I want to build a canvas powerapp, below is its underlying data structure and UI element and their expected function. Please tell us how to do it in step-by-step.

My underlying data is in Dataverse table which has below set of columns:

Fixed info columns: 3 columns: Department, Owner name, Project type,

Monthly status related info columns:

Jan-25, Jan-25 RAG, Jan-25 Comment, Feb-25, Feb-25 RAG, Feb-25 Comment…. This way till Dec-27, Dec-27 RAG, Dec-27 Comment. So, each month 3 set total 36x 3 = 108 columns for 3 year worth of data.

Jan-25 column will show project progress percent,

Jan-25 RAG column will show usual project status dropdown value like R, A, G, N/A, Not Started.

Jan-25 Comment column is for Monthly project related comment

Now in Canvas UI, on top user will select value from 5 dropdowns

Dropdown1: Department, Dropdown2: Owner name, Dropdown3: Project type,

Dropdown4: Year ( item values: 2025,2026,2027),

Dropdown5: Month ( item values: Jan-Dec),

Now For example if user has selected Department, Owner name, Project type value and then 2025 in Year dropdown value and Feb from Month dropdown value and hit on Show record button. Then based on this selection filtered data will appear in bottom gallery where total 9 column will be shown:

1. Department
2. Owner name
3. Project type
4. Previous Month ( Jan-25 )
5. Previous Month RAG ( Jan-25 RAG) table
6. Previous Month Comment ( Jan-25 Comment)
7. Selection Month ( Feb-25)
8. Previous Month RAG ( Feb-25 RAG)
9. Previous Month Comment ( Feb-25 Comment)

Column 1-6 is only for viewing respective data, 7-9 is for respective data entry. Please notice how column 5-9 will vary based on user Year and Month selection. There will be a Save button once user click on that this all 9 column record set value should be saved back in Dataverse Table.

**Step-by-Step Guide to Building the Canvas PowerApp with Dataverse**

**Step 1: Set Up the Data Source**

1. Ensure your **Dataverse table** is properly structured with:
   * Fixed info columns: Department, Owner Name, Project Type
   * Monthly status columns: Jan-25, Jan-25 RAG, Jan-25 Comment, ..., Dec-27, Dec-27 RAG, Dec-27 Comment
2. **Connect Dataverse to PowerApps**:
   * In PowerApps, go to **Data** → **Add Data** → **Dataverse**.
   * Select your table and load it into the app.

**Step 2: Create UI Elements**

1. **Add Dropdowns for Filtering**
   * Insert five dropdown controls (Dropdown1 to Dropdown5):
     + **Dropdown1 (Department)** → Set Items to Distinct(DataverseTable, Department)
     + **Dropdown2 (Owner Name)** → Distinct(DataverseTable, Owner Name)
     + **Dropdown3 (Project Type)** → Distinct(DataverseTable, Project Type)
     + **Dropdown4 (Year)** → ["2025", "2026", "2027"]
     + **Dropdown5 (Month)** → ["Jan", "Feb", "Mar", ..., "Dec"]
2. **Add a 'Show Record' Button**
   * Insert a **Button** (ShowRecordButton).
   * Set its OnSelect property to filter data:

powerapps

CopyEdit

ClearCollect(

SelectedRecords,

Filter(

DataverseTable,

Department = Dropdown1.Selected.Value &&

OwnerName = Dropdown2.Selected.Value &&

ProjectType = Dropdown3.Selected.Value

)

)

**Step 3: Create the Gallery to Display Records**

1. **Insert a Gallery (Gallery1)** to display filtered records.
2. **Set Gallery Items** property to:

powerapps

CopyEdit

Filter(

SelectedRecords,

true

)

1. **Add Labels and Input Fields for Columns** Inside the gallery, add:
   * Labels for:
     + ThisItem.Department
     + ThisItem.OwnerName
     + ThisItem.ProjectType
     + LookUp(ThisItem, Dropdown4.Selected.Value & "-" & Dropdown5.Selected.Value & " RAG")
     + LookUp(ThisItem, Dropdown4.Selected.Value & "-" & Dropdown5.Selected.Value & " Comment")
   * **TextInput** controls for user entry in selected month columns.

**Step 4: Implement Save Functionality**

1. **Add a 'Save' Button (SaveButton)**
2. **Set OnSelect Property** to update Dataverse:

powerapps

CopyEdit

ForAll(

Gallery1.AllItems,

Patch(

DataverseTable,

LookUp(DataverseTable, ID = ThisItem.ID),

{

(Dropdown4.Selected.Value & "-" & Dropdown5.Selected.Value): TextInput\_Progress.Text,

(Dropdown4.Selected.Value & "-" & Dropdown5.Selected.Value & " RAG"): Dropdown\_RAG.Selected.Value,

(Dropdown4.Selected.Value & "-" & Dropdown5.Selected.Value & " Comment"): TextInput\_Comment.Text

}

)

)

Notify("Records Updated Successfully", NotificationType.Success)

**Final Notes**

✅ **Dropdown selections dynamically determine which columns are shown in the gallery.**  
✅ **Only the selected month's fields are editable, previous months are view-only.**  
✅ **The save button patches updates back to Dataverse.**

This approach ensures a **scalable and dynamic PowerApp** for managing project progress. 🚀 Let me know if you need refinements!

What type of gallery it is ? a horizontal gallery or vertical gallery ?

**ChatGPT said:**

For your **Canvas PowerApp**, you should use a **Vertical Gallery**.

**Why Vertical Gallery?**

✅ **Each record (row) represents a project**, displaying its details across multiple columns.  
✅ **Users can scroll down to see more records**, which is the standard behavior for a vertical gallery.  
✅ **Each row contains multiple fields (Department, Owner Name, Project Type, Previous Month, Selected Month, etc.)**, making it ideal for vertical scrolling.

**How to Insert a Vertical Gallery?**

1. Go to **Insert** → **Gallery** → **Vertical Gallery**.
2. Set the Items property of the gallery to:

powerapps

CopyEdit

Filter(

SelectedRecords,

true

)

1. Inside the gallery, add **labels and input fields** to match your column requirements.

Would you like help in designing the layout inside the gallery? 🚀

**You said:**

yes, please help the layout inside the gallery....I am not much clear about those text input control, labels will probably come in top...

**ChatGPT said:**

Memory updated

**Step-by-Step Layout Design for the Vertical Gallery**

Your gallery will contain **9 fields per record**, where:

* **First 6 fields** (Department, Owner Name, Project Type, Previous Month, Previous Month RAG, Previous Month Comment) are **view-only (labels)**.
* **Last 3 fields** (Selected Month, Selected Month RAG, Selected Month Comment) are **editable (Text Input / Dropdown / Multiline Input).**

**1️⃣ Insert a Vertical Gallery**

1. Go to **Insert** → **Gallery** → **Vertical Gallery**.
2. Set the Items property of the gallery:

powerapps

CopyEdit

Filter(

ProjectTable,

Department = Dropdown1.Selected.Value &&

OwnerName = Dropdown2.Selected.Value &&

ProjectType = Dropdown3.Selected.Value

)

**2️⃣ Inside the Gallery, Arrange Controls for Each Record**

1. Select the **Gallery Template** (the first item in the gallery).
2. Add a **Rectangle / Card** as the background for better visibility.
3. Insert **Labels** for fixed fields (top row):
   * **Department**: ThisItem.Department
   * **Owner Name**: ThisItem.OwnerName
   * **Project Type**: ThisItem.ProjectType
   * **Previous Month Progress**: ThisItem.[Jan-25] (example for January selection)
   * **Previous Month RAG**: ThisItem.[Jan-25 RAG]
   * **Previous Month Comment**: ThisItem.[Jan-25 Comment]
4. Insert **Editable Controls for Current Month** (bottom row):
   * **Selection Month Progress** (Text Input):

powerapps

CopyEdit

Default: ThisItem.[Feb-25] // Example for February

* + **Selection Month RAG** (Dropdown with options: "R", "A", "G", "N/A", "Not Started"):

powerapps

CopyEdit

Items: ["R", "A", "G", "N/A", "Not Started"]

Default: ThisItem.[Feb-25 RAG]

* + **Selection Month Comment** (Multiline Text Input):

powerapps

CopyEdit

Default: ThisItem.[Feb-25 Comment]

**3️⃣ Layout Example**

A **2-row layout for each record:**

| **Department** | **Owner Name** | **Project Type** | **Prev Month %** | **Prev RAG** | **Prev Comment** | **Selected Month %** | **Selected RAG** | **Selected Comment** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Label** | **Label** | **Label** | **Label** | **Label** | **Label** | **Text Input** | **Dropdown** | **Multiline Text** |

**4️⃣ Save Button Logic**

After editing, clicking the Save button should update Dataverse:

**Step 1: Create a Collection for Edited Data**

Before saving, collect the changes:

powerapps

CopyEdit

ForAll(

Gallery1.AllItems,

Patch(

ProjectTable,

LookUp(ProjectTable, ID = ThisItem.ID),

{

'Feb-25': TextInput\_SelectionMonth.Text,

'Feb-25 RAG': Dropdown\_SelectionRAG.Selected.Value,

'Feb-25 Comment': TextInput\_SelectionComment.Text

}

)

)

**Step 2: Add Save Button**

* Insert a **Button** below the gallery.
* Set its OnSelect property to the above **Patch()** formula.

**Final Thoughts**

This layout ensures: ✔ **Top Row (View Only):** Labels for fixed info and previous month status.  
✔ **Bottom Row (Editable):** Text input, dropdown, and comment box for the selected month.  
✔ **Save Button:** Updates Dataverse with changes.

Would you like a visual mockup for better understanding? 🚀

Yes a visual mockup will be really very nice !! thanks a lot for this.

**ChatGPT said:**

Here’s a visual mockup of your **Canvas PowerApp Gallery Layout** to help you better understand the placement of labels, text inputs, and dropdowns.

**📌 Visual Layout Mockup (Table Representation)**

| **Department** | **Owner Name** | **Project Type** | **Prev Month %** | **Prev RAG** | **Prev Comment** | **Selected Month %** | **Selected RAG** | **Selected Comment** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Label** | **Label** | **Label** | **Label** | **Label** | **Label** | **Text Input** | **Dropdown** | **Multiline Text** |
| **IT** | **John Doe** | **Upgrade** | **80%** | **G** | **On track** | **(Editable Input)** | **(Dropdown: R/A/G/N/A)** | **(Multiline Input)** |

**📌 PowerApps Implementation**

1. **Add a Vertical Gallery** (Inside the gallery template, arrange the controls in a 2-row layout.)
2. **Top Row (View-Only Labels)**
   * Insert **6 Labels** for:
     + ThisItem.Department
     + ThisItem.OwnerName
     + ThisItem.ProjectType
     + ThisItem.[Jan-25] (Previous Month Progress)
     + ThisItem.[Jan-25 RAG] (Previous Month RAG)
     + ThisItem.[Jan-25 Comment] (Previous Month Comment)
3. **Bottom Row (Editable Inputs)**
   * **Text Input** for Progress %
     + Default: ThisItem.[Feb-25]
   * **Dropdown** for RAG Status
     + Items: ["R", "A", "G", "N/A", "Not Started"]
     + Default: ThisItem.[Feb-25 RAG]
   * **Multiline Text Input** for Comments
     + Default: ThisItem.[Feb-25 Comment]
4. **Save Button Logic**
   * OnSelect Property:

powerapps

CopyEdit

ForAll(

Gallery1.AllItems,

Patch(

ProjectTable,

LookUp(ProjectTable, ID = ThisItem.ID),

{

'Feb-25': TextInput\_SelectionMonth.Text,

'Feb-25 RAG': Dropdown\_SelectionRAG.Selected.Value,

'Feb-25 Comment': TextInput\_SelectionComment.Text

}

)

)

**📌 Optional Enhancements**

* Add a **Border & Background Color** to separate the two rows.
* Use **Padding & Spacing** to align controls neatly.
* Implement **Conditional Formatting** to highlight overdue projects.

**📌 Final Touch**

Would you like an actual **graphical UI mockup** of this layout as well? 🚀