



Intro to PowerApps Portals

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Who Am I?

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Intro to PowerApps Portals

Goal Today

- In the next 60 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)



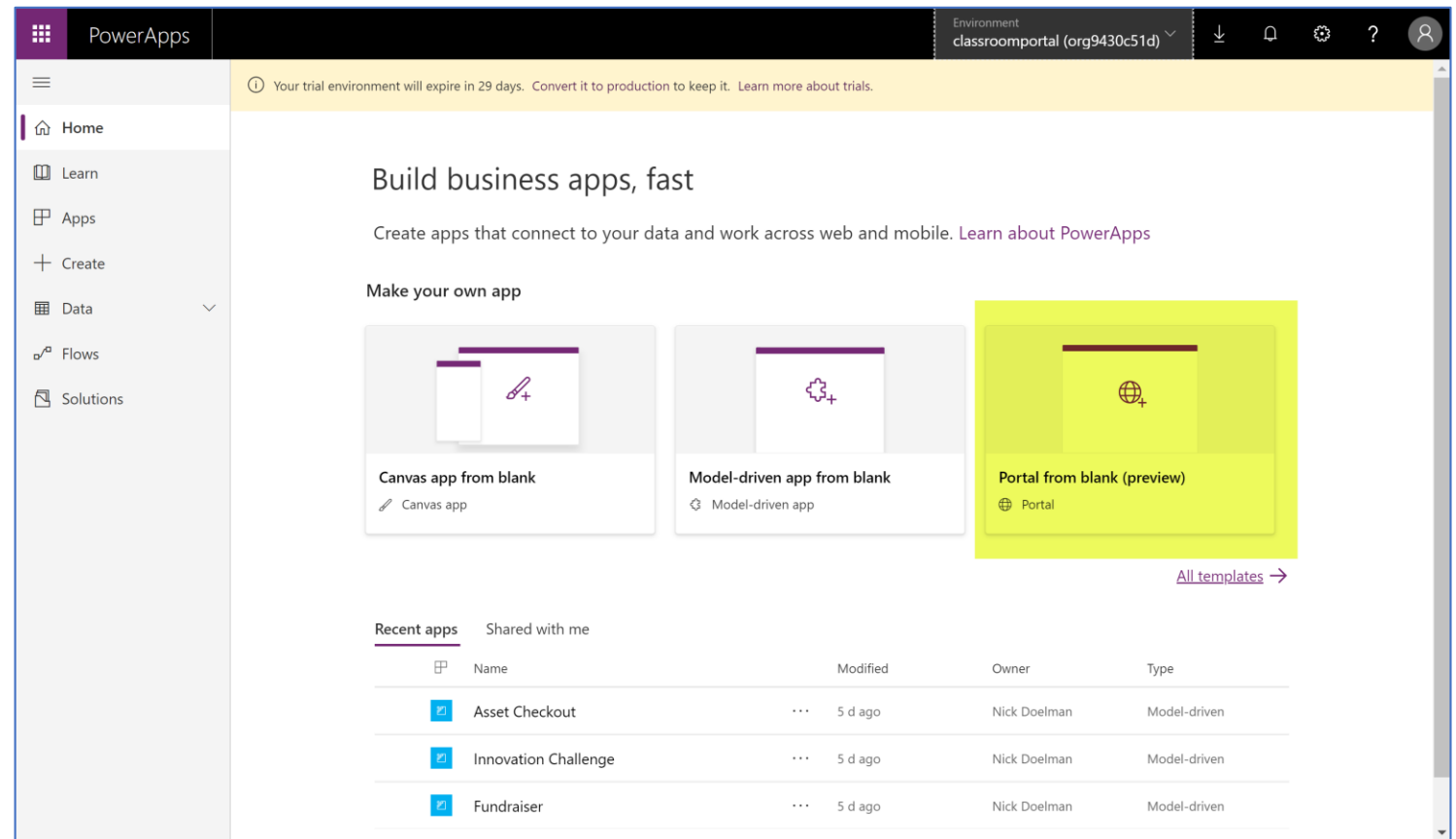
Intro to PowerApps Portals

DEMO



Intro to PowerApps Portals

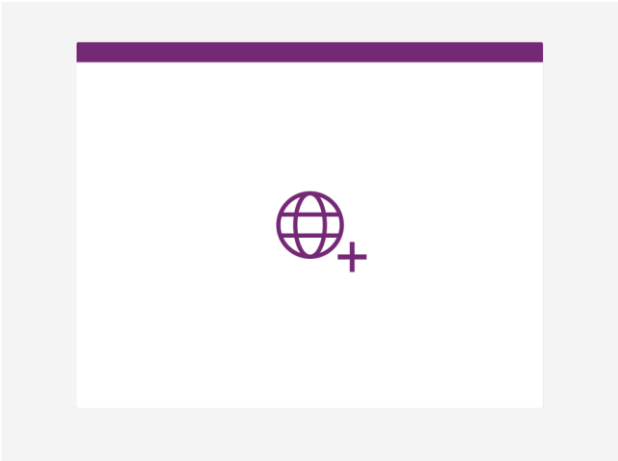
- Provision Portal




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](#)

Create

Cancel



Intro to PowerApps Portals

The screenshot shows the PowerApps portal creation interface. At the top, the 'PowerApps' header is visible, along with the environment 'classroomportal (org9430c51d)'. A yellow banner indicates that the trial environment will expire in 29 days. A notification box on the right states 'Portal provisioning in progress' and explains that the portal is being provisioned and will be notified via the Notifications pane once it is ready.

The main content area is titled 'Build business apps, fast' and includes a link to 'Learn about PowerApps'. Below this, the 'Make your own app' section offers three templates: 'Canvas app from blank', 'Model-driven app from blank', and 'Portal from blank (preview)'. The 'Portal from blank (preview)' option is highlighted with a blue border.

Below the templates, there is a section for 'Recent apps' and 'Shared with me'. The 'Recent apps' section displays a table with the following data:

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

The screenshot displays the Microsoft PowerApps user interface. At the top, a dark header bar contains the 'PowerApps' logo, the current environment 'classroomportal (org9430c51d)', and various utility icons. A yellow banner below the header states: 'Your trial environment will expire in 29 days. Convert it to production to keep it. Learn more about trials.'

The left sidebar features a navigation menu with options: Home, Learn, Apps, Create, Data, Flows, and Solutions. The main content area is titled 'Build business apps, fast' and includes the instruction 'Create apps that connect to your data and work across web and mobile. [Learn about PowerApps](#)'.

Under the heading 'Make your own app', three templates are presented:

- 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 below these options.

The 'Recent apps' section, filtered by 'Shared with me', contains a table with the following data:

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 Microsoft PowerApps portal interface. At the top, the header includes the PowerApps logo, the environment name 'classroomportal (org9430c51d)', and navigation icons. A yellow banner below the header 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, the section 'Make your own app' features three templates:

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

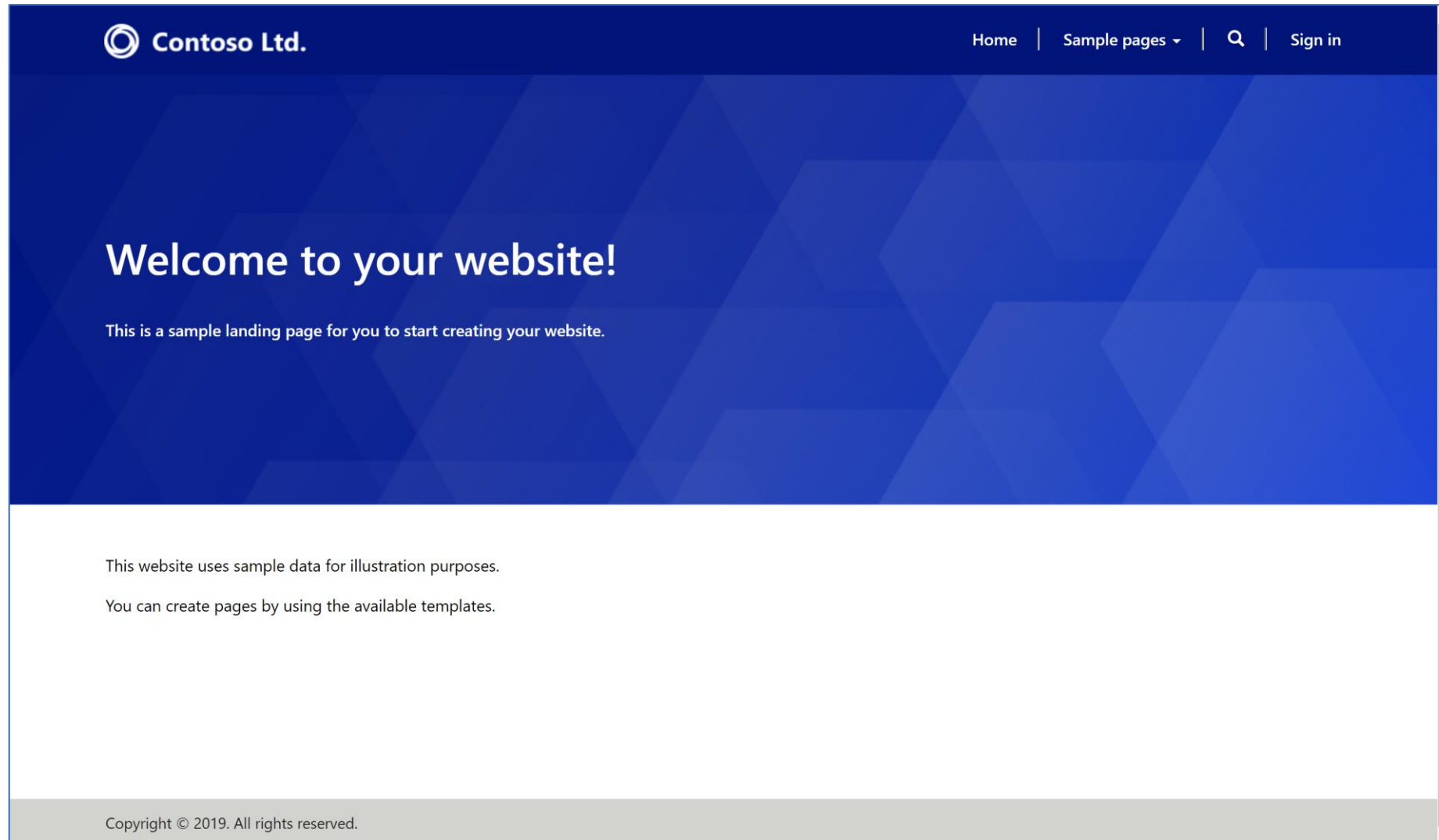
A link [All templates](#) with a right arrow is located to the right of these templates.

Below the templates, there are two tabs: 'Recent apps' (selected) and 'Shared with me'. The 'Recent apps' tab displays a table of recently created or modified 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



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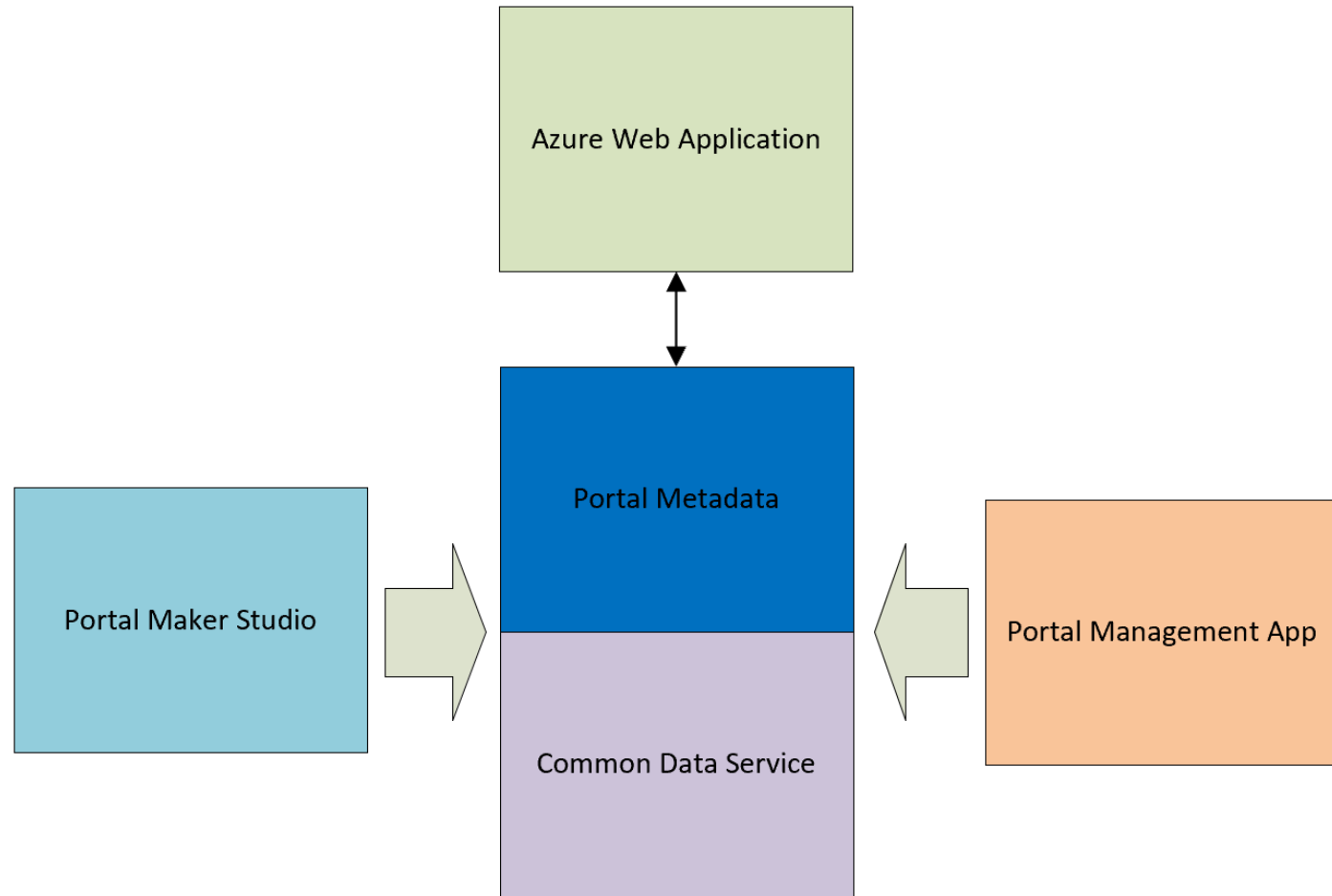
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- Portal Theory



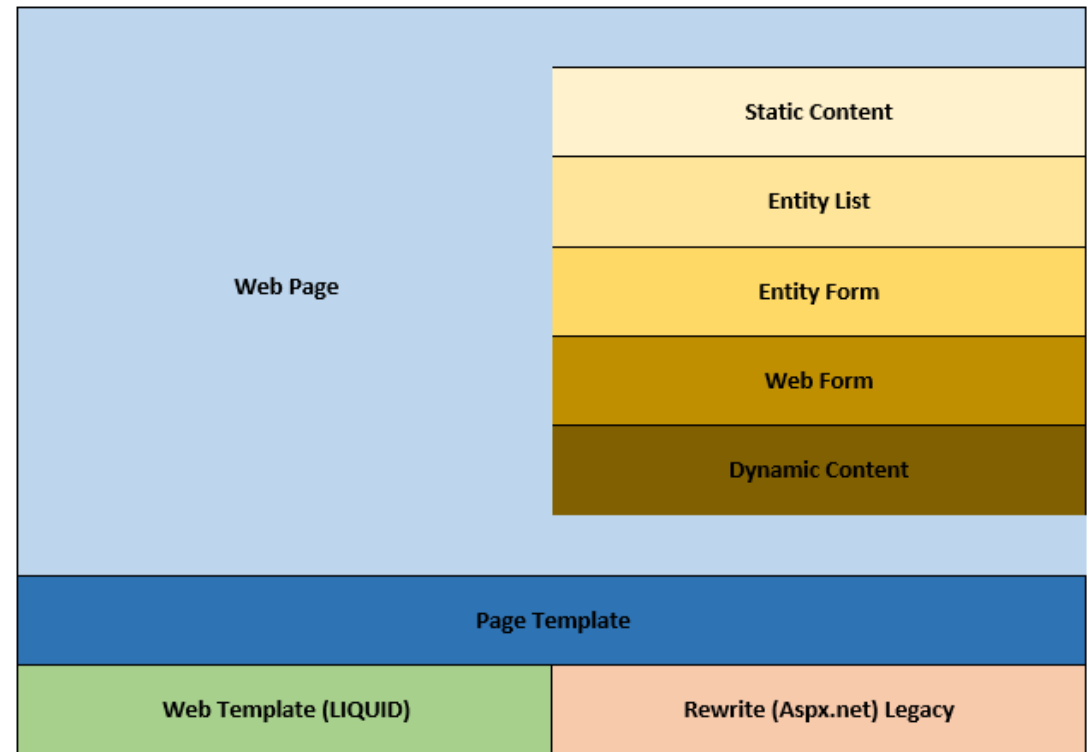
Intro to PowerApps Portals

- Portal components



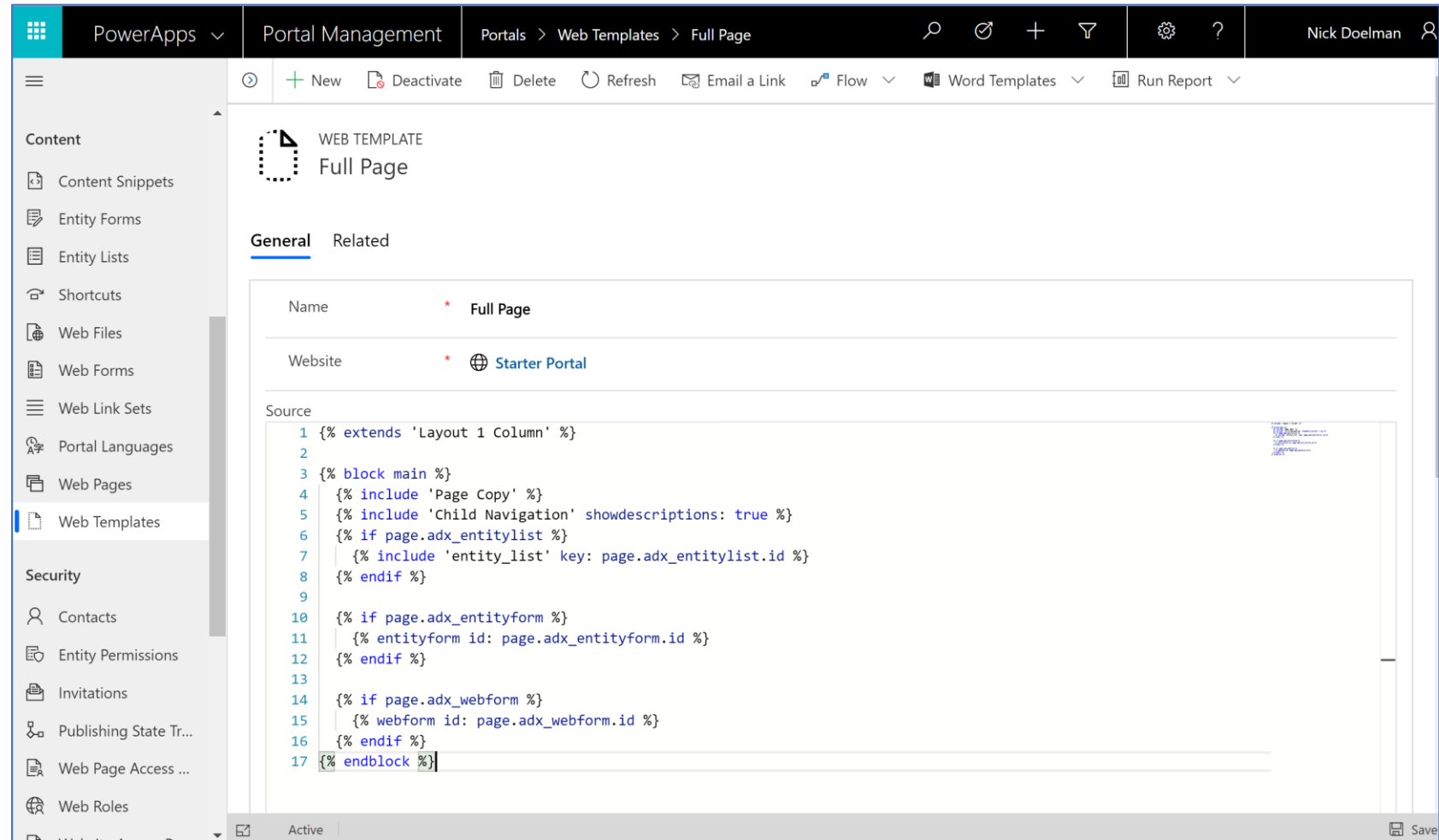
Intro to PowerApps Portals

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



Intro to PowerApps Portals

- Preconfigured templates
- Uses Liquid Markup
- Good place to store JavaScript



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 all classes they are teaching

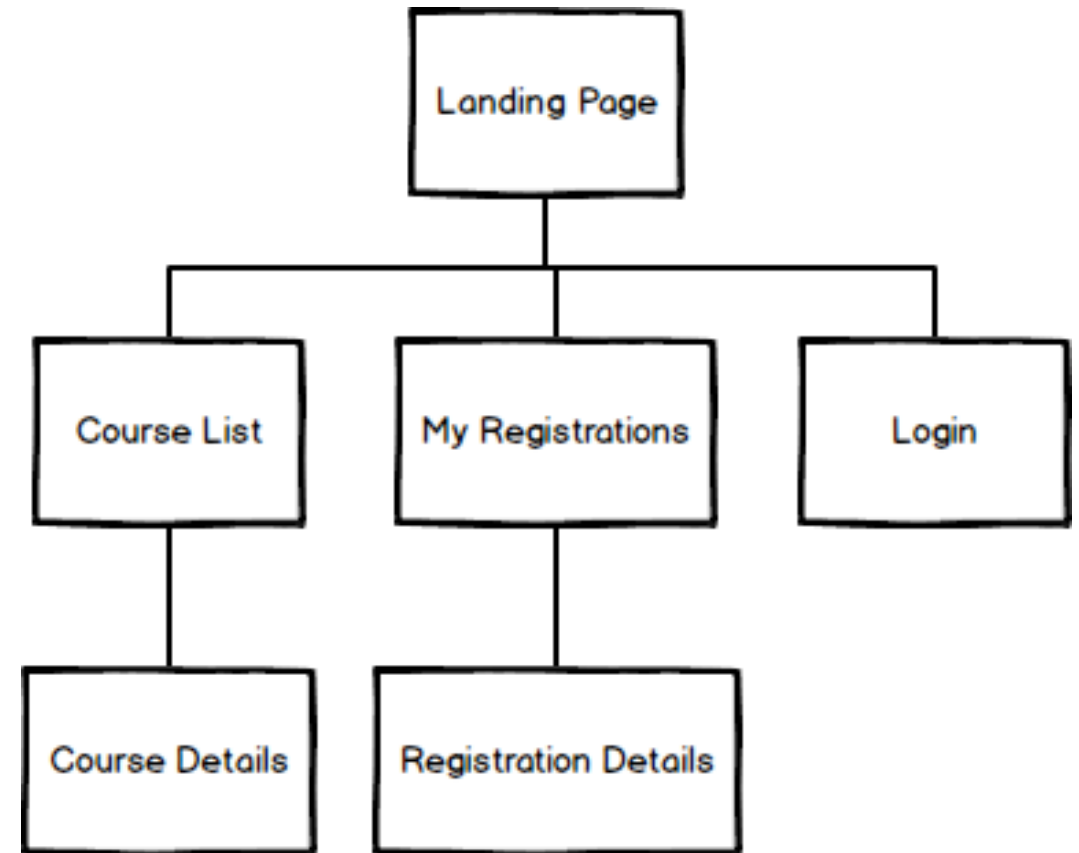


Created by Håkan Forss @hakanforss <http://hakanforss.wordpress.com>



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- 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



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Model Driven App

The screenshot displays the PowerApps interface for a 'Classroom' app. The left-hand navigation pane includes a 'Management' section with options for 'Courses', 'Classes', and 'Registrations'. The main area is titled 'Active Registrations' and contains a table with three records. The table has columns for 'Registration...', 'Class', 'Student', 'Student Account', 'Registra...', and 'Status R...'. The records are as follows:

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

At the bottom of the screen, there is a status bar showing '1 - 3 of 3 (0 selected)' and a navigation bar with the 'Classroom' app icon.



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Model Driven App

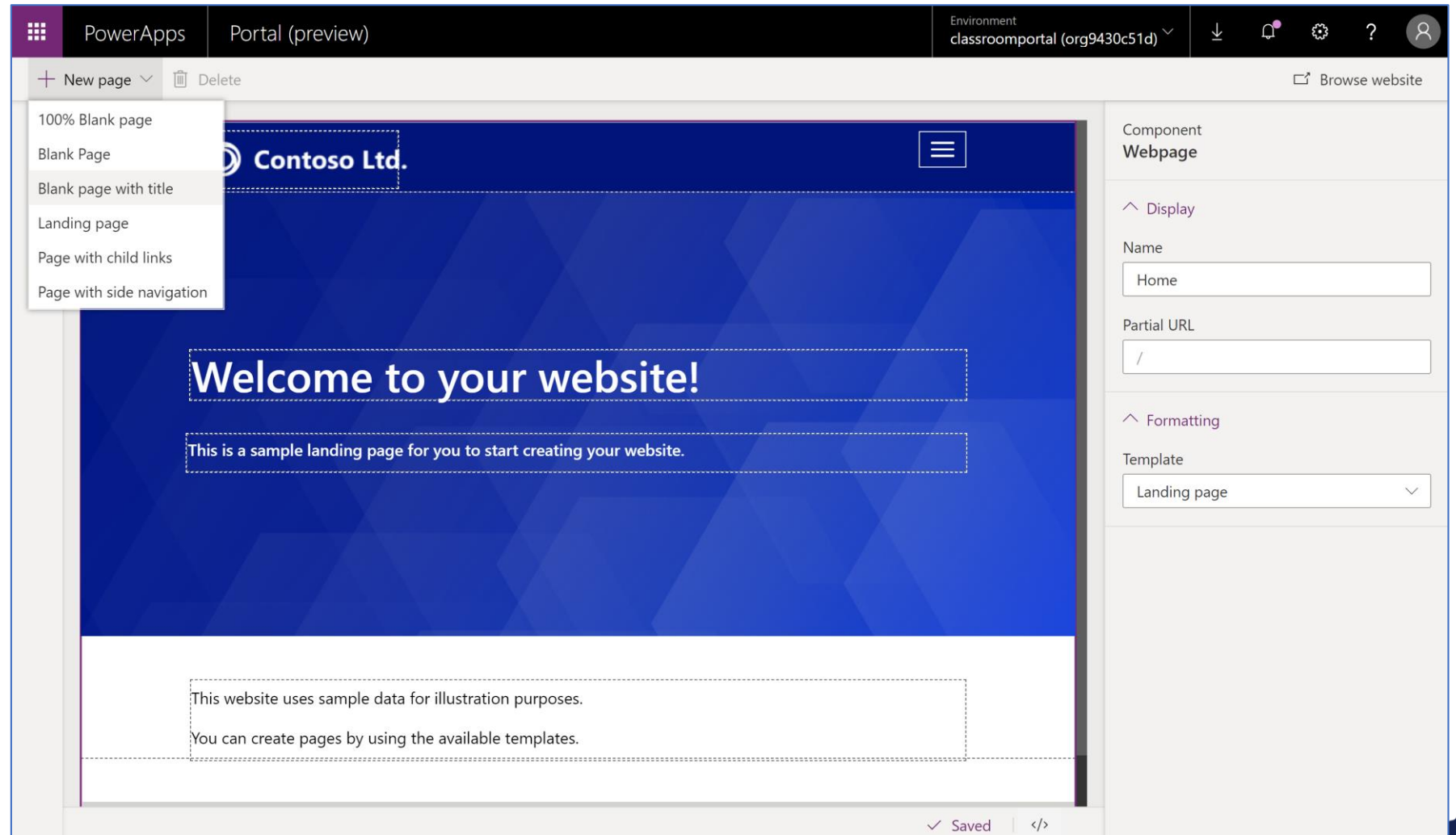
The screenshot displays a PowerApps Portal interface for a 'Class Room App'. The breadcrumb navigation shows 'Classroom > Registrations > REG-01000'. The left sidebar contains navigation options: Home, Recent, Pinned, and a 'Management' section with Courses, Classes, and Registrations (the active item). The top toolbar includes actions like New, Deactivate, Delete, Refresh, Assign, Share, Email a Link, and Flow. The main content area shows the 'REGISTRATION REG-01000' with tabs for 'General' and 'Related'. The 'General' tab displays a table of registration details.

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



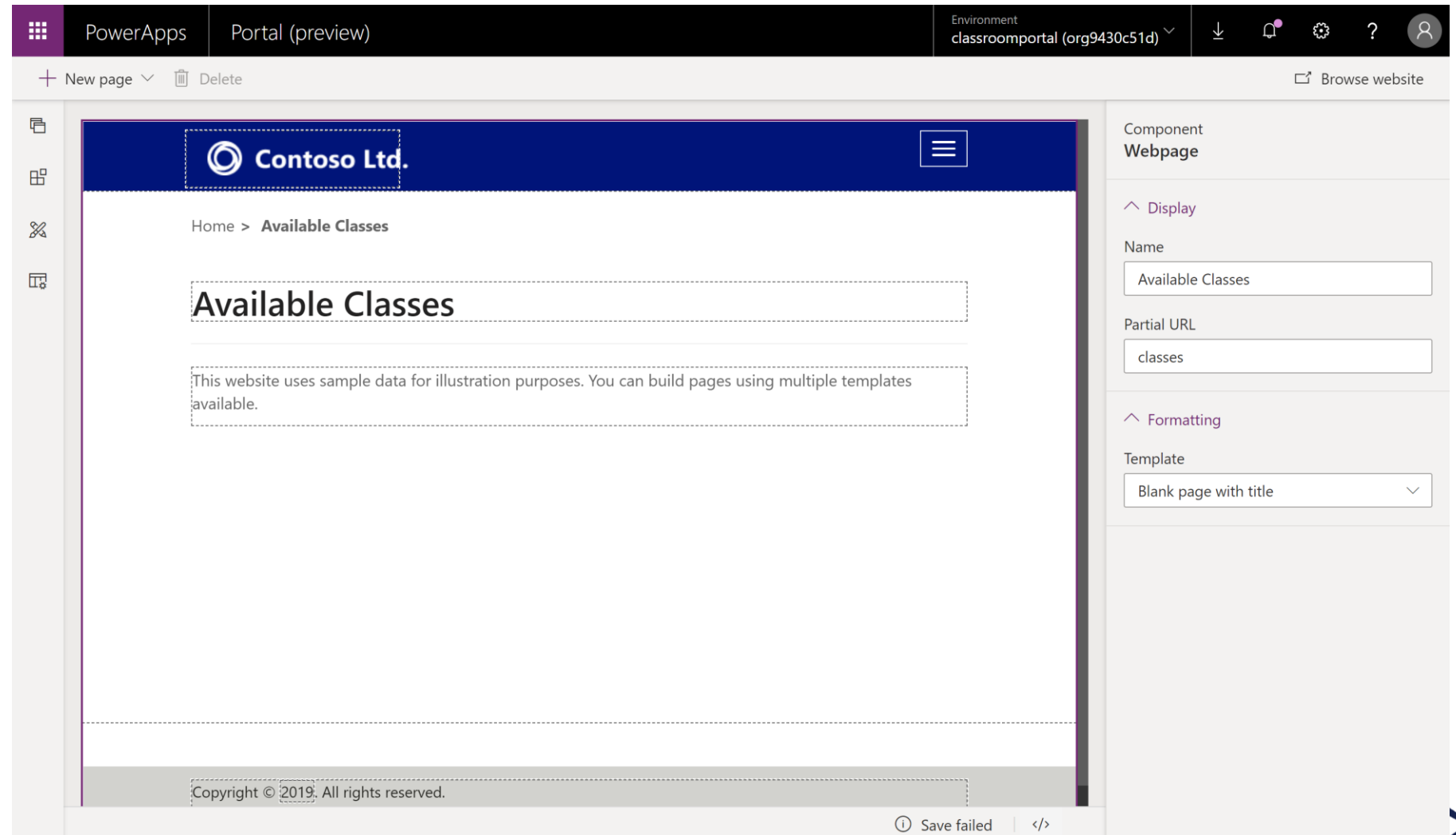
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Create New Page



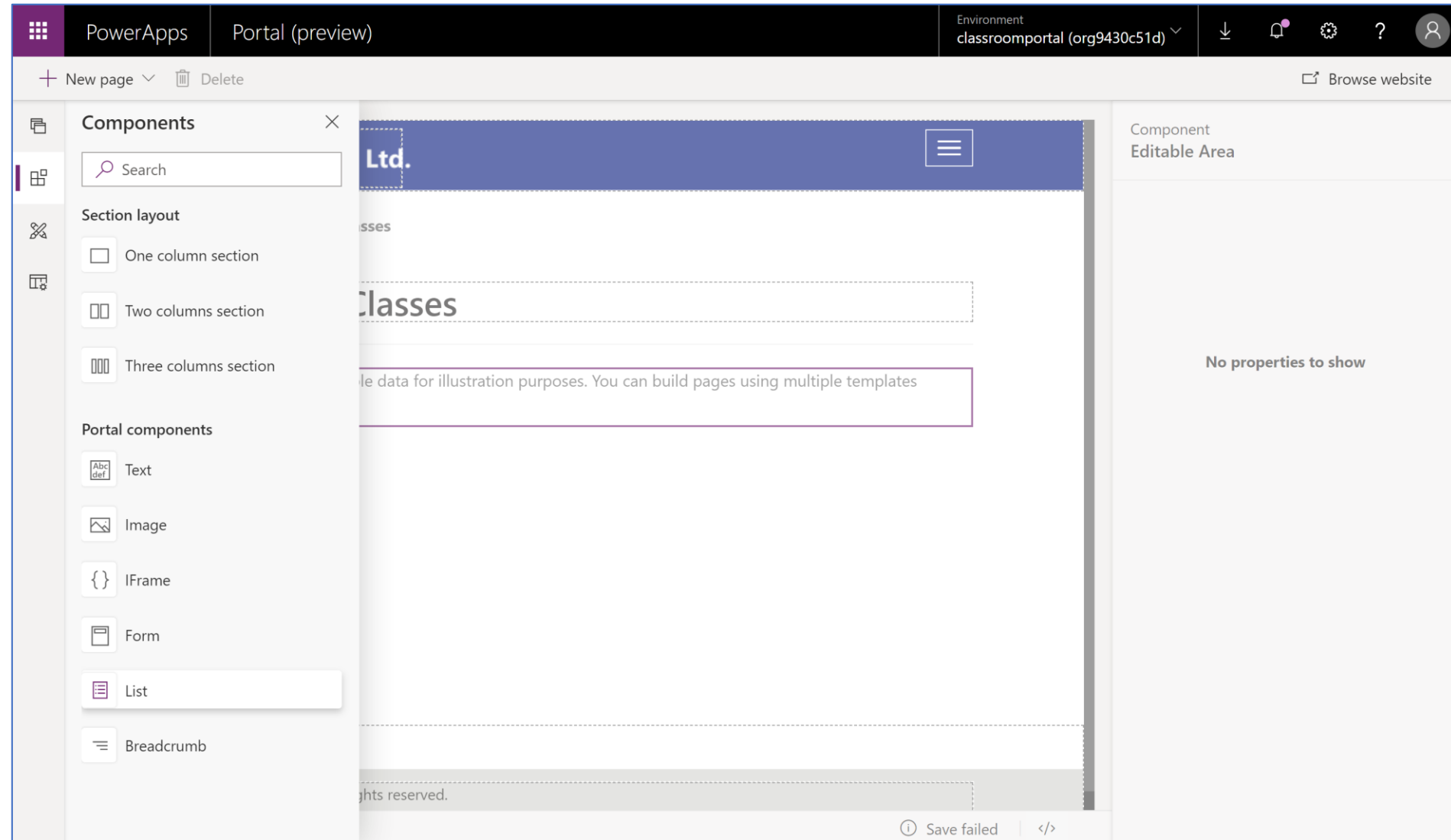
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Edit Page



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Add List



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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 content area shows a page titled 'Available Classes' under the 'Contoso Ltd.' header. The page content includes a heading 'Available Classes', a placeholder text 'This website uses sample data for illustration purposes. You can build pages using multiple templates available.', and a 'List' component placeholder with the text 'Configure the list using the properties pane'. The right-hand side of the interface features the 'Component List' properties pane, which is currently expanded to show the 'Display' section. This section includes options for 'Create new' (selected) and 'Use existing', a 'Name' field with the value 'ClassList', an 'Entity' dropdown set to 'Class (avngr_class)', and a 'Views' dropdown set to 'Active Classes'. Below these, there are four toggle switches for 'Create new record', 'View details', 'Edit record', and 'Delete record', all of which are currently turned off. The 'Settings' section is partially visible at the bottom of the properties pane. At the bottom of the main content area, a status bar indicates 'Save failed' and provides a '</>' icon.



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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

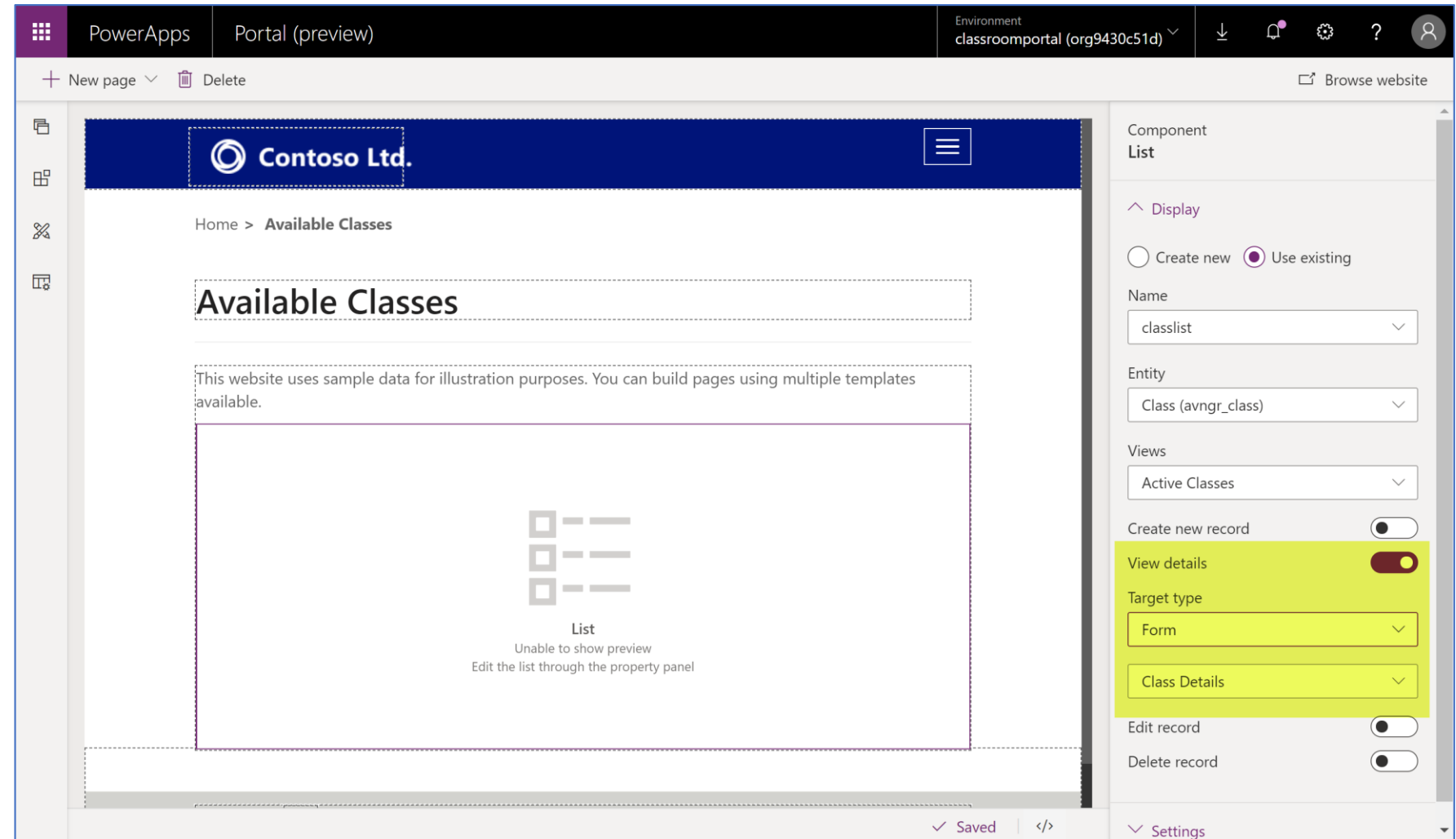
Add Detail Form

The screenshot shows the PowerApps Portal editor interface. The top navigation bar includes 'PowerApps' and 'Portal (preview)'. The environment is set to 'classroomportal (org9430c51d)'. The main canvas displays a page layout with a blue header, a breadcrumb 'Home > New page > New page', and a title 'Class Details'. Below the title is a text block: 'This website uses sample data for illustration purposes. You can build pages using multiple templates available.' A large rectangular area is highlighted with a dashed border, containing a placeholder for a 'Form'. The placeholder text reads: 'Form Unable to show preview Edit the form through the property panel'. The right-hand property panel is open, showing the 'Component Form' settings. The 'Display' tab is selected, with options for 'Create new' and 'Use existing' (selected). The 'Name' is set to 'Class Details', the 'Entity' is 'Class (avngr_class)', the 'Form layout' is 'Web - Class Details', and the 'Mode' is 'ReadOnly'. There are also sections for 'Form success settings' and 'Advanced settings'. The bottom status bar shows 'Saved' and a code icon.



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**Edit List Control
to navigate to
form**



Intro to PowerApps Portals

Portal Management App


The screenshot displays the 'Active Entity Lists' section of the PowerApps Portal Management app. The interface includes a top navigation bar with 'PowerApps', 'Portal Management', and 'Portals > Entity Lists'. A left-hand navigation pane lists various management options. The main area features a table of active entity lists with columns for Name, Entity Name, P., Enable Entit..., Sea..., Filte..., Calendar Vi..., Ma..., and O. Two records are visible: 'classlist' and 'Courselist'. A search bar is located at the top right of the table area. At the bottom, there is a pagination bar showing '1 - 2 of 2 (0 selected)' and a column selection bar with letters A through Z.

✓	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



Intro to PowerApps Portals

Allow users to login

 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		▼



PowerApps Portals



Licensing of PowerApps Portals :

User Type	Licensing	SKU Name	Unit Capacity	Price/month	Comments
External user – Authenticated	Per log in	PowerApps Portals login capacity add-on	100 log ins	\$200	A log in provides an external authenticated user access to a single PowerApps portal for up to 24 hours
External user – Unauthenticated	Per page view	PowerApps Portals page view capacity add-on	100K page views	\$100	
Internal user	Via USL	<ul style="list-style-type: none">• Various Dynamics 365 SKUs• PowerApps per app plan• PowerApps per user plan	NA	NA	Custom portal use rights are aligned with custom app use rights

- Customers can provision a PowerApps portal instance
- No need to purchase separate¹ license

¹\$500 per month per Dynamics 365 Additional Portal instance as of July 2019



Crash Course in Dynamics 365 Portals

Next Steps – “Homework”

Provide feedback!

- Create Portal Content (Wizard)
- Create custom web templates
- View on Mobile (responsive design)
- Change CSS Themes/Logos/etc.
- Explore Entity Permissions for tighter security
- Learn 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
- Online Learning (working on it!)



Thank you

