



Accelerate development of SPFx solutions with PnP reusable controls and frameworks

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June 9th, 2018





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I'm a big SharePoint and Office 365 development enthusiast!



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SharePoint User Group Spain

SUGES



SPS EVENTS

WiFi Keys for Attendees

- Connect to the wireless network **MSFT_GUEST**
- Login details for the wireless network:
 - Guest Username O365Sat@outlook.com
 - Guest Password: 0195

Agenda

Reusable controls
(React)

Reusable property
pane controls (React)

PnPJS library

Demo

A few minutes ago, in a office not that far away...a developer was writing the same code he did last week

Reusable controls

Reusable React controls for SharePoint Framework solutions

Reusable controls

Common project requirements

Use Office UI Fabric

Rich user experience

Used in pages (content)

“SharePoint-aware”

Very simple to configure and use

Extensible events

Open source

FileTypeIcon

Returns the file type icon based on a specified file path or application.

Excel (font): 

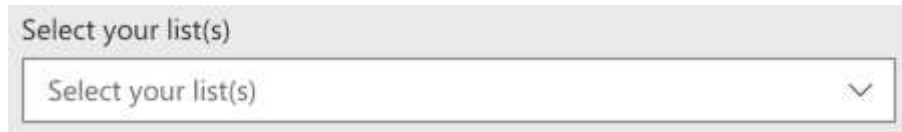
Excel (image): 

Word (font): 

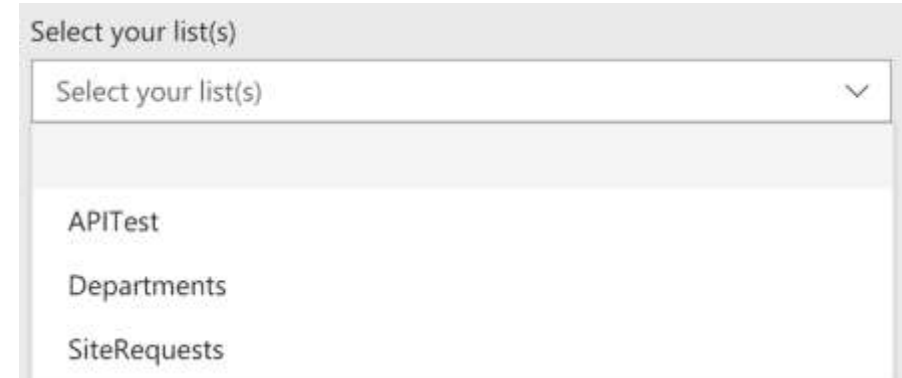
Word (image): 

ListPicker

Allows you to select one or multiple available lists/libraries of the current site.



A single selection ListPicker control. It features a light gray header bar with the text "Select your list(s)". Below the header is a white rectangular box containing the placeholder text "Select your list(s)" and a small downward-pointing chevron icon on the right side.











A ListPicker control showing a list of available lists. It has a light gray header bar with the text "Select your list(s)". Below the header is a white rectangular box containing the placeholder text "Select your list(s)" and a small downward-pointing chevron icon on the right side. Below this box is a scrollable list of three items: "APITest", "Departments", and "SiteRequests".









A ListPicker control showing a list of available lists with checkboxes. It has a light gray header bar with the text "Select your list(s)". Below the header is a white rectangular box containing the placeholder text "Select your list(s)" and a small downward-pointing chevron icon on the right side. Below this box is a scrollable list of three items, each with a checkbox and a label: ☐ "APITest", ☐ "Departments", and ☐ "SiteRequests".

ListView

Renders a list view for the given set of items.

	ID ↓	Name	Path	Title
	1	SPFx document.docx	Link	
	2	How to let custom property fields trigger the apply b...	Link	
	3	SharePoint framework breadcrumb extension.docx	Link	
	4	SharePoint Framework multi-component bundles.docx	Link	
	5	IMG_5091.JPG	Link	
	6	SPFx session.pptx	Link	PowerPoint Prese...
	9	SPFx marketing.pdf	Link	

^		ID	Name	Path	Title
^ Draft (3)					
		3	Buildings in Antwerp.docx	Link	
		4	Buildings in Oslo.docx	Link	
		2	Antwerp by the numbers.docx	Link	
^ Approved (2)					
		1	History of Belgium.docx	Link	
		6	History of Antwerp.pptx	Link	PowerP...

Placeholder

Renders a placeholder which can be used to show a message indicating the web part still has to be configured.



Configure your web part

Please configure the web part.

Configure

SiteBreadcrumb

Returns a breadcrumb based on the current location.



Local Workbench > Todo List

This screenshot shows a breadcrumb trail within a light gray header bar. The text "Local Workbench" is followed by a right-pointing chevron and "Todo List". The entire breadcrumb string is contained within a solid blue rectangular box, indicating that "Todo List" is the current page.



Local Workbench > Todo List

This screenshot shows a breadcrumb trail within a light gray header bar. The text "Local Workbench" is followed by a right-pointing chevron and "Todo List". The "Local Workbench" portion is highlighted with a solid blue rectangular box, indicating it is the current page.

WebPartTitle

Renders a web part title that is editable when the page is in edit mode.



SecurityTrimmedControl

Show or hide components based on user permissions.

Check permissions on the current site

Check permissions on the current list

Check permissions on remote site

Check permissions on remote list / library

Checking permissions on the current site

```
<SecurityTrimmedControl context={this.props.context}  
    level={PermissionLevel.currentWeb}  
    permissions={[SPPermission.viewPages]}>  
    {/* Specify the components to load when user has the required  
    permissions */}  
</SecurityTrimmedControl>
```

TaxonomyPicker

Allows you to select one or more Terms from a TermSet via its name or TermSet ID.

Select terms

Engineering

×

Legal

×

Select Term

Department

- Department

☐

Engineering

☒

Executive Management

☐

Finance

☐

Guest Migrated By Sharepoint

☒

Legal

☐

Operations

☐

Research and Development

☐

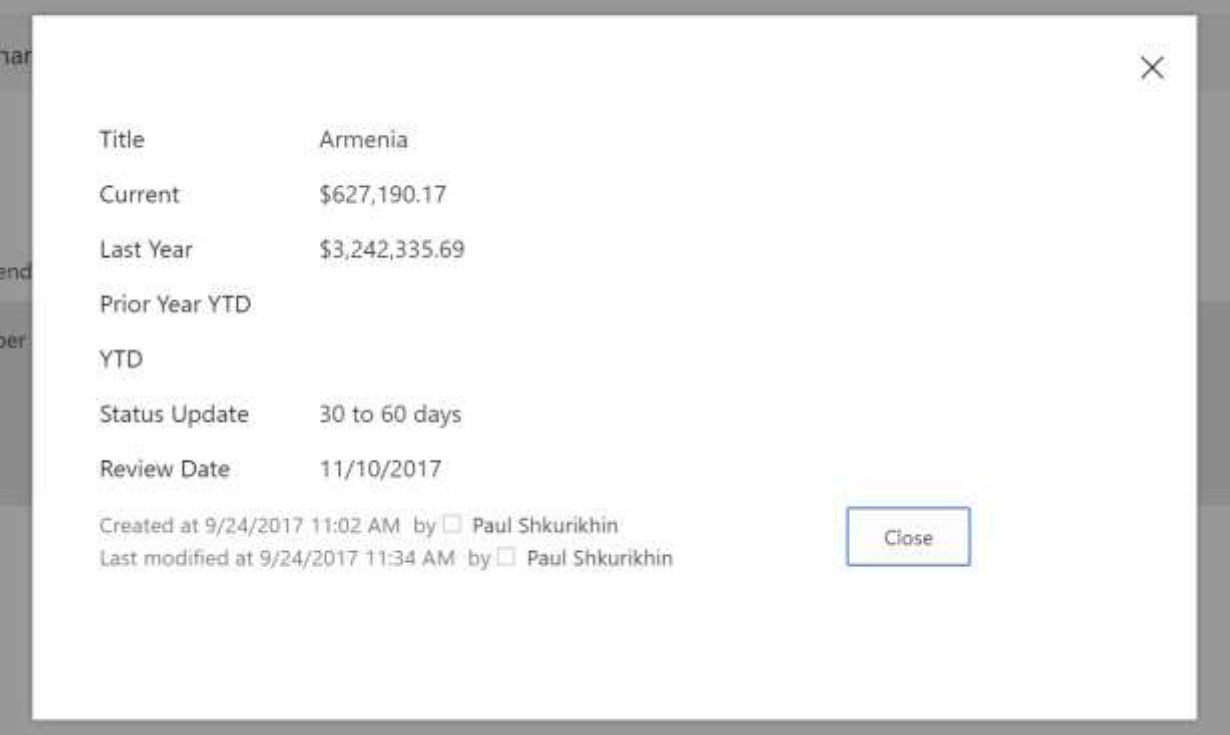
Sales and Marketing

 Save

× Cancel

IFrameDialog

Renders a Dialog with an iframe as content.



A screenshot of a web application dialog box titled "IFrameDialog". The dialog has a close button (X) in the top right corner. It displays a table with financial data for "Armenia". The table has two columns: a label column and a value column. The data rows are: "Current" with value "\$627,190.17", "Last Year" with value "\$3,242,335.69", and "Prior Year YTD YTD". Below the table, there is a "Status Update" row with value "30 to 60 days" and a "Review Date" row with value "11/10/2017". At the bottom, there is a metadata section showing "Created at 9/24/2017 11:02 AM by ☐ Paul Shkurikhin" and "Last modified at 9/24/2017 11:34 AM by ☐ Paul Shkurikhin". A "Close" button is located in the bottom right corner of the dialog.

Title	Armenia
Current	\$627,190.17
Last Year	\$3,242,335.69
Prior Year YTD YTD	
Status Update	30 to 60 days
Review Date	11/10/2017

Created at 9/24/2017 11:02 AM by ☐ Paul Shkurikhin
Last modified at 9/24/2017 11:34 AM by ☐ Paul Shkurikhin

Close

Field Controls

React controls that can be used in SPFx Field Customizers to provide rendering of the fields similar to out of the box experience.

- FieldAttachmentsRenderer
- FieldDateRenderer
- FieldFileTypeRenderer
- FieldLookupRenderer
- FieldNameRenderer
- FieldTaxonomyRenderer
- FieldTextRenderer
- FieldTitleRenderer
- FieldUrlRenderer
- FieldUserRenderer

Reusable property pane controls

Reusable property pane controls for SharePoint Framework solutions

Reusable property-pane controls

Common project requirements

Use Office UI Fabric

Rich user experience

Used in web part property-pane

“SharePoint-aware”

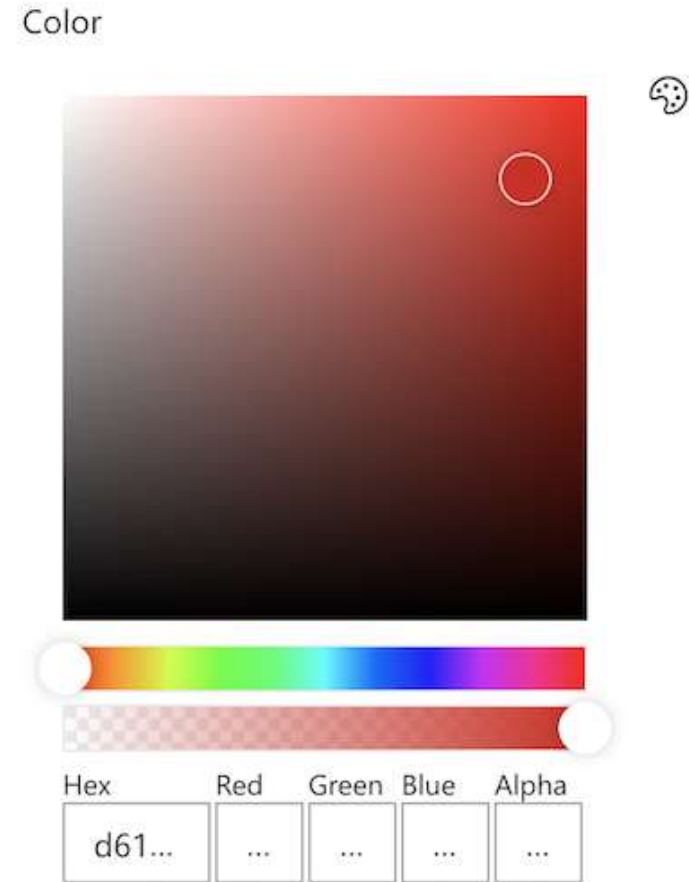
Very simple to configure and use

Extensible events

Open source

PropertyFieldColorPicker

Generates a color picker that you can use inside the property pane.



PropertyFieldSwatchColorPicker

generates a swatch color picker
that you can use inside the
property pane.

Swatch Color



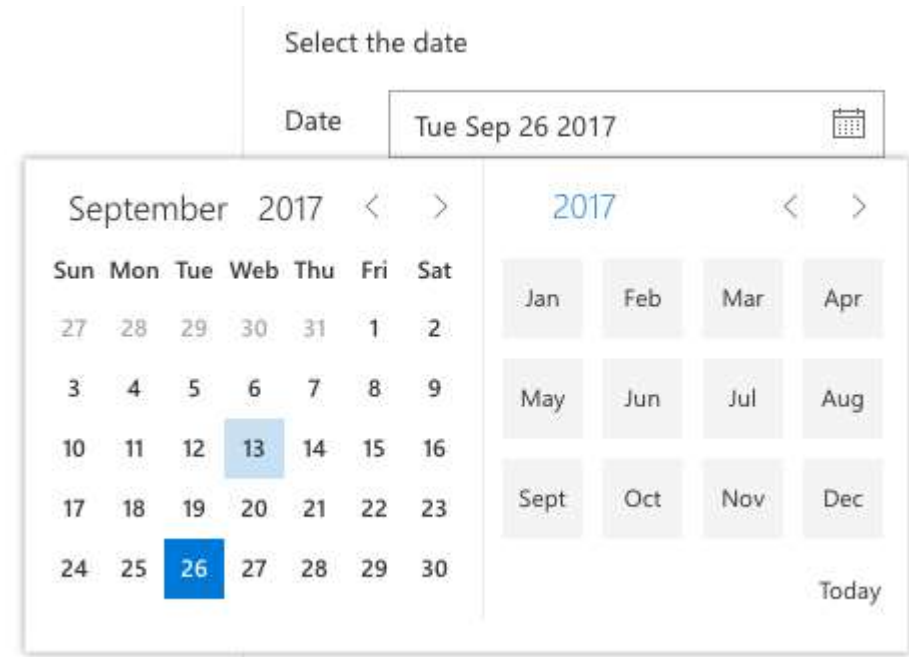
Swatch Color



PropertyFieldDateTimePicker

Generates a Date and Time picker field that can be used in the property pane of your SharePoint Framework web parts.

The control can be configured to be date only or date and time.



Select the date

Date

Tue Sep 26 2017



Select the date and time

Date

Tue Sep 26 2017



Time

12 am



:

00



:

00



PropertyFieldListPicker

Generates a list picker field that can be used in the property pane of your SharePoint Framework web parts.

The control can be configured as a single or multi-selection list picker.

Select a list

▼

Documents

Form Templates

MicroFeed

Site Assets

Site Pages

Style Library


Select multiple lists

- ☐ Documents
- ☒ Form Templates
- ☐ MicroFeed
- ☒ Site Assets
- ☐ Site Pages
- ☐ Style Library

PropertyFieldMultiSelect

Generates a dropdown with the possibility of selecting multiple values.

Multi select field



The image shows a multi-select dropdown menu. The top part is a white box with a thin border containing the text "EN, NL" and a small downward-pointing chevron icon on the right. Below this box is a list of three items, each with a square checkbox and a label to its right. The first item has a blue checkbox with a white checkmark and the label "EN". The second item has a white checkbox with a black border and the label "FR". The third item has a blue checkbox with a white checkmark and the label "NL". The background of the list items is a light gray color.

Selected	Value
<input checked="" type="checkbox"/>	EN
<input type="checkbox"/>	FR
<input checked="" type="checkbox"/>	NL

PropertyFieldNumber

Generates an input field for numbers. Text is not allowed as this will result into an invalid input.

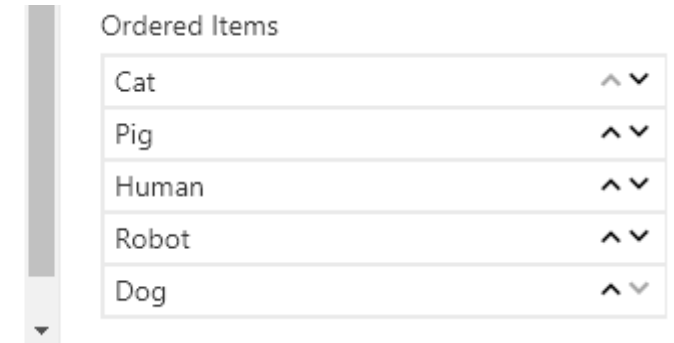
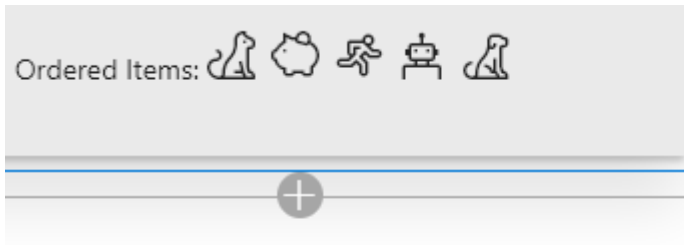
Number value only

Number field description

ⓘ The value should be a number, actual is: 123deg.

PropertyFieldOrder

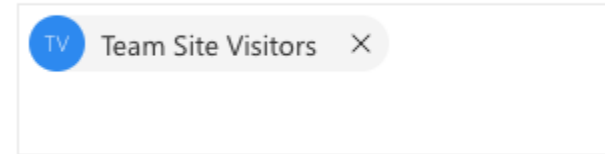
Generates a list that can be easily reordered using drag and drop and/or arrow buttons.



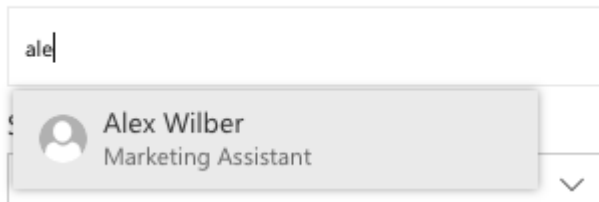
PropertyFieldPeoplePicker

Generates a people / group picker that can be used in the property pane of your SharePoint Framework web parts.

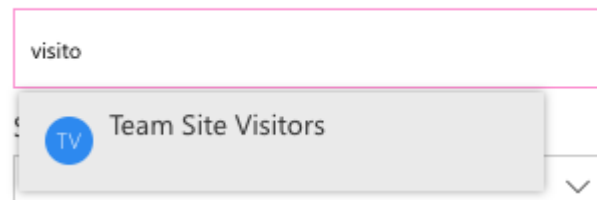
PropertyFieldPeoplePicker



PropertyFieldPeoplePicker



PropertyFieldPeoplePicker



PropertyFieldSpinButton

Generates a spin button which allows the user to incrementally adjust a value in small steps.

Spin Value

Spin Value

PropertyFieldTermPicker

Generates a term picker that can be used in the property pane of your SharePoint Framework web parts.

Select terms



Select terms

Engineering × Legal ×



Select terms

Taxonomy_0tKSfiSEU3ed1RdcA7sGrA==

People

Department

☒ Engineering

☐ Executive Management

☐ Finance

☒ Legal

☐ Operations

☐ Research & Development

☐ Sales & Marketing

Job Title

Location

System

PropertyFieldCollectionData

Gives you the ability to insert a list / collection data which can be used in your web part.

Firstname *	Lastname	Age *	Favorite city *	Signed	
<input type="text" value="John"/>	<input type="text" value="Rue"/>	<input type="text" value="40"/>	<input data-bbox="1951 782 2216 831" type="text" value="Montreal"/>	<input type="checkbox"/>	✕
<input type="text" value="Ann"/>	<input type="text" value="Lastname"/>	<input type="text" value="Age"/>	<input data-bbox="1951 868 2216 916" type="text" value="Favorite city"/>	<input type="checkbox"/>	+

Controls with callout

Standard controls with callout for displaying additional contextual information

- PropertyFieldButtonWithCallout
- PropertyFieldCheckboxWithCallout
- PropertyFieldChoiceGroupWithCallout
- PropertyFieldDropDownWithCallout
- PropertyFieldLabelWithCallout
- PropertyFieldLinkWithCallout
- PropertyFieldSliderWithCallout
- PropertyFieldTextWithCallout
- PropertyFieldToggleWithCallout

Do you still build your SharePoint REST requests as long strings?

If so, this is when you start crying

PnPJS

Fluent JavaScript API for consuming SharePoint and Office 365 REST APIs

PnPJS

Fluent API

SharePoint and Office 365 REST APIs

New: Managed Metadata!

Type-safe

Very simple to configure and use

Removes the complexity of some operations

Easy to batch requests

Multiple packages, only install what's required

SharePoint Framework, Node.js, or JavaScript projects

Open source

Packages - @pnp/

common

Provides shared functionality across all pnp libraries

config-store

Provides a way to manage configuration within your application

graph

Provides a fluent api for working with Microsoft Graph

logging

Light-weight, subscribable logging framework

nodejs

Provides functionality enabling the @pnp libraries within nodejs

odata

Provides shared odata functionality and base classes

pnpjs

Rollup library of core functionality (mimics sp-pnp-js)

sp

Provides a fluent api for working with SharePoint REST

sp-addinhelpers

Provides functionality for working within SharePoint add-ins

sp-clientsvc

Provides base classes used to create a fluent api for working with SharePoint Managed Metadata

sp-taxonomy

Provides a fluent api for working with SharePoint Managed Metadata

Get

```
// get all items
```

```
const items = await sp.web.lists.getByTitle("My List").items.get();
```

```
// get a specific item by id
```

```
sp.web.lists.getByTitle("My List").items.getById(1).get()
```

```
// use odata operators for more efficient queries
```

```
sp.web.lists.getByTitle("My List").items.select("Title",  
"Description").top(5).orderBy("Modified", true).get()
```

Add

```
// add an item to the list
sp.web.lists.getByTitle("My List").items.add({
    Title: "Title",
    Description: "Description"
}).then((iar: ItemAddResult) => {
    console.log(iar);
});
```

Batch

```
let batch = sp.web.createBatch();  
list.items.inBatch(batch).add({.....}, entityTypeFullName).then(b => {  
    console.log(b);  
});  
list.items.inBatch(batch).add({.....}, entityTypeFullName).then(b => {  
    console.log(b);  
});  
batch.execute().then(d => console.log("Done"));
```

Demo



Web part to list documents from a SharePoint document library

The web part should be configurable to allow the user to

- select the source list from the site
- Select a managed metadata term to use as filter

List, managed metadata and sample data already available on a test site

Source code:

<https://github.com/joelfmrodrigues/demos/tree/master/PnP%20Controls>

Resources

Reusable
controls
(React)

<https://github.com/SharePoint/sp-dev-fx-controls-react>
<https://sharepoint.github.io/sp-dev-fx-controls-react/>

Reusable
property
pane
controls
(React)

<https://github.com/SharePoint/sp-dev-fx-property-controls>
<https://sharepoint.github.io/sp-dev-fx-property-controls/>

PnPJS

<https://github.com/pnp/pnp>
<https://pnp.github.io/pnp/>

Web Part
samples

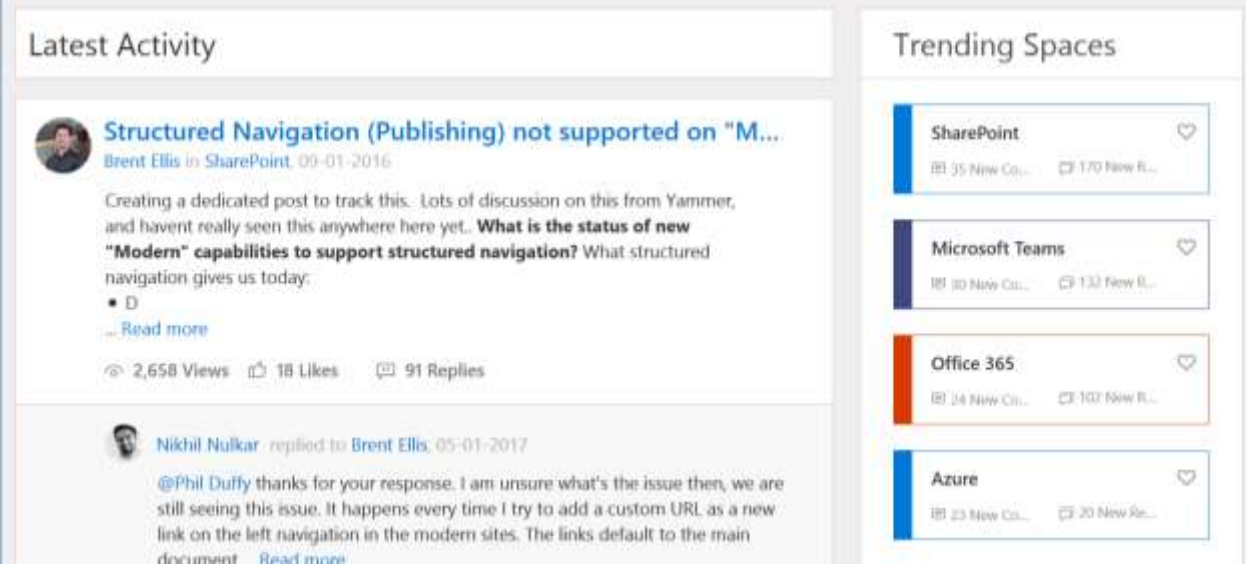
<https://github.com/SharePoint/sp-dev-fx-webparts>

Extension
samples

<https://github.com/SharePoint/sp-dev-fx-extensions>

Thank you!

Questions?



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- Trusted resource for news, best practices and answers from Microsoft product teams and MVPs
- Join today! It's free – sign in with your Microsoft Account.

Raffle

Please, fill your SP & Office 365 Saturday Madrid passport if you want to participate.

You can win one of these gifts:



Pasaporte / Passport

Si deseas participar en **el sorteo final**, deberás conseguir la firma de nuestros patrocinadores Platinum, Gold y Silver en sus stands. Una vez que tengas todas las firmas, rellena tu valoración de las sesiones y entrega esta hoja a las 18:15 en la sala Auditorio.

If you want to participate in **the final raffle**, you must get the signature of our Platinum, Gold and Silver sponsors in their stand. Once you have all the signatures, complete the poll about the sessions and give us this sheet at 18:15 PM in the Auditorium room.

東京 TOKIOTA	bindtuning	encamina PIENSA EN COLORES	KWizCom Bittek	everis an NTT DATA Company
plain concept	raona	RICOH imagine. change.	happit	icefire

My name is: **Odor** My e-mail: **Odor@winterfell.com**

Por favor, puntúa las sesiones en el **campo gris** con números desde 1 (muy mal) a 10 (gran sesión).

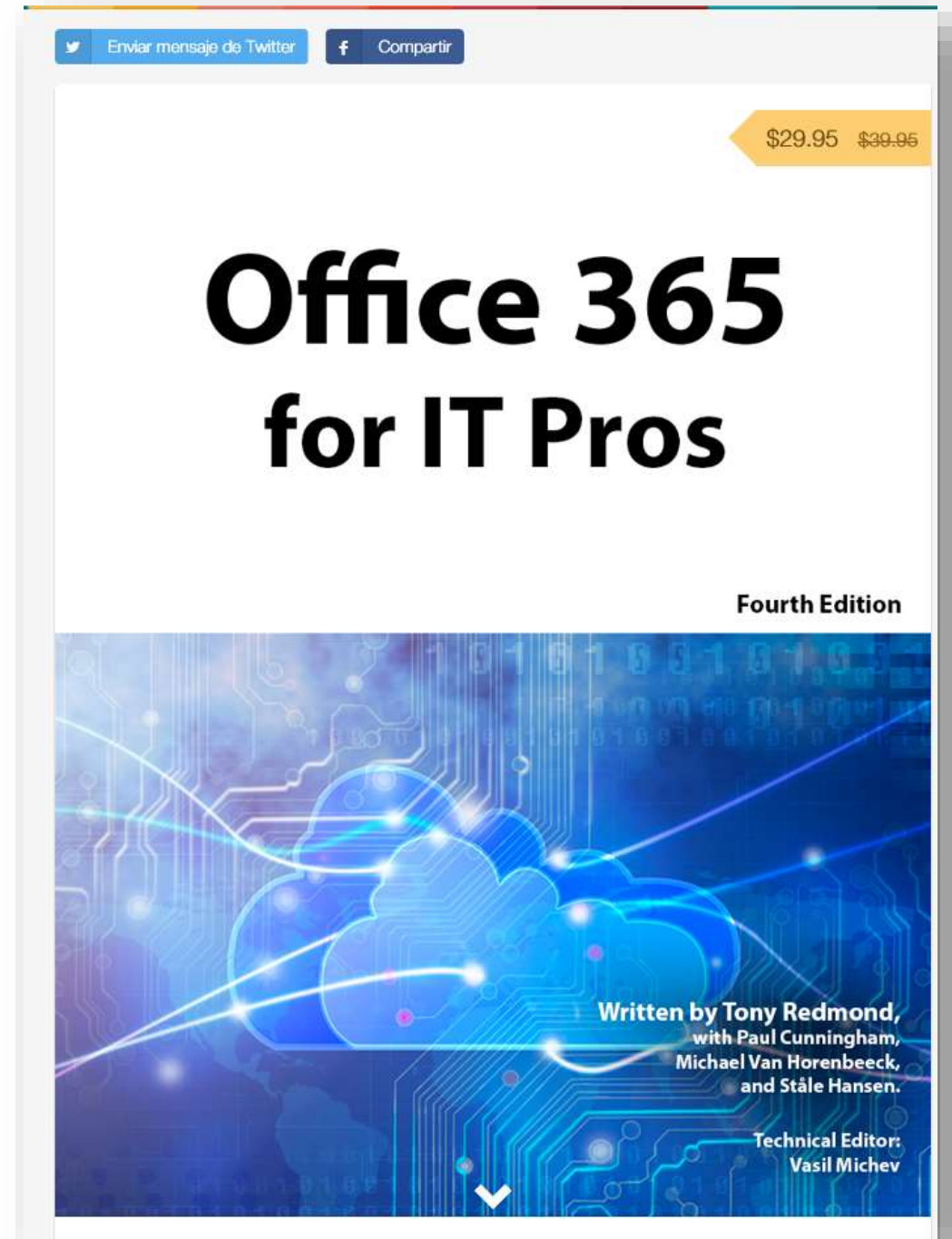
Please, rate sessions in the **greyed field** with numbers from 1 (too bad) to 10 (great session).

9:30 AM - 10:30 AM	Lorem Ipsum Lorem	10	Lorem Ipsum Lorem	Lorem Ipsum Lorem
10:30 AM - 11:30 AM	Lorem Ipsum Lorem	9	Lorem Ipsum Lorem	Lorem Ipsum Lorem
11:45 AM - 12:45 PM	Lorem Ipsum Lorem	8	Lorem Ipsum Lorem	Lorem Ipsum Lorem

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<https://gumroad.com/l/O365IT/spsspain>



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Silver sponsors



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Collaborate

