



The no-code cloud platform to build industry specific business applications and native apps.  
Connect with data from any source (ERP - Industrial - IoT) and innovate faster.

Tutorials

## Build an app with a simple form

## Inhoud

<b>Introduction.....</b>	<b>3</b>
<b>Step 1 - Creating a basic form .....</b>	<b>4</b>
<b>Step 2 - Adding a list.....</b>	<b>11</b>
<b>Step 3 - Adding business logic.....</b>	<b>16</b>
<b>Summary.....</b>	<b>19</b>

## Introduction

In this tutorial we are going to create an expenses form.

During the tutorial you can view your progress in the Any2info app for Android, iOS or web.

In this tutorial we will outline why certain fields are used and what the advantages of using these fields are.

Topics are:

- Creating and editing an form
- Creating a dataclip, using the Excel add-in
- Creating a list for use in the expenses form
- Adding business logic to a form using form rules

Pre requirements, before starting the tutorial

- Make sure you have created an account on the any2info platform
  - If not create one using this link: <https://store.any2info.com/Trial>
- Make sure you have access to a collection
- Make sure you have excel installed and the Any2Info Excel Add-in

## Step 1 - Creating a basic form

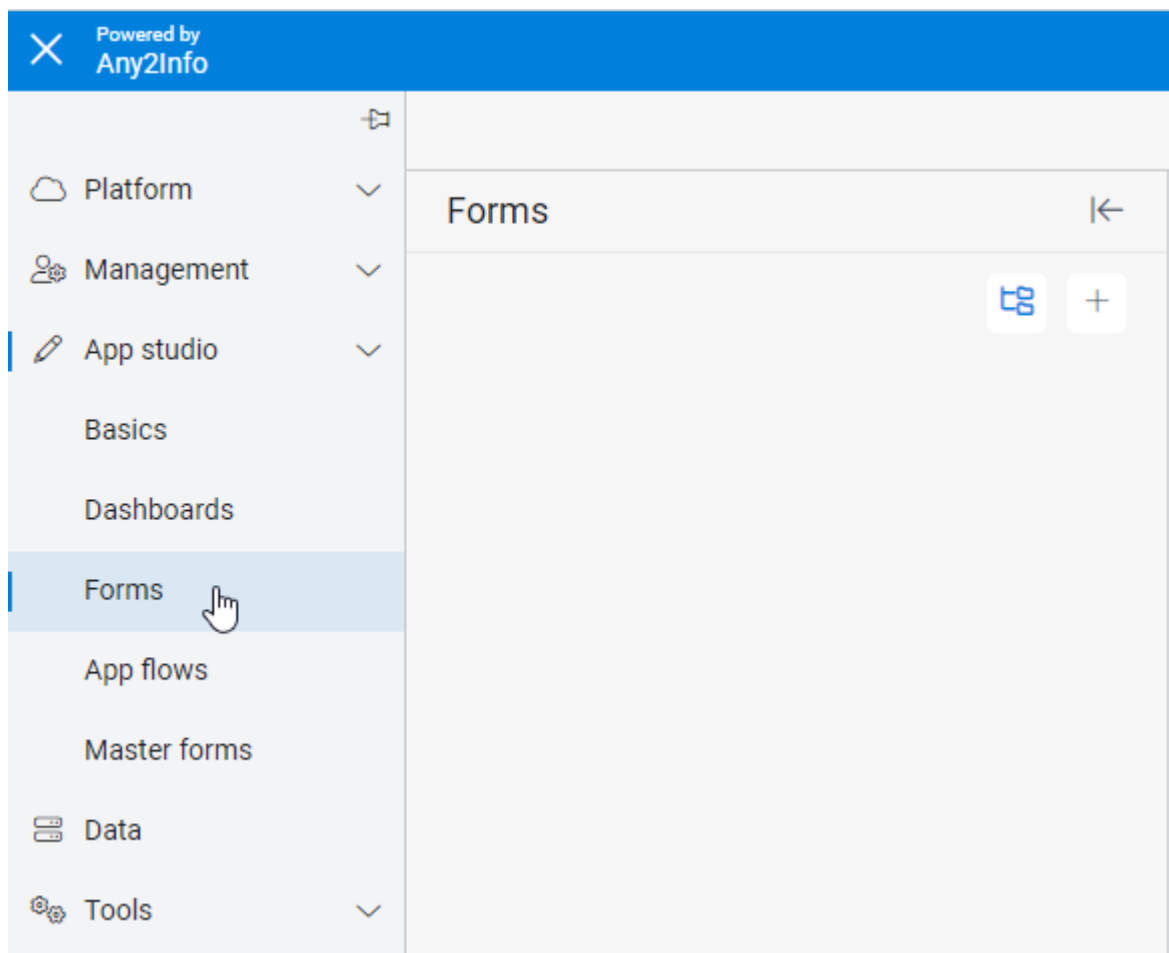
In this first step we are going to create a new form with a few basic fields. The fields we are going to use are:


- A numeric field, for entering the amount
- A textbox field, for entering a description for the expense
- A date field, for selecting the date the expense was made

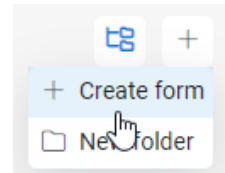
Using these three fields a simple and basic declaration form can be created.

### Let's get started!

Open the Any2Info platform and navigate to Forms in the App Studio:



In the form designer we are going to create a new form by clicking on the  icon and selecting the option create form:



The platform will create a new empty form with the name Form 1.

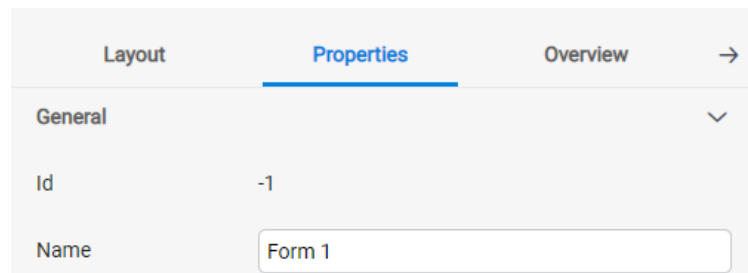
The first thing we are going to do is **change the name of the form**. To change the name we need



to click on the icon in the top the canvas



After clicking the settings button the properties on the form will be opened on the righthand side of the screen. And here we can edit the Name of the form:

A screenshot of the 'Properties' panel on the right side of the screen. The panel has three tabs: 'Layout', 'Properties' (which is selected and underlined in blue), and 'Overview'. Below the tabs is a 'General' section with a dropdown arrow. Under 'General', there are two fields: 'Id' with the value '-1' and 'Name' with a text input field containing 'Form 1'.

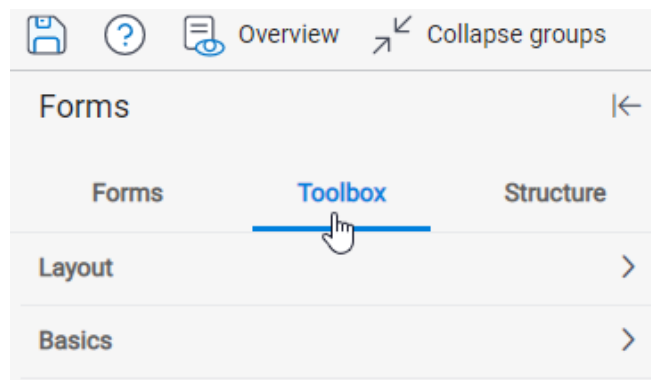
Change the name "Form 1" to something like "Expenses" or "My expenses".

Next we have to **add fields to the form**.

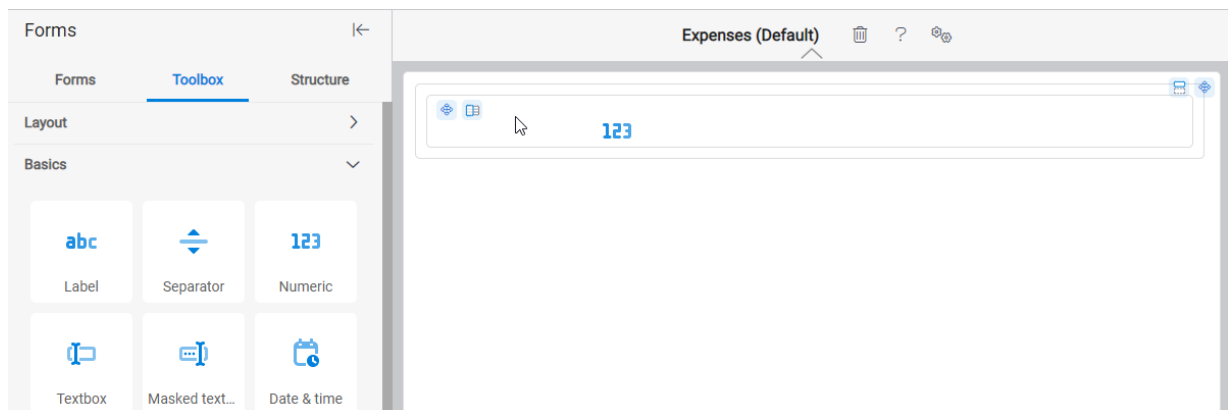
To add fields we need to navigate to the toolbox on the lefthand side of the screen:

When opening the **toolbox** a number of field categories appear, feel free to check out all the field but for now we are only interested in the "Basics" category.

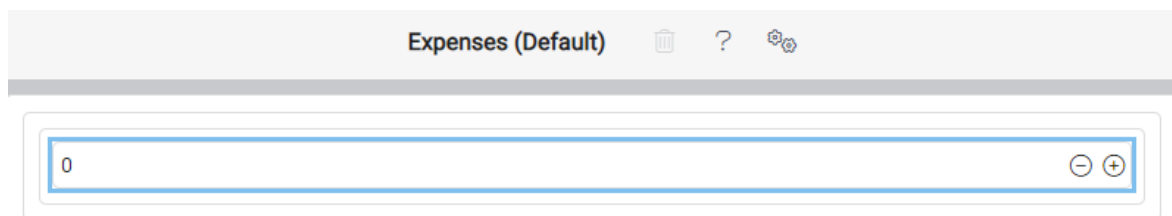
When you open the basics category you will see a number of field including the fields we are going to use (Numeric, Textbox and Date & time)



To add our first Numeric field we need to **drag and drop the field from the toolbox to the canvas**.



After dropping the field on the canvas a preview of the field will be drawn on the canvas



Since the numeric will be used to enter an amount we need to **edit a few properties**.


To edit the properties select the field by clicking on it (after dropping a field on the canvas the field is already selected).

The properties we are going to edit are:

- Name: the name is used to recognize the field in a later stadium. Make sure the name is recognizable!
- Label visible: enabling this property makes sure there is a descriptive label visible above the field.
- Display text: setting this property determines which text should be displayed above the field.
  - Display texts are translatable pieces of text that can be used an reused throughout the application. To set the display text we need to create a new display text, this can be achieved by clicking **Create** the text below the selection box.
  - After clicking “Create” a pop-up will appear where you can enter a name and a default text. The name is used to identify the display text and the default is used to show a default text when no translations are entered (editing existing translations can be done through the menu option Tools -> Translations)
  - In this case we enter the Name and Default value “Amount”

- Maximum: this properties sets the maximum amount a user can enter, in this example we set the max to 1000
- Decimal count: since this is an amount we need to set the decimal count to 2.

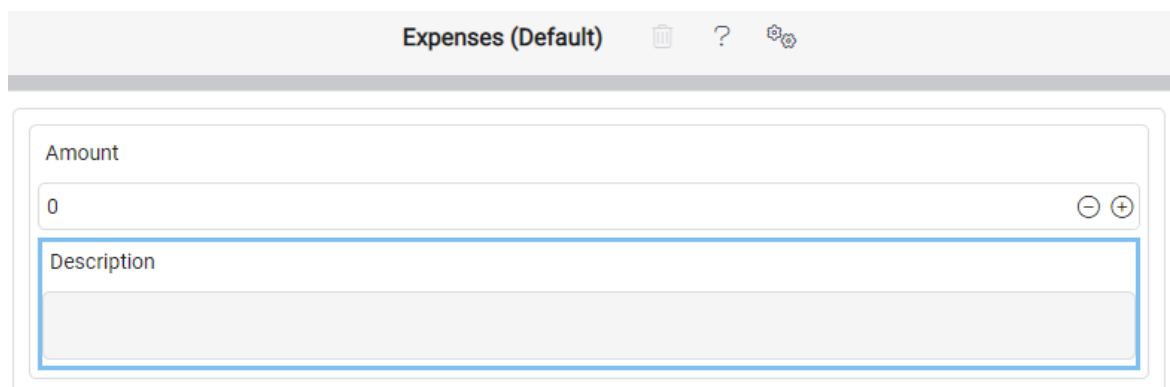
After changing these properties the result should look something like this:



Next we are going to add a Textbox field, again by dragging and dropping the field on the canvas. For the textbox we are going to change the following properties:

- Name: to make sure we recognize the field
- Label visible: to show a descriptive text
- Display text: to set the text that needs to be shown

After setting the properties our form should look like this:

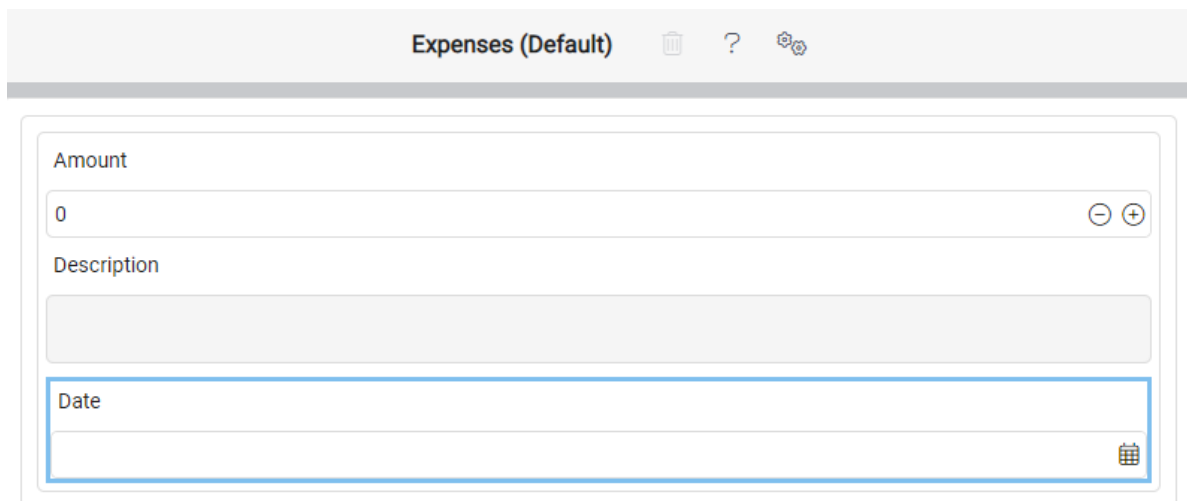


Lastly we are going to add a Date & Time field. For this field we need to edit these properties:

- Name: to make sure we recognize the field
- Label visible: to show a descriptive text
- Display text: to set the text that needs to be shown

After setting these properties the first step of our tutorial is completed

The finished form should look a little like the form shown below:

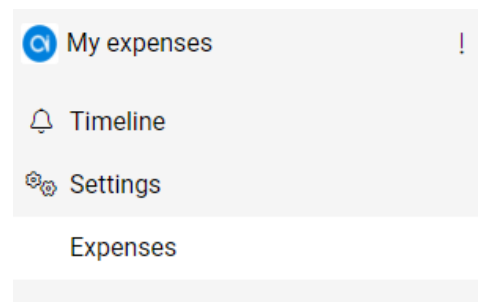


We are now going to **save our changes**.

After saving the changes you are asked if you want to **add the form to the viewer menu**, select "Continue" to add the form.

You can now open the mobile or web app to view your end result.

After opening the app of mobile app your menu on the lefthand side of the screen should show your newly created form.



Start using the app:

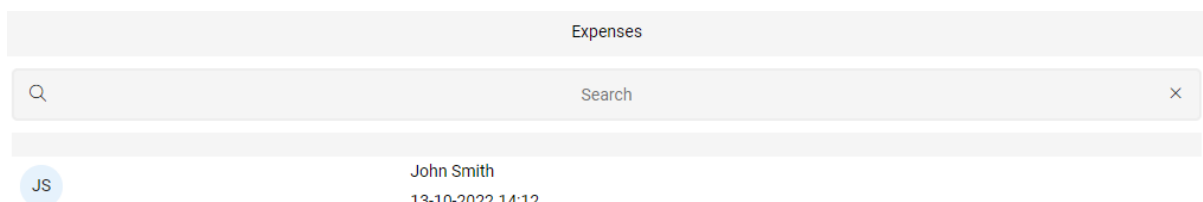
When you click on the menu option Expenses an overview will open with an



When pressed a **new form will be created** with the fields we just configured.

After entering an amount, description and a date please click on the save icon again in the righthand side bottom corner.

The expenses form will be saved and the newly created form is **added to the overview**.

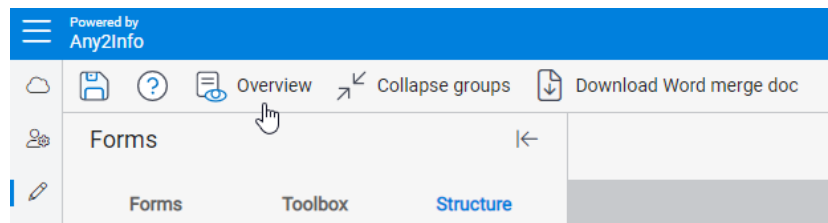


As you can see the overview shown your initials, name and the current date.




To change what is shown we need to go back to the platform and choose App Studio -> Forms.

In the toolbar on the top side of your screen there is an option "Overview" click on this option.



After clicking the option the canvas shows a preview of the overview of expenses called the "Form overview".

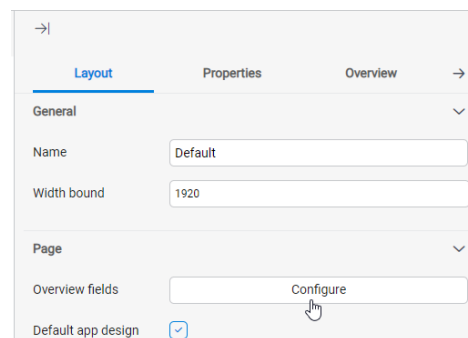
This **overview is freely configurable** by editing the property overview fields.


To edit the property overview fields we need to open the properties of the form by clicking the icon  in the top of the screen, above the canvas.

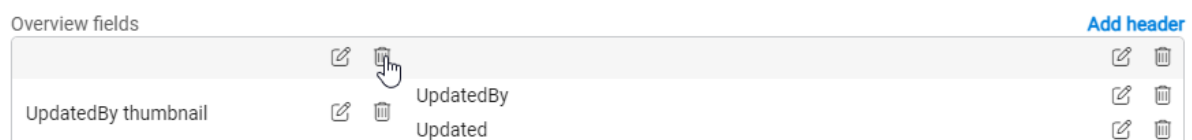
After clicking this icon, choose the tab Layout – Page

Here we can edit the overview field by clicking on the Configure button next to the property

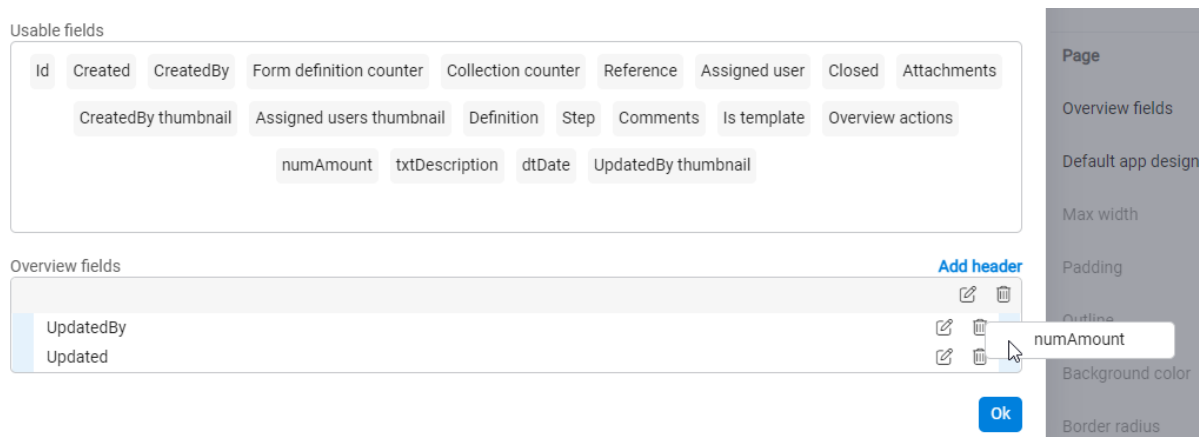
A pop-up will be opened where you are able to configure your overview.



Now we are going to remove the overview field "UpdateBy thumbnail" by clicking the icon  up.















And we are going to add the amount, description and date field to the "Overview fields" by dragging and dropping them from the "Usable fields" section.



When dragging a field from the usable fields section make sure to drop them at the end of the overview fields section as shown in the image above.

After dragging the amount, description and date field to the overview fields your configuration should look something like the image below



Overview fields Add header

	 	numAmount		txtDescription		dtDate	
UpdatedBy	 	numAmount	 	txtDescription	 	dtDate	 
Updated	 						

Ok

Click on the “Ok” button and **save the form** using the save icon in the main toolbar.

You can go back to your mobile of web app and **reload the form** to view the changes we just made. After reopening the form the overview will look like this

Expenses			
<div><div></div><div>Search</div><div></div></div>			
	Amount	Description	Date
John Smith 13-10-2022 14:12	10.25	Hotel	13 Oct 2022

## Step 2 - Adding a list

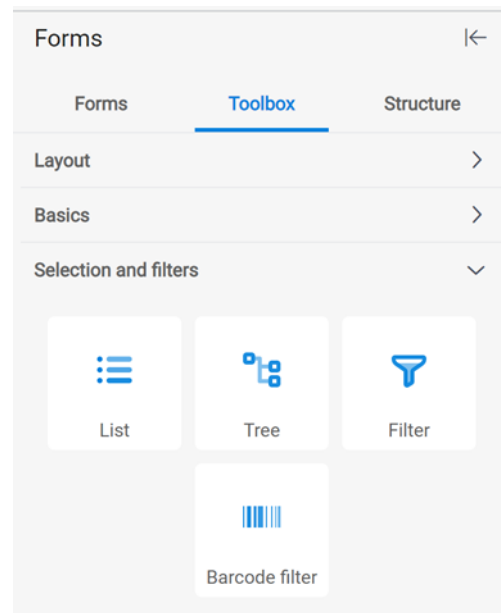
To make sure the filled out expenses are easy to categorize we are going to **add a selection list** to our expenses form.

The first step in adding a selection list to our form will be to add the list field to our form.

Open the platform and navigate to the App Studio - > Forms.

Open the Expenses form and navigate to the toolbox just like we did in step 1.

In the toolbox we are going to select the category "Selection and filters" The first field in this category is the list field. Using the drag and drop method place the field on your form.

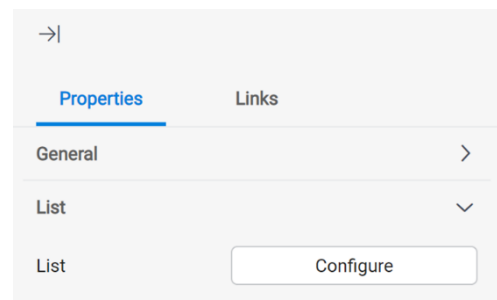


For this field we are going to edit the following properties:

- Name: to make sure we recognize the field
- Label visible: to show a descriptive text
- Display text: to set the text that needs to be shown

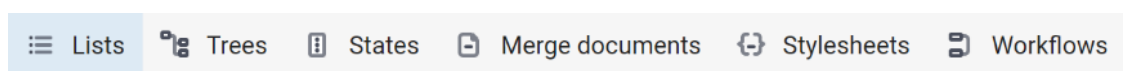
There is a forth property we need to set, **the list property**.

This property is used to determine the options the selection list should show. If we press the configure button you will see there are no "Lists" available since we have not yet created a "List definition".



Before we start creating a list definition make sure to **save your form** using the save icon in the toolbar.

We can create a new list definition using **the footer support functions** on the bottom of the screen.



In the footer there are multiple options available but for now we are only interested in the **Lists option**.

When we press this option the footer will expand and we can create a new list.

In the Any2Info software suite there are two types of lists:

- Manual: A list of which the items rarely change, for example a list with the option Yes and No
- Dataclip: A list that is populated by a dataclip.

A **dataclip** is a table like structure that is used to **connect data to the UI elements**.

There are multiple types of dataclips but for now we are going to focus on the “Push” dataclip, this is a type of dataclip in which the data is pushed to the platform form a source.

In this case the **source is going to be an Excel file**.

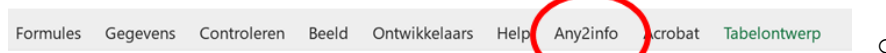
- Make sure the Any2Info Excel Add-in is installed!  
<https://academy.any2info.com/any2info-academy/install-excel-add-in>

- Create a blank Excel file

- Create a table with the contents below. Make sure it is a table, this is important

Id	Description
1	Transportation
2	Hotel
3	Food
4	Other

- Go to the Any2Info Tab



- Open the settings dialog and enter the following information  
Url: <https://platform.any2info.com>

User: your username

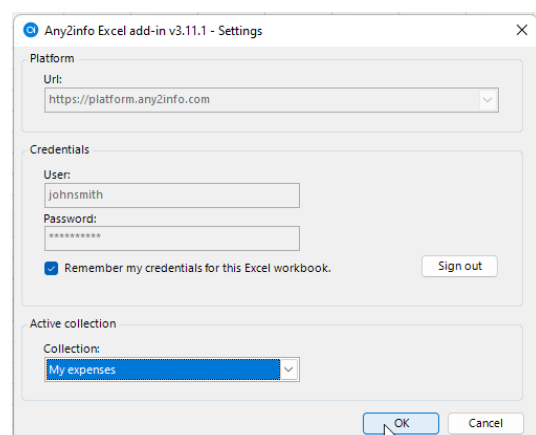
Password: your password

Click the “Sign in” button

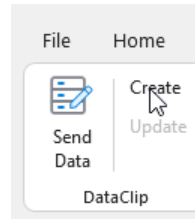
In the active collection section

select your collection

Click the “Ok” button



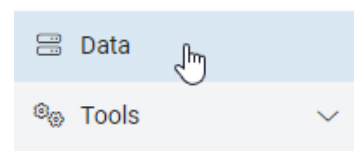
- In the toolbar there will appear a number of new options, we are interested in the Create option in the DataClip section (if the create option is disabled please make sure one of the cells in the table is selected)
- When we click the create button a dataclip creation wizard is opened.
- In the first steps the new dataclip headers are shown, in our case the headers Id and Description. Click next, and then again next
- For the unique header we select the **Id header** all other option we leave as is and click next.
- In this step we give the dataclip a name, for example “ExpensesCategories” and click next and then again next
- The dataclip will be created and if the process is finished click on the “Finish” button
- The last step in creating the dataclip will be to actually send the data to our cloud platform, this can be achieved by clicking the “Send data” button in the toolbar
- Another pop-up will appear, in this pop-up click the “Send” button
- Now we are done creating our dataclip we can go back to the platform



Now we are going to make a list from the dataclip we have created

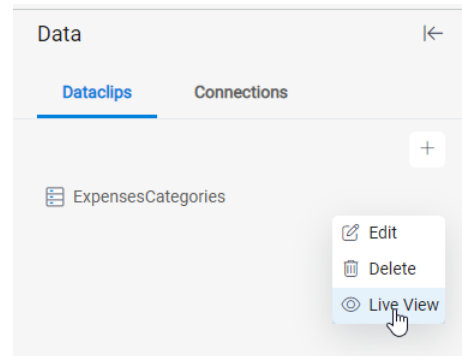
First we check if the dataclip is successfully created and contains data

Therefore navigate in the platform menu to **Data - Tab Dataclips**

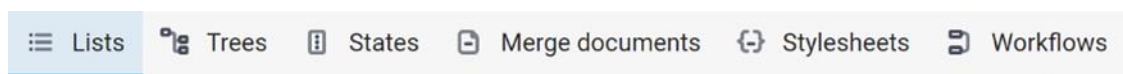


In the dataclip editor you will see the dataclip we just created, when hovering on the name 3 dots will appear on the right side and you can open a menu with the option “Live view”.

After clicking the live view button the content of the dataclip will appear on your screen.



To create the list we need to navigate back to the App Studio - Forms, open the Expenses form and then select in the footer “Lists”.



- In the lists footer we can select the option “New List” on the left side
- Choose the option In the pop-up dataclip

- Enter a name for the list, for example “Categories list”
- Select the dataclip we just created
- Select the Description as Text header
- Leave the other options blank

Name	Categories list
Dataclip	ExpensesCategories
Text	Description
Color	
Barcode	
Filters	

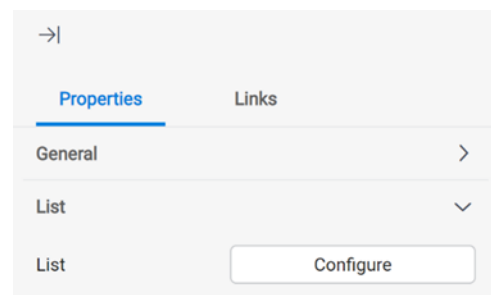
Save

- When your done configuring click on the save button.
- After the save is completed a **preview of the list** will be shown on the righthand side of the footer.

We can now close the footer by pressing  the icon on the righthand side of your screen.

Now we are going to finish the list field configuration and therefore we need to make sure the **list field known which list to use**.

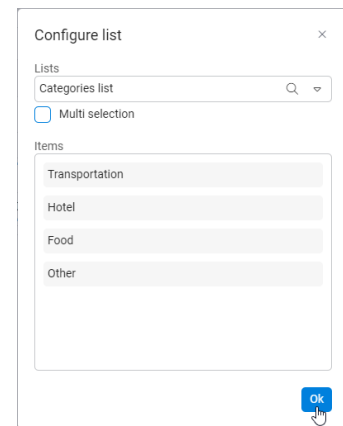
This we can accomplish by selecting the list field on the canvas and clicking on the configure button for the list property.



In the lists selection list we see our newly created list as an option

Make sure the list is selected and click on the “Ok” button.

**Save the form** by clicking the save icon in the toolbar en check if the mobile app and/or web app show the new list field.



Open the webapp or native app (store Google Play or Apple) and do not forget to **reload the form from the app menu**.

Your form should look something like this

A screenshot of a web application form titled 'Expenses'. The form has several input fields: 'Amount' with the value '10.25' and minus/plus buttons; 'Description' with the value 'Hotel'; 'Date' with the value '13 Oct 2022' and a calendar icon; and 'Category' which is a dropdown menu. The dropdown menu is open, showing a list of categories: 'Transportation', 'Hotel', 'Food', and 'Other'. A mouse cursor is pointing at the 'Transportation' option.

### Step 3 - Adding business logic


For small expenses below 10,00 euro the description is not required but we want to enforce that for expenses of 10,00 and more a description is entered.

To accomplish this we are going to **add a form rule**. This form rule will consist of three parts

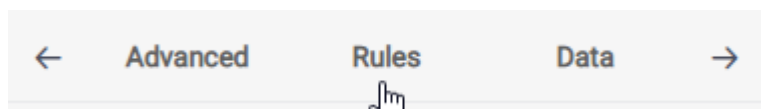
- The condition: what should be checked
- Valid actions: which actions should be taken if the condition is true
- Invalid actions: which actions should be taken if the condition is not true


To add this rule to the form we need to open the properties of the form like we did earlier in this tutorial.

In the properties panel there are multiple tabs and we need to select the **"Rules" tab**.

This tab can be found by clicking on the icon  in the top righthand corner of the properties panel.

After clicking on the panel the rules tab will appear

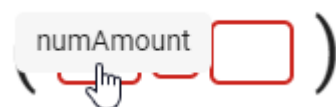


Next we are going to add a rule by clicking on the  icon.

A new pop-up will appear on the screen.

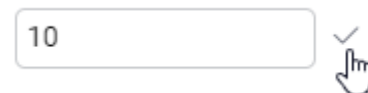
Set **the name of the rule** to something like "Description required".


Now we need to **create the condition**, this can be done by dragging the "Amount" field from the values to the left red box.



Next we need to add the greater or equal operator in the middle red box, again using drag and drop.

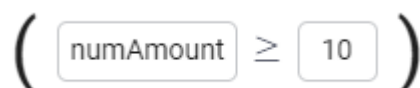
And lastly we need to add a new fixed value of 10. This can be done using the "Value" textbox on the righthand side of the screen



After entering the amount of 10 click on the  icon. In the values panel a new value will appear which can be dragged to the condition.



The **finished condition** should look like this:





Now we need to **add a valid action**, in this case we are going to add an set property action for the field description.

To accomplish this we need to press the label [Add action](#)

This click will open a new pop-up in which we can configure our action

- Create action
- Trigger on: Valid
- Perform action: Set field property
- Field: Description
- Property: Required
- Use static: true, this means the value we are going to set is fixed and not taken from another field.
- Value: true

Configure form action

Trigger on  
Valid

Perform action  
Set field property

Field  
txtDescription

Property  
Required

☒ Use static

Value  
☒

Cancel Ok

Next we need to create a counter action

- Create action
- Trigger on: Invalid
- Perform action: Set field property
- Field: Description
- Property: Required
- Use static: true, this means the value we are going to set is fixed and not taken from another field.
- Value: false

The completed rule should look like this:

Configure form rule

Rule name  
Description required

Condition  
( numAmount ≥ 10 )

Conditional operators  
and or  
= ≠ >  
≥ < ≤  
A A Ab  
AB\_

Values  
lstCategory numAmount txtDescription Empty No value No selection Signed in user Form ID Form creator  
Form closed Is template 10

Add field value

Value

Rule actions  
On valid  
SetProperty of property Required for field txtDescription to value true

On invalid  
SetProperty of property Required for field txtDescription to value false

Add action


Cancel Ok

Confirm the rule with the “Ok” button and save the form.

Go to the mobile or web app and check if the rule works

If configured correctly the form should show:

A warning if you try to save the form with an amount greater or equal to 10

 Notification ×

There are validation errors, check your entered values

Ok

And a warning if you did not enter a description.

Amount

10 − +

Description

This field is required, please enter a value

## Summary

What we learned in this tutorial

- Creating a basic form with a number of fields
- Creating a dataclip
- Creating lists
- Adding business logic to the form

Feel free to try out other fields and create your own forms.