

PowerApps Portals Crash Course

With Nick Doelman

MVP Business Applications

Who Am I?

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Intro to PowerApps Portals

Goal Today

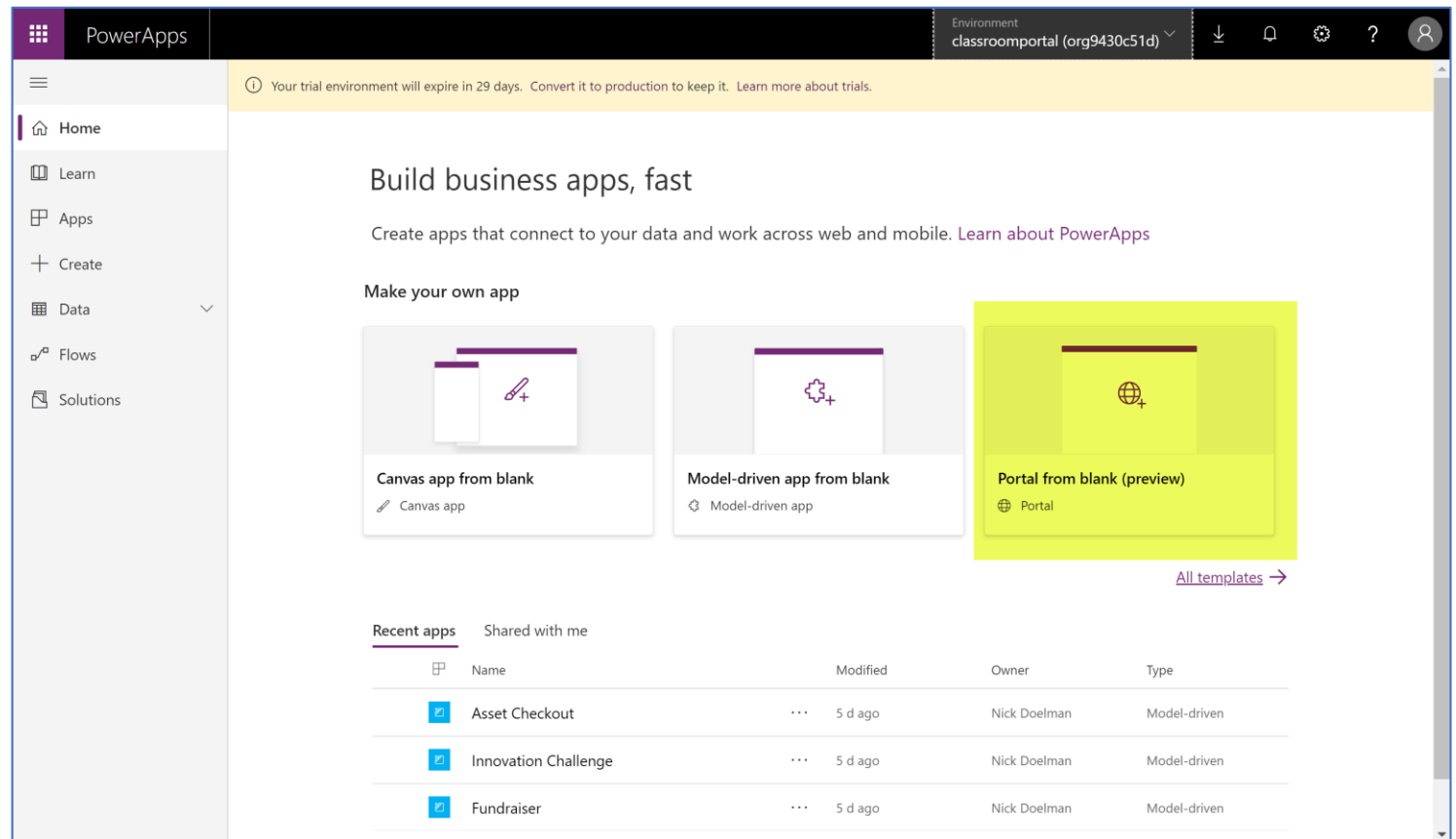
- In the next 50(?) minutes...
- Provision a portal and surface CDS data to an authenticated external user
- LIVE demonstration
- Assume knowledge of Model-Driven Configuration (Entities, Forms, Views, etc)

Intro to PowerApps Portals



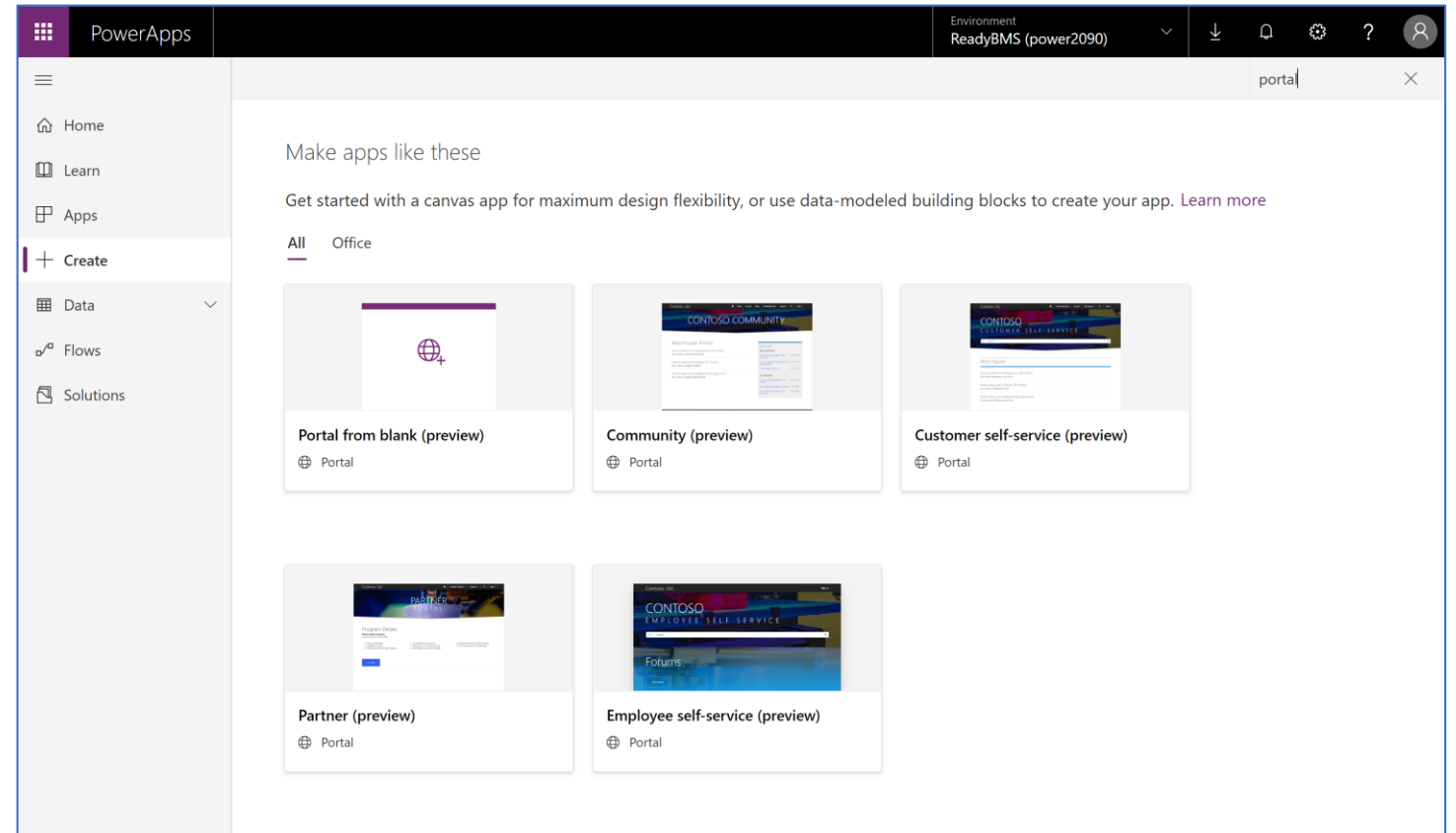
Intro to PowerApps Portals

- Provision Portal



Intro to PowerApps Portals

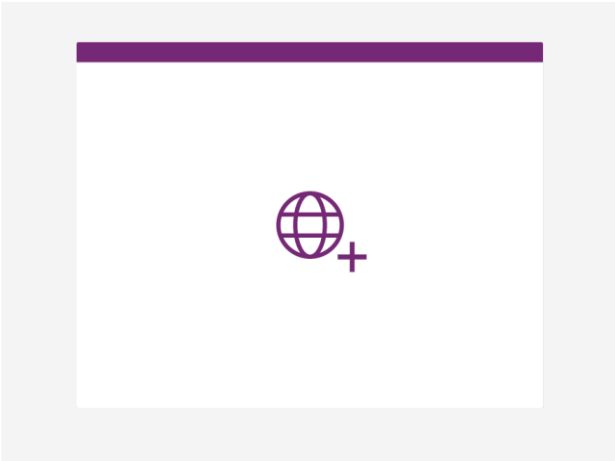
- If Dynamics 365, you can choose other starter portals




Intro to PowerApps Portals

- Provision Portal

Portal from blank (preview)



Create a website to share data with external and internal users. This template comes with sample pages to get you quickly started. [Learn more](#)

 Portal

ⓘ We'd need to install certain prerequisites. If you'd like to quickly try portals, use an environment with portal package already installed or create a new one using this link.
[Create new environment](#)

Name *

Address * ⓘ

✓ [classroomportal.powerappsportals.com](#)

Language

By clicking on Create, you agree to the [Terms and Conditions](#) and the [Terms of service](#).
[Privacy Statement](#)

Intro to PowerApps Portals

The screenshot shows the PowerApps portal creation interface. At the top, the 'PowerApps' header is visible. A yellow banner at the top right states: 'Your trial environment will expire in 29 days. Convert it to production to keep it. Learn more about trials.' A notification box on the right says: 'Portal provisioning in progress. Your portal classroomportal is currently being provisioned and this can take time. You'll be notified via Notifications pane once it is provisioned.'

The main content area is titled 'Build business apps, fast' and includes the text 'Create apps that connect to your data and work across web and mobile. Learn about PowerApps'. Below this, the section 'Make your own app' offers three options:

- Canvas app from blank (Canvas app)
- Model-driven app from blank (Model-driven app)
- Portal from blank (preview) (Portal)

A link 'All templates →' is located below these options. At the bottom, the 'Recent apps' section is displayed, showing a table of recently created or shared apps.

Recent apps		Shared with me		
Name	Modified	Owner	Type	
classroomportal	...		Portal	
Asset Checkout	5 d ago	Nick Doelman	Model-driven	
Innovation Challenge	5 d ago	Nick Doelman	Model-driven	

Intro to PowerApps Portals

PowerApps Environment: classroomportal (org9430c51d)

Your trial environment will expire in 29 days. Convert it to production to keep it. [Learn more about trials.](#)

Build business apps, fast

Create apps that connect to your data and work across web and mobile. [Learn about PowerApps](#)

Make your own app

Canvas app from blank
Canvas app

Model-driven app from blank
Model-driven app

Portal from blank (preview)
Portal

[All templates →](#)

Recent apps

Name	Modified	Owner	Type
Portal Management	2 min ago	Nick Doelman	Model-driven
Asset Checkout	5 d ago	Nick Doelman	Model-driven
Innovation Challenge	5 d ago	Nick Doelman	Model-driven

Intro to PowerApps Portals




The screenshot shows the PowerApps web interface. The top navigation bar includes the PowerApps logo, the environment name 'classroomportal (org9430c51d)', and icons for download, notifications, settings, and help. A yellow banner at the top right states: 'Your trial environment will expire in 29 days. Convert it to production to keep it. Learn more about trials.'

The main content area is titled 'Build business apps, fast' and includes the text 'Create apps that connect to your data and work across web and mobile. [Learn about PowerApps](#)'. Below this is the 'Make your own app' section, which features three templates:

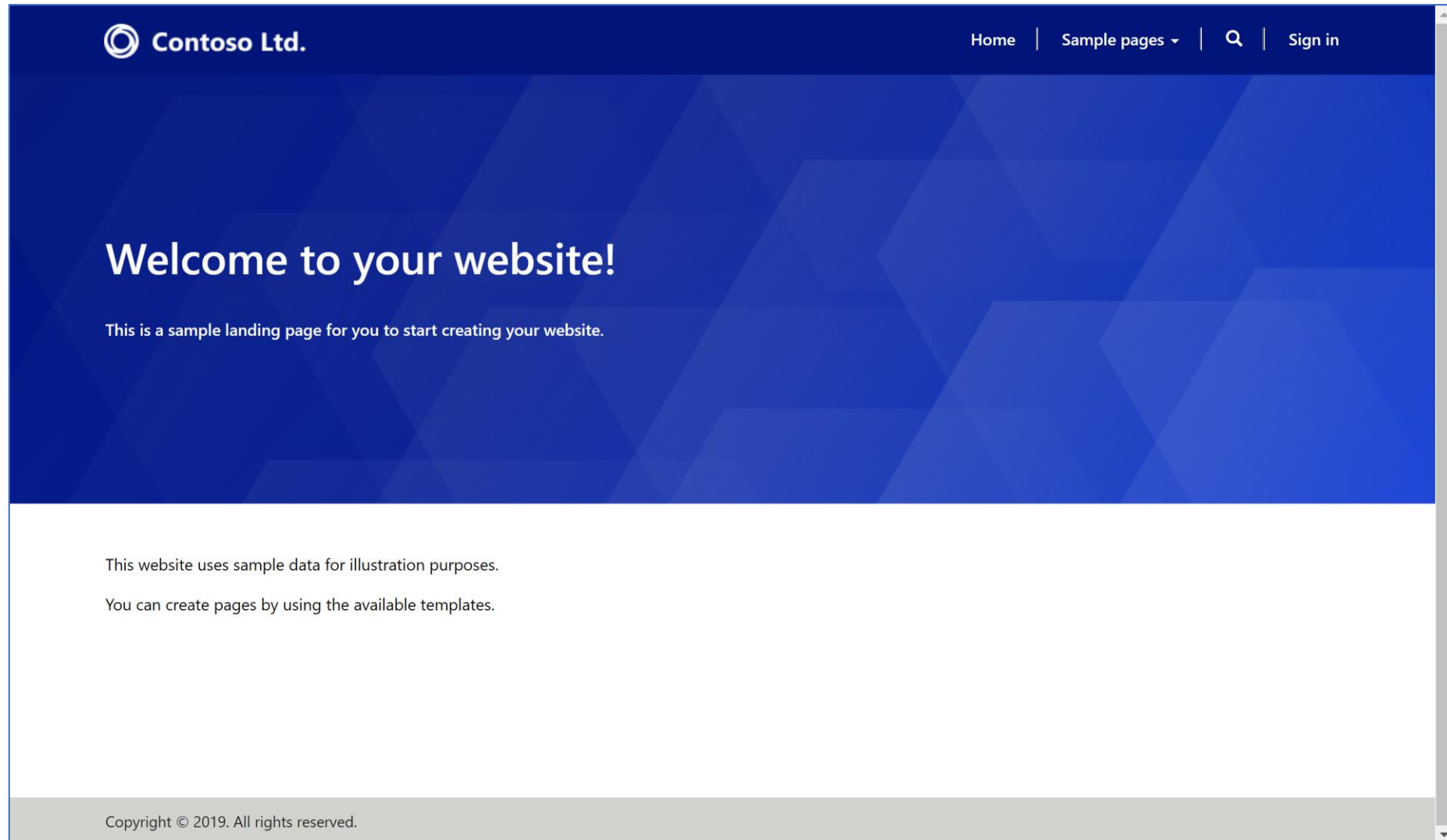
- Canvas app from blank**: Represented by a pencil icon and labeled 'Canvas app'.
- Model-driven app from blank**: Represented by a gear icon and labeled 'Model-driven app'.
- Portal from blank (preview)**: Represented by a globe icon and labeled 'Portal'.

A link '[All templates](#) →' is located to the right of the templates.

Below the templates is the 'Recent apps' section, which is currently selected. It shows a table of recently used apps:

Name	Modified	Owner	Type
 classroomportal	1 min ago	Nick Doelman	Portal
 Portal Management	12 min ago	Nick Doelman	Model-driven
 Asset Checkout	5 d ago	Nick Doelman	Model-driven

Intro to PowerApps Portals



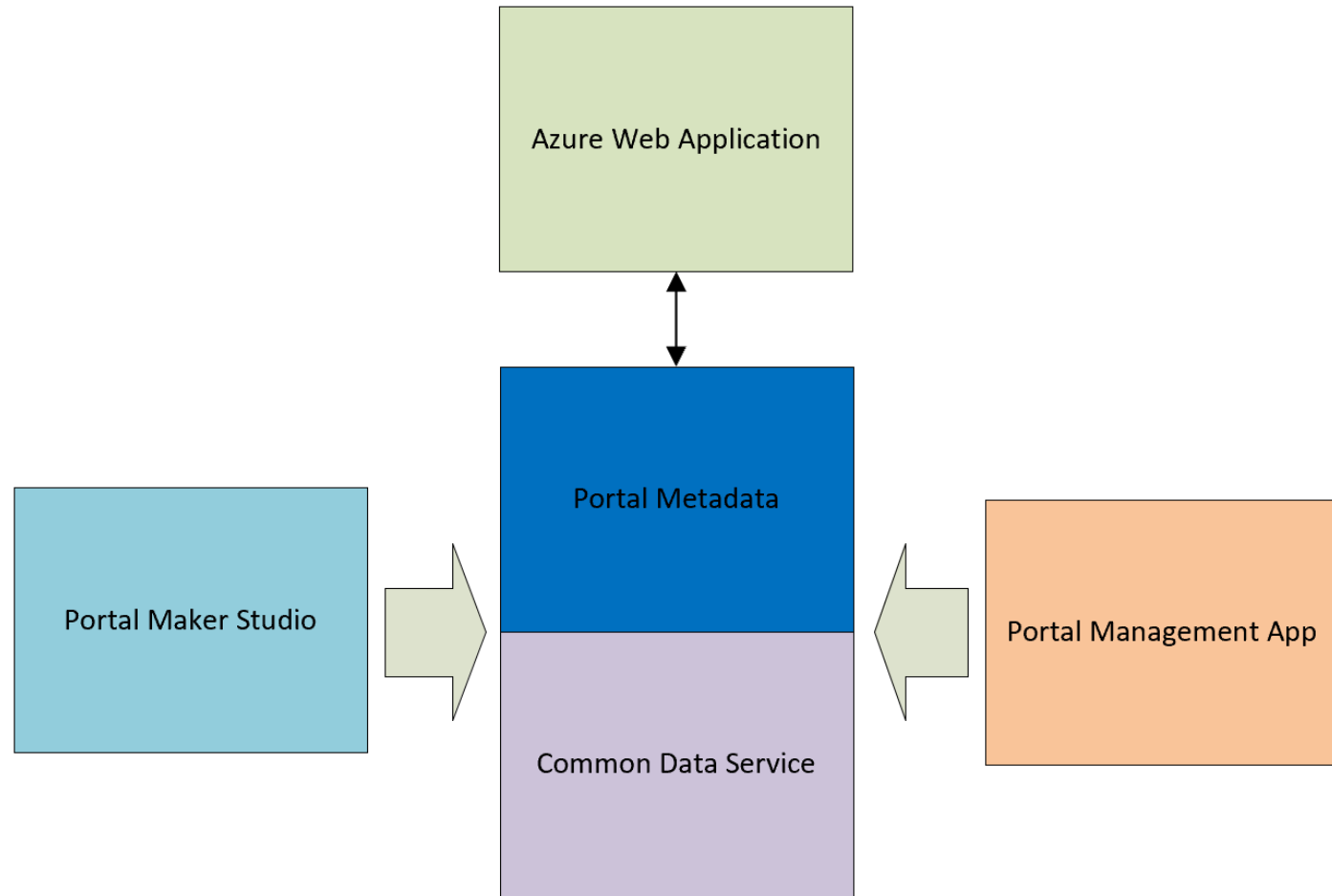
Intro to PowerApps Portals

- Portal Theory



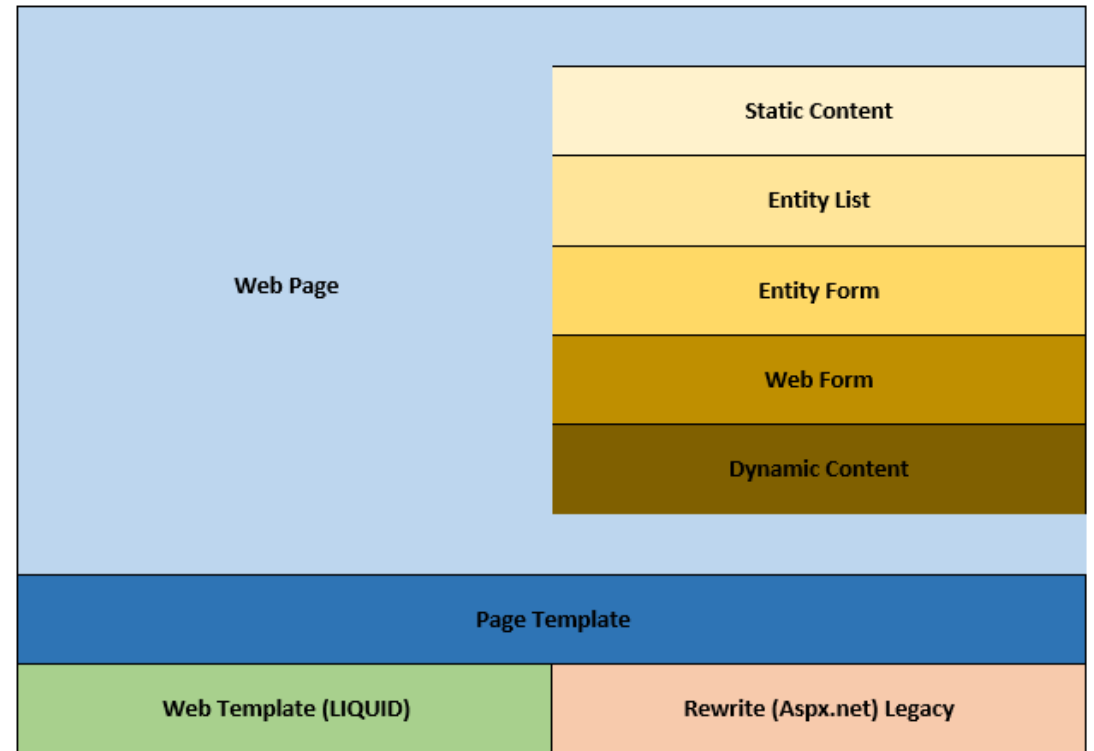
Intro to PowerApps Portals

- Portal components



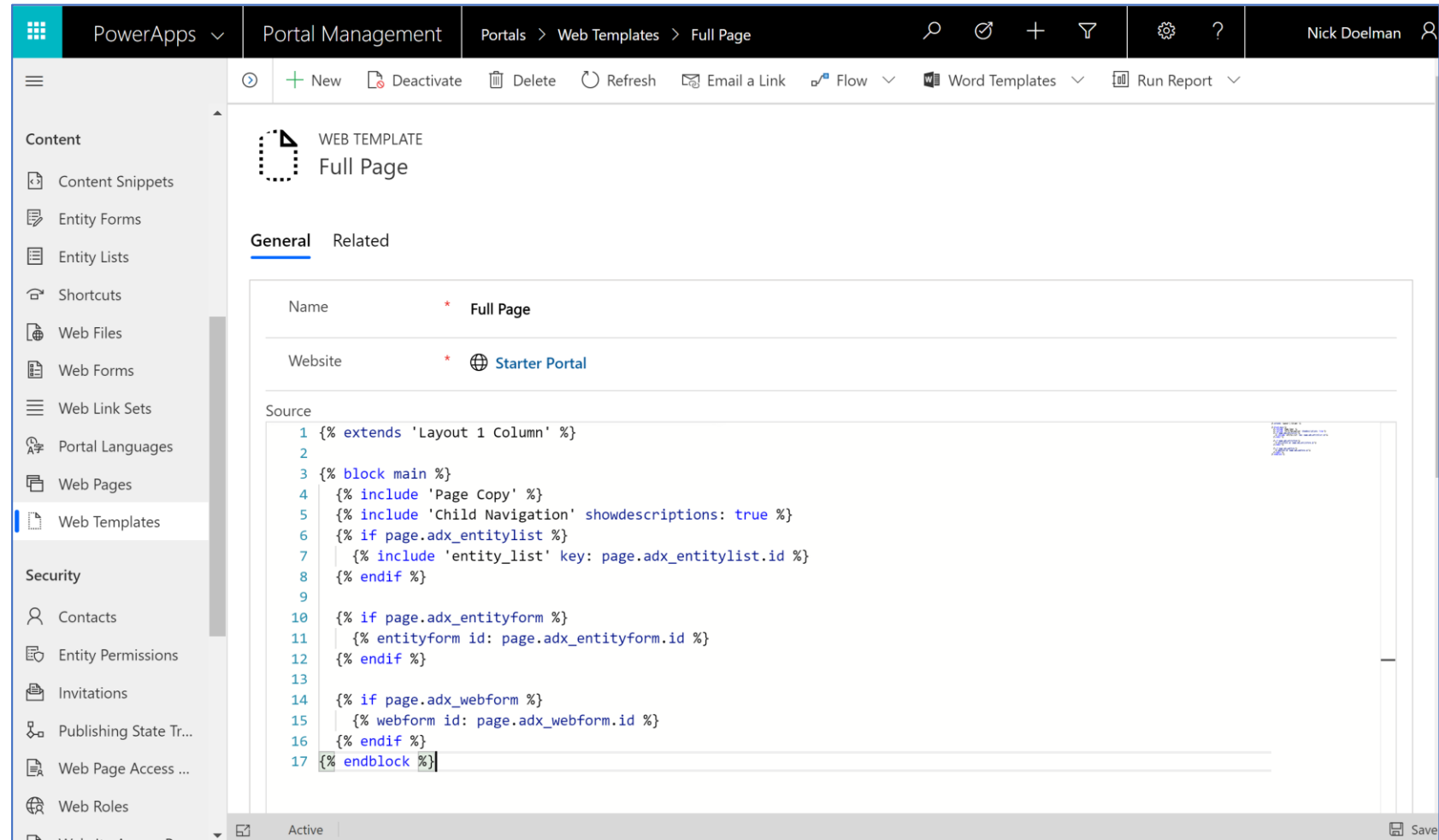
Intro to PowerApps Portals

- Portal structure
- Portal metadata stored in CDS
- Different Portal Components for rendering



Intro to PowerApps Portals

- Preconfigured templates
- HTML
- Uses Liquid Markup
- Good place to store JavaScript, CSS



Intro to PowerApps Portals

```
{% extends 'Layout 1 Column' %}
```

```
{% block main %}
```

```
    {% include 'Page Copy' %}
```

```
    {% include 'Child Navigation' showdescriptions: true %}
```

```
    {% if page.adx_entitylist %}
```

```
        {% include 'entity_list' key: page.adx_entitylist.id %}
```

```
    {% endif %}
```

```
    {% if page.adx_entityform %}
```

```
        {% entityform id: page.adx_entityform.id %}
```

```
    {% endif %}
```

```
    {% if page.adx_webform %}
```

```
        {% webform id: page.adx_webform.id %}
```

```
    {% endif %}
```

```
{% endblock %}
```


Intro to PowerApps Portals

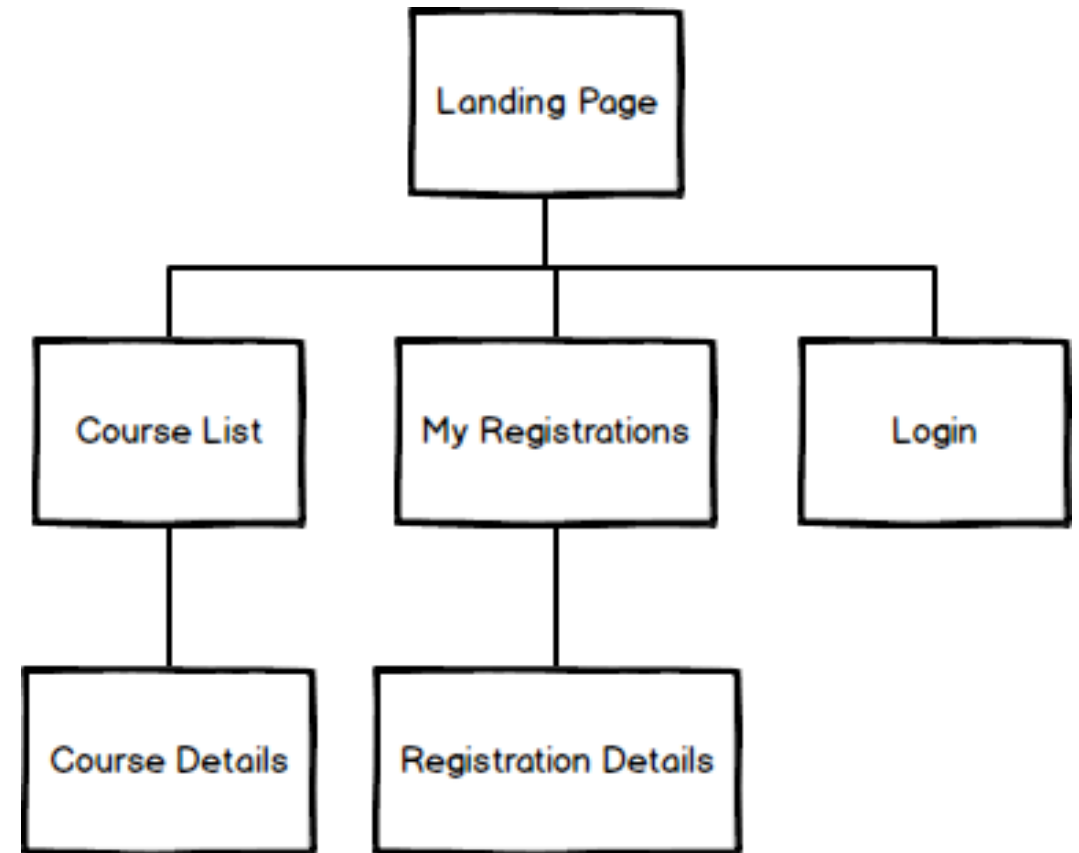
Requirement

- We have a class management model driven app
- We want folks to see class information on a portal
- We want instructors to see just the classes they are teaching



Intro to PowerApps Portals

- Design Portal
- Site Map a good place to start
- Consider “Minimal Viable Product”



Intro to PowerApps Portals

Design – Web Pages

Class room

http://classroom.powerappsportals.com

My Registrations


Registration ID	Student	Class	Date
REG-002	Bob Smith	Intro to Portals	2019-8-20
REG-005	Bob Smith	SSRS	2019-6-13
REG-007	Bob Smith	PowerApps	2019-10-16

Class room

http://classroom.powerappsportals.com

REG-002

Course

Start Date 

Student

Fee

Intro to PowerApps Portals

Model Driven App

PowerApps Class Room App Classroom > Registrations

Show Chart New Delete Refresh Email a Link Flow Run Report Excel Templates

Active Registrations

Search for records

✓	Registration...	Class	Student	Student Account	Registra...	Status R...
	REG-01000	Intro to PowerApps Portals-8/1	Maria Campbell (sample)	---	8/9/2019	Registered
	REG-01001	SSRS for the PowerApps-8/21/2	Maria Campbell (sample)	---	8/5/2019	Registered
	REG-01002	Intro to PowerApps Portals-9/1	Nancy Anderson (sample)	---	8/6/2019	Registered

All # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

1 - 3 of 3 (0 selected)

Classroom

Intro to PowerApps Portals

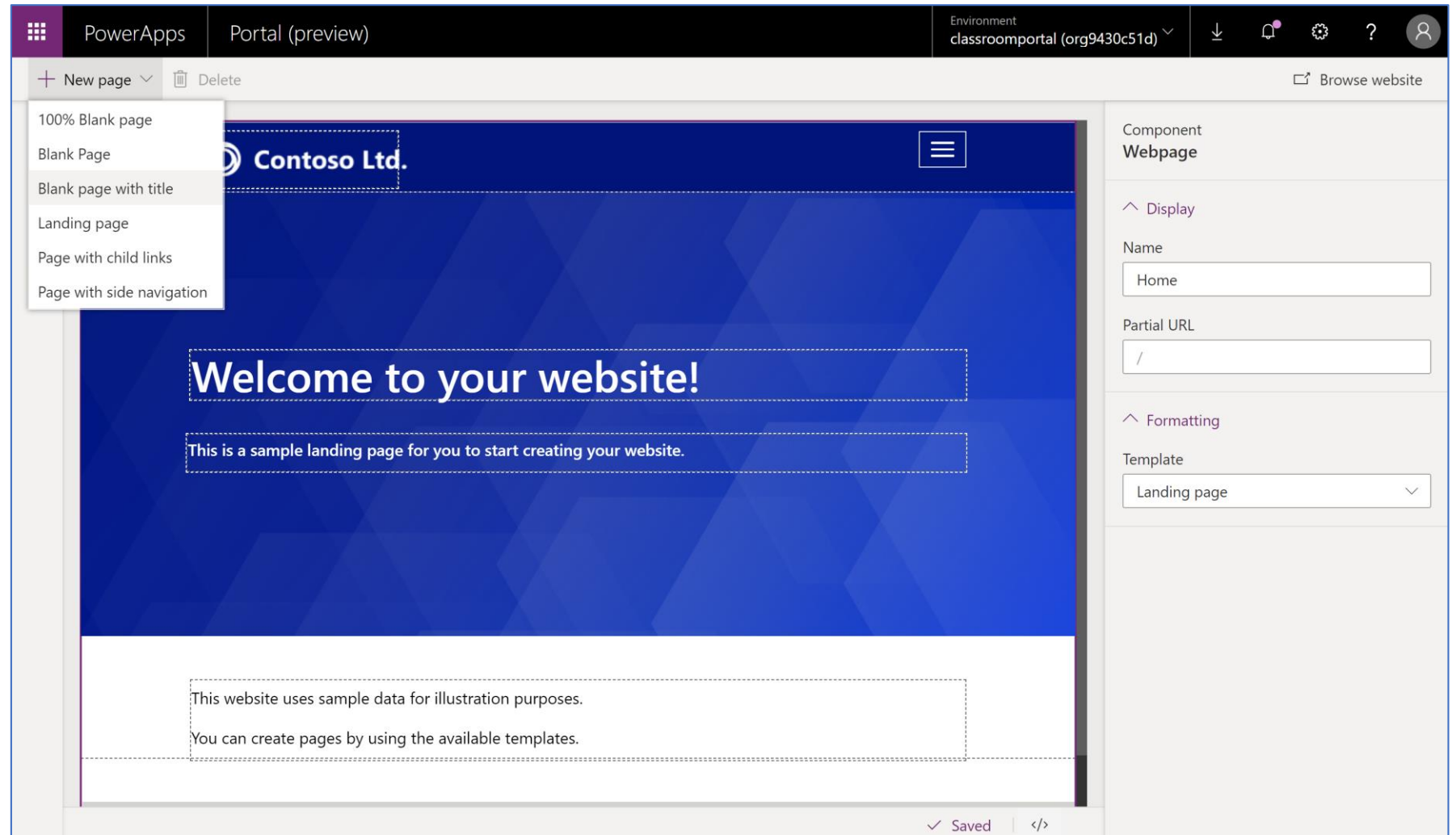
Model Driven App

The screenshot displays the PowerApps interface for a 'Class Room App'. The top navigation bar shows the app name and the current path: 'Classroom > Registrations > REG-01000'. A left-hand navigation pane lists options: Home, Recent, Pinned, Management, Courses, Classes, and Registrations (which is currently selected). The main content area shows the details for the 'REGISTRATION REG-01000'. Above the details is a toolbar with actions: New, Deactivate, Delete, Refresh, Assign, Share, Email a Link, and Flow. The details are organized into two tabs: 'General' (active) and 'Related'. The 'General' tab contains a table with the following data:

Class	Intro to Powe...	Registration Number	REG-01000
Registration Date	8/9/2019	Amount Paid	\$1,000.000
Student	Maria Campb...	Student Account	---
		Status Reason	Registered

Intro to PowerApps Portals

Create New Page



Intro to PowerApps Portals

Edit Page

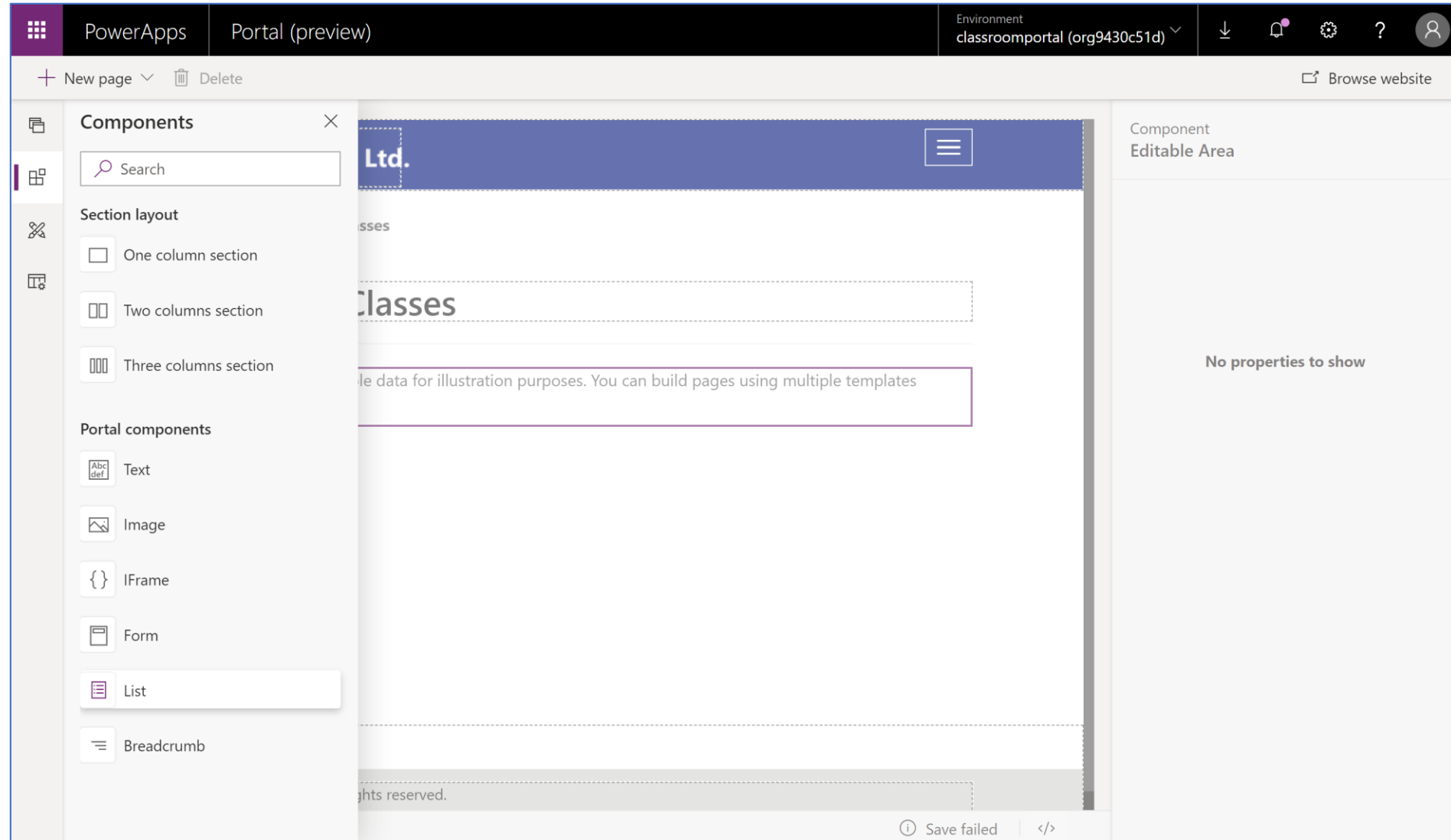
The screenshot displays the PowerApps Portal editor interface. The top navigation bar includes the PowerApps logo, the text 'Portal (preview)', and the environment 'classroomportal (org9430c51d)'. Below this, a toolbar shows 'New page' and 'Delete' options. The main workspace shows a preview of a web page with a blue header containing the 'Contoso Ltd.' logo and a hamburger menu. The page content includes a breadcrumb 'Home > Available Classes', a title 'Available Classes', and a paragraph of sample data text. A footer contains the text 'Copyright © 2019. All rights reserved.'.

On the right side, the 'Component Webpage' panel is visible, showing the 'Display' section with fields for 'Name' (Available Classes) and 'Partial URL' (classes). The 'Formatting' section shows the 'Template' dropdown set to 'Blank page with title'.

At the bottom right, a status bar indicates 'Save failed' and provides a code editor icon.

Intro to PowerApps Portals

Add List




Intro to PowerApps Portals

Link List to Model Driven View

The screenshot displays the PowerApps Portal (preview) interface. The top navigation bar includes the PowerApps logo, the text 'Portal (preview)', and the environment 'classroomportal (org9430c51d)'. Below the navigation bar, the main workspace shows a page titled 'Available Classes' for 'Contoso Ltd.'. The page content includes a header 'Home > Available Classes', a title 'Available Classes', and a placeholder text: 'This website uses sample data for illustration purposes. You can build pages using multiple templates available.' Below this is a large rectangular area labeled 'List' with the instruction 'Configure the list using the properties pane'. To the right of the workspace is a 'Component List' pane with a 'Display' section containing radio buttons for 'Create new' (selected) and 'Use existing'. Below this are fields for 'Name' (ClassList), 'Entity' (Class (avngr_class)), and 'Views' (Active Classes). At the bottom of the pane are four toggle switches for 'Create new record', 'View details', 'Edit record', and 'Delete record'. A 'Settings' section is partially visible at the bottom. The bottom status bar shows a 'Save failed' message and a code icon.

Intro to PowerApps Portals

Preview Portal App

 **Contoso Ltd.**

Home | Sample pages ▾ | Available Classes | 🔍 | Sign in

Home > Available Classes

Available Classes

This website uses sample data for illustration purposes. You can build pages using multiple templates available.

Course ↑	Start Date and Time	End Date and Time	Instructor	Status Reason	Latitude	Longitude
Intro to PowerApps Portals	8/12/2019 8:00 AM	8/12/2019 5:00 PM	Jim Glynn (sample)	Scheduled		
Intro to PowerApps Portals	9/16/2019 8:00 AM	9/16/2019 5:00 PM	Jim Glynn (sample)	Scheduled		
SSRS for the PowerApps	8/21/2019 8:00 AM	8/21/2019 5:00 PM	Jim Glynn (sample)	Scheduled		

Intro to PowerApps Portals

Add Detail Form

The screenshot displays the PowerApps Portal editor interface. The top navigation bar includes the PowerApps logo, the current page name 'Portal (preview)', the environment 'classroomportal (org9430c51d)', and various utility icons. Below the navigation bar, a toolbar offers 'New page' and 'Delete' options. The main workspace shows a preview of a web page with a blue header, a breadcrumb trail 'Home > New page > New page', and a title 'Class Details'. The body contains a message about sample data and a large placeholder for a form. The form placeholder is labeled 'Form' and includes the text 'Unable to show preview' and 'Edit the form through the property panel'. A footer section contains the text 'Copyright © 2019. All rights reserved.'.


PowerApps Portal (preview) Environment: classroomportal (org9430c51d)

+ New page Delete Browse website

Home > New page > New page

Class Details

This website uses sample data for illustration purposes. You can build pages using multiple templates available.



Form
Unable to show preview
Edit the form through the property panel

Copyright © 2019. All rights reserved.

✓ Saved </>

Component Form

Display

☐ Create new ☒ Use existing

Name
Class Details

Entity
Class (avngr_class)

Form layout
Web - Class Details

Edit form

Mode
ReadOnly

Form success settings

Advanced settings

Intro to PowerApps Portals

**Edit List Control
to navigate to
form**

The screenshot displays the PowerApps Portal editor interface. The top navigation bar includes the PowerApps logo, the text "Portal (preview)", and the environment name "classroomportal (org9430c51d)". Below the navigation bar, the main workspace shows a preview of the portal page. The page has a blue header with the "Contoso Ltd." logo and a hamburger menu icon. The main content area is titled "Available Classes" and contains a message: "This website uses sample data for illustration purposes. You can build pages using multiple templates available." Below the message is a list control placeholder with the text "List" and "Unable to show preview. Edit the list through the property panel".

On the right side, the "Component List" panel is visible. It shows the "Display" section with the "Use existing" radio button selected. The "Name" field is set to "classlist". The "Entity" field is set to "Class (avngr_class)". The "Views" field is set to "Active Classes". The "Create new record" toggle is turned off. The "View details" toggle is turned on. The "Target type" is set to "Form". The "Class Details" dropdown is expanded, showing "Class Details" as the selected option. The "Edit record" and "Delete record" toggles are turned off.

At the bottom of the editor, there is a "Saved" status and a "Settings" dropdown menu.

Intro to PowerApps Portals

Portal Management App

The screenshot displays the PowerApps Portal Management interface. The left sidebar contains a navigation menu with categories: Entity Forms, Entity Lists (selected), Shortcuts, Web Files, Web Forms, Web Link Sets, Portal Languages, Web Pages, Web Templates, Security (including Contacts, Entity Permissions, Invitations, Publishing State Tr..., Web Page Access ..., Web Roles, Website Access Pe...), Ads, and Ad Placements.


The main area is titled 'Active Entity Lists' and features a search bar 'Search for records'. Below the header, a table lists active entity lists with columns: Name, Entity Name, P., Enable Entit..., Sea..., Filte..., Calendar Vi..., Ma..., and O. The table contains two rows:

✓	Name	Entity Name	P.	Enable Entit...	Sea...	Filte...	Calendar Vi...	Ma...	O
	classlist	avngr_class	10	No	No	No	No	No	No
	Courselist	avngr_course	10	No	No	No	No	No	No

At the bottom, there is a horizontal scroll bar, a column selector (All, #, A-Z), and a status bar indicating '1 - 2 of 2 (0 selected)'.

Intro to PowerApps Portals

Allow users to
login

 **Contoso Ltd.**

Home | Sample pages ▾ | Available Classes ▾ | 🔍 | Jim Glynn (sample) ▾

Home > Available Classes

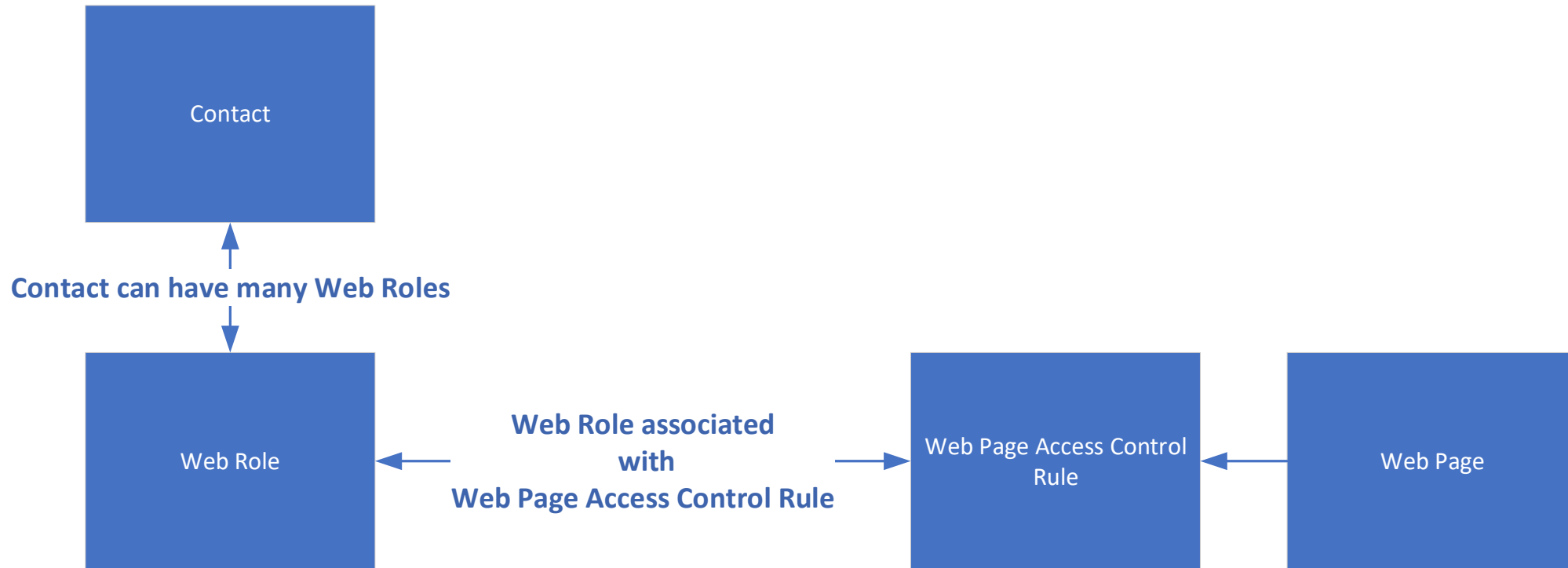
Available Classes

This website uses sample data for illustration purposes. You can build pages using multiple templates available.

Course ↑	Start Date and Time	End Date and Time	Instructor	Status Reason	Latitude	Longitude
Intro to PowerApps Portals	8/12/2019 8:00 AM	8/12/2019 5:00 PM	Jim Glynn (sample)	Scheduled		▼
SSRS for the PowerApps	8/21/2019 8:00 AM	8/21/2019 5:00 PM	Jim Glynn (sample)	Scheduled		▼

Intro to PowerApps Portals

Web Page Access Control Rule



PowerApps Portals Licensing

User Type	Model	SKU Names	Unit capacity	Price/month	Channel	Comments
External user (authenticated)	Per log in	PowerApps Portals login capacity add-on	100 logins	\$200	All	<ul style="list-style-type: none"> A login provides the authenticated user with access to a single portal for up to 24 hours Multiple logins during the 24-hour period count as 1 billable login
		PowerApps Portals login capacity add-on Tier 2	1000 logins	\$1000	All	
		PowerApps Portals login capacity add-on Tier 3	5000 logins	\$3500	CSP Only	
External user (Unauthenticated)	Per page view	PowerApps Portals page view capacity add-on	100,000 page views	\$100	All	
Internal user	Via license	Dynamics 365 (various) PowerApps per app plan PowerApps per user plan	N/A	N/A	N/A	<ul style="list-style-type: none"> Custom portal use rights are aligned with custom app use rights

Intro to PowerApps Portals

Next Steps – “Homework”

- Provide feedback! <https://experience.dynamics.com/insider>
- Create Portal Content (Wizard in Portal Management App)
- Create custom web templates
- View on Mobile (responsive design)
- Change CSS Themes/Logos/etc.
- Explore Entity Permissions for tighter security
- Azure B2C for Authentication
- Custom Scripting and integration to Azure (Payment Button)
- Subscribe to crm.audio “Refresh the Cache” podcast

Crash Course in Dynamics 365 Portals

Learning Resources

- MS Learn

<https://docs.microsoft.com/en-us/learn/paths/extend-dynamics-365-portals/>

<https://docs.microsoft.com/en-us/learn/paths/work-with-portals-in-dynamics-365/>

<https://docs.microsoft.com/en-us/learn/paths/get-started-dynamics-365-portals/>

- Portals Masterclass (please contact me)
- Online Learning (working on it!)