

Module 4: Make canvas apps with Power Apps

Scenario

You are a functional consultant for your organization Contoso. You are assigned to work on a project for your client Fabrikam. You have been assigned to continue work on the Fabrikam Knowledge canvas app that we started creating in the prior module. In this practice you will be providing the user with visual feedback of which questions they got right and wrong. You will also be enabling the score button only if the user has provided some answers.

Exercise 1 – Customizing the User Experience

Task 1 – Show the Assessment Result

In this task, you will show the assessment result to the user. In this task you will use a local variable ShowResults to indicate if the results should show. It will be updated upon the user clicking the score button. Each item will then use an expression to highlight if the answer is right or wrong, only when ShowResults is true.

1. Navigate to <https://make.powerapps.com>.
2. Make sure you are in your environment.
3. Select **Solutions**.
4. Select **Assessment**.
5. Select the **Fabrikam Assessment** Canvas application.
6. Click on the **Edit** button located on the command bar.
7. Wait for the app designer to load.
8. Select the **Take Assessment Screen**.
9. Select the **OnVisible** property of the **Take Assessment Screen** and replace the value with the snippet below. This snippet will re-add the Clear function and add a new function that will initialize a variable **ShowResults** and set it to **false**.

Clear(UserAnswers);UpdateContext({ShowResults:false})

10. Select the **OnSelect** property of the **Score Button**.
11. Add the snippet below to the content you currently have. This snippet will add a function that will set the **ShowResults** value to **true**.

;UpdateContext({ShowResults:true})

Hint: If a syntax error is thrown due to the semicolon after including the above command, then make sure to remove the extra semicolon.

12. Select **Answer4 Selected** checkbox of the **assessment Question List**.
13. Select the **Fill** property of **Answer4 Selected** and set it to the snippet below. This snippet will:

- Set the Fill Color to White if ShowResults is false.
- Set the Fill Color to Red id ShowResults is true, the checkbox is check, and the Points value is less than 0.
- Set the Fill Color to Green id ShowResults is true, the checkbox is check, and the Points value is more than 0.

If(ShowResults, If('Answer4 Selected'.Value = true && ThisItem.'Answer 4 Points' > 0, Color.Green, If('Answer4 Selected'.Value = false, Color.White, Color.Red)), Color.White)

14. Select the **Fill** property of **Answer3 Selected** checkbox and set to the snippet below.

If(ShowResults, If('Answer3 Selected'.Value = true && ThisItem.'Answer 3 Points' > 0, Color.Green, If('Answer3 Selected'.Value = false, Color.White, Color.Red)), Color.White)

15. Select the **Fill** property of **Answer2 Selected** checkbox and set to the snippet below.

If(ShowResults, If('Answer2 Selected'.Value = true && ThisItem.'Answer 2 Points' > 0, Color.Green, If('Answer2 Selected'.Value = false, Color.White, Color.Red)), Color.White)

16. Select the **Fill** property of **Answer1 Selected** checkbox and set to the snippet below.

If(ShowResults, If('Answer1 Selected'.Value = true && ThisItem.'Answer 1 Points' > 0, Color.Green, If('Answer1 Selected'.Value = false, Color.White, Color.Red)), Color.White)

Task 2 – Disable/Enable Button

In this task, you will disable the score button if there are no answers selected and enable it when there is at least one answer selected.

1. Select the **Score Button**.
2. With the **Score Button** selected, set the **DisplayMode** property to the snippet below. This snippet will disable the button if there are no answers selected and enable it if there is at least one answer selected.

If(CountRows(UserAnswers) > 0, DisplayMode.Edit, DisplayMode.Disabled)

Task 3 - Create the Results Screen

In this task, you will copy the Main Screen and rename it Results Screen.

1. Click on the ellipses button of Main Screen and select Duplicate Screen.
2. Click on the ellipses button of the new screen and click Rename.
3. Rename the new screen **Results Screen**.
4. Select the **Knowledge Assessment List** under the **Results Screen**. Click on the ellipses button and click **Delete**.
5. Make sure the **Insert** tab is selected. Click **Gallery** and select **Horizontal**.
6. The **Data source** pop-out will come to view.
Select **Knowledge Test Results** for data source.
7. Rename the gallery to **User Result List**.
8. Delete the image in **User Result List**. You will receive an error with a red X - Hover over the X and select **Edit in the formula bar**.
9. Delete the formula in the **fx** bar to remove the error.
10. Select the **User Results List** gallery.
11. In the **Advanced** tab, select the **Items** property and set it to the snippet below.

Filter('Knowledge Test Results', Owner = CurrentUser)

11. Return to the **Properties** tab. Click **Edit** on the Fields property. For Title, using the dropdown, select the **createdon** value.
12. For the Subtitle element, using the dropdown, select crxxx_totalpoints. (crxxx refers to your unique prefix.)
13. Select the **Results Screen** and navigate to the **Insert** tab. Add the **Left** icon to the upper left corner.
Change the color to **white**.
14. Set the Left icon OnSelect to this snippet.

Back()

Task 4 – Add Button for Results Screen

In this task, you will add a button to the Main Screen. This button will navigate to the Results page.

1. Select the **Main Screen**.
2. Go to the **Insert** tab and click **Icons**.
3. Select the ... **More** Icon.
4. Place the icon in the left side of the header.
5. Change the **color** of the icon to **White**.
6. Select the **OnSelect** property of the icon and provide the function below. This function will run when the icon is clicked and navigate to the Results Screen.

Refresh(Users);Navigate('Results Screen', ScreenTransition.None)

Task 5 – Test Your Work

In this task, you will run and test the applications.

1. Select the **Main Screen**.
2. Click **Play**.
3. Click on the ... **More** icon.
4. You should navigate to the **Results Screen**. This page might be empty because you didn't take any tests yet.
5. Click on the **Back** button.
6. You will be taken back to the **Main Screen**.
7. Click on the take test icon of one of the **Assessments**.
8. The questions should load, and the **Score Assessment** button should be **Disabled**. This is because you must select at least one answer before you can submit your answers.

Note: If you do not see any data, you need to use the model-driven app to create some assessment questions with answers.

9. Select some answers.
10. The **Score Assessment** button will now be enabled.
11. Click on the **Score Assessment** button.
12. The answers that have more than 0 points will become **Green** and the answers that have 0 zero points will become **Red**.
13. Click on the **Emoji** button.

14. You will be taken to the **Feedback Screen**.
15. The Submit Feedback button will be **Disabled**. This is because you must provide a comment before you can submit the feedback.
16. Provide a **Comment**.
17. The Submit Feedback will become **Enabled**. Select the **Status Reason** which is a required field.
18. Click **Submit Feedback**.
19. Your **Feedback** will be submitted, and you will navigate back to the **Assessment Screen**.
20. Click on the **Back** button.
21. You will go back to the **Main Screen**.
22. Click on the ... **More** icon.
23. You will be taken to the **Results Screen**. You should see at least one result in the **Results** list.
24. Click on the **Back** button.
25. You will go back to the **Assessments Screen**.
26. Close the **Preview**.
27. Click **File** and **Save**.
28. Click **Close** to close the app designer.

Task 6 – Other things you can try

Now that you have built a basic canvas app that interacts with the Dataverse, here are some things you can try on your own to make the app better. **The following steps are optional and are more advanced to challenge your learning. These are not expected or required to all be completed.**

- Try different ways of presenting the Test Results – for example you could try the Data Grid control.
- Add an image control to the Main Screen and show the user's profile image using User().Image. Note: You will need to setup a profile image for the user you are using for it to show more than the default image.
- You can add an image to the Knowledge Assessment table and then change the Main Screen list of Assessments to show the image. Note: after you add the table image in Dataverse, you will need to upload an image via the model-driven app. You will also need to go to View-Data Sources and refresh the Knowledge Assessment table metadata.
- Think about how else you might improve the app using the knowledge you've gained during the practices. You can always Save As your app, and try any changes you want without impacting your completed work!