

Project Management

Overview:

The project involved developing a solution using PowerApps application with Data Verse for an IT company . The client uses the solution for Project management of their farm. This project enabled them to track all the projects with associated members in their organization

Client details:

Name: Confidential | **Industry:** IT | **Location:** US

Technologies:

Dataverse, PowerApps (Canvas Apps),

Project Description:

Traditionally project management has been a time-consuming and error-prone process for client. Paper-based or spreadsheet methods often lead to inefficiencies, time consuming, limited visibility and control, Data inconsistency and inaccuracy. Recognizing these challenges, client sought a solution that could streamline the project management process and provide real-time insights into projects, clients, and assigned employees. This project was developed using data verse as data source and also consists of 1:N and N:1 relation between different tables.

What is Project Management?

A project management is a record of the projects, tasks, assigned employees, project details. It facilitates project monitoring and management by acting as a tool for project tracking and management. The following are some noteworthy aspects of the project's success:

Sample and Design :

Project Management Home screen

Steps

Create a Tables in data verse

- Go to data verse -> choose Account table.
- Go to add records -> add account name and create a contact specific to that account.
- To define project team members we use user table.
- *Create a table, Name-> Project*, add column Cost (currency), start date(date type), End date(date type), add image column.
- Now relate project table with Account table as **Many : One** . For that create a column client with data type as lookup, Account table as related table.
- Save the Table.

- Create another table, Name-> Project Task, add column priority as choice column and add choices as P1, P2, P3.
- Add column task status as choice column and add choices New, Open, and closed.
- Add column Assigned to with data type as lookup and related table user table.
- Add column project with data type as lookup relate with Project table.

Note-> Project column of project task is related to project table as **Many : One**.

- Go to relationship
- Create a relationship many to many with project and user.

Create App

- Go to make.powerapps
- Create an app (Blank app) with a name
- Go to data, add tables, Accounts, Projects, Users and Project task
- To list out all the projects
- Add a gallery to screen (Vertical gallery) and connects to the table Projects
- To insert projects in project table, insert edit form, connect to projects table.
- Edit fields-> add, cost, image, client, start date, end date.
- To allow users to submit the data they have entered in thr form add check icon and in Onselect = SubmitForm("FormName")
- Adjust columns in project gallery as per required.
- Set **Item** property of project details form to **galProject.selected**.
- In TemplateFill of galProject add If(ThisItem.IsSelected, RGBA(230, 230, 230, 1), RGBA(0, 0, 0, 0)).

To show accounts based on projects

- Add a gallery.
- Add combobox to Client gallery and in ItemProperrty add Account table
- For default property of combobox add default = galProjects.Selected.Client. AccountName.
- As it is a dropdown so users may change, so to submit that info Add a button and onSelect of this Patch(Projects,galProjects.selected, {Client:drpClient.selected}).
- A project is related to project task in **One: Many** relationships data in App.
- Now we would have to list out all the project tasks related to projects in a gallery control and provide ability to users to add or update project task information and for that leverage a form control.
- Add gallery to project task related to project.
- Set Items Property -> galProjects.selected.ProjectTask.
- Add edit form connects those to Project Task table.
- Edit Fields-> Assigned to, Priority, Project, Task Status.
- In this form Project column is a lookup column, As we already had project.Selected made, so default the selected project. To do it select Project Data card-> Unlock it
- Set default-> galProjects.Selected.
- Since its value is pre-set you can hide that column. To do that select DataCard -> go to visibility and made false.
- Add a '+' icon to project task and in OnSelect = NewForm(FormTask)

- Add a check icon and in OnSelect of this SubmitForm(Formtask).
- Add additional piece of metadata to project task gallery, add priority, status and assigned to.
- To connect galTask to Form control, In item property of form control add *galTask.selected*.
- We can also add additional tasks to project by clicking on '+' icon.
- To list out **Many : Many relationships** scenario.
- A project can have many team members and a team member can be a part of many projects.
- To do that Insert a gallery -> change layout to title.
- In Items of Gallery galProjects.selected.users.
- Add project team members.
- Add a combobox control, In combobox go to items property and set users.
- Add a button called add, by clicking on this button it will associate selected users to the project.
- So this is **Many : Many** relationship.
- To leverage this Set OnSelect of this button to ForAll (cbxUsers.selectedItems, Relate(galProjects.selected, ThisRecord)
- To remove a specific user from a project in gallery control insert Trans icon and in OnSelect -> Unrelate(galProjects, selected.Users, ThisItem).

The screenshot displays a 'Project Management' application interface. It is divided into several sections:

- Projects:** A gallery on the left showing three projects: 'Project X' (cost 55000, client JJ Corporation), 'Project Y' (cost 100000, client JJ Corporation), and 'Project NoteVed' (cost 150000, client Microsoft Entra ID).
- Project Details:** A central form for editing project information. Fields include:
 - Name: Project X
 - Client: JJ Corporation
 - Start Date: 2/26/2024 00:00
 - End Date: 3/28/2024 00:00
 - cost: 55000
 - Cover Image: A placeholder with a 'Tap or click to add a picture' button.
- Project Team:** A section on the right with a 'Find items' dropdown, an 'Add' button, and a list of team members including 'Bibhuti' with a delete icon.
- Project Tasks:** A table at the bottom showing tasks for the selected project:

Name	Priority	Status	Assigned To
Project Report	P1	Active	Bibhuti
Migration	P2	Active	#
- Clients:** A section at the bottom left with a dropdown for 'JJ Corporation' and an 'Update Client' button.

Use Case- In the project management screen, managers are responsible for inputting essential project details. These details encompass the project's name, client information, project cost, start date, end date, and a cover image. Additionally, managers have the capability to add and modify tasks for each project. This includes specifying the task's priority, status, and the individual to whom the task is assigned.

Furthermore, managers can update client details associated with a specific project. They also have the ability to include new members in the project team. This comprehensive functionality allows managers

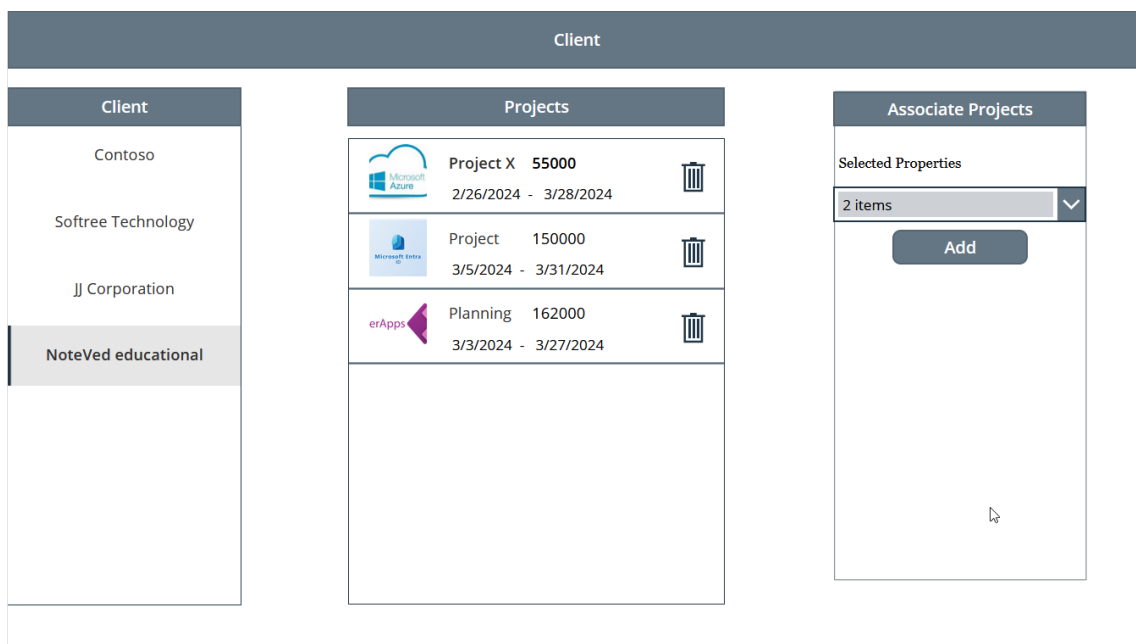
to oversee and manage projects effectively by maintaining accurate project information, task assignments, client data, and team composition.

Project management client screen:

Steps

- Add a gallery and connected to accounts.
- To show case projects add a gallery and in Items property add galClients.selected.projects.
- Adjust columns in gallery as required.
- To associate project for a specific client, add a combo box and make Items= Project.
- Add a button called add and leverage OnSelect(ForAll (cbprojects.selectedItems, Relate(galClients.selected.Projects, ThisRecord)

Use case- In the client screen, managers have access to a table listing all clients along with their associated projects. Each client can be linked to multiple projects, providing a comprehensive overview of the projects associated with each client. Managers also have the flexibility to re-associate projects dynamically to specific clients, allowing for efficient management and organization of project-client relationships. This feature enables managers to easily track and manage the various projects assigned to each client, ensuring effective project-client alignment and streamlined project management processes.



When a manager selects a client from the client screen, they can view all projects details related to that specific client. This functionality provides managers with a detailed overview of the projects linked to a particular client, as well as the cost for the project and also project duration. Additionally, managers have the capability to delete projects directly from this interface. This feature streamlines project management by allowing managers to easily access project details, team member information, and delete projects as needed, all within a single user-friendly interface.

This project is successfully done by using the above-mentioned technology and it is maintaining the requirement of the client.