Module 2: Work with Dataverse

Scenario

You are a functional consultant for your organization Contoso. You are assigned to work on a project for your client Fabrikam. Fabrikam would like to encourage their employees to continuously learn. They want to build an application that allow a small set of employees to create knowledge assessments and then make them available to all employees to test their knowledge. The employees need to be able to pick an assessment and quickly complete it in just a few minutes. In this practice, you will be creating a data model to support the applications.

Working with the client, you have determined the following basic needs for storing data:

- A Knowledge Assessment table will represent the actual assessment and contain one or more questions from a Knowledge Question table
- A Knowledge Test Result table will track when employees take an assessment
- The employee who took the assessment will be tracked using the existing Common Data Model (CDM) User table
- The existing Common Data Model (CDM) Feedback table will be used to allow employees to express their opinions on the assessment

Exercise 1 - Create the Knowledge Assessment Table

In this exercise, you will be creating the Knowledge Assessment table and its columns. Knowledge Assessment will be a new custom table you create. You also enable the feedback option for this table, this will cause the system to create the relationship between Knowledge Assessment and the CDM Feedback table.

Task 1 - Create a table

- Navigate to https://make.powerapps.com.
- 2. Make sure you are in the **Right** environment you created.
- 3. Select Solutions.
- 4. Click to open the Assessment.
- 5. Click +New and select Table > Table.
- 6. Enter **Knowledge Assessment** for **Display Name** in the **Properties** section. Click on the **Primary Column** tab and enter **Title** for **Display Name**.
- 7. Select **Enable Attachments**.
- 8. Click to expand **Advanced options** under the **Properties** section and scroll to **Rows in this table** section.

- 9. Check the **Can be linked to feedback** checkbox.
- 10. Click **Save**. It may take a few minutes for your table to be created.
- 11. Once the table is created it will be listed in the **All** screen, Select the table **Knowledge Assessment** and click **+New column** from the top menu.
- 12. Enter Start Date for Display Name and select Date and time > Date Only for Data Type.
- 13. Click Save.
- 14. Click +New column again.
- 15. Enter End Date for Display Name and select Date and time > Date Only for Data Type.
- 16. Click Save.
- 17. You will now add an **Choice** type column. Click **+New column**.
- 18. Enter **Difficulty** for **Display Name** and select **Choice** for **Data Type**.
- 19. Under Sync this choice with, select New Choice.
- 20. Enter **Difficulty** for Display Name.
- 21. Enter Beginner for Item 1 and click +New choice.
- 22. Enter Intermediate for Item 2 and click +New choice.
- 23. Enter Advanced for Item 3 and click Save.
- 24. Select **Difficulty** from drop-down for **Sync this choice with** and then select **Beginner** for the **Default choice**.
- 25. Click **Save** at the bottom of the screen.

Task 2 - Create a calculated column

- 1. Click +New column.
- Enter Days Remaining for Display Name and select Number > Whole Number for Data
 Type.
- 3. Click Advanced Options.
- 4. Enter **0** for **Minimum Value** and **1000** for **Maximum Value**.
- 5. Select **Calculated** from **Behavior drop-down**.
- 6. Click **Save and edit**. A pop-up window should appear allowing you to configure the calculation. (You may need to disable a pop-up blocker.)
- 7. A new browser opens click + Add Action.
- 8. Enter the following formula:

DIFFINDAYS(NOW(), crXXX_enddate)

Note: That crXXX is environment-dependent and the name of your environment will be different. To find your environment-specific designation, type **cr** and wait for the field to auto-fill your environment name.

- 9. Click the check mark. (Depending on your window size, you may need to click out of the text box to see the check mark.)
- 10. Click Save and Close.

Exercise 2 – Create the Knowledge Question Table

In this exercise, you will be creating the Knowledge Question table and its columns.

Task 1 - Create a table

- 1. Navigate to https://make.powerapps.com and make sure you are in your **Practice** environment.
- 2. Select Solutions.
- 3. Open the **Assessment**.
- 4. Click + New and select Table.
- 5. Enter **Knowledge Question** for Display Name.
- 6. Go to the **Primary Column** section.
- 7. Change the **Display Name** to **Question**. Click **Save**.
- 8. Click the newly added table **Knowledge Question** from the tables list. Click **+ New column** from the top menu.
- 9. Enter Answer 1 for Display Name, select Text for Data Type and click Save.
- 10. Repeat the step 9 and create 3 more columns with the below values:
 - o Name: **Answer 2**, Data Type: **Text**.
 - Name: Answer 3, Data Type: Text.
 - o Name: **Answer 4**, Data Type: **Text**.
- 11. Click +New column.
- 12. Enter **Answer 1 Points** for **Display Name**, select **Whole Number** for **Data Type** and click **Save**.
- 13. Repeat the step 12 and add 3 more filed with values below. These will store the points awarded if someone picks this answer.
 - o Name **Answer 2 Points** Data Type **Whole Number**.

- Name Answer 3 Points Data Type Whole Number.
- o Name **Answer 4 Points** Data Type **Whole Number**.

Note: There are many ways you could model the answers depending on the complexity of your requirements. The approach shown here is simplified for practice purposes to focus on demonstrating how to work with the table creation process.

Exercise 3 – Create the Knowledge Test Result Table

In this exercise, you will be creating the Knowledge Test Result table and its columns.

Task 1 - Create a table

- 1. On the navigation menu, click **Assessment** to return to the solution.
- 2. Click +New and select Table.
- 3. Enter Knowledge Test Result for Display Name and click Save.
- 4. Select the newly added table **Knowledge Test Result** from the table list and click **+New column**.
- 5. Enter **Total Points** for **Display Name** and select **Whole Number** for **Data Type**.
- 6. Click Save.

Exercise 4 – Add existing tables to the solution

In this exercise, you will be adding the existing tables Feedback and User. This ensures when relationships are created later between these tables, they will be tracked as part of the solution.

Task 1 – Add existing tables

- 1. From the navigation menu, click **Assessment** to return to the solution.
- 2. Click **Add Existing** and select **Table**.
- 3. Select the **Feedback** and **User** tables and click **Next**.
- 4. Leave the Include All Objects and Include Table Metadata unchecked and click Add.
- 5. Your solution will now have **5 tables** and **1 Choice** in addition to your apps.