



Data Tables

Data Tables

- **What is a Data Table?**
- **How to create a Data Table?**
- **Navigate your data table**
- **Change the structure of your data table**
- **Filter your data table**
- **Practical example**

What is a Data Table

It's a table that is **stored in the memory**

It has **rows** and **columns**

We can access a particular **cell**, navigating through rows & columns

Data table is a special type of **variable** in UiPath

A common Business Process scenario



Input

any **tabular** format :
csv, Excel files,
HTML tables

Data Table

processing

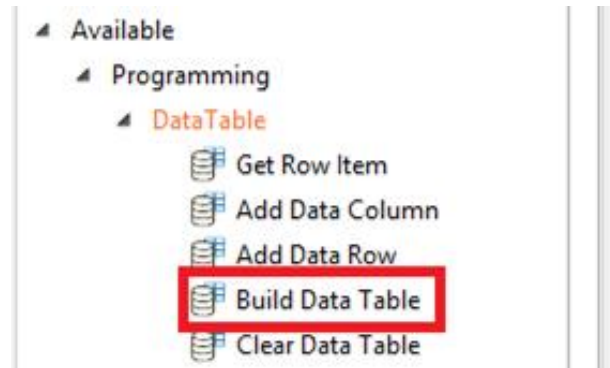
Output

any app

How to create a Data Table



or



1. reading tabular data from external sources

Read CSV
Read Excel
Read Range
Extract Structured Data

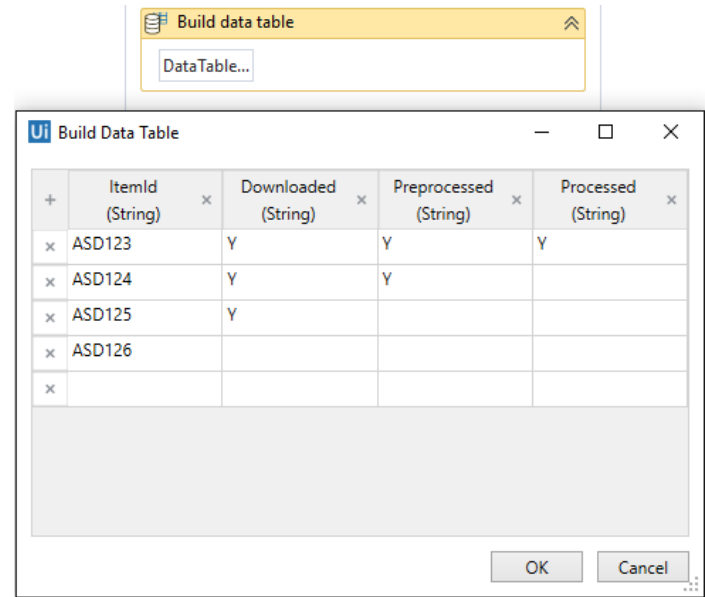
2. creating it from scratch

Build Data Table

Build your data table

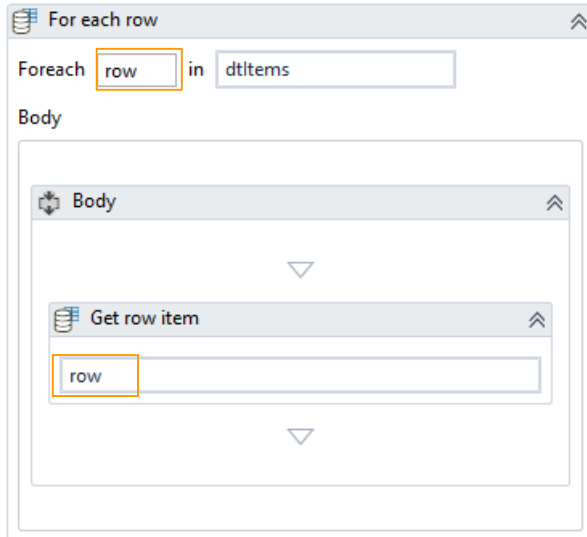
Build Data Table

1. Click on **+** to add a new column in the DataTable.
1. Set the column *Name* , *Data* type and the other properties
1. Start adding your data in the rows.
Press ENTER to go to the next row



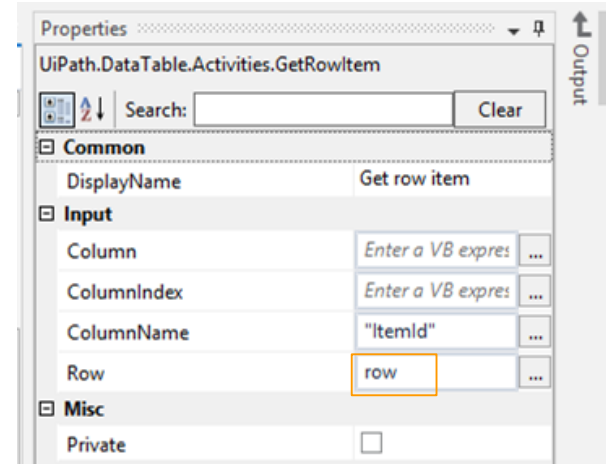
Navigate your data table

For Each Row



Iterate through your DataTable rows.

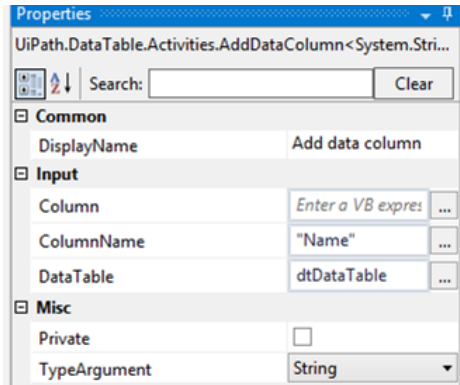
Get Row Item



set *Column Index* (it starts from 0 !)
or the *Name* (as a String)

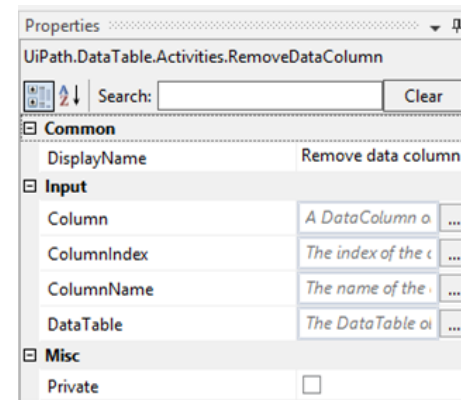
Change the structure

Add Data Column



Name of the new column,
the DataTable

Remove Data Column



Column name or Index, the source
DataTable

Filtering your data table

Using **Select** method
of data table object

A*B Assign

```
selectedRows = dataTable.Select("Age >= 30 ")
```



Display all rows in the DataTable

```
Foreach row in selectedRows
```

result of Select - an
array of datarows

Name	Variable type	Scope	Default
selectedRows	DataRow[]	Sequence	Enter a VB expression

Practical examples

1. Calculate the average age of people over 18 in a table
 - Make sample data table
 - Filter data by age condition
 - Adding up years of age
 - Divide to number of people
2. Create a robot that reads the *Cash In, On Us Check, Not On Us Check* values from the *AnyTellerDemo.csv* file and enters them in the AnyTeller app

KB articles and useful documentation

- <http://www.uipath.com/kb-articles/how-to-filter-a-data-table>
- <http://www.uipath.com/kb-articles/how-to-use-insert-datatable-activity>
- <http://www.uipath.com/kb-articles/simulate-excel-vlookup-in-a-datatable>
- <http://www.uipath.com/kb-articles/how-to-work-with-a-dynamic-array>
- <http://www.uipath.com/kb-articles/how-to-compare-collections>