Technical specification

Project management

Document purpose

The main purpose of this technical specification document is to provide technical details of the Salesforce solution developed to meet the project's needs.

The fundamental purpose of this project is to deliver a structure that contains information about Projects, their Milestones, and their To-do Items, allowing their management and control within the Salesforce platform.

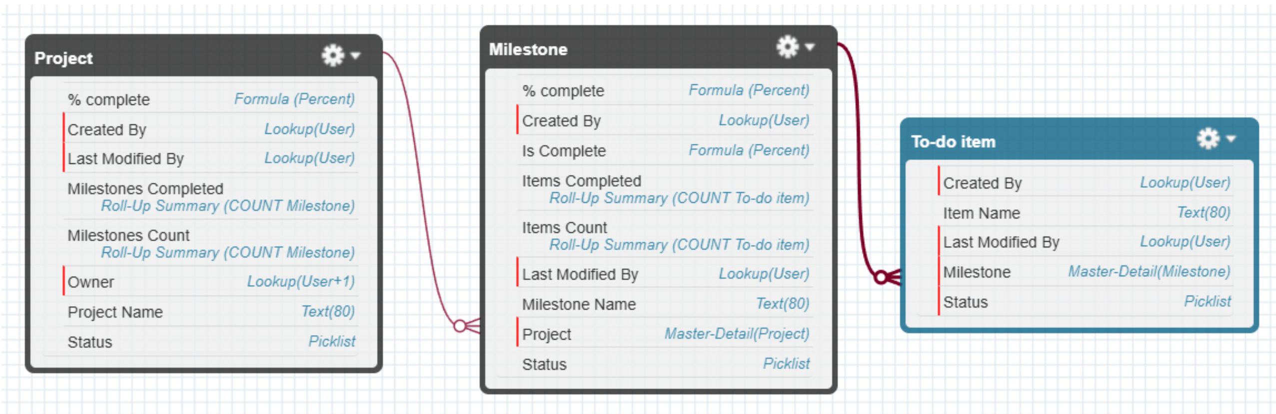
Project objectives

This project aims to have the information recorded and its status and completion percentages displayed, controlled, and automated within the Salesforce platform.

A guided screen was developed to make it easier for the user to create objects with their details, avoiding the need for the user to access the objects one by one, saving work time and generating efficiency in the daily use of the solution.

- **Project:** The main object of the solution, where the name of the Project must be informed, will be the record initially created, and which will have the Milestones records as related, its status will be controlled by the progress of the status of the records below it.
- **Milestone:** The secondary object of the solution will be the record that will have the To-do Items related to it, its status will be controlled by the progress of the statuses of the records below it.
- **To-do item:** The lowest-level object in the solution will be the object representing the tasks to be performed. This is the only one whose status will be updated manually.

The structure of the objects is as follows:



Data Dictionary

sObject	Field Name	Data Type
Project__c	PercentCompletion__c	Formula (Percent)
Project__c	MilestonesCompleted__c	Roll-Up Summary (COUNT Milestone)
Project__c	MilestonesCount__c	Roll-Up Summary (COUNT Milestone)
Project__c	OwnerId	Lookup(User,Group)
Project__c	Name	Text(80)
Project__c	Status__c	Picklist
Milestone__c	PercentCompletion__c	Formula (Percent
Milestone__c	IsComplete__c	Formula (Percent
Milestone__c	ItemsCompleted__c	Roll-Up Summary (COUNT To-do item)
Milestone__c	ItemsCount__c	Roll-Up Summary (COUNT To-do item)
Milestone__c	Name	Text(80)
Milestone__c	Project__c	Master-Detail(Project)
Milestone__c	Status__c	Picklist
TodoItem__c	Name	Text(80)
TodoItem__c	Milestone__c	Master-Detail(Milestone)
TodoItem__c	Status__c	Picklist

Created metadata and use reason

- Custom sObjects: Custom objects and fields were created and used, as there are no standard objects that meet the requirements, such as allowing the creation of master-detail relationships, which allows completeness controls to be performed without the need for more complex automations.
- Apex Triggers: Triggers were created and used to automate “statuses” instead of Flows due to the current inability of Flows to deal with an “undelete” situation; through Triggers, there is no such restriction.
- New Project override: The button for creating new Project records was overridden because I believe that the process of creating records through the developed screen should be the focus of use, as it greatly facilitates the creation of all necessary records.
- Global picklist: A global options list was created because the values were the same for all objects, making future maintenance easier.
- Paths: Paths were created to provide quick viewing and perhaps editing of record statuses.
- Reports: Two reports were created so that your Charts could be added to the project record layouts, enabling a clear and quick view of the current project status.
- Static resources: Two static resources were created, one containing the library needed to work with “xlsx” spreadsheets and another to overwrite the platform’s standard “css” classes.
- Permission Set: A permission set was created containing all the necessary field, class, and tab permissions to facilitate configuration for users who use the solution.

General Considerations and Possible Improvements

I developed everything thinking about what was essential to provide a good user experience, trying to facilitate the use of the tool and providing a quick and clear view of the information. That said, I saw the need to use a screen with steps, the possibility of importing a spreadsheet to speed up the creation of records, and also the use of paths and charts to highlight the most important information in the layouts.

If it were something to be done with much more time available, some things could still be done to improve the user experience, such as:

- Allow all stages to import spreadsheets, including a single one that creates all records and their related files
- Allow all tables to be editable
- Allow the screen to be resized for use on tablets or smartphones
- Create a functionality for the multiple deletion of table rows

User Guide

A detailed step by step guide was created with Scribe and is available on the following link:
[Click here]