

Lab 9. Creating a Business Process Flow

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Learning Objectives: Be able to create a Business Process Flow and a Model-driven app that will consume it.

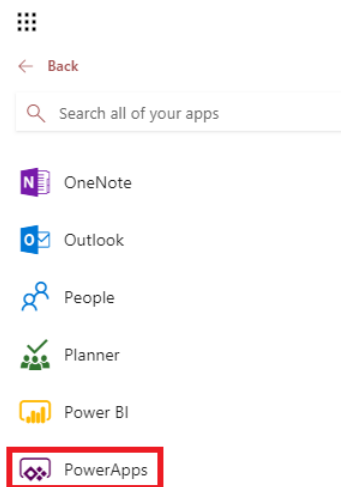
Scenario: You will create a Business Process Flow (BPF) that illustrates how to approve a loan. You will have to create business entities in CDS (Common Data service); these entities will be consumed by the BPF.

Prerequisites: During the lab the system will suggest you start a Premium trial subscription; you can accept it.

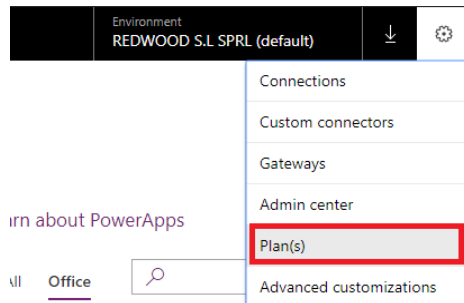
Duration : 25 minutes

Tasks:

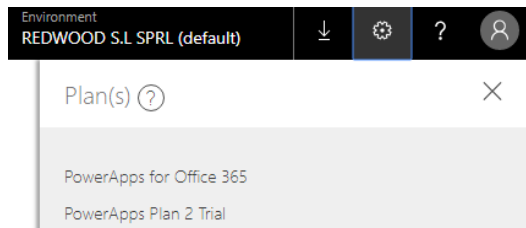
1. Go to the **PowerApps Studio**: <https://powerapps.microsoft.com> or by clicking on the **PowerApps app** in the **Office 365 App Launcher**:



2. If you are working on your own tenant, you first must have **PowerApps Plan 2** in order to be able to create **Model-driven apps**. To check your PowerApps plan, go to the following PowerApps menu:

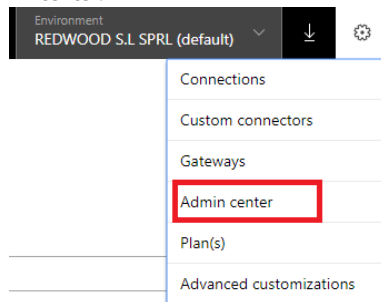


You should get **plan 2**:



If that is not the case, move to the next step.

3. You can have a free trial version of PowerApps Plan 2. Connect to the [web site](https://powerapps.microsoft.com/en-us/pricing/) <https://powerapps.microsoft.com/en-us/pricing/> to start your trial. When the trial is generated, go to the **PowerApps Admin center**:



4. Click **New environment**:



5. Fill in the required information:

New environment

Create new environments for app and flow development and to maintain separate databases. [Learn more](#)

Environment name

Workshop

Region (?)

Europe (default)

Can't be changed once your environment is created.

Environment type (?)

Trial

Cancel

Create environment

6. Click **Create environment**.
7. The next step (Creating a Database) should not be done if your PowerApps trial account is part of the tenant created by the trainer. You will use the shared database
- When requested, click **Create Database**:

Commented [A1]: Refaire les screens shots mais mon interface est french a ce stade

✓ You created an environment



Do you want to create a database?
(Recommended)

Your environment includes access to the Common Data Service. Create a database to start using it.

- Collect, store, and share data.
- Use data modeling
- Create custom forms
- Manage security and access to data

Skip

Create database

8. If the next screen you will provide more details on the **database settings**:

Create a database for this environment ?

Choose the currency and language your data should use.

Currency ?

EUR ▼

Language ?

English ▼

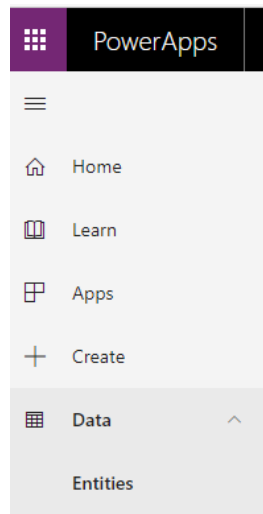
☒ Include sample apps and data

By choosing **Create my database**, you agree Microsoft can use entity and field names that you create (but not content in the database tables) to help improve our common data model. These names may be stored in our diagnostic systems and copied across regions. [Learn more](#)

Cancel

Create database

9. Click again on **Create database**.
10. Go to the list of environments and click on the newly created environment, and you will see that the database is being built.
11. Go back to the PowerApps portal <https://powerapps.microsoft.com> and select the [new environment](#).
12. Select the Data Menu and click on Entities:



13.

14. Click new Entity and create a **new Entity** called **Loan**:

15. Click **Next**. Click **Add field** to add a new field in this loan entity:

New entity

×

Display name *

Loan

Plural display name *

Loans

Name * ⓘ

cr714_ Loan

☐ Enable attachments (including notes and files)

16. Create a field **Amount** (type **Currency**) like shown **here**:

Amount

×

Display name *

Amount

Name * ⓘ

cr327_ Amount

Data type * ⓘ

Currency

▼

☐ Required

☒ Searchable

Commented [A2]: Pourquoi antother ? et qui du champ name qui apparait par defaut ? ???

17. Create a field **Account** (type **Customer**):

Account ×

Display name *

Name * ⓘ

Data type * ⓘ

👤 Customer ▼

☐ Required

☒ Searchable

18. Create another field **Approval Status** based on the **Option Set** datatype

Approval Status ×

Display name *

Name * ⓘ

Data type * ⓘ

☰ Option Set ▼

Option set *

▼

19. Click **Option set** and select **New option set**:

The screenshot shows a software interface with a sidebar on the left containing a list of categories. The 'New option set' button is highlighted with a red box. A red arrow points from this button to the 'Option set' dropdown menu in the 'Approval Status' form on the right. The form fields are as follows:

- Display name ***: Approval Status
- Name ***: cra46_ ApprovalStatus
- Data type ***: Option Set
- Option set ***: (empty dropdown)

Provide **3 options: Approved, Rejected, Pending**:

The screenshot shows the 'Approval Status' form with the following fields:

- Display name ***: Approval Status
- Name ***: cra46_ approvalstatus

Below the fields is a 'View more' link. The 'Items (3)' section contains a list of three items:

Item	Action
Approved	...
Rejected	...
Pending	...

At the bottom of the list is an 'Add new item' link.

Approval Status



Display name *

Approval Status

Name * ⓘ

cr327_ ApprovalStatus

Data type * ⓘ

Option Set

Option set *

Approval Status

Edit option set

Default value

[No default value]

☐ Required

☒ Searchable

20. Click **Save** and make **Approved** the default value:

Approval Status

×

Display name *

Approval Status

Name * ⓘ

cra8b_ ApprovalStatus

Data type * ⓘ

☰ Option Set ▾

Option set *

Approval Status ▾

Edit option set

Default value

Approved ▾

☐ Required

☒ Searchable

21. Click Done.

22. Create a field **Signed** based on the **Two options** type (Yes, No), and Yes should be the default value:

Signed



Display name *

Signed

Name * ⓘ

cra8b_ Signed *

Data type * ⓘ

Two Options

Items

☒ Yes

☐ No

Default value

Yes

☐ Required

☒ Searchable

23. Create the last field: **Send Money:**

Send Money



Display name *

Send Money

Name * ⓘ

cra8b_ SendMoney *

Data type * ⓘ

Two Options

Items

☒ Yes

☐ No

Default value

Yes

☐ Required

☒ Searchable

- 24. Save your field.
- 25. Save the entity.
- 26. The following table summarizes your entity Loan fields and settings:

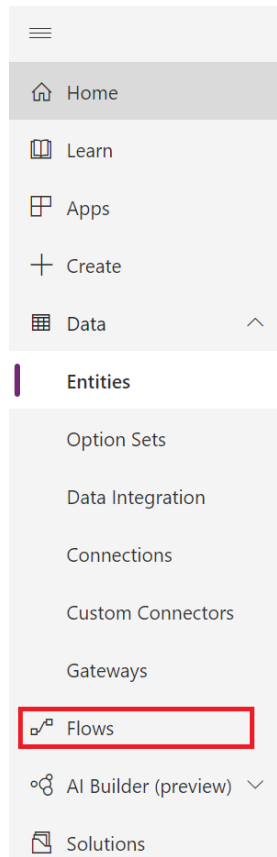
Entities > Loan

FieldsRelationshipsBusiness rulesViewsFormsDashboardsChartsKeysData

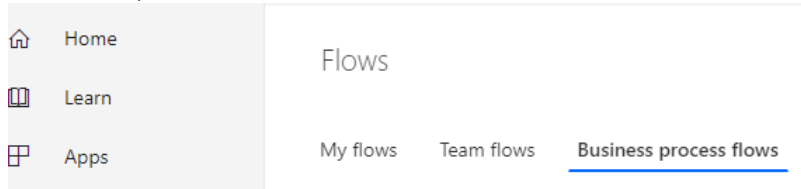
Display name ↑ ↓		Name ↓	Data type ↓	Type ↓	Required ↓	Searchable ↓
Account	...	cra8b_account	Customer	Custom		✓
Amount	...	cra8b_amount	Currency	Custom		✓
Amount (Base)	...	cra8b_amount_base	Currency	Custom		✓
Approval Status	...	cra8b_approvalstatus	Option ...	Custom		✓
Currency	...	transactioncurrencyid	Lookup	Standard		✓
Exchange Rate	...	exchangerate	Decimal...	Standard		✓
Name	...	cra8b_name	Text	Custom	✓	✓
Send Money	...	cra8b_sendmoney	Two Op...	Custom		✓
Signed	...	cra8b_signed	Two Op...	Custom		✓

Commented [A3]: Pleins de champ “systeme apparaissent en plus chez moi [Mention was removed]

- 27. Let’s get back to Flow to create a new Business Process Flow. Make sure you are in the good environment.
Click on Flows in the left panel.



28. Click Business process Flows:



29. Click New and fill in the BPF Display Name and Name; associate it with your loan entity in "Common Data Service entity field:

Create business process flow ×

Display name *

Loan BPF

Name *

new_LoanBPF

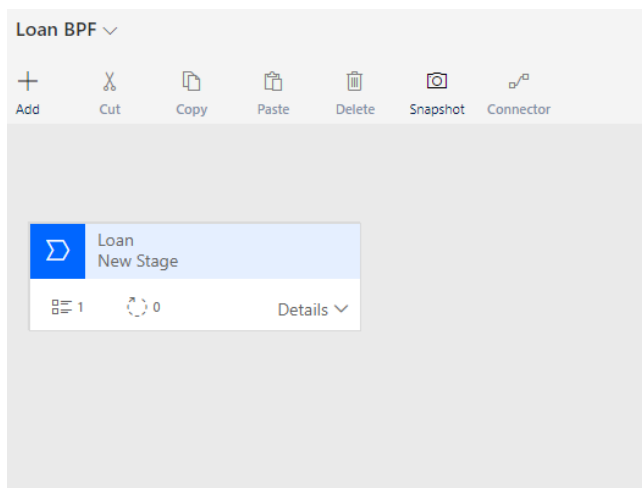


Common Data Service entity *

Loan



30. Click Next and the BPF designer will show-up:



31. Click the **Loan New Stage** and the stage property page, change the display name as **Loan basic info** and click on **Apply**:

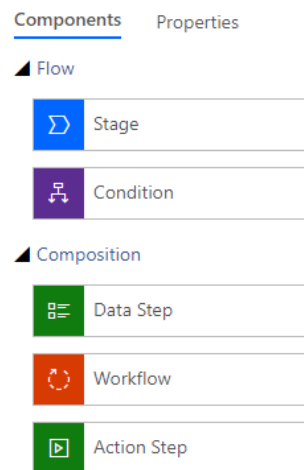
Components	Properties
Stage	
Display Name	
<input type="text" value="Loan Basic Info"/>	
Category	
<input type="text"/>	
Entity	
<input type="text" value="Loan"/>	

32. In the stage, click the **Data Step**, name the step Name **Set Account** Step, select the **Account** data field, make it **Required**, and click **Apply**.

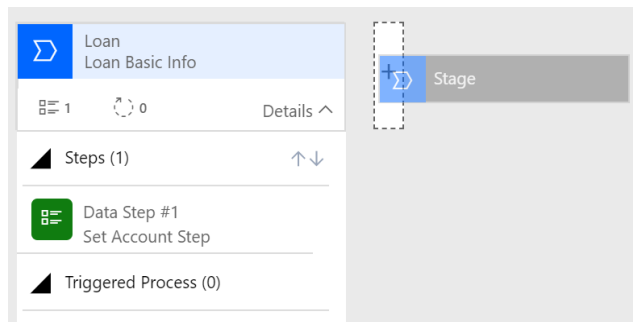
Commented [A4]: Il faut faire un expand pour le voir !

Components	Properties
Data Step	
Step Name	
<input type="text" value="Set Account Step"/>	
Data Field	
<input type="text" value="Account"/>	
<input checked="" type="checkbox"/> Required	
Sequence	
<input type="text" value="1"/>	

33. Click **Components** to add a new Stage:



34. Click **Stage** and drag & drop a stage next to the current stage:



35. Name the Stage **Amount info** and like you did before, edit the data step of the new stage and link it to the Amount Data Field:

Components

Properties

Data Step

Step Name

Set Amount

Data Field

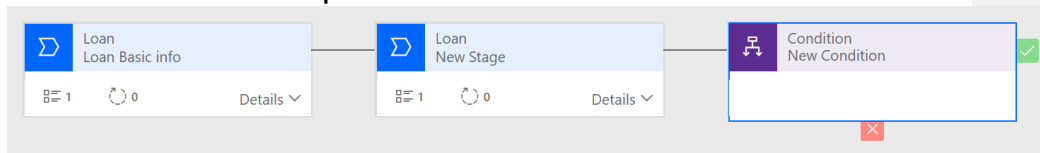
Amount

☒ Required

Sequence

1

36. Click Apply.
37. Name the stage Loan Amount info.
38. Add a new **Condition Component**:



39. and define the rule as follow:

Condition

Display Name

Check if expensive

Rules

[+ New](#)

Rule 1

Field
Amount

Operator
Is greater than

Type
Value

Value
500.00

Condition Expression (Text View)

(Amount Is greater than [500])

Apply

Discard

40. Add a **new stage** and name it **Approval**. Name the **data step Approval** and select the **field Approval Status**.

41. Add a **new Condition** and name it **Check if Approved** with the following rule:

Commented [A5]: De quell coté ???? yes ou non ????

Condition

Display Name

Check if Approved

Rules

[+ New](#)

Rule 1

Field

Approval Status

Operator

Equals

Type

Value

Value

☐ Pending

☒ Approved

☐ Rejected

Condition Expression (Text View)

(Approval Status Equals
[Approved])

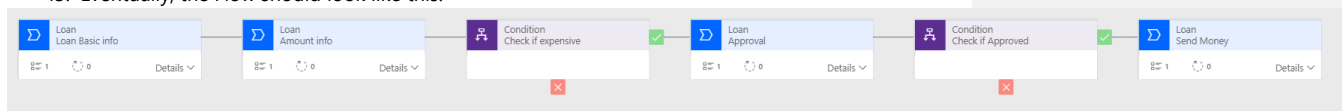


Apply

Discard

42. Add a **new stage**, name it **Send Money** and associate the data set with the field **Send Money**.

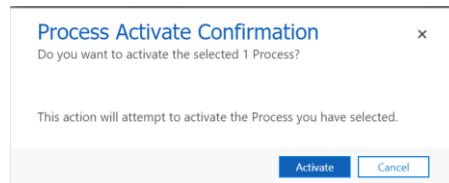
43. Eventually, the Flow should look like this:



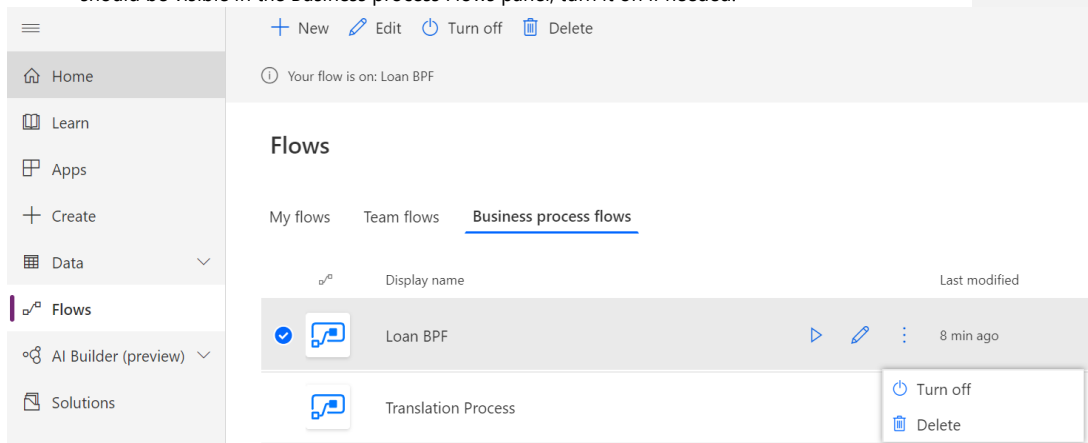
44. Click Save

45. Click Validate.

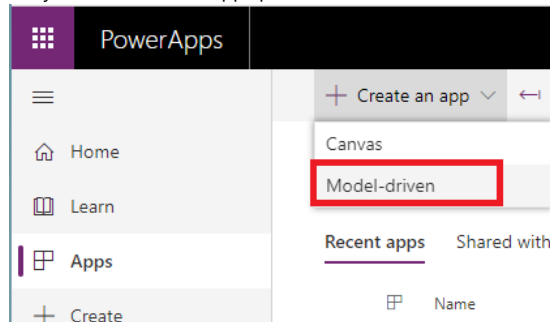
46. Click on Activate and confirm the activation:



47. Make sure the Business process Flow is activated; go to the Flows menu, and your LoanBPF Flow should be visible in the Business process Flows panel; turn it on if needed.



48. Now in order to use the Business Process Flow, we must create a **Model-Driven** Apps associated with our loan Entity. Go to the PowerApps portal and create a new Model-Driven Apps:




49. Name it Loan:

Name :*

Unique Name :*

Description:

Icon: ☒ Use Default Image

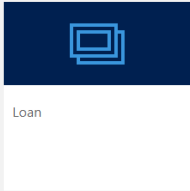
Unified Interface URL: 

☐ Use existing solution to create the App

☐ Choose a welcome page for the app

☐ Enable Mobile Offline

App Tile:









50. Click **Done**.



51. The App Designer will show-up:

PowerApps

App Designer
Loan

 Add
  Edit
  Remove
  Search Canvas

Site Map
  Site Map
 

Dashboards
  Dashboards
 All
 Business Process Flows
  Business Proces...
 All

Entity View (0)

52. Edit the **Site Map** component.

53. Rename the New Area to **Loan Area**.

54. Rename the New Group to **Loan Group**.

55. Rename the Sub Area to **Loan sub-area**.

56. Associate the Loan Subarea with the entity Loan:

Components

Properties

SUB AREA

General

Type

Entity

Entity *

Loan

URL

Default Dashboard

Select a dashboard

Title (1033)

Loan Subarea

Icon

Use Default Image

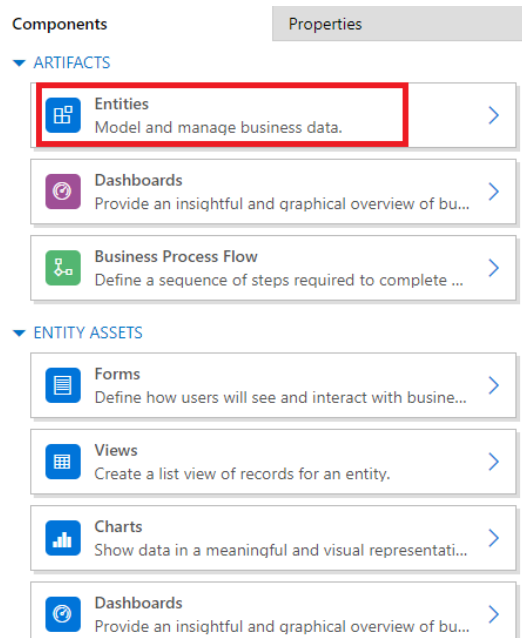
ID *

New_SubArea

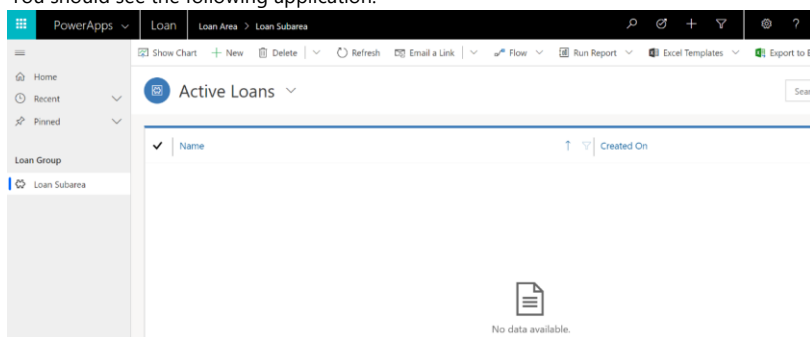
☐ Parameter Passing

57. Click Save and Close, and you will be redirected back to the App Designer screen.


58. In the Designer, Click on **Entities**:



59. In the list of entities, **loan** has already been selected, but you still must select **Loan BPF**. This is important for the internal working of BPF. This extra step might be automated in the future.
60. Click Save.
61. Click Publish.
62. Click Play.
63. You should see the following application:



64. If you click **New**, a new loan will be created. Set the Name to **loan for a new car** and save it:



LOAN

loan for a new car

Loan BPF

Active for less than one mi...

General

Related


Name

*

loan for a new car

Owner

*

 serge luca

65. Click on the stage Loan Basic Info; here, you need to define a **new account**:

Loan Basic Info (1 Min)

Active for 1 minute

Set account step

*

Look for Record

Next Stage

66. A new popup will be visible, click on **Accounts** to create a new account.:

Loan Basic Info (1 Min)

Active for 1 minute


Set account step


*

Look for Record

Next Stage


All

 Accounts

 Contacts

No records found. Create a new record.

+ New

 Change View

67. Click New to create a new account, call it **Redwood** and click **Save and Close**:

SaveSave & CloseNewFlow

Account: Account

New Account

SummaryDetails

ACCOUNT INFORMATION

Account Name	* Redwood
Phone	---
Fax	---
Website	---
Parent Account	---
Ticker Symbol	---

68. In the Flow, go to the next stage:

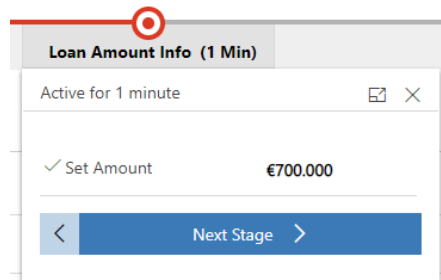
Loan Amount Info (< 1 Min)

Active for less than one minute

Set Amount

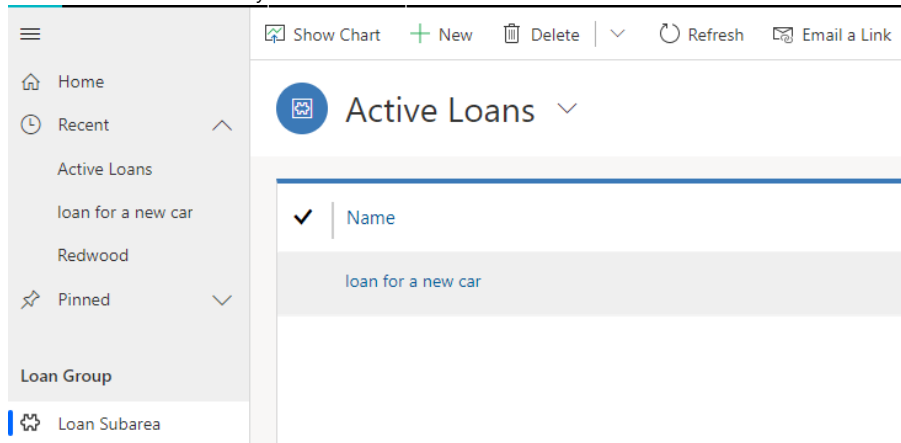
<Finish

69. As you can see this is supposed to be the last step by default; however, if you add an amount higher than 500, you will see additional steps:

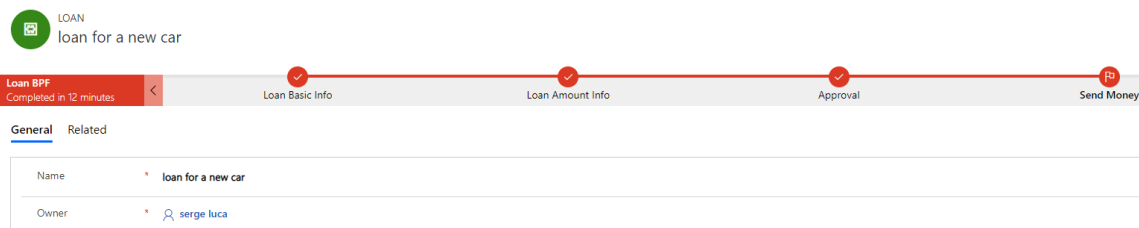


70. Click on **Next stage** until the end of the process.

71. Click on **Home** to see your list of entities:



72. If you click on **loan for a new car**, the whole process will show up:



73. Congratulation for your first Business Process Flow!

