

CHEAT SHEET - POWER FX

Power Apps (Power Fx) cheat sheet

The Power Fx functions you reach for daily, with one-line examples and the delegation notes that bite in production.

119

FUNCTIONS

13

CATEGORIES

Power Fx

LANGUAGE

App & navigation 11 functions

Set	Set a global variable <code>Set(gblUser, User().FullName)</code>
UpdateContext	Set screen-scoped variables <code>UpdateContext({locShowPanel: true})</code>
Navigate	Move to another screen <code>Navigate(scrDetail, ScreenTransition.Cover)</code>
Navigate (with context)	Pass data to the next screen <code>Navigate(scrDetail, None, {locId: ThisItem.ID})</code>
Back	Return to the previous screen <code>Back()</code>
Launch	Open a URL or app <code>Launch("https://learn.microsoft.com")</code>
Notify	Show a banner message <code>Notify("Saved", NotificationType.Success)</code>
Reset	Reset a control to default <code>Reset(txtSearch)</code>
Select	Trigger another control's OnSelect <code>Select(btnSave)</code>
Param	Read a launch parameter <code>Param("recordId")</code>
Exit	Close the running app <code>Exit()</code>

Creating & changing records 8 functions

Patch (update)	Update an existing record <code>Patch(Tasks, ThisItem, {Status: "Done"})</code>
Patch (create)	Create a new record <code>Patch(Tasks, Defaults(Tasks), {Title: txtTitle.Text})</code>
Patch (bulk)	Update many records at once <code>Patch(Tasks, colEdits)</code>
Defaults	Get a blank record for a source <code>Defaults(Tasks)</code>
Remove	Delete a specific record <code>Remove(Tasks, galTasks.Selected)</code>
RemoveIf	Delete records matching a condition <code>RemoveIf(Tasks, Status = "Archived")</code>
Update	Replace a record wholesale <code>Update(Tasks, oldRec, newRec)</code>

UpdateIf

Change fields on matching records

`UpdateIf(Tasks, Priority = "Low", {Status: "Closed"})`**Forms** 8 functions

Form behavior lives in functions; mode and errors live in properties on the form control.

SubmitForm

Save the form to its source

`SubmitForm(frmEdit)`**NewForm**

Put a form into new-record mode

`NewForm(frmEdit)`**EditForm**

Put a form into edit mode

`EditForm(frmEdit)`**ViewForm**

Put a form into read-only mode

`ViewForm(frmEdit)`**ResetForm**

Discard unsaved changes

`ResetForm(frmEdit)`**frm.Mode**

Read the current form mode

`frmEdit.Mode = FormMode.New`**frm.Error**

Read the last submit error

`frmEdit.Error`**frm.LastSubmit**

Get the record just saved

`frmEdit.LastSubmit.ID`**Collections & local storage** 5 functions**Collect**

Add rows to a collection

`Collect(colCart, {Item: "Pen", Qty: 2})`**ClearCollect**

Clear, then refill a collection

`ClearCollect(colStaff, Filter(Staff, Active))`**Clear**

Empty a collection

`Clear(colCart)`**SaveData**

Persist a collection on the device

`SaveData(colCart, "cart")`**LoadData**

Reload a saved collection

`LoadData(colCart, "cart", true)`**Filtering, search & sort** 10 functions

This is where delegation matters most. Non-delegable functions silently cap at the row limit (default 500).

Filter

Return rows matching a condition

`Filter(Staff, Department = "IT")`**Search**

Substring search across columns

`Search(Staff, txtFind.Text, "Name", "Email")`**Lookup**

Return the first matching record

`Lookup(Staff, ID = locId)`

Sort	Order by a single formula <code>Sort(Staff, LastName)</code>
SortByColumns	Order by named columns <code>SortByColumns(Staff, "LastName", SortOrder.Ascending)</code>
First / Last	Get the first or last record <code>First(Sort(Orders, Created, SortOrder.Descending))</code>
FirstN / LastN	Get the first or last N records <code>FirstN(Orders, 10)</code>
Distinct	Unique values from a column <code>Distinct(Staff, Department)</code>
CountRows	Count rows in a table <code>CountRows(Filter(Tasks, !Done))</code>
CountIf	Count rows matching a condition <code>CountIf(Tasks, Status = "Open")</code>

Conditional logic 10 functions

If	Return a value by condition <code>If(Score >= 50, "Pass", "Fail")</code>
Switch	Match one value against many <code>Switch(Status, "A", "Active", "I", "Inactive", "Unknown")</code>
IsBlank	Test for blank <code>IsBlank(txtName.Text)</code>
IsEmpty	Test a table for zero rows <code>IsEmpty(colCart)</code>
IsBlankOrError	Test for blank or error <code>IsBlankOrError(LookUp(Staff, ID = locId))</code>
Coalesce	First non-blank value <code>Coalesce(txtNick.Text, txtName.Text, "Guest")</code>
IfError	Catch and replace an error <code>IfError(Value(txtQty.Text), 0)</code>
And &&	All conditions true <code>And(Active, Approved)</code>
Or 	Any condition true <code>Or(IsAdmin, IsOwner)</code>
Not !	Invert a condition <code>Not(IsBlank(txtName.Text))</code>

Text 16 functions

Concatenate &	Join text values <code>"Hi, " & txtName.Text</code>
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Left / Right	Characters from one end <code>Left("PowerStack", 5)</code>
Mid	Characters from a position <code>Mid("PowerStack", 6, 5)</code>
Len	Count characters <code>Len(txtCode.Text)</code>
Upper / Lower	Change case <code>Upper("po-123")</code>
Proper	Title-case each word <code>Proper("jane doe")</code>
Trim	Trim ends + collapse inner spaces <code>Trim(" a b ")</code>
TrimEnds	Trim leading/trailing spaces only <code>TrimEnds(" a b ")</code>
Substitute	Replace text by match <code>Substitute("a-b-c", "-", "/")</code>
Replace	Replace text by position <code>Replace("2026", 1, 2, "19")</code>
StartsWith / EndsWith	Test a prefix or suffix <code>StartsWith(txtFile.Text, "P0-")</code>
Find	Position of one string in another <code>Find("@", txtEmail.Text)</code>
Split	Break text into a table <code>Split("a,b,c", ",", "")</code>
Concat	Join a table column into text <code>Concat(colTags, Value, ", ")</code>
IsMatch	Test against a regex pattern <code>IsMatch(txtZip.Text, "\d{5}")</code>
Char	Character from a code point <code>Char(10)</code>

Date & time 11 functions

Now	Current date and time <code>Now()</code>
Today	Current date at midnight <code>Today()</code>
DateAdd	Add a span to a date <code>DateAdd(Today(), 7, TimeUnit.Days)</code>
DateDiff	Span between two dates <code>DateDiff(StartDate, EndDate, TimeUnit.Days)</code>
DateValue	Parse text into a date <code>DateValue("2026-06-13")</code>

DateTimeValue	Parse text into a datetime <code>DateTimeValue("2026-06-13 09:30")</code>
Text (format)	Format a date as text <code>Text(Now(), "dd mmm yyyy")</code>
Date	Build a date from parts <code>Date(2026, 6, 13)</code>
Time	Build a time from parts <code>Time(9, 30, 0)</code>
Weekday	Day-of-week number <code>Weekday(Today())</code>
Year / Month / Day	Pull a part from a date <code>Month(Today())</code>

Math & aggregation 11 functions

Aggregations over large sources are mostly non-delegable - they run on the rows already pulled, not the whole table.

Sum	Total a column <code>Sum(Orders, Amount)</code>
Average	Mean of a column <code>Average(Orders, Amount)</code>
Min / Max	Smallest or largest value <code>Max(Orders, Amount)</code>
Count	Count numeric values in a column <code>Count(Orders.Amount)</code>
CountA	Count non-blank values in a column <code>CountA(Orders.Notes)</code>
Round	Round to N decimals <code>Round(12.345, 1)</code>
RoundUp / RoundDown	Round away from / toward zero <code>RoundUp(12.31, 1)</code>
Mod	Remainder after division <code>Mod(17, 5)</code>
Abs	Absolute value <code>Abs(-8)</code>
Rand	Random decimal 0-1 <code>Rand()</code>
RandBetween	Random whole number in range <code>RandBetween(1, 100)</code>

Table shaping 11 functions

AddColumns	Add a calculated column <code>AddColumns(Staff, "Full", First & " " & Last)</code>
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DropColumns	Remove columns <code>DropColumns(Staff, "Email", "Phone")</code>
RenameColumns	Rename columns <code>RenameColumns(Staff, "First", "FirstName")</code>
ShowColumns	Keep only named columns <code>ShowColumns(Staff, "Name", "Department")</code>
GroupBy	Group rows by columns <code>GroupBy(Sales, "Region", "Rows")</code>
Ungroup	Flatten a grouped table <code>Ungroup(grouped, "Rows")</code>
ForAll	Evaluate a formula per row <code>ForAll(colEdits, Patch(Tasks, ThisRecord))</code>
With	Name temporary values inline <code>With({tax: 0.1}, total + total * tax)</code>
Sequence	Generate a numeric table <code>Sequence(5)</code>
Concurrent	Run actions in parallel <code>Concurrent(Refresh(A), Refresh(B))</code>
Table	Build an inline table <code>Table({n: 1}, {n: 2})</code>

Data conversion 7 functions

Value	Text to number <code>Value("123.45")</code>
Text	Number to formatted text <code>Text(1234.5, "#,##0.00")</code>
JSON	Serialize a value to JSON <code>JSON(colCart, JSONFormat.Compact)</code>
ParseJSON	Parse JSON into an untyped object <code>ParseJSON(txtPayload.Text)</code>
Boolean	Text to boolean <code>Boolean("true")</code>
GUID	Generate or parse a GUID <code>GUID()</code>
ColorValue	Hex string to a color <code>ColorValue("#742774")</code>

Records & scope references 5 functions

These are operators and references, not functions - but you use them constantly.

ThisItem	Current row inside a gallery <code>ThisItem.Title</code>
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ThisRecord	Current row in ForAll / Filter <code>Filter(Orders, ThisRecord.Amount > 0)</code>
Self	The current control <code>Self.Fill</code>
Parent	The containing control <code>Parent.TemplateHeight</code>
As	Alias a record scope <code>ForAll(Orders As O, O.Amount * 1.1)</code>

Connectors (real patterns) 6 functions

SharePoint and Dataverse are added as data sources, then queried with the normal table functions. There is no `SharePoint.GetItems()` or `Dataverse.Retrieve()` in Power Fx - those are Power Automate connector actions.

Office365Users.MyProfileV2	Rich profile of the current user <code>Office365Users.MyProfileV2().jobTitle</code>
Office365Users.SearchUserV2	Search the directory <code>Office365Users.SearchUserV2({searchTerm: txtFind.Text}).value</code>
Office365Outlook.SendEmailV2	Send an email as the user <code>Office365Outlook.SendEmailV2("a@x.com", "Hi", "Body")</code>
SharePoint list	Query a list like any table <code>Filter('My List', Status.Value = "Open")</code>
Dataverse table	Query a table like any table <code>Lookup(Accounts, accountid = locId)</code>
User	Basic current-user info <code>User().Email</code>