo	10/04/2023	6	20

For example, if a project has a start date of the 16th January 2023, a project duration of 10 months and a monthly spend of £20, then this project will generate 10 cashflows; the first one will be on the 16th February and the final one on the 16th November 2023.

Instructions

The data is in the Project Spend.csv file on GitHub in the Misc Datasets folder.

[CourseDatasets/Project Spend.csv at main · MarkWilcock/CourseDatasets \(github.com\)](https://github.com/MarkWilcock/CourseDatasets/blob/main/Project%20Spend.csv)

Create a table, named Project cashflow, that contains cashflows for all projects. This table will have columns project name, Cashflow Date and Spend. It should look something like this.

Project Cashflow

Project Name	Cashflow Date	Spend
Alpha	16-Feb-2023	20
Alpha	16-Mar-2023	20
Alpha	16-Apr-2023	20
Alpha	16-May-2023	20
Alpha	16-Jun-2023	20
Alpha	16-Jul-2023	20
Alpha	16-Aug-2023	20
Alpha	16-Sep-2023	20
Alpha	16-Oct-2023	20
Alpha	16-Nov-2023	20

Optional Additional Exercise

Add a Dates table to the data model. Use this to build a column chart that shows the total spend each month. A dates table is available at [CourseDatasets/Calendar.csv at main · MarkWilcock/CourseDatasets \(github.com\)](https://github.com/MarkWilcock/CourseDatasets/blob/main/Calendar.csv)