# **Project Creation Setup for Milestones PM+**

Step 1: Determine Template Creation Needs	1
Step 2: Project Creation Settings	2
Required Fields	2
Optional Fields	3
Configuration Examples	3
Step 3: Setup Button or Flow	5
Method 1 – Button or Link	5
Method 2 – Static Template Flow	6
Method 3 – Variable Template Flow	10
Method 4 – Variable Template Flow with Simple Criteria	13
Method 5 – Apex Trigger	17

# Step 1: Determine Template Creation Needs

The first step is to determine the specific requirements for your project creation use case. This will decide which method to follow in Step 3.

#### Scenario 1

In this scenario, Projects should be created by manually clicking a button or link. The template that should be used for each Project should be manually selected. Follow Method 1 – Button or Link.

#### Scenario 2

In this scenario, Projects should be created automatically using the same template. Follow <u>Method 2 –</u> <u>Static Template Flow</u>.

#### Scenario 3

In this scenario, Projects should be created automatically from a template that is indicated by a field on the triggering record. Follow <u>Method 3 – Variable Template Flow</u>.

#### Scenario 4

In this scenario, Projects should be created automatically from a template that is chosen based on simple record criteria. Follow <u>Method 4 – Variable Template Flow with Simple Criteria</u>.

#### Scenario 5

In this scenario, Projects should be created automatically from a template that is chosen based on complex record criteria. Follow <u>Method 5 – Apex Trigger</u>.

# Step 2: Project Creation Settings

Project Creation Settings tell the Milestones PM+ app which fields from the triggering record should be used to create the new Project. These settings must be configured in order to automatically create projects using Flows. To create these settings, navigate to **Setup > Custom Settings > Project Creation Settings > Manage > New.** 

By default, the Project object has an Account and Opportunity lookup field. To associate Projects to non-Account or Opportunity objects, first create a new Project lookup field to that object.

# **Required Fields**

There are a number of fields that must be populated on project creation settings. These fields tell Milestones PM+ how to create and name the new Project, and how to relate it to the triggering record.

### Name

This is the API name of the object that should trigger project creation, in all lowercase. For example, if a Project should be created whenever an Opportunity's Stage Name is set to Closed Won, the Name for the relevant Project Creation Settings would be **opportunity**. If a Project should be created when a field on a custom object Student\_Info\_\_c is updated, the Name for the Project Creation Settings would be **student\_info\_\_c**.

### Project Naming Convention Field

This is the API name of the field that is used to populate the Name of the new Project. This could be set to any field on the triggering record, including formula fields and standard and custom text fields. For example, if the new Project should have the same name as the triggering Opportunity, this field would be set to **Name**. If the Project should be named using a custom formula field Project\_Name\_Formula\_\_c, this field would be set to **Project\_Name\_Formula\_\_c**.

#### **Project Creation Field**

This is the API name of the field that contains the value representing the Project template that should be used to create the new Project. This could be set to any field on the triggering record, including formula fields, text fields, and picklist fields. For example, if the new Project should be created using a template whose name is equal to the triggering Opportunity's Stage Name, this field would be set to **StageName**. If the Project should be created using a template whose name is equal to the value selected in a custom picklist field Template\_Picklist\_c, this field would be set to **Template\_Picklist\_c**.

### Project Lookup Field 1

This is the API name of the lookup field on the Project object that should relate the triggering record to the new Project. For example, if the Project is created from an Account, this field could be set to **Account\_\_c**. If the Project is created from a custom object Student Info, this field could be set to a custom lookup field on Project **Student\_Info\_\_c**.

# **Optional Fields**

In addition to the required fields, there are some optional fields that can be used to enhance automatic project creation.

### Primary Lookup

This is the API name of the lookup field on the triggering record that should be used to populate the new Project's **Project Lookup Field 1** field, if you do not want that field to be populated with the triggering record's Id. For example, if the Project is created from an Account and should be related to the triggering Account's parent record, this field should be populated with **Parentld**.

### Project Lookup Field 2

This is the API name of an additional lookup field on the Project object that should be populated during the creation process. For example, if the Project is created from an Opportunity and should be linked to both the Opportunity and its related Account, this field should be populated with **Account\_\_c**. If this field is populated, a value must also be entered for the **Secondary Lookup** field.

### Secondary Lookup

This is the API name for the field on the triggering record that should be used to populate the Project's **Project Lookup Field 2** field. For example, if the Project is created from an Opportunity and should be linked to both the Opportunity and its related Account, this field should be populated with **AccountId**. This field only needs to be populated if **Project Lookup Field 2** is populated.

# **Configuration Examples**

Below are example Project Creation Setting configurations for the scenarios outlined in Step 1. Note that the Project Creation Settings are not limited to the fields referenced in these scenarios - both standard and custom fields of various types can be utilized in the Project creation process.

#### Methods 1 and 5

No Project Creation settings are needed for these. Skip to step 3.

#### Method 2 - Static Template Flow

In this example, Projects should be created automatically when the Stage Name of an **Opportunity** is updated to "Closed Won." The new Project should be created from the template referenced by a custom text field **Project\_Template\_Name\_\_c**, and the Project's name should be based on a custom Opportunity formula field **Project\_Name\_\_c**.

The project creation settings for this scenario would be configured as follows:

Project Creation Settings Information	ı
Name	opportunity
Primary Lookup 👳	
Project Naming Convention Field	Project_Namec
Project Creation Field 😡	Project_Template_Name c //
Project Lookup Field 1 😡	Opportunity_c
Project Lookup Field 2 😡	
Secondary Lookup 👳	

### Method 3 – Variable Template Flow

In this example, Projects should be created automatically when a custom picklist field **Template\_Picklist\_\_c** on **Account** is updated. The new Project should be created from the template referenced by the picklist field, and the Project's name should be the same as the triggering Account record. The Projects' **Ownerld** field should also be populated with the triggering record's Ownerld. The project creation settings for this scenario would be configured as follows:

Project Creation Settings Information	n
Name	account
Primary Lookup 🖗	
Project Naming Convention Field 🛛	Name
Project Creation Field 😡	Template_Picklistc
Project Lookup Field 1 🛛	Account_c
Project Lookup Field 2 😡	Ownerld
Secondary Lookup 🛛	Ownerld //

### Method 4 - Variable Template Flow with Simple Criteria

In this example, Projects should be created automatically when a custom Number field **Student\_Year\_\_c** on a custom object **Student\_Info\_\_c** is updated. The Project should be created from the template referenced by a custom picklist field **Template\_Picklist\_\_c**, which is automatically populated based on the triggering record's new Student\_Year\_\_c value. The Project's name should be based on a custom Student\_Info\_\_c formula field **Project\_Name\_\_c**. A lookup on Project to Student\_Info\_\_c, **Student\_Info\_\_c**, has already been created.

The project settings for this scenario would be configured as follows:

Project Creation Settings Information	ı
Name	student_infoc
Primary Lookup 🛛	
Project Naming Convention Field @	Project_Namec
Project Creation Field	Template_Picklistc
Project Lookup Field 1 👳	Student_Infoc
Project Lookup Field 2 👳	
Secondary Lookup 👳	

# Step 3: Setup Button or Flow

Follow the instructions below for the method indicated by your chosen scenario in Step 1.

# Method 1 – Button or Link

- 1. Navigate to the object that should trigger Project creation.
  - **a.** Lightning: Setup > Object Manager > Chosen Object > Buttons, Links, and Actions, New Button or Link
  - **b.** Classic, Standard Object: Setup > Build > Customize > Chosen Object > Buttons, Links, and Actions > New Button or Link
  - c. Classic, Custom Object: Setup > Build > Create > Objects > Chosen Object > Buttons, Links, and Actions > New Button or Link
- 2. Display Type: Select either "Detail Page Button" (recommended) or "Detail Page Link."
- 3. Behavior: Select the value that matches your desired behavior.
- 4. Content Source: Select "URL."
- 5. Value Input: Paste /apex/MPM4\_BASE\_\_Milestone1\_Import\_Project?&Id={!Object.Id}

Ensure that **Object** is replaced with the API name of the object. The button or link should now be configured as follows:

#### Account Custom Button or Link New Button or Link

Custom Button or Link Edit	Save Quick Save Preview Cancel
Label	Create Child Project
Name	Create_Child_Project
Description	Creates a child Project and associates it with the current Account record.
Display Type	Detail Page Link <u>View example</u> Detail Page Button View example
	C List Button <u>View example</u>
Behavior	Display in new window View Behavior Options
Content Source	
Select Field Type	Insert Field Functions
Account	✓ Insert Merge Field ✓ Insert Operator ▼ All Function Categories
/apex/MPM4_BASEMilestone1_	Import_Project?&Id={!Account.Id} ABS ADDMONTHS AND
Check Syntax i Link Enco	ding Unicode (UTF-8)
	Save Quick Save Preview Cancel

- 6. Click "Save."
- 7. Navigate to Page Layouts and add the button or link to the page, as follows:

Save 🔻 Quick Save Preview As 🔻 Cancel   🐼 Undo 🐟 Redo   📰 Layout Properties						
Fields	<u>^</u>	Quick Find Button	Name 🗙			
Buttons		Add Contacts To C	Check for New Data	Delete	Include Offline	Sharing
Custom Links		Add to Call List	Clean	Edit	Link a Slack Channel	Sharing Hierarchy
Quick Actions		Change Owner	Company Hierarchy	Get Contacts	Printable View	Submit for Approval
Actions	- 1	Change Record Type	Create Child Project	Get Survey Invita	Prospecting Insights	View Account Hier
Expanded Lookups Related Lists	•					
Account Detail Standard Buttons Edit Change Owner Change Record Type Delete View Account Hierarchy Sharing Sharing Hierarchy Include Offline Custom Buttons © Custom Button: Create Child Project						

### Method 2 – Static Template Flow

- 1. Create a new Flow by navigating to Setup > Flows and clicking "New Flow."
- 2. New Flow: Select "Record-Triggered Flow." Click "Create."
- 3. Configure Start:
  - a. Object: Select the object that should trigger Project creation. Following the configuration example in Step 2, the selected object would be "Opportunity."
  - b. Configure Trigger: Select "A record is updated."
  - c. Set Entry Conditions: Configure this section to specify when an Opportunity record should trigger the Flow. Following the configuration example in Step 2, this section would be configured as follows:
    - i. Condition Requirements: Select "All Conditions Are Met (AND)."

- ii. Field: Select "StageName."
- iii. Operator: Select "Equals."
- iv. Value: Select "Closed Won."
- d. When to Run the Flow for Updated Records: Select "Only when a record is updated to meet the condition requirements."
- e. Optimize the Flow for: Select "Actions and Related Records."
- f. Click "Done." Your configuration should be set up as follows:

	Configure	Start	
Select Object Select the object whose records trigger the flow when they're created, updated, * Object	or deleted.		
Opportunity			
Configure Trigger			
<ul> <li>Trigger the Flow When:</li> <li>A record is created</li> <li>A record is updated</li> <li>A record is created or updated</li> <li>A record is deleted</li> </ul>			
Set Entry Conditions Specify entry conditions to reduce the number of records that trigger the flow a executions helps to conserve your org's resources. If you create a flow that's triggered when a record is updated, we recommend fi meet the condition requirements option for When to Run the Flow for Update Condition Requirements All Conditions Are Met (AND)	nd the number of times the flow is rst defining entry conditions. Then ed Records.	is executed. Minimizing unnecessary flow n select the <b>Only when a record is updated to</b>	
Field	Operator	Value	
StageName	Equals	▼ Closed Won	Î
Add Condition  When to Run the Flow for Updated Records  Every time a record is updated and meets the condition requirement  Only when a record is updated to meet the condition requirements	s		
* Optimize the Flow for:			
Fast Field Updates         Update fields on the record that triggers the flow to run.         This high-performance flow runs before the record is saved to the database.         Include a Run Asynchronously path to access an external system after	Actions and Related Re Update any record and perf This more flexible flow runs database. r the original transaction for the	ecords form actions, like send an email. <i>after</i> the record is saved to the e triggering record is successfully committed	
			Cancel Done

- 4. (If you would like the flow to update the triggering record's template field if it is null, continue with this step. If this validation is not required, continue to Step 5.) Click the plus button under "Run Immediately" to add an **"Update Triggering Record"** element:
  - a. Label: Enter the desired value, e.g. "Update Template Name Field."
  - b. API Name: Enter the desired value, e.g. "Update\_Template\_Name\_Field."
  - c. Description: Enter the desired value, e.g. "This action updates the Template Name field on the triggering record if it is null."

- d. How to Find Records to Update and Set Their Values: Select "Use the record that triggered the flow."
- e. Set filter conditions: Configure this section to only update the field if it is currently null. Following the configuration example in Step 2, this section would be configured as follows:
  - i. Condition Requirements to Update Record: Select "All Conditions Are Met (AND)."
  - ii. Field: Select "Project\_Template\_Name\_\_c."
  - iii. Operator: Select "Is Null."
  - iv. Value: Enter "{!\$GlobalConstant.True}."
- f. Set Field Value for the Record
  - i. Field: Select "Project\_Template\_Name\_\_c."
  - ii. Value: Enter the name of the Project template that should be used, e.g. "Standard Project Template."
- g. Click "Done." The action should be configured as follows:

	New Update Reco	ords	
Update Salesforce records using values from the flow	Ν.		*
* Label	* API Name		
Update Template Name Field	Update_Te	Template_Name_Field	
Description			
This action updates the Template Name Field on t	he triggering opportunity if it is	is null.	
<ul> <li>How to Find Records to Update and Set Their Value</li> <li>Use the opportunity record that triggered the file</li> <li>Use the IDs and all field values from a record or</li> <li>Specify conditions to identify records, and set file</li> <li>Set Filter Conditions</li> <li>Condition Requirements to Update Record</li> <li>All Conditions Are Met (AND)</li> </ul>	es low r record collection ields individually		
Field	Operator	Value	
Project_Template_Namec	Is Null	▼ True X	
+ Add Condition			
Set Field Values for the Opportunity Record	d		
Field	Value		
Project_Template_Namec	← Standard Pr	Project Template	ī
+ Add Field			
			·
		Cancel Dor	ie

- 5. Click the plus button under "Update Triggering Record" (or "Run Immediately, if skipping step 4) to add an **"Action"** element:
  - a. Action: Search for and select "Create Child Projects."
  - b. Label: Enter the desired value, e.g. "Create Project."
  - c. API Name: Enter the desired value, e.g. "Create\_Project."
  - d. Description: Enter the desired value, e.g. "This action creates a child Project and associates it with the triggering record."
  - e. Set Input Variables:
    - i. parentRecs: Toggle the switch to "Include."
    - ii. Value: Enter "{!\$Record.Id}."
  - f. Click "Done." The action should be configured as follows:

		New Action			
ilter By Category	•	Action Create Child Projects			
All	Use val	lues from earlier in the flow to set the inp	uts for the "Crea	ate Child Projects" Apex action. 1	Го
Users	*Label	outputs later in the now, store them in va	* API Name		
Group	Crea	ite Project	Create_Pro	oject	
Work Plans	Descrip	tion			
Work Steps	This	action creates a child Project associated w	vith the triggeri	ng Opportunity.	
Sales leads					
Appointments	Set In	nput Values			
Task	Aa	parentRecs			)
Price books		{!\$Record.Id}		nciue	
Feed Item					
Order Management	-				
				Cancel Don	ie

6. Once these actions are completed, your Flow should be configured as follows:



7. Click "Save" and enter the desired Label, API Name, and Description. Activate the Flow to complete the configuration process.

### Method 3 – Variable Template Flow

- 1. Create a new Flow by navigating to Setup > Flows and clicking "New Flow."
- 2. New Flow: Select "Record-Triggered Flow." Click "Create."
- 3. Configure Start:
  - a. Object: Select the object that should trigger Project creation. Following the configuration example in Step 2, the selected object would be "Account."
  - b. Configure Trigger: Select "A record is updated."
  - c. Set Entry Conditions: Configure this section to specify when an Opportunity record should trigger the Flow. Following the configuration example in Step 2, this section would be configured as follows:
    - i. Condition Requirements: Select "All Conditions are Met (AND)."
    - ii. Field: Select "Template\_Picklist\_\_c."
    - iii. Operator: Select "Is Changed."
    - iv. Value: Enter "{!\$GlobalConstant.True}."
  - d. When to Run the Flow for Updated Records: Following the configuration example in Step 2, this value should default to "Every time a record is updated and meets the condition requirements." If your specific use case does not cause this field to be defaulted, select "Only when a record is updated to meet the condition requirements."
  - e. Optimize the Flow for: Select "Actions and Related Records."

f. Click "Done." Your configuration should be set up as follows:

Configure Start	
Select Object Select the object whose records trigger the flow when they're created, updated, or deleted. *Object Account	4
Configure Trigger  Trigger the Flow When:  A record is created  A record is updated  A record is created or updated  A record is created or updated	
Set Entry Conditions Specify entry conditions to reduce the number of records that trigger the flow and the number of times the flow is executed. Minimizing unnecessary flow executions helps to conserve your org's resources. If you create a flow that's triggered when a record is updated, we recommend first defining entry conditions. Then select the Only when a record is updated to meet the condition requirements option for When to Run the Flow for Updated Records. Condition Requirements All Conditions Are Met (AND)	
Field Operator Value	
Template_Picklist_c     Is Changed     Image: Chang	
When to Run the Flow for Updated Records       Image: Constraint of the condition requirements         Image: Second S	
* Optimize the Flow for:	
Fast Field Updates       Actions and Related Records         Update fields on the record that triggers the flow to run.       Update any record and perform actions, like send an email.         This high-performance flow runs before the record is saved to the database.       This more flexible flow runs after the record is saved to the database.	
Include a Run Asynchronously path to access an external system after the original transaction for the triggering record is successfully committed	
Cancel Don	e

- 4. Click the plus button under "Run Immediately" to add an "Action" element:
  - a. Action: Search for and select "Create Child Projects."
  - b. Label: Enter the desired value, e.g. "Create Project."
  - c. API Name: Enter the desired value, e.g. "Create\_Project."
  - d. Description: Enter the desired value, e.g. "This action creates a child Project and associates it with the triggering record."
  - e. Set Input Variables:
    - i. parentRecs: Toggle the switch to "Include."
    - ii. Value: Enter "{!\$Record.Id}."

f. Click "Done." The action should be configured as follows:

	New Action	
Filter By Category	Action Create Child Projects	
All	Use values from earlier in the flow to set the input	s for the "Create Child Projects" Apex action. To
Users	*Label	* API Name
Group	Create Child Projects	Create_Child_Projects
Work Plans	Description	
Work Steps	This action creates a child Project associated wit	th the triggering Account.
Sales leads		
Appointments	Set Input Values	
Task	A <sub>a</sub> parentRecs	
Price books	{!\$Record.Id}	inclue
Feed Item		
Order Management		
		Cancel Done

5. Once these actions are completed, your Flow should be configured as follows:

O	Record-Triggered Flow Start
Run Immedia	tely
÷	Create Child Projects
>_ +	Apex Action
Ō	End

6. Click "Save" and enter the desired Label, API Name, and Description. Activate the Flow to complete the configuration process.

# Method 4 – Variable Template Flow with Simple Criteria

- 1. Create a new Flow by navigating to Setup > Flows and clicking "New Flow."
- 2. New Flow: Select "Record-Triggered Flow." Click "Create."
- 3. Configure Start:
  - a. Object: Select the object that should trigger Project creation. Following the configuration example in Step 2, the selected object would be "Student Info."
  - b. Configure Trigger: Select "A record is updated."
  - c. Set Entry Conditions: Configure this section to specify when a Student Info record should trigger the Flow. Following the configuration example in Step 2, this section would be configured as follows:
    - i. Condition Requirements: Select "All Conditions Are Met (AND)."
    - ii. Field: Select "Student Year."
    - iii. Operator: Select "Is Changed."
    - iv. Value: Enter "{!\$GlobalConstant.True}."
  - d. When to Run the Flow for Updated Records: Following the configuration example in Step 2, this value should default to "Every time a record is updated and meets the condition requirements." If your specific use case does not cause this field to be defaulted, select "Only when a record is updated to meet the condition requirements."
  - e. Optimize the Flow for: Select "Actions and Related Records."
  - f. Click "Done." Your configuration should be set up as follows:

Configure Start					
Select Object Select the object whose records trigger the flow when they're created, updated, or deleted. * Object Student Info					
Configure Trigger  Trigger the Flow When: A record is created A record is updated A record is created or updated A record is deleted					
Set Entry Conditions Condition Requirements All Conditions Are Met (AND)	Operator Value Is Changed Value				
<ul> <li>Optimize the Flow for:</li> <li>Fast Field Updates         Update fields on the record that triggers the flow to run.             This high-performance flow runs <i>before</i> the record is saved             to the database.         Include a Run Asynchronously path to access an external system after the original transaction for the triggering record     </li> </ul>	e send an email. is saved to the and is successfully committed				
	Cancel Done				

- 4. Click the plus button under "Run Immediately" to add a "Decision" element:
  - a. Create a new Outcome for each possible project template that could be selected. For example, if the Template\_Picklist\_c field could reference one of four templates based on Student Year values 9-12, the decision would have four outcomes configured in total. Following the example configuration in Step 2, the Grade 9 outcome would be configured as follows:
    - i. Label: Enter "Choose Grade 9 Template."
    - ii. Outcome API Name: Enter "Choose\_Grade\_9\_Template."
    - iii. Condition Requirements to Execute Outcome: Select "All Conditions Are Met (AND)."
    - iv. Resource: Select "\$Record > Student Year."
    - v. Operator: Select "Equals."
    - vi. Value: Enter "9."
    - vii. When to Execute Outcome: Select "Only if the record that triggered the flow to run is updated to meet the condition requirements."
  - b. When all desired outcomes have been configured, click "Done." A decision with four outcomes for grades 9-12 would be configured as follows:

New Decision					
Update Project Template This updates the Project Template fi Outcomes For each path the fi	Field to Match Grade (Update_Project_Template_Field_ eld to store the project template that matches the updated Student Year v ow can take, create an outcome. For each outcome, specify the conditions	_to_Match_Grad value. . that must be met fo	e) 💉	that path.	
OUTCOME ORDER () +	OUTCOME DETAILS				Delete Outcome
Choose Grade 9 Template	*Label Choose Grade 9 Template		*Outcome API N Choose_Grad	lame le_9_Template	
Choose Grade 10 Template	Condition Requirements to Execute Outcome All Conditions Are Met (AND) Resource	Operator		Value	
Choose Grade 12 Template	# SRecord > Student Year × + Add Condition	Equals	•	9	
Do Not Update Template 👻	When to Execute Outcome  When to Execute Outcome If the condition requirements are met Only if the record that triggered the flow to run is updated to	o meet the conditio	on requirements		
					Cancel Done

- 5. For each outcome of the Decision, click the plus button under the Decision name to add an "Update Triggering Record" element. Following the example configuration from Step 2, the Update element for the Grade 9 outcome would be configured as follows:
  - a. Label: Enter "Select Grade 9 Template."
  - b. API Name: Enter "Select\_Grade\_9\_Template."
  - c. Description: Enter "This action populates the Template Picklist field with the Grade 9 Project Template when the Student Year field is updated to Grade 9."
  - d. How to Find Records to Update and Set Their Values: Select "Use the record that triggered the flow."
  - e. Condition Requirements to Update Record: Select "None Always Update Record."

- f. Set Field Values for the Record:
  - i. Field: Select "Template\_Picklist\_\_c."
  - ii. Value: Select "Grade 9 Project Template."
- g. Click "Done." The action should be configured as follows:

New Update Records				
Update Salesforce records using values from the flow.				*
*Label		* API Name		
Update Template to Grade 9		Update_Template_to_Grade_9		
Description				
Updates the Template Picklist field to store Grade 9 Project Te	empla	te.		
				1.
* How to Find Records to Update and Set Their Values				
Use the student info record that triggered the flow	Use the student info record that triggered the flow			
Use the IDs and all field values from a record or record coll	lectior	1		
<ul> <li>Specify conditions to identify records, and set fields individually</li> </ul>				
Set Filter Conditions				
Condition Requirements to Update Record				
None—Always Update Record				
Set Field Values for the Student Info Record				
Field		Value		
Template_Picklist_c	←	Grade 9 Project Template		<b></b>
+ Add Field				•
			Cancel	one

- 6. Once a Record Update element has been created for each outcome, click the plus button above "End" to add an "Action" element:
  - a. Action: Search for and enter "Create Child Projects."
  - b. Label: Enter "Create Project."
  - c. API Name: Enter "Create\_Project."
  - d. Description: Enter "This action creates a child Project and associates it with the triggering record."
  - e. Set Input Variables:
    - i. parentRecs: Toggle the switch to "Include."
    - ii. Value: Enter "{!\$Record.Id}."

f. Click "Done." The action should be configured as follows:

	New Action
Filter By	Action
Category	Create Child Projects
All	Use values from earlier in the flow to set the inputs for the "Create Child Projects" Apex action. To
Users	* Label * API Name
Group	Create Child Projects Create_Child_Projects
Work Plans	Description
Work Steps	Creates a child Project associated with the triggering Student Info.
Sales leads	
Appointments	Set Input Values
Task	A <sub>a</sub> parentRecs
Price books	{!\$Record.Id}
Feed Item	
Order Management	•
	Cancel Done

7. Once these actions are completed, your Flow should be configured as follows:



8. Click "Save" and enter the desired Label, API Name, and Description. Activate the Flow to complete the configuration process.

# Method 5 – Apex Trigger

In orgs with Milestones PM+ Premium Edition, the Project Creation Trigger page can assist you in creating a custom trigger. For orgs with Milestones PM+ Free Edition, you can review Milestones PM+ Starter Packs for implementation options, or follow the steps below to manually create a trigger.

### Create a Trigger

To manually create a trigger, two main variables must be managed by either users or a workflow - the template name (e.g. "New Client Onboarding") and Project name (e.g. "Account Name - New Client Onboarding"). In most implementations, users will either populate a custom text field or select a template from a picklist field. If implementing a picklist field, make sure there is no default value; otherwise, the trigger will not fire.

- 1. Log into your sandbox. Go to the Salesforce object that will create Projects.
- 2. Create a picklist field with values matching the Project template names (e.g. "New Client Onboarding") and note the API name for this field (e.g. "Project\_Templates\_\_c").
- 3. Go to the Developer Console (available in Salesforce Enterprise Edition and above unless an API package has been purchased with Professional Edition). Click File > New > Apex Trigger.
- 4. Enter a trigger name (e.g. "MPM4\_Opportunity\_Project\_Creation") and select the target object, e.g. "Opportunity."

New Apex Tri	gger		×
Name:	MPM4_Opportunity	_Project	
sObject:	Opportunity	~	
		Submit	t

5. Copy and paste the template trigger code below, replacing variables accordingly. Make sure that "after insert, after update" is included in the parenthesis.

```
trigger MPM4_ObjectName_Project_Creation on ObjectName(after insert, after
update) {
    if (Trigger.isAfter) {
        Type pcu = System.Type.forName('MPM4_BASE',
    'Milestone1_Project_Creation_Utility');
        if (pcu != null) {
            MPM4_BASE.Milestone1_Project_Creation_Utility projCreationUtil =
        (MPM4_BASE.Milestone1_Project_Creation_Utility) pcu.newInstance();
```

```
if (Trigger.isAfter) {
    projCreationUtil.createChildProject(trigger.oldMap,
trigger.newMap, new Map<String, Object>{
        'projectCreationField' => 'FieldName',
        'projectLookupField1' => 'FieldName',
        'projectLookupField2' => 'FieldName',
        'secondaryLookup' => 'FieldName',
        'projectNamingConventionField' => 'FieldName'
        });
      }
   }
}
```

For explanations of the parameters in createChildProject, refer to Step 2: Project Creation Settings.

For assistance deploying this trigger or changing the setup of how Projects are automatically created, review <u>Milestones PM+ Starter Packs</u> for trigger creation services, including implementation and customization (e.g. an opportunity product can be used to select the template, a project can support being tied to multiple child opportunities, etc.).

TIP: Use <u>Rollup Helper for free</u> to rollup the product(s) on an opportunity, and then use that rollup field as part of a workflow that triggers project creation. If you have three or more lookups to set on the Project object, use <u>Lookup Helper for free</u>.

#### Create a Test Class

To deploy the trigger into production, a test method class must be created. The code below can be used to build your trigger. Note that if there are multiple required fields on the target object, values for those fields must be provided in the constructor before inserting the record.

- From your sandbox, go to the Developer Console (available in Salesforce Enterprise Edition and above unless an API package has been purchased with Professional Edition). Click File > New > Apex Class.
- 2. Enter the name of the new trigger, plus "\_Test" as the Apex class name. Click "OK."

New Apex class
Please enter a name for your new Apex class
MPM4_ObjectName_Project_Creation_Test
OK Cancel

3. Copy and paste the template test class code below, replacing variables accordingly. Note that this test class may need some adjustments to function with the chosen target object.

```
// All test methods in this class can access all data.
@isTest(SeeAllData=true)
public class ObjectName_Project_Creation_Test {
    static testmethod void ObjectName Project Trigger Test() {
        MPM4_BASE__Milestone1_Project__c testProj = new
MPM4_BASE__Milestone1_Project__c(Name = 'Test456');
        Account testAcc = new Account(Name = 'Test321');
        insert testAcc;
        ObjectName testObj = new ObjectName(
            Name = 'Test123',
            AccountId = testAcc.Id
            // Insert additional required fields here
        );
        Test.startTest();
            insert testObj;
            testObj.Name = 'Test1234';
            update testObj;
        Test.stopTest();
        testProj = [SELECT Id, MPM4 BASE ProjectLookupField1 FROM
MPM4 BASE Milestone1 Project c WHERE MPM4 BASE ProjectLookupField1 =
:testObj.Id];
        System.assert(testProj != null, 'Project not created');
    }
}
```

Admin Guide

Support Resources

Starter Packs

