



# Use advance techniques in canvas apps to perform custom updates and optimization

✓ 7300 XP ➔

6 hr 45 min • Learning Path 10 Modules

Level

Intermediate

Product

Power Apps, Microsoft

Power Platform

Role

Developer

Subject

Business applications

Do you want to build custom canvas apps in a more advanced way? This learning path will help you use advanced techniques in customizing and optimizing the performance of your canvas apps.

## Prerequisites

- A basic understanding of how to create a Power Apps canvas app and some experience working with controls in Power Apps.

[+ Add](#)

## Redeem your code

Have an achievement code? [Redeem your code now.](#)

## Modules in this learning path



### Use imperative development techniques for canvas apps in Power Apps

✓ 1000 XP ➔

57 min • Module9 Units

#### ⓘ Note

##### App in a Day instructor-led training

Continue your learning journey with the [App in a Day instructor-led workshop](#). This course provides hands-on experience for building custom apps! [Browse training events](#).

Imperative development techniques can help you achieve the goal for your app. You learn about different development methods and different variables in Power Apps.

#### Overview ▲

##### Imperative versus declarative development



6 min

##### The three types of variables in Power Apps



5 min

##### Global variables



8 min

##### Contextual variables



4 min

**Collections**

8 min

**Additional variable concepts**

6 min

**Exercise - Using the variables and collections**

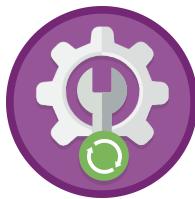
7 min

**Module assessment**

10 min

**Summary**

3 min

**Perform custom updates in a Power Apps canvas app**

✓ 700 XP



38 min • Module6 Units

**!** Note**App in a Day instructor-led training**

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With some Power Apps canvas apps a form isn't the solution. This module focuses on how to perform custom updates when your data isn't in a form.

**Overview ^****Sometimes you need something more than forms**

6 min

**Use the Patch function to create and edit records**

8 min

[Delete records from data sources and collections](#)

8 min

[Use the Patch function to update a Gallery](#)

3 min

[Module assessment](#)

10 min

[Summary](#)

3 min



## Use Dataverse choice columns with formulas

✓ 700 XP



42 min • Module6 Units

**Note****App in a Day instructor-led training**

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Explore how you can use Power Fx formulas to work with the Choice column in Microsoft Dataverse. These column data types present the user with a fixed list of values that are defined by the maker.

**Overview ^**[Introduction](#)

7 min

[Filter Dataverse choice columns with Power Fx formulas](#)

4 min

[Modify choice and choices values](#)

4 min

### Exercise - Dataverse choice columns

20 min



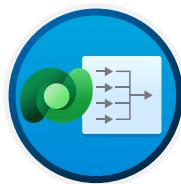
### Check your knowledge

6 min



### Summary

1 min



## Reduce complexity in your data model with Dataverse table relationships

✓ 700 XP



44 min • Module6 Units

### ⚠ Note

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Learn how to use Dataverse relationships in canvas apps from Power Apps. As real-life objects are related to each other, the relationships are used in Dataverse to link rows in one table to another. Using the relationships properly means that apps can hide unnecessary complexities of the data model.

### Overview ^

#### Introduction

8 min



#### Work with one-to-many relationships

6 min



#### Work with many-to-many relationships

8 min



### Exercise - Work with Dataverse relational data

15 min



### Check your knowledge

6 min



### Summary

1 min



## Work with relational data in a Power Apps canvas app

✓ 700 XP



45 min • Module6 Units

### ⚠ Note

#### App in a Day instructor-led training

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Do you want to improve a user's experience in your canvas app? This module will show you how to work with relational data to provide a good experience for app users.

### Overview ^

### What is relational data?

6 min



### Work with relationships in Power Apps

10 min



### Exercise - Work with relational data

10 min



### Microsoft Dataverse for apps makes relationships even easier

10 min



## Module assessment

6 min



## Summary

3 min



# Work with data source limits (delegation limits) in a Power Apps canvas app

✓ 600 XP



33 min • Module5 Units

### ⓘ Note

#### App in a Day instructor-led training

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It's important to learn how to work with data source limits. You need to understand the various limits and variables that go into those limits to best work with data in Power Apps. This will help you chose the best data source for an app to meet your requirements.

### Overview ^

## Delegation overview

6 min



## Functions, predicates, and data sources combine to determine delegation

8 min



## Delegation warnings, limits, and non-delegable functions

10 min



## Module assessment

6 min



## Summary

3 min



## Complete testing and performance checks in a Power Apps canvas app

✓ 700 XP



38 min • Module6 Units

### ⓘ Note

#### App in a Day instructor-led training

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Do you want to test your app and improve its performance? This module helps you understand how to test an app and improve performance.

### Overview ^

#### The importance of thinking about performance

8 min



#### Improve performance with data sources

9 min



#### Testing and troubleshooting your app

8 min



#### Exercise - Use the Concurrent function to test performance

4 min



#### Module assessment

6 min



## Summary

3 min



## Optimize app load time

✓ 700 XP



30 min • Module6 Units

### ⚠ Note

#### App in a Day instructor-led training

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Learn how you can evaluate and improve app load times. By regularly reviewing and measuring your app, you can proactively identify and remediate startup performance problems.

### Overview ▾

#### Introduction

9 min



#### Use Monitor to troubleshoot app start performance issues

3 min



#### Optimize App.OnStart

5 min



#### Data load strategies

5 min



#### Check your knowledge

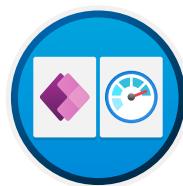
6 min



#### Summary

2 min





## Use Monitor to troubleshoot Power Apps

✓ 700 XP



40 min • Module6 Units

### ⓘ Note

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Continue your learning journey with the [App in a Day instructor-led workshop](#). This course provides hands-on experience for building custom apps! [Browse training events](#).

Learn how the Monitor tool from Power Apps Studio can help you proactively identify, troubleshoot, and resolve issues within your app.

### Overview ^

#### Introduction



3 min

#### Identify and resolve common problems



9 min

#### Collaborate by using Monitor



6 min

#### Exercise - Debug and collaborate with Monitor in Power Apps



15 min

#### Module assessment



5 min

#### Summary



2 min





## Use Power Apps Instrumentation with Application Insights

✓ 800 XP



38 min • Module7 Units

### ① Note

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Explore how you can set up your Power Apps canvas app to send telemetry to Application Insights.

### Overview ▾

#### Introduction



3 min

#### Set up an app for Application Insights



4 min

#### View Application Insights data



4 min

#### Custom logging with trace



5 min

#### Exercise - Collect and analyze telemetry data



15 min

#### Check your knowledge



6 min

#### Summary



1 min

