

Starting shortly.  
Please wait!

# ActivityInfo

Formulas



ActivityInfo

# Training Agenda

- Introduction to the ActivityInfo Formula Language
- Using formulas
  - Calculated fields
  - Relevance rules
  - Validation rules
  - Reports
- Examples

# Concepts

## BASIC

A **formula** expresses a calculation or rule using symbols.

Can be used for data validation, analysis, and permissions.

If you want to use formulas, strongly recommend setting up your forms with **CODES**.

# Arithmetic

## BASIC

`FIELD_CODE + 1`

`FIRST_A + FIELD_B`

`WOMEN / (MEN + WOMEN) * 100`

# True/False Rules

## BASIC

`AGE < 18`

`AGE > 0 && AGE <= 18`

`Name == "Alex" || Name == "Fay"`

# FUNCTIONS

# Functions

## FUNCTIONS

Remember this from math class?

$f(x)$

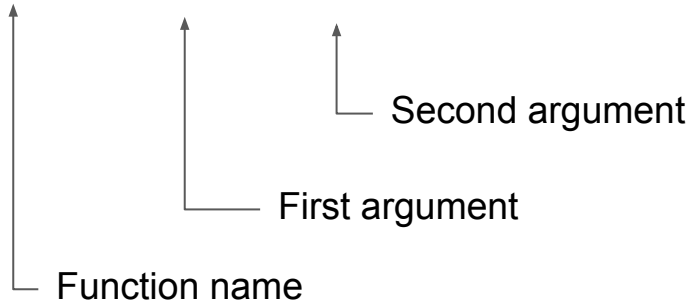
$\text{SIN}(\theta)$

$\text{MIN}(3, 4)$

# Functions

## FUNCTIONS

MIN(3, 4)



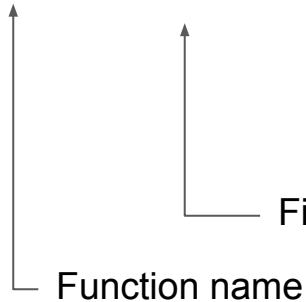


# The IF Function


## FUNCTIONS

IF ( AGE < 18 , "Minor" , "Adult" )


Function name




First argument is the condition



This is the result if the  
condition is true



This is the result if the  
condition is false



# Select Fields

## FUNCTIONS

`GENDER.Male => True if Male is selected`

`GENDER.[Female]`

`AGE_GROUP.[Children under 5]`

# Scores from Select fields

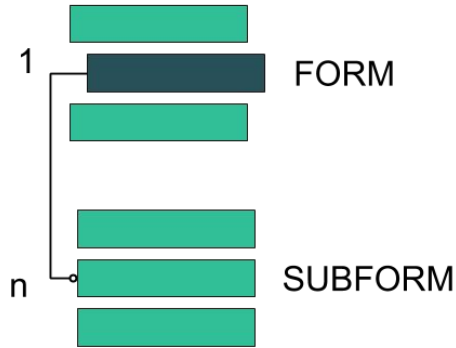
## FUNCTIONS

```
IF(DISABLED.YES, 5, 0) +  
IF(AGE < 18, 3, 0)
```

# SUBFORMS

# Subform fields in formulas

## EXPAND - SETUP



SUBFORM\_FIELD\_CODE

**SUM**(SUBFORM\_FIELD\_CODE.NUM\_CHILD)

**AVERAGE**(SUBFORM\_FIELD\_CODE.AGE)

**MEDIAN**(SUBFORM\_FIELD\_CODE.AGE)

# Reference Fields

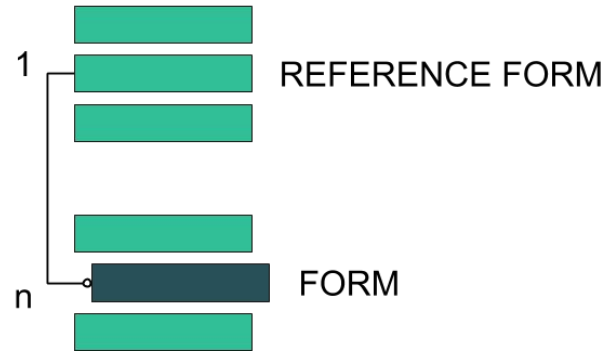
# Using the dot notation

## Reference Fields

PROVINCE . NAME

PROVINCE . POPULATION

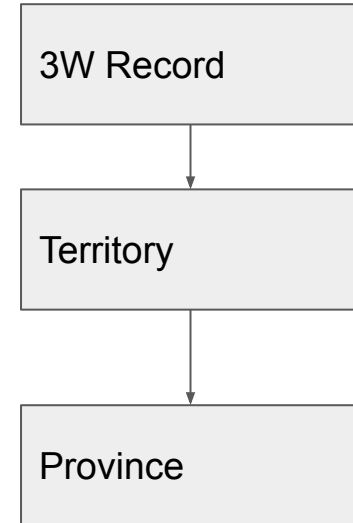
TERRITORY . PROVINCE . POPULATION



# Compared to SQL

## Reference Fields

```
SELECT
  t.NAME
  p.NAME,
  p.POPULATION
FROM threew w
LEFT JOIN territory t ON (w.terr = t.id)
LEFT JOIN province p ON (t.prov = p.id)
```

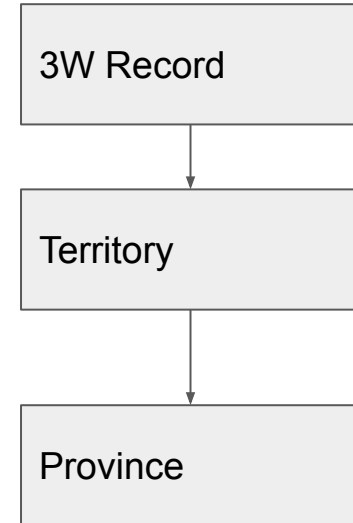




# Compared to SQL

## Reference Fields

```
territory.NAME  
territory.province.NAME  
territory.province.POPULATION
```

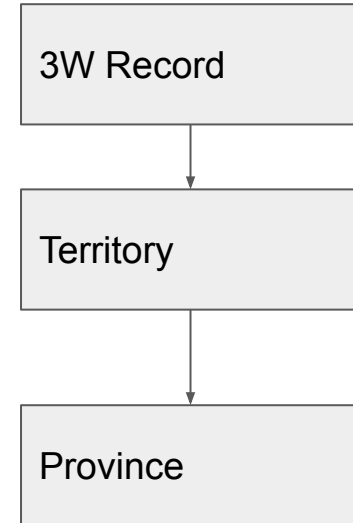


# Values of reference field

## Reference Fields

`territory.NAME`  
`territory`

A text field  
The record ID



# Using Formulas

# Using formulas

1. Table view
2. Calculated fields
3. Relevance rules
4. Validation rules
5. Pivot tables

# Examples

# Examples

1. Scoring
2. Dates
3. Filtering relevance rules