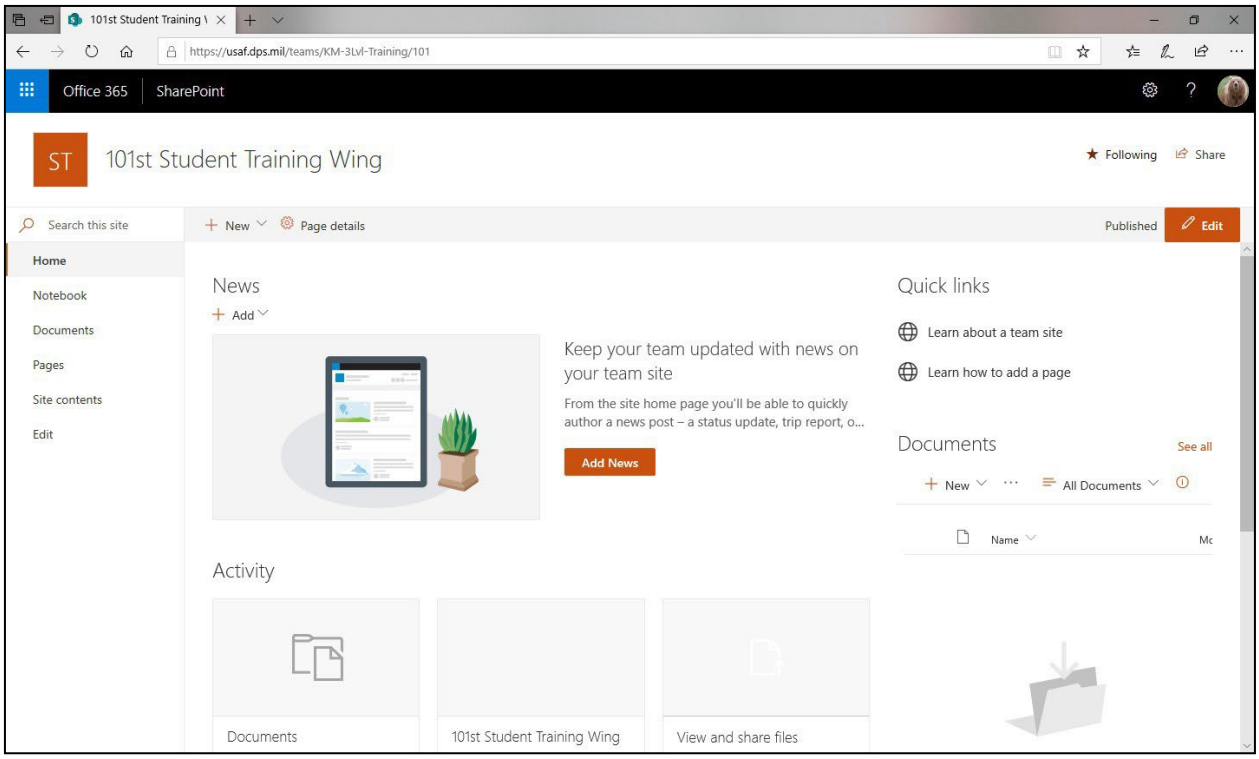
Module 2 Objective 2b

Performance Exercise

Welcome to SharePoint. Now that you have seen the primary features SharePoint is capable of, it's time to put that awareness into practice. Use these skills to complete the exercise below, in preparation for your PC. In this hands-on exercise, each of you will develop a SharePoint site of your own.

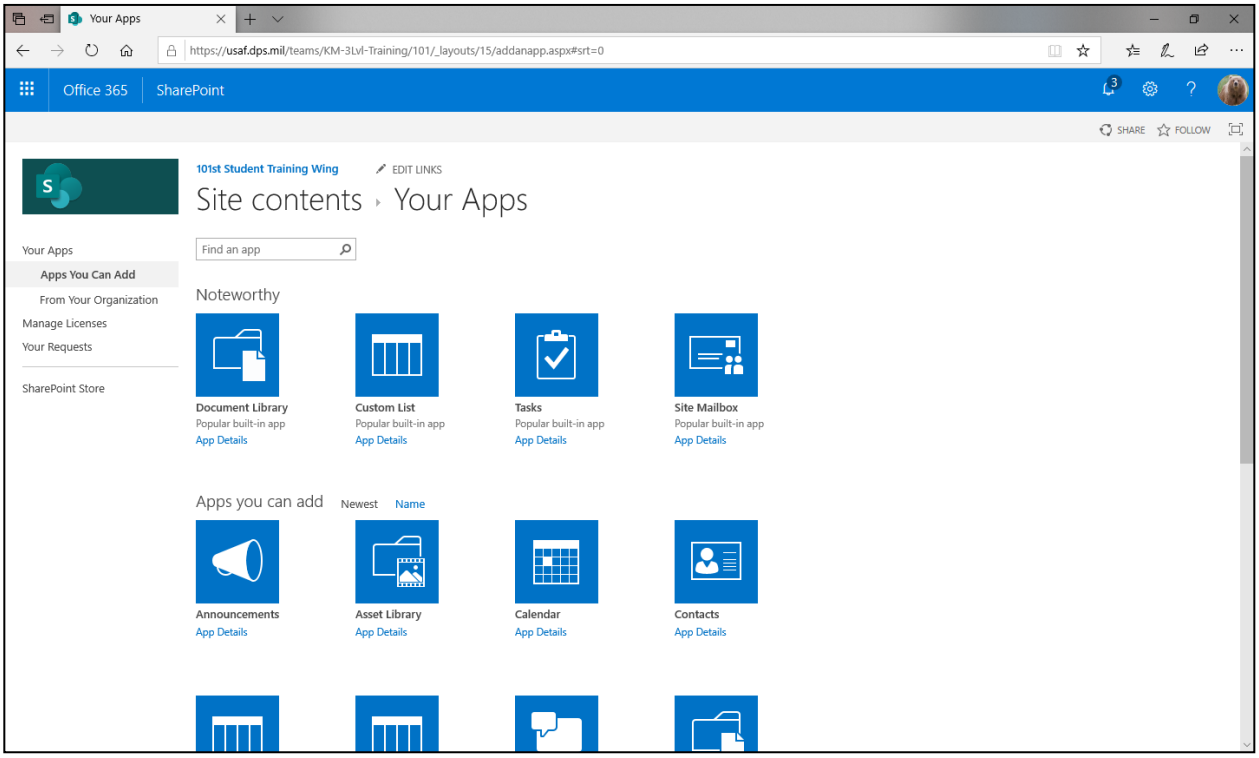
Begin by opening a web browser (Microsoft Edge is strongly recommended). Next, inform your instructor that you wish to begin the SharePoint Exercise, Module 2, Objective 2b; they will provide you a specific SharePoint site to access within the following SharePoint Site Collection (https://usaf.dps.mil/teams/KM-3Lvl-Training/YourLastName). For demonstration purposes, the site we're going to be using throughout this exercise guide is the 101st Student Training Wing, so some Names/Titles may differ from your own.



Now that we're on your site, let's begin with one of the most fundamental aspects of a SharePoint site; the *list*.

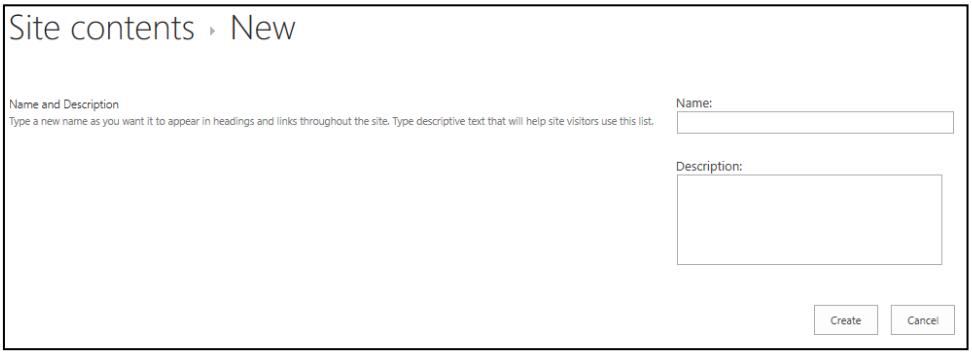
Lists: Lists on SharePoint are spreadsheets for data consolidation/organization. Custom Lists are akin to Excel spreadsheets, and enable users to input column specific data (attributes) relevant to a single row (instance of an object). Columns are typically independent variables, while rows are dependent variables.

Enough of the technical jargon, let's make one to see what use they offer. There are several ways to do this. Let's select the Settings Menu via the gear/cog icon in the top-right of the site. Next, click "Add an app".

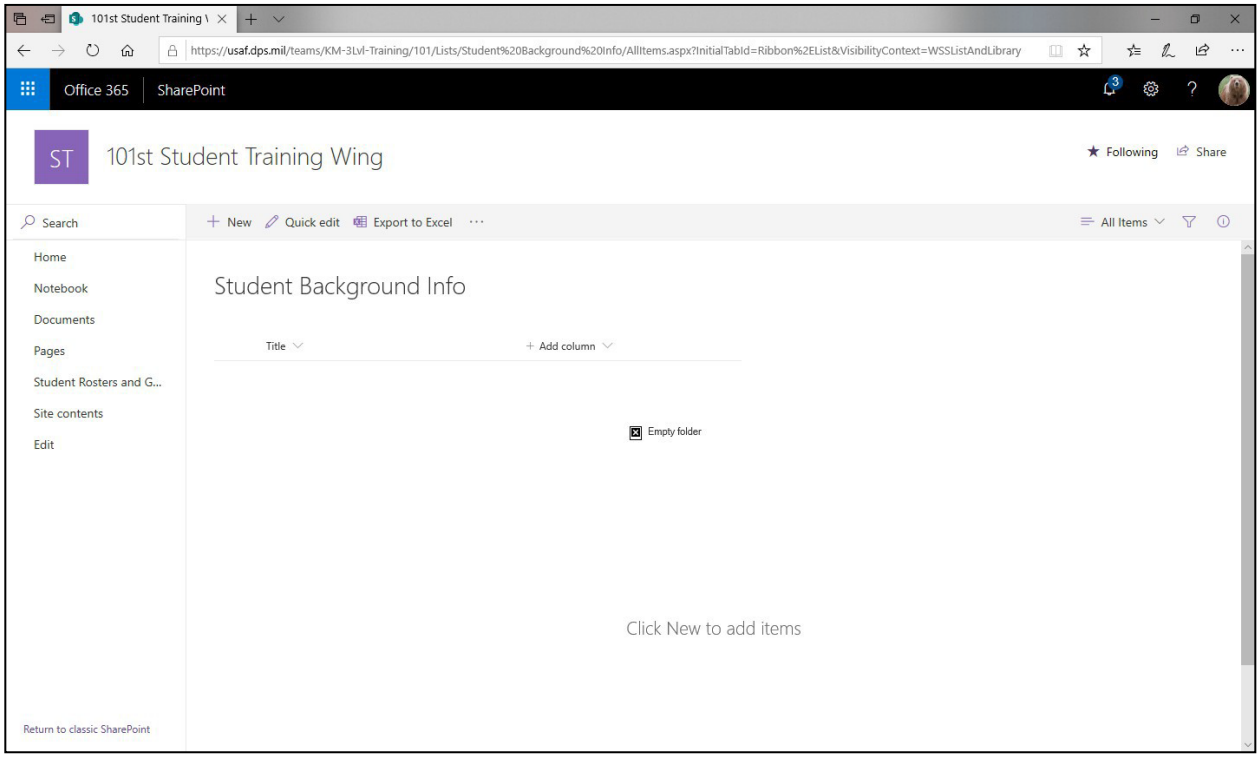


A tiled list of all applications you can create within your SharePoint site will be visible. It is recommended that you change how they are sorted from “Newest”, to “Name”. Fortunately, we are looking for “Custom List” and that should be located at the very top, under “Noteworthy”. Click “Custom List”.

A popup window will appear, click, “Advanced Options”.



Let’s give our List a name that clearly communicates its purpose, while keeping it short, or concise. Enter “Student Background Info” for the name. Our title should be descriptive enough, but unlike the title, Description is not a required field. Leave Description blank. Click “Create”.



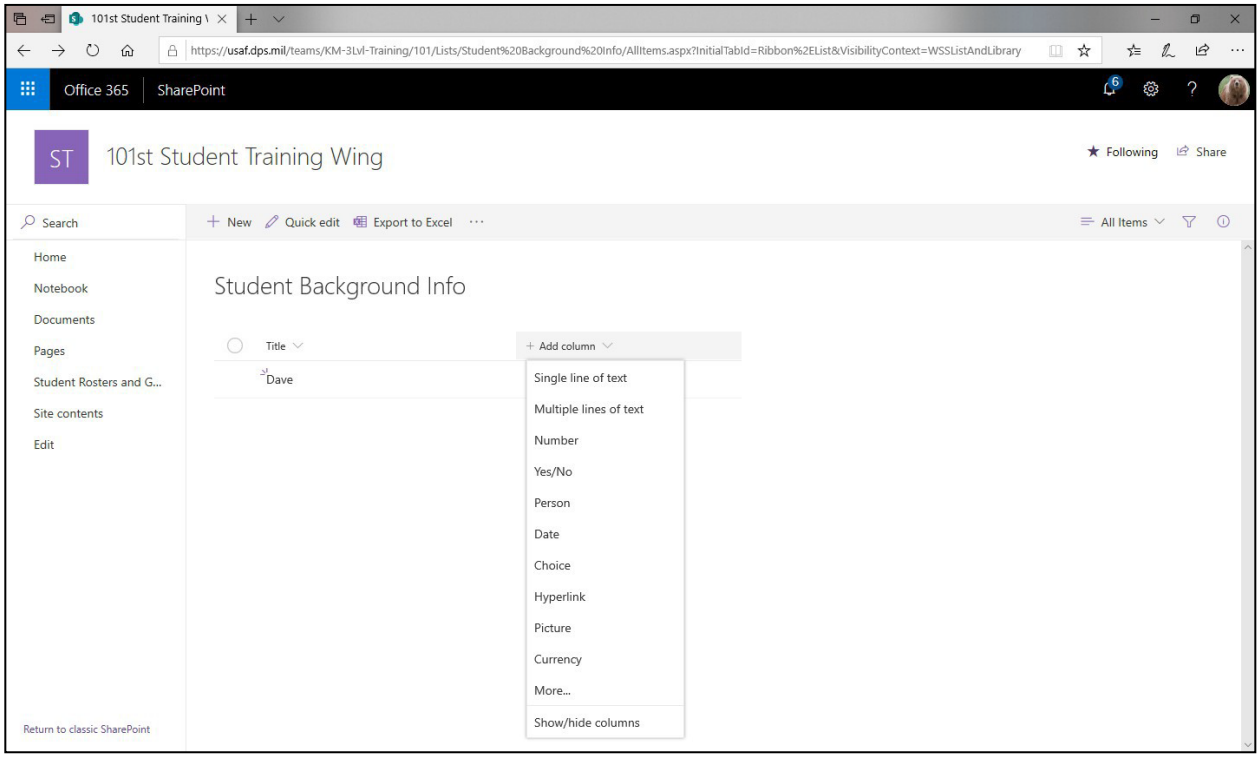
The page should reload and showcase our new list, which is empty and boring. Let's add an item to see how it's presented within a SharePoint list.

Click the "+ New" button just above the library's title, "Student Background Info". The New Item pane should appear on the right side of the window. Only one field is available to complete, "Title". Notice how there is a red asterisk next to it; this communicates to the user that information is required to be entered in this field in order to save this item. Let's give our new item a title; "Dave". Then click "Save".

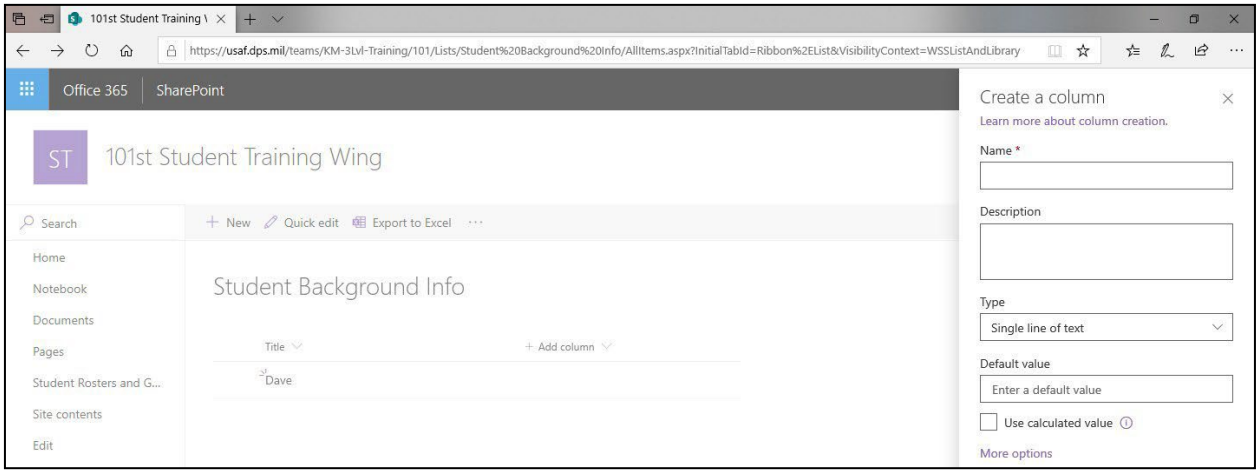
Dave should be the only list item visible, which makes our Student Background Info list a little too basic.

Let's add a few columns to fill out our list.

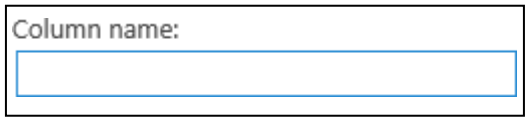
Click the  button to add some new fields for us to collect into on.



A number of options will appear, let's first choose "A single line of text". We'll discuss the other types of columns later.



The Create a Column pane will appear on the right-side of the page.



Name: It's good practice to make this short, or concise, yet descriptive. Users should be able to look at your column and understand what its purpose is. Let's give our column the name "Last Name".

Description: Based upon the previous entry, a description shouldn't be necessary. In some circumstances it may be prudent to use an abbreviation/acronym/initialism as the name; in these cases, use the Description field to detail what the name is in full. It can also be useful to provide instructions for users about alternative entry requirements such as desired formatting. We will leave the Description for the column we are creating blank.

Type: This option allows you to conveniently swap to a different column type while you're in the midst of creating the column. We will leave this as single line of text.

Default Value: This should be blank except in the rare instance a field will be consistent in the vast majority of list item entries (70%+). Leaving this blank minimizes data entry errors, helping to strengthen the quality of information gathered. For our scenario, delete all the text in this field.

Use Calculated Value: This value is not commonly utilized, but allows the column to compute basic standalone formulas (such as for formatting). If you are looking to use a formula/calculation, it is generally best practice to utilize the Calculated column type. For our scenario, leave this unchecked.

More Options

Maximum Characters: By default, when you create a Single Line of Text column, this value will be set to (255). This is indicates that users will not be able to enter anymore characters (letters, numbers, symbols) than the number established. In our scenario, people's last names can easily be in excess of 12 characters, as well as be hyphenated. Let's change this number from 255, to 30. Again, this will help minimize the number of data entry errors, even if only minimally.

Require that this column contains information: By default, when you create a column, this value will be set to (No). The better question to ask ourselves when completing this option is, *will this field always have data to enter?* With a SharePoint list, we are trying to collect information in a usable fashion, which means SharePoint developers must control what and how information is entered. If there is a reason for this information to be gathered in the first place, and this field will always have data to be entered, we must press users to do so. A few examples would include e-mail for military members (everyone has an e-mail); VIN for a list of vehicles; status of a list of projects/project phases (we can't make assumptions about whether or not something has started/finished/in-progress); or color of a dog (I'm not familiar with any translucent dogs). As far as I'm aware, the absolute majority of personnel within the United States have last names. For our scenario, we will set this option to "Yes".

Enforce unique values: By default, when you create a column, this value will be set to (No). This option is inquiring whether or not each list item entry should be different from other list items. An example of an appropriate use of enforce unique values would include, Social Security Number, Case Number, License Plate Number, Agent Assigned (to a case). Things like Date of Birth, Last Name, Home Phone, would be ineffective unique values because in each case, it's very possible that multiple people share the same last name, or home phone number. In our scenario, many last names are common, so leave this set to "No".

Add to all content types By default, when you create a column, this value will be set to (Yes). Leave this set to "Yes" as we wish to add this to our one content type (list) "Item".

Click "Save". A new column labeled "Last Name" should be created to the right of the "Title" column.

The next column we'll discuss is the Choice column type. The choice column is mutually beneficial to both the data entry user as well as the data collector. It makes entering information more convenient, as it's faster to click an option(s) than it is to type and it's easier to understand what the expectations for the entry are (think multiple choice questions versus fill-in the blank) which is beneficial for the data entry user. It's beneficial for the data collector because they can control for format and response range, making the data more consistent and easier to interpret/process. For our scenario, let's create a Choice column called "Status" so we can understand which of our students are Prior Service and which are Non-Prior Service.

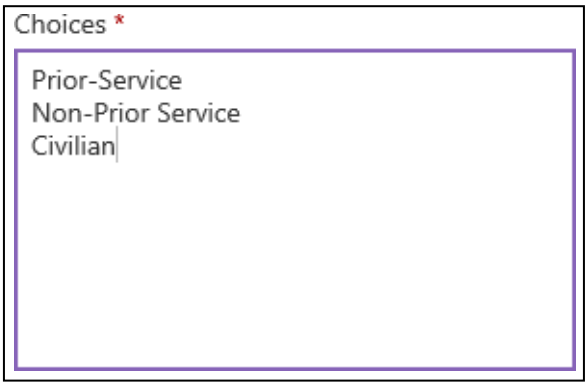
Column Name: Status | **Description**: [empty] | **Type:** Choice

Choices: Structure your choice options each on a separate line, as the default text is formatted.

Prior-Service

Non-Prior Service

Civilian



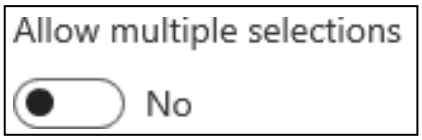
Can add choices manually: This option should be utilized only when there is a notable chance for you to have overlooked some other choice. This partially defeats the purpose of the Choice column, but may be a way to appease the very rare occurrence of a data outlier. We are very familiar with the status options of our students, so we will leave this unchecked.

Default Value: None | **Use Calculated Value:** unchecked

More Options (Click the colored text).

Display Choices Using: Everyone should be familiar with a drop-down menu, if not, look at the style of the Default Value option above. The other option, "Radio Buttons" are the small circle option selectors utilized in this very option. Radio buttons are best used when the number of options to pick from are few (no more than four). This helps manage the visual "real estate" on your data entry (New Item) form. If you have many options to pick from, (four or more), or you have a lot of information on your data entry (New Item) form, and visual space is scarce, utilize the drop-down menu option. It's less convenient (requiring a user to click twice, versus only once for the radio button), but it can be more visually appealing. In our scenario, select the "Radio Buttons" option as we only have three choices, and not many other fields.

Allow Multiple Selections: This field can be utilized in the event several choices might be selected. Think of health issues on a medical form (check all that apply), or on a list of bases that you might want to visit (most people have more than one base they're ok with PCSing to). In our case, a student would not be considered both a Non-Prior Service student and a Civilian, or any other combination, so we'll set this to "No".



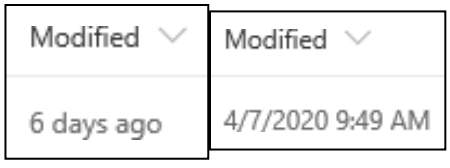
Require that this column Contains Information: Yes (all students will fit into one of the three status choices).

Click "Save".

Create another column (only two left). This will be a date column to track the class start date.

Name: Class Start | **Description:** [empty] | **Type:** Date and Time | **Include Time:** No

Friendly Format: This option is asking if we want the date we enter to appear as an actual date (05/10/2020) or whether we want it to be user friendly (5 days ago/2 hours ago). We're concerned with the date itself more than just a visual reminder, so let's leave this set to "No".



Calculated Value: This *could* be checked to control the formatting of the date (10MAY20 versus 05/10/2020), in our example, we'll leave this unchecked.

More Options

Require that this column contains information: No (we may not have a student registered for a class, even though we are aware they are supposed to attend KM technical training).

Click "Save".

We need to create one last column. This time select "More" from the bottom of the New Column menu. The page will reload and we will be brought to a more robust Create Column page. This time we're going to create the paintbrush of Knowledge Management – the Calculated Column. A firm understanding of this column type and its capabilities are what set experienced SharePoint developers apart from amateur SharePoint users.

Our column will be fairly simple, but useful nonetheless.

Column Name: Grad Date | **Type:** Calculated (calculation based on other columns)

Description: Grad date generated 30 days from start date.

Formula: It is here where the calculated column takes form. Those of you who have used formulas in Excel are already familiar with this function, although the SharePoint form is not quite as sophisticated, and cannot reach individual cells of other items. The Calculated column returns information based upon the contents of fields in other columns (of the same item). An easy example would be to display the status of someone's PT test as "Failed" if they scored below a 75. It could that simple, or it could incorporate the minimum requirements for individual fitness components and Male/Female. It can also be based off other calculated columns.

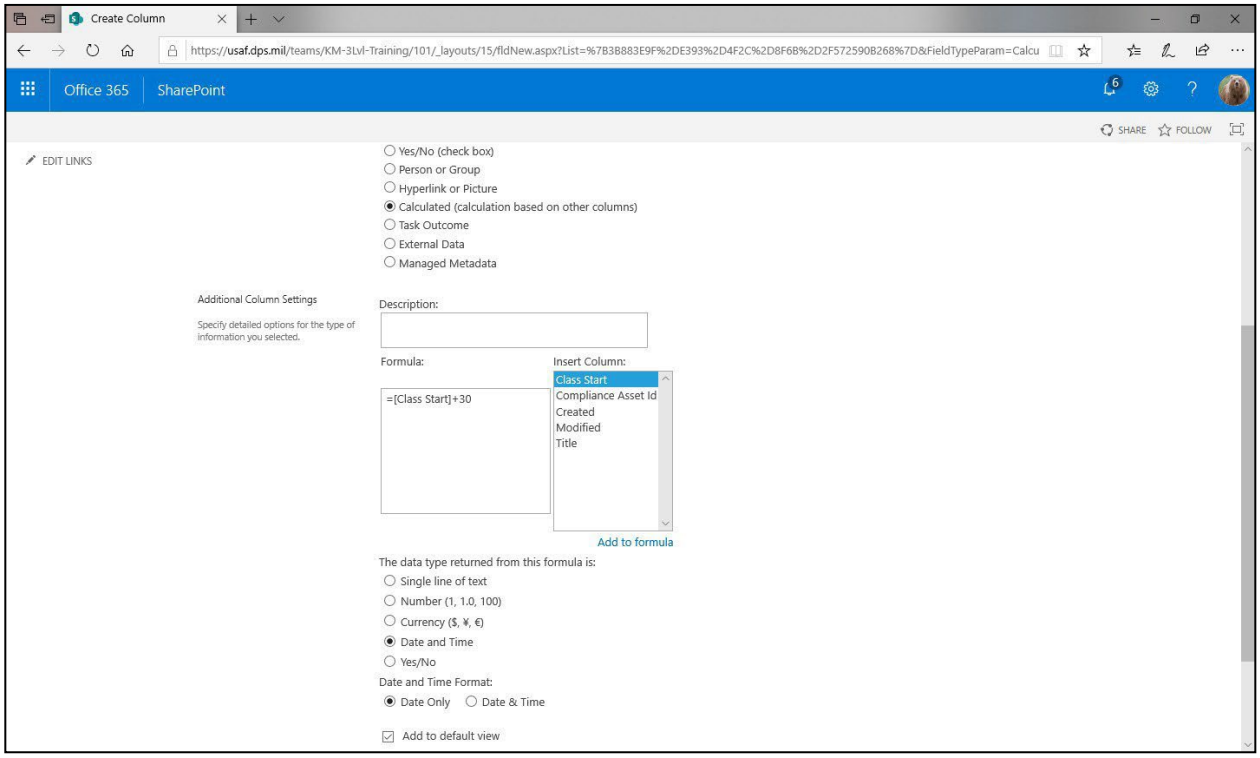
In our example, we simply want to save users time when they enter a new student, so we'll use a calculated column to automatically calculate their graduation date. To do so, enter the following formula in the white text box:

```
=[Class Start]+30
```

We created the Class Start date earlier, but SharePoint stores this as a number. Each day is equal to 1 (beginning with December 31st 1899 at 11:59:59pm), so we want to add 30 days to the date integer that exists for whatever the class start date may exist for each individual student. Which is what we've done.

Next, we need to specify the format in which we want SharePoint to present this. If we output the answer to our formula as a single line of text or a number, we will get the number of days since 31DEC1899, which likely isn't helpful. Currency will return that same number, but with a dollar sign and two decimals, which isn't a substantial improvement. Instead, "Date and Time" is what we want to select, as that is usable. A second Date and Time Format option will appear, simply leave "Date Only" selected.

NOTE for Experienced Excel Users: SharePoint's calculated columns can utilize the [Today] and [Me] functions, but must first be tricked into believing these are columns. As such, create a column labeled "Today" or "Me" before creating your calculated column using the function. Create the calculated column, then delete the "Today" or "Me" column. The formula will work as intended.



Click “OK” at the bottom.

We should now have five columns; Title, Last Name, Status, Class Start, and Class Grad. We should also have 1 item, “Dave” with the other fields blank, except for Class Grad because that computes automatically based on the empty Class Start field.

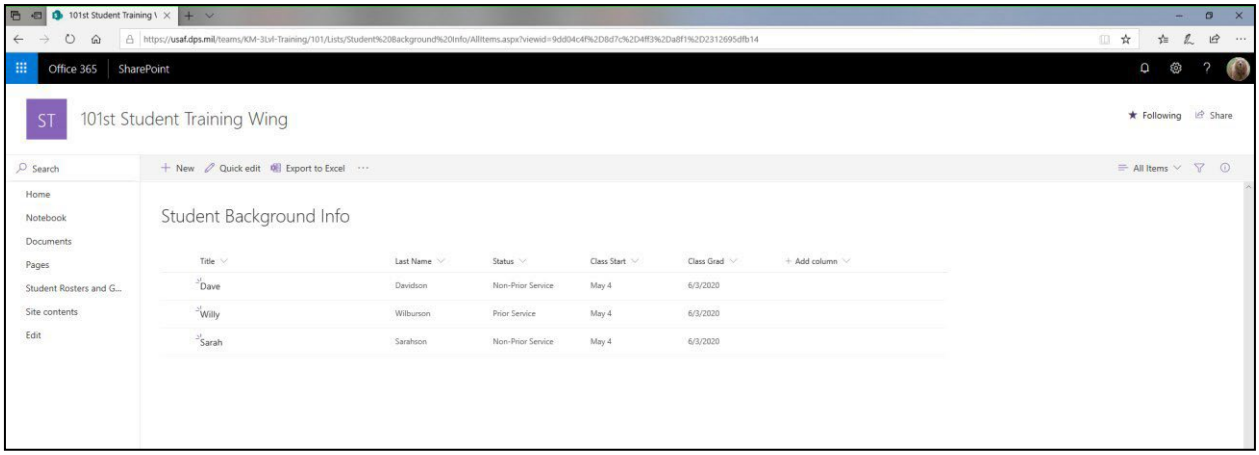
Let’s edit Dave’s information

Hover your mouse over his name, then click the three vertical dots to open the Actions menu. Next, click the “Edit” option from the drop-down menu. A pane will appear from the right-side of the screen, fill in the information as follows:

Title: Dave | **Last Name:** Davidson | **Status:** Non-Prior Service | **Class Start:** 4 May 2020

Then click “Save”.

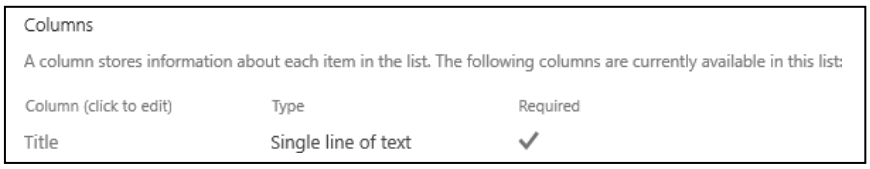
Create two new items, filling out all fields, with one having a status of “Prior Service” and one having a status of “Non-Prior Service. Once done, you should have something similar to the image below:



As you can see, the Title column stands out as illogical. We’re using it as a First Name, but a person’s title typically refers to Mr., Mrs., Dr., Honorable, etc. Let’s mitigate this lack of clarity by modifying the column’s name.

Begin by accessing the Settings menu (cog/gear) icon in the top-right of the site. Select “List Settings”.

Next, locate the Columns section midway down the page, and click “Title” (see image below).



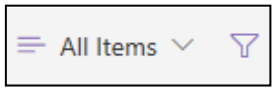
Modify the column name from “Title” to “First Name”. Click “OK”.

If we return to our list (click the large text “Student Background Info” at top of the page, to the right of the teal SharePoint logo) we’ll be able to see our modified column in action.

That’s the basics of how to create list items/content and modify columns. Let’s now move into List/Library Views.

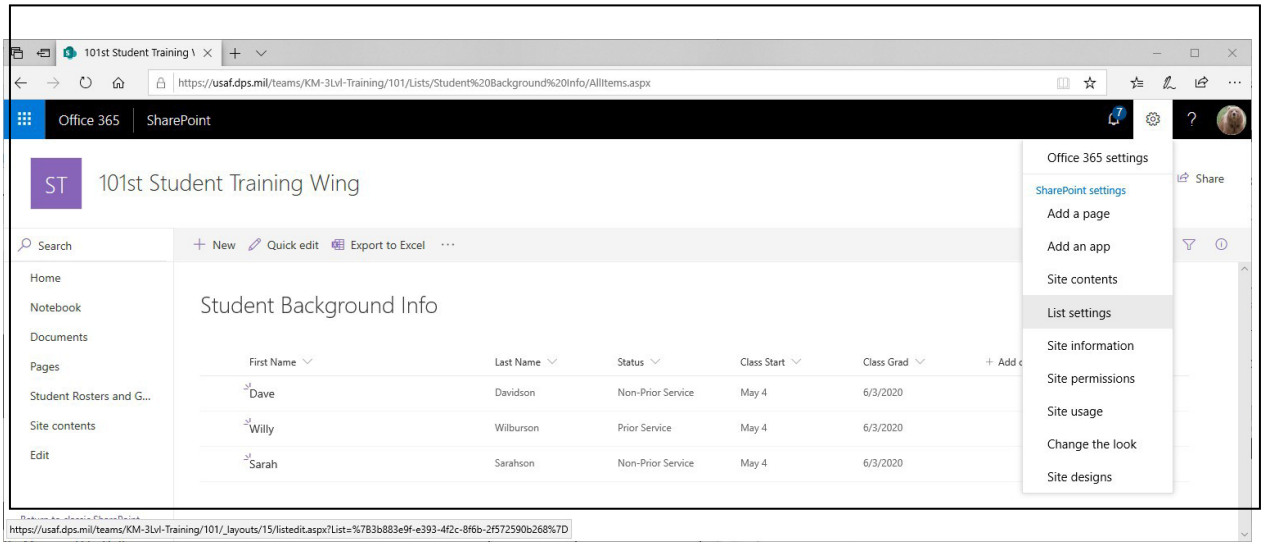
Views: SharePoint lists/libraries are often massive collections of items/documents. As such, it can be difficult for users to locate information more relevant to them. Views provide a way to tailor the presentation of the information (list items, or library documents/files) to their own, more manageable needs. This allows two different users to make very different uses for the same list, while minimizing (or eliminating) the issues of managing two different collections of information that overlap (think of a Venn diagram).

To see how these work, let’s create two in the steps below.

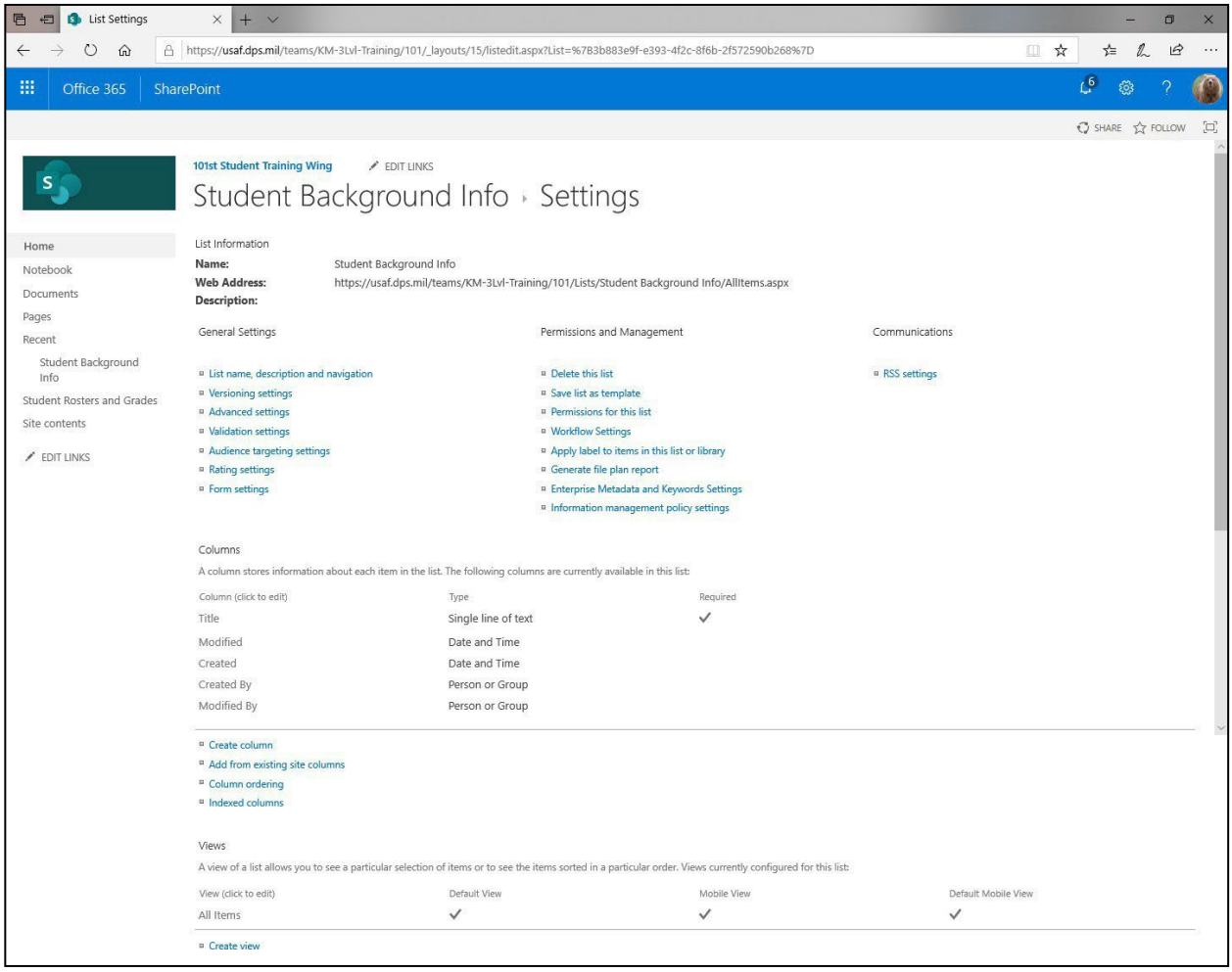
While we can flip between, and edit views using the 

button in the top-right of the list, it cannot create a new view.

Instead, we will need to access the List Settings to create a new view. To do so, click the Settings menu (cog/gear) icon in the top-right of the SharePoint window.

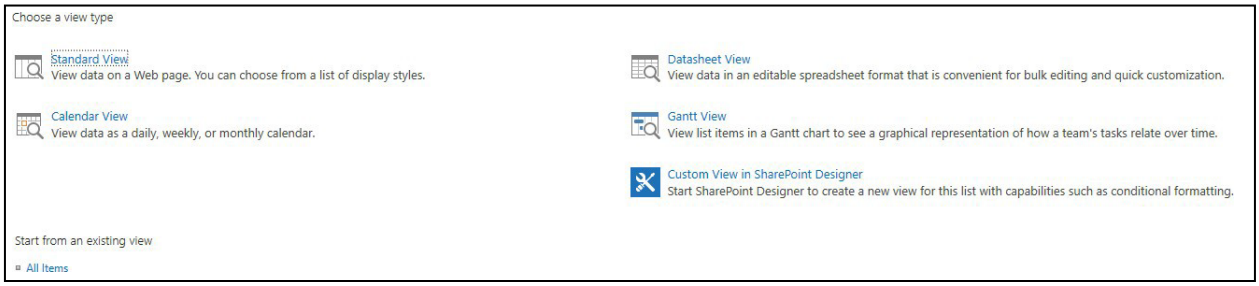


Scroll down to the bottom (we’ll discuss the List/Library Settings later). Locate the Views Section, then select the blue text “Create View”.



As you read through the different types of views, it may be prudent to mention that lists are simple tables that SharePoint renders into a format visually appealing based upon the format that we demand. Calendars, Announcements, Tasks/Links lists are all just differently packaged lists.

In our scenario, we want to first create a Standard View. Standard views are the default, aesthetically pleasing view most users commonly interact with on SharePoint. Click “Standard View”.



Seeing as we already have a Standard View that shows us all the Students in our Student Background list, let’s create a Filtered Standard View. This will allow us to sort out entries we are not interested in reviewing based on criteria we define. Let’s operate on the mindset that we want to only see Non-Prior Service students.

View Name: This should be concise but clearly communicate its purpose. Let’s label ours “Non-Prior Service Students”

Make this the default view: Leave this unchecked, most users accessing this list will likely want to see *all* the students we’re tracking.

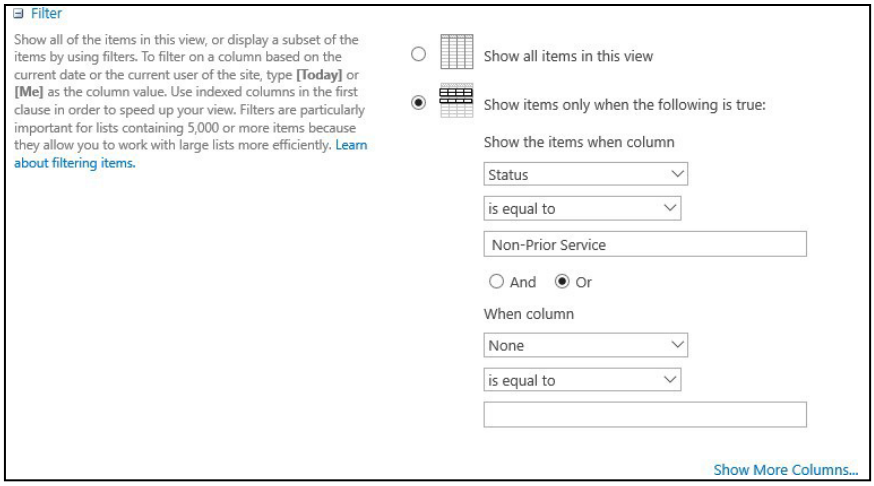
Audience: While you do not want to overcrowd the views available to users, this is one that likely more users than just ourselves would benefit from having access to, so let's leave this set to "Create a Public View". If this list were one we didn't "own", or it was an isolated instance of wanting to view information in a certain format, we may want to create a personal view for ourselves.

Columns: Here we can specific which columns we wish to see (and which we do not care about viewing), as well as the order. Seeing as this list will only contain students whose status is "Non-Prior Service" we don't need to see the Status column (as all the student's statuses should be the same, and thus not matter to us). Uncheck the box to the left of Status.

Scroll down to the Filter section.

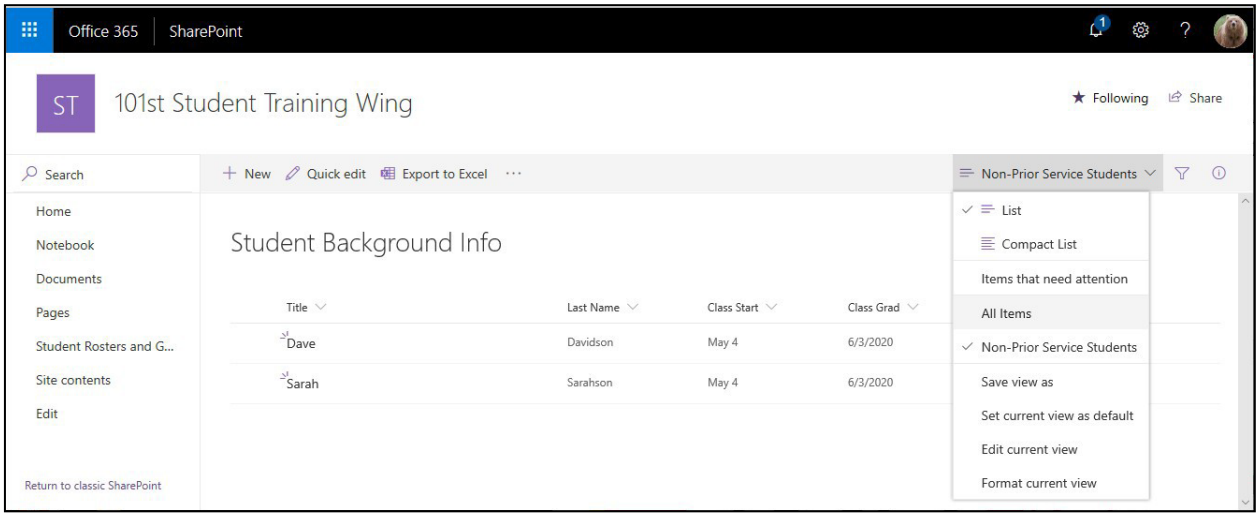
Filter: Using a filter can significantly affect users' ability to find meaningful information. The choice column we created earlier, through its enforcement of standardized formatting of selectable data points that greatly enhance the functionality of filters.

Here we can specify the exact criteria we want certain columns to contain (or exclude) in order to be visible/hidden. For our scenario, mirror the information in the image below. We are effectively telling our SharePoint List View to only show list items (entries) that have the exact text "Non-Prior Service" in the Status column (field). All other items will be hidden.



Once the filter section of your view looks like the one above, scroll down and click "OK".

You should now only see two of your three list items/students (see picture below). If we wanted to see all the students again, we simply click on the three lines to the top-right of the list, which also features the name of the View you're currently… viewing.



Click the View Options, then select “All Items”.

You should now see all three students we created earlier, as well as their status, which we chose not to show in the other view.

We have one more aspect to experience in regards to Views before we move on. Create another view by clicking the Settings menu (cog/gear) icon in the top-right of the site. Select List Settings.

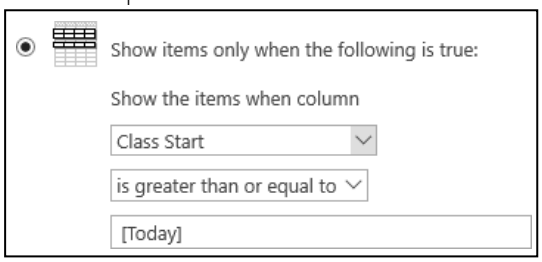
Once the List Settings page loads, scroll down, to the Views section. From here we could edit existing views (All Items, or Non-Prior Service Students) by clicking on the view’s name. However, we want to create a new type of view, the Datasheet view, so click “Create View” at the very bottom.

Select the Datasheet View type. This will allow us to present our list in style similar to an Excel Spreadsheet. Additionally, it will enable users to quickly input data without having to navigate around the menus and options screens in the New Item/Edit Item forms.

Let’s make a view so that we can quickly enter in new students, while hiding students that have already started class.

View Name: New Students – Quick Entry | **Default View:** No | **Audience:** Create a Public View

Columns: [no changes] | **Sort:** Class Start | **Filter:**



Scroll down and click “OK”.

Click “Quick Entry” to make use of this function.

Alternatively, we can download and open the list with Excel via the “Export to Excel” button.

Now that we understand the purpose and implementation of List/Library Views, let’s spend a minute on List Settings. Access List Settings via the Setting menu (cog/gear) icon in the top-right of the site and select “List Settings”.

While Most of these options are self-explanatory, Save List as a Template warrants further discussion. Due to permissions, having the ability to successfully create a template for a list may be limited or restricted. With this option, you can effectively copy your list (or library) for future use. This can find purpose in archiving an old, full list and recreating a new, blank list; in duplicating a sophisticated list/library used by one unit onto another unit’s site; or in preserving a list/library used only seasonally.

We’ll be returned to List Settings for Student Background Info.

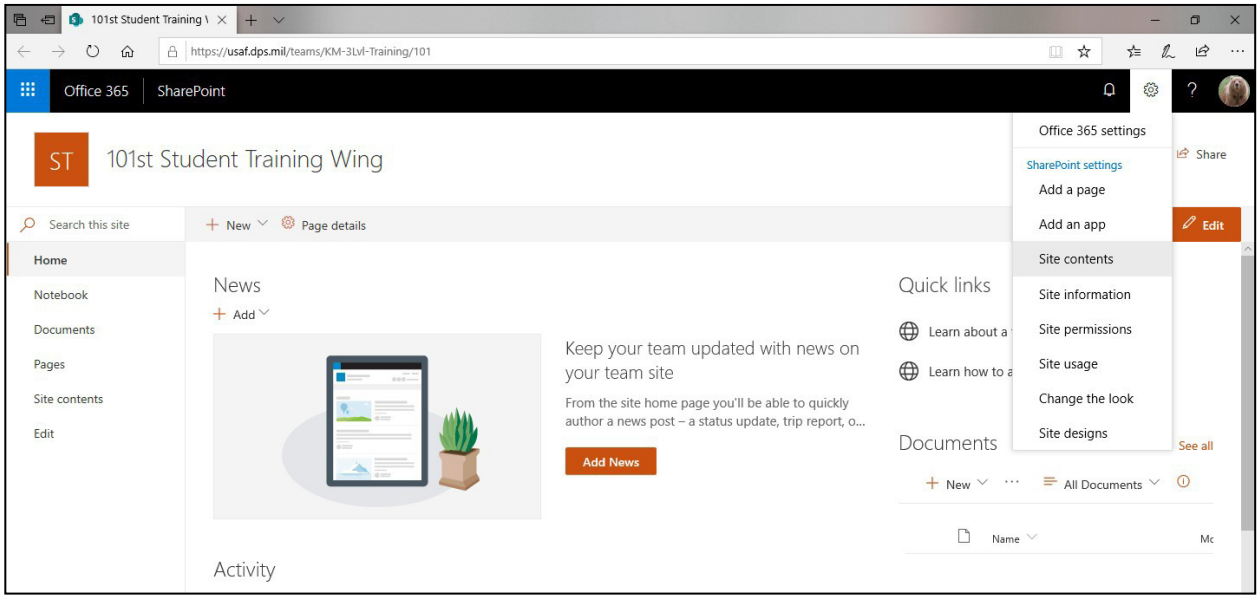
That concludes Lists, List Items, and Views.

Document Library

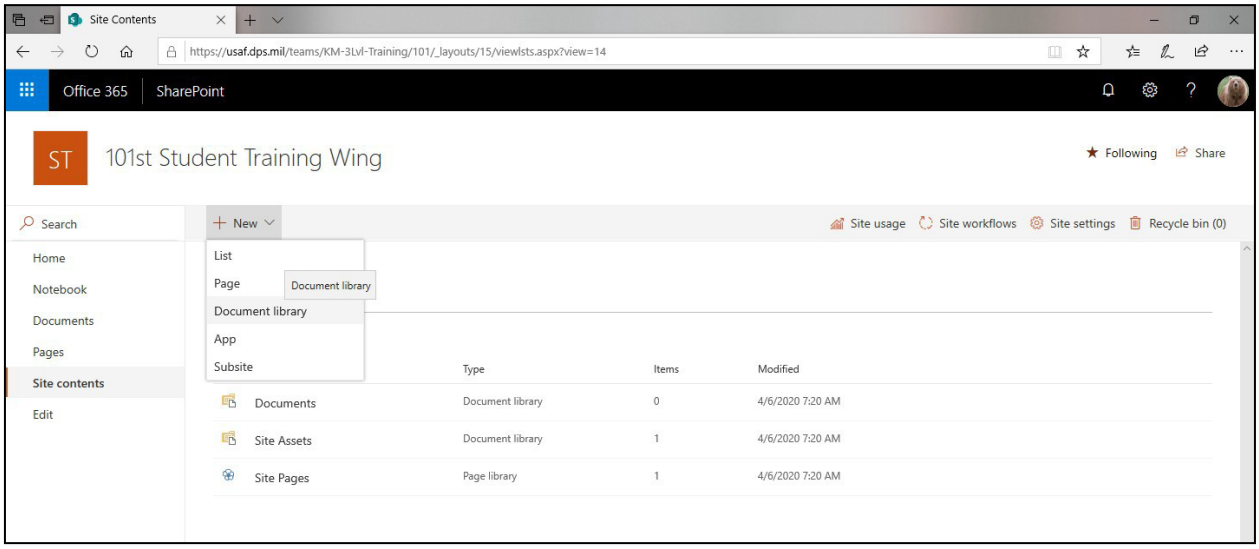
Return to the front page of your site by clicking the 

in the top-left of the page.

Let’s add a library. There are several ways to do this. Let’s select the Settings Menu via the gear/cog icon in the top-right of the site. Next, click “Site Contents”. It is here that all lists, libraries, apps and subsites that exist under the current site will be visible.

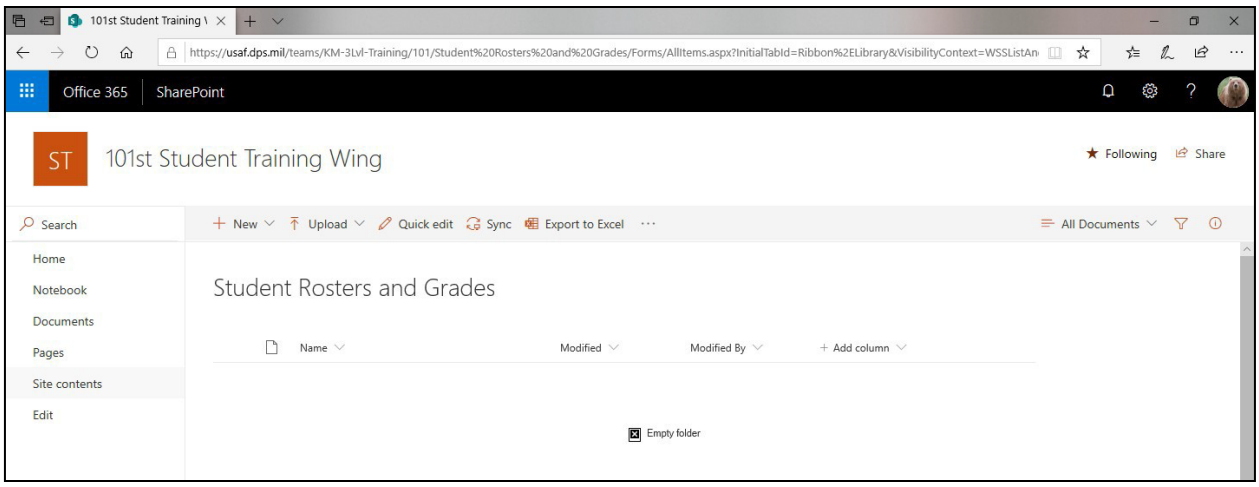


The page will reload.

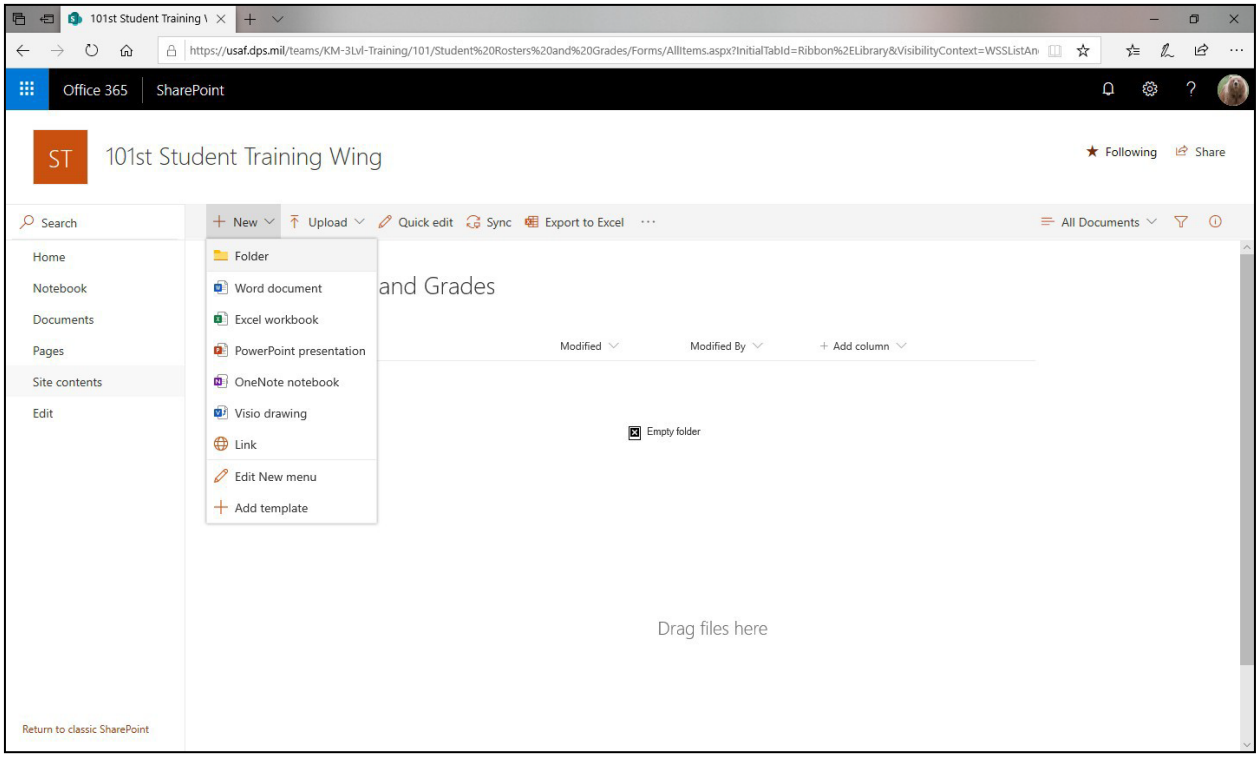


Click the button marked “+ New” and select “Document Library” from the drop-down menu.

Name your library “Student Rosters and Grades”. The name is descriptive enough, so let’s skip Description. Leave “Show in Site Navigation” checked, as we want



Click the “+ New” button within the document Library and select “Folder” from the drop-down menu.

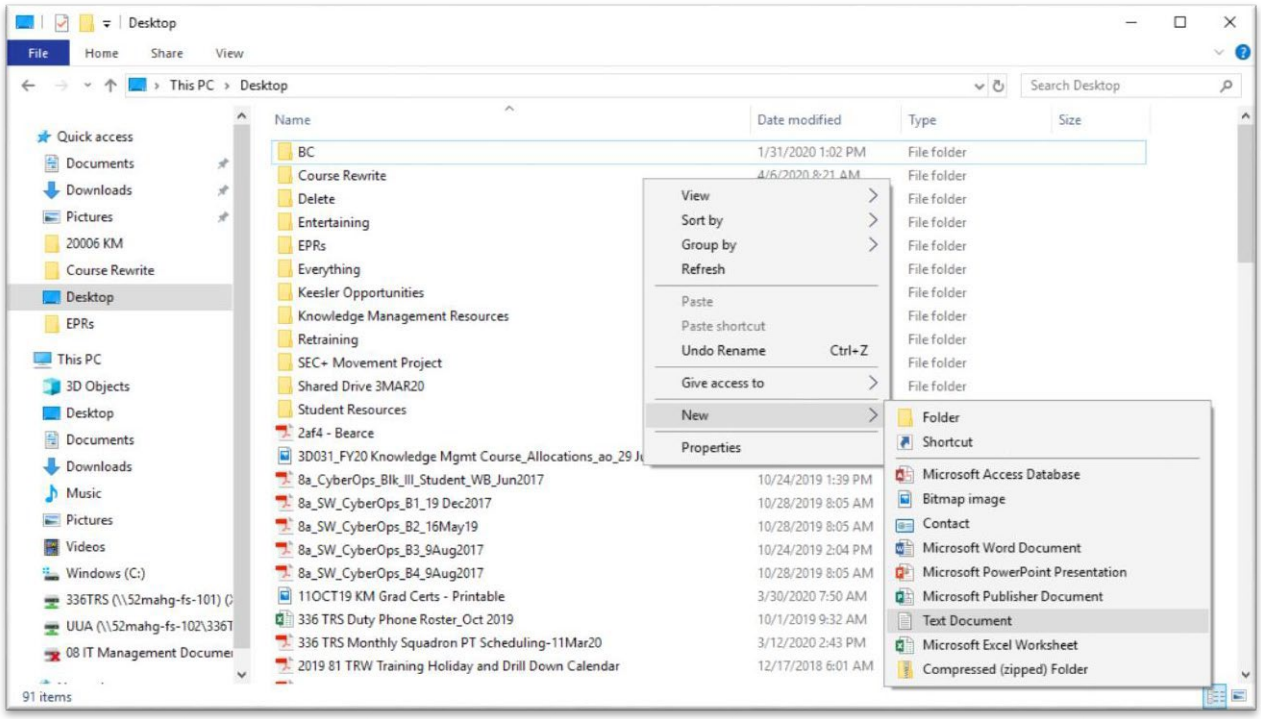


Name the folder “KM 20009 Class”.

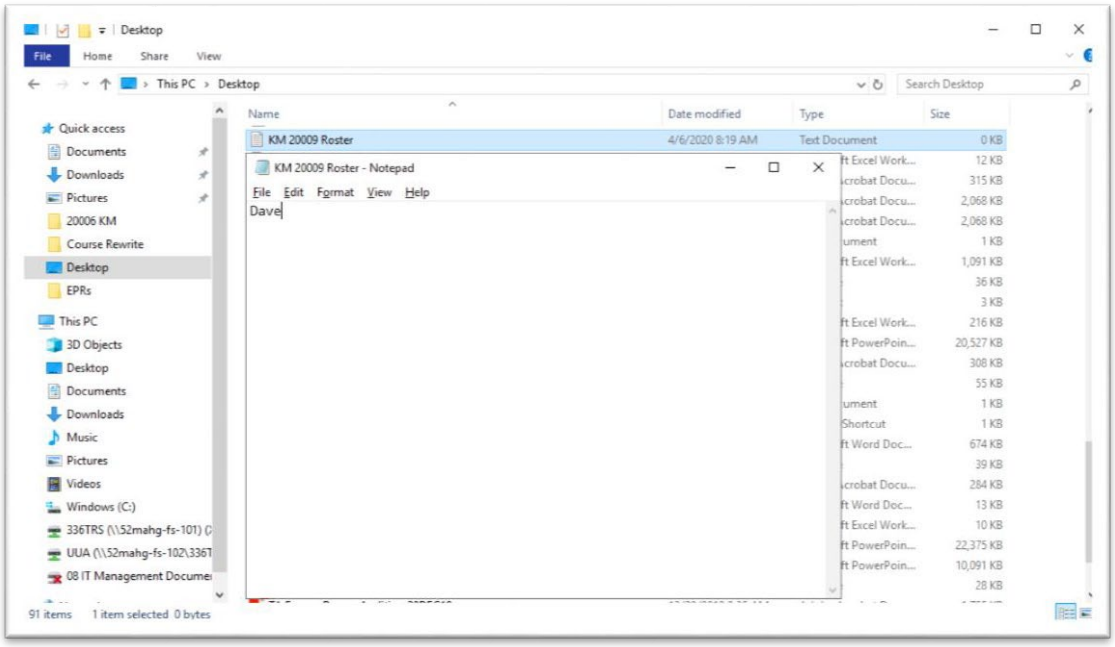
Repeat step # to create another folder named “KM 20010 Class”.

Now we need to add some documents to our folder.

Go to your desktop, right-click any empty space and select “New >” then “Text Document”.



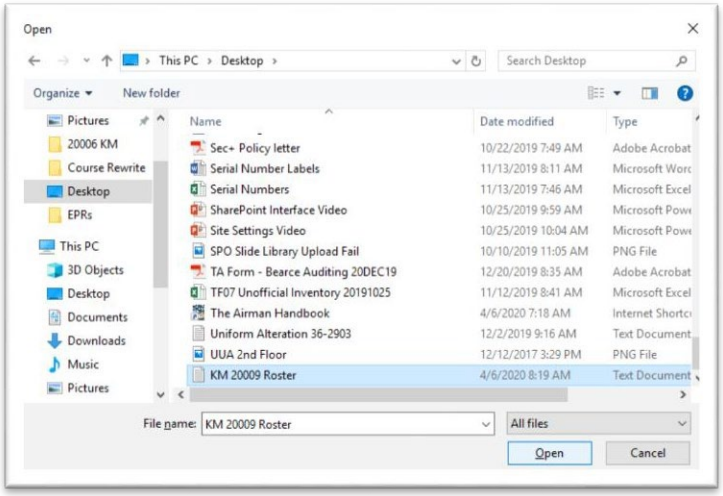
Name your text document “KM 20009 Roster”. Open your text document, enter some text (so it isn’t a blank document) then Save and close the document.



Within SharePoint, click the KM 20009 Class folder.

Next, click the “Upload” button and select “Files” from the drop-down menu.

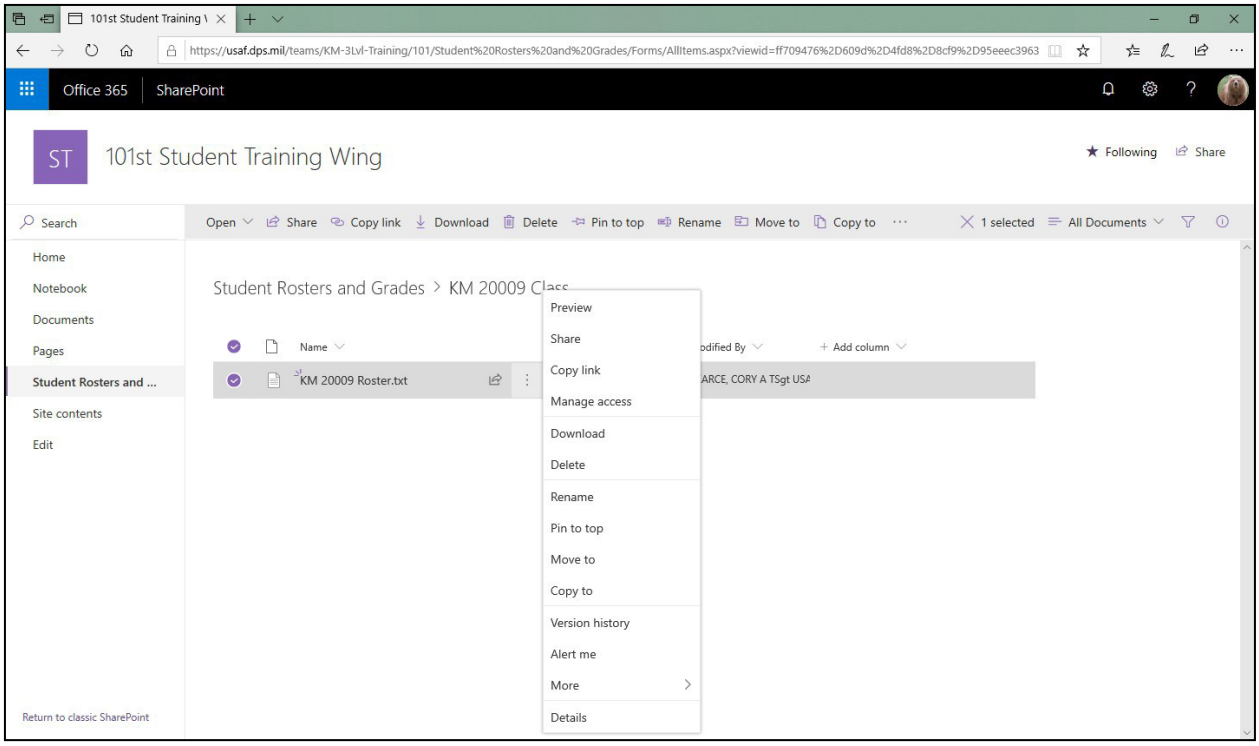
Locate the text document “KM 20009 Roster” that you just created, click it, then click the “Open” button at the bottom-right of the pop-up window.



You should now have KM 20009 Roster.txt listed as a document within your KM 20009 Class folder, inside your Student Rosters and Grades Library.

SharePoint offers a lot of different actions to perform on an individual document. You can access these via hovering your mouse over the row of the document, and clicking on the three vertical

dots (generally to the right of the document's name, see picture below).



Most of these are self-explanatory. A few of these, however, warrant additional explanation.

Let's begin first the most easy to understand: Delete.

Delete: Let's practice by deleting KM 20009 Roster.txt; hover your cursor over the name of the document, then select the actions menu via the three vertical dots. Next, from the menu, click "Delete". A popup window will appear asking you to confirm the action. Click "Delete". The popup will disappear and your item will be gone.

But how do we get an item back? A common request for KMers on the Sustainment team, are to recover an accidentally deleted document or list item. It's actually very simple to locate and bring the file back. We'll take a small detour to learn this feature, known as the Recycle Bin and located on every page. Additionally, Site Collection Administrators have access to a Site Collection Recycle Bin which all other recycle bins "feed" into.

Recycle Bin: Begin by clicking the "Site Contents" option on the left-side of the site (known as the "Quick Launch").

Next, click on the "Recycle Bin" button located on the far right of the menu bar.

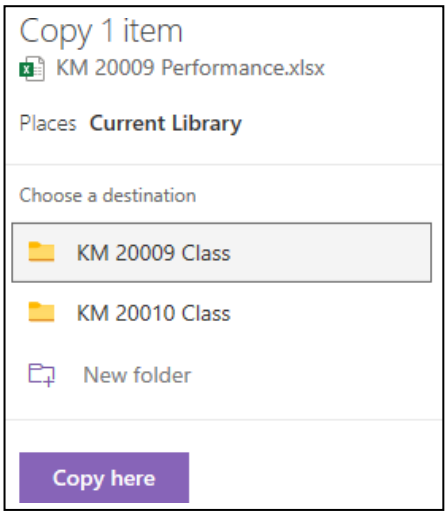
The page will reload once more and a list of all content deleted [within the last 30 days] will now be displayed below. Click the circle next to "KM 20009 Roster.txt" and then click the "Restore" button above in the menu bar.

You have successfully recovered a deleted item via the Recycle Bin. Now return to where the document was originally located; Student Rosters and Grades > KM 20009 Class.

And let's return to the actions menu by hovering your mouse over the row of the document, and clicking on the three vertical dots (generally to the right of the document's name, see picture below).

Move To/Copy To: These two options allow us to move content between other Libraries or folders within a site.

Let's practice the Copy To function by using the scenario that our KM 20009 Performance.xlsx is very good, and we want to save the trouble of creating it anew, so we'll simply copy it to KM 20010 Class folder, and then rename it. Thus, we will have two copies of a properly formatted Excel workbook.



Begin by selecting the "Copy To" option from the Actions menu.

A Copy Item pane will appear on the right side of the screen; we need to specify the library and folder/subfolder we wish to place the copy of this document into. Select "Current Library", then Select the KM 20010 Class folder (the older folder we created earlier). Next, click the colored "Copy here" button.

Your KM 20009 Performance.xlsx file should now be copied to the other folder. Use the "breadcrumbs" at the top of the library to navigate back to the parent library/folder (Student Rosters and Grades) so we can access the KM 20010 Class folder.

Once returned to the parent folder (Student Rosters and Grades library), click "KM 20010 Class". Our document, KM 20009 Performance.xlsx, should be visible. Let's change its name so that it properly communicates what it [will] be used for. Access the file's Action menu by hovering you mouse over the file's name, then clicking the three vertical dots.

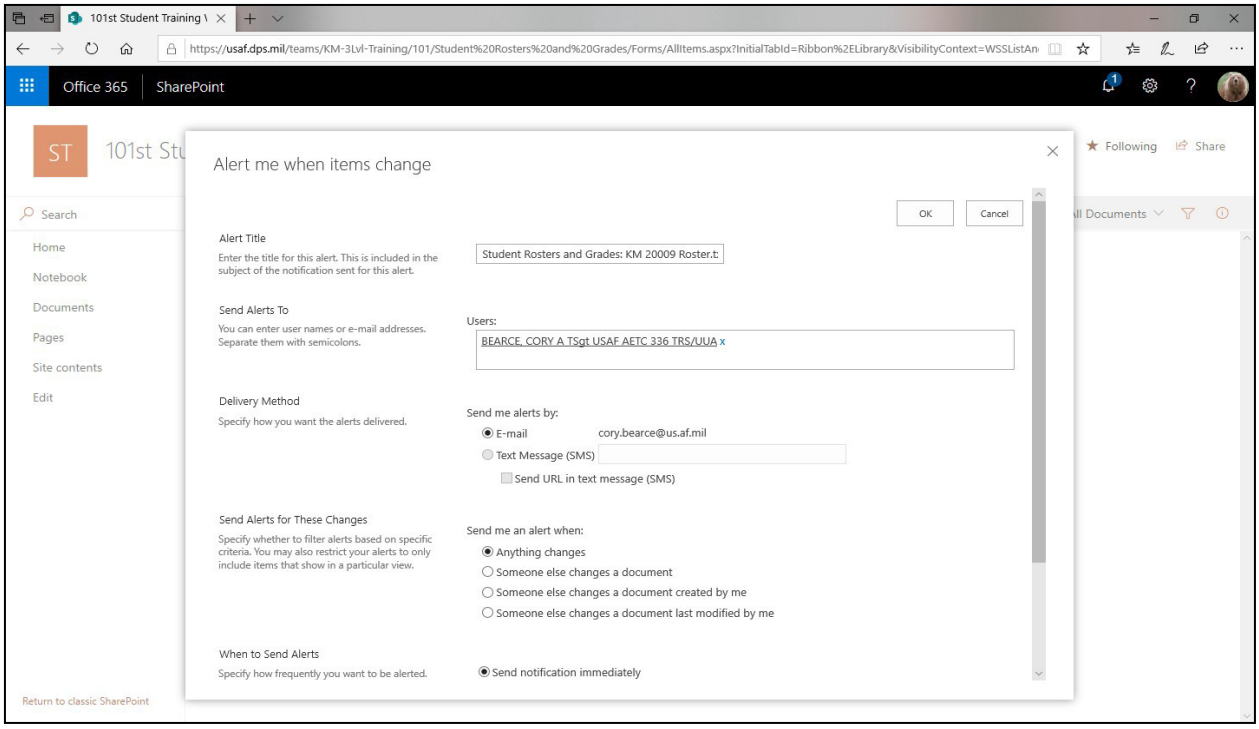
Select "Rename from the drop-down menu. Change the file name to "KM 20010 Performance". Click the "Save" button.

Now that our future KM 20010 class has a template to use for tracking their performance, we can return to our KM 20009 folder and continue exploring the Actions Menu. Use the breadcrumbs (as you did earlier) to return to the Student Rosters and Grades library/folder and then navigate to your KM 20009 Class sub folder.

Let's return to the actions menu by hovering your mouse over the row of the document, and clicking on the three vertical dots (generally to the right of the document's name.

Alert Me: Alerts are automatic email notifications for a list/library or item/document when those entities have been created, edited or deleted.

Select Alert Me from the document's action menu. A popup window will appear (see below).



Name your alert something descriptive yet concise. Identify who you want alerts sent to – do this by typing in the user's "Lastname, Firstname" and separate multiple names via semi-colon.

Go ahead and ensure your name is in this box, it should do so by default. Additionally, include your instructors name as a user.

"E-mail" is the only delivery method that can be selected. Beneath Delivery Method is the option for "Send Alerts for These Changes". This option will allow you to customize the type of changes the recipient wishes to receive. Let's leave it on "Anything Changes". Lastly, you can select the frequency of those changes. If the alert function is being utilized on a List, Library or site with a lot of users, a lot of documents or a lot of activity, it may be more prudent to dial down the frequency of the alerts (such as in a scheduled daily summary, an hour before work ends). Let's set this option to "Send notification immediately" as only you have access to this one document – if someone else changes it, you'd probably be concerned! Now click "Ok" at the bottom of the popup window.

You should be back to your Student Rosters and Grades library.

Now, Let' navigate to your "Student Background Info" List to create Workflow or Flow using Power Automate!

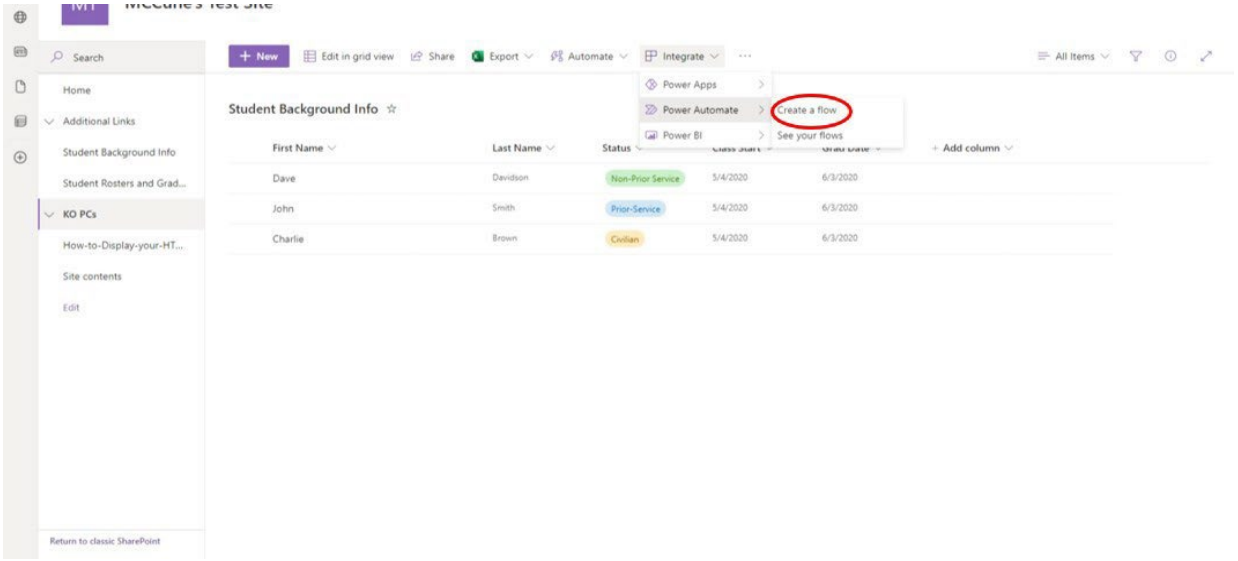
Power Automate is an on-line workflow service that automates actions across the most common apps and services.

You can use Power Automate to automate workflows between your favorite applications and services, sync files, get notifications, collect data, and much more.

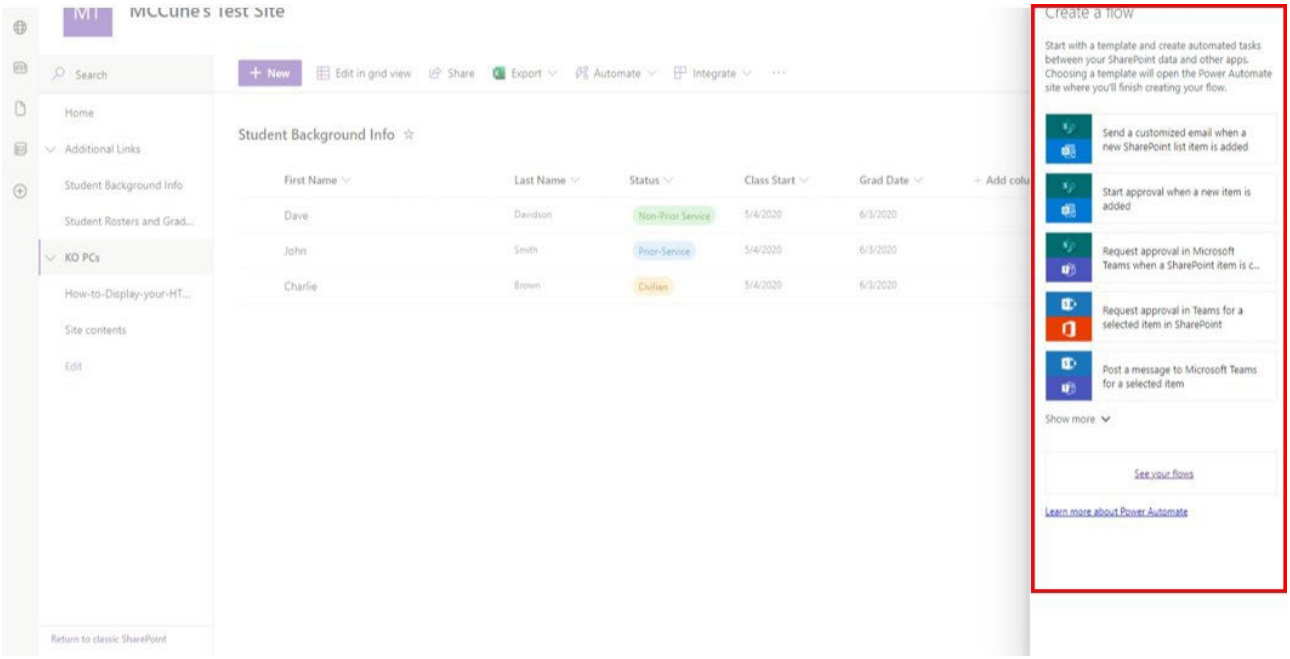
For example, you can automate these tasks:

- Instantly respond to high-priority notifications or emails.
  Capture, track, and follow up with new sales leads.
- Copy all email attachments to your OneDrive for Business account.
- Collect data about your business, and share that information with your team. Automate approval workflows.

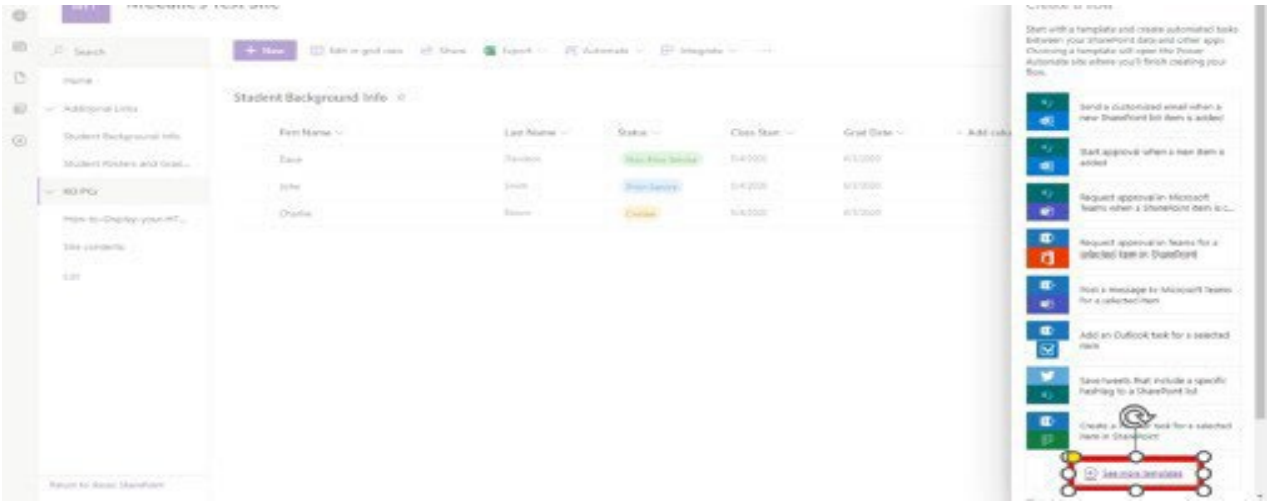
A common use of Power Automate is to receive notifications.



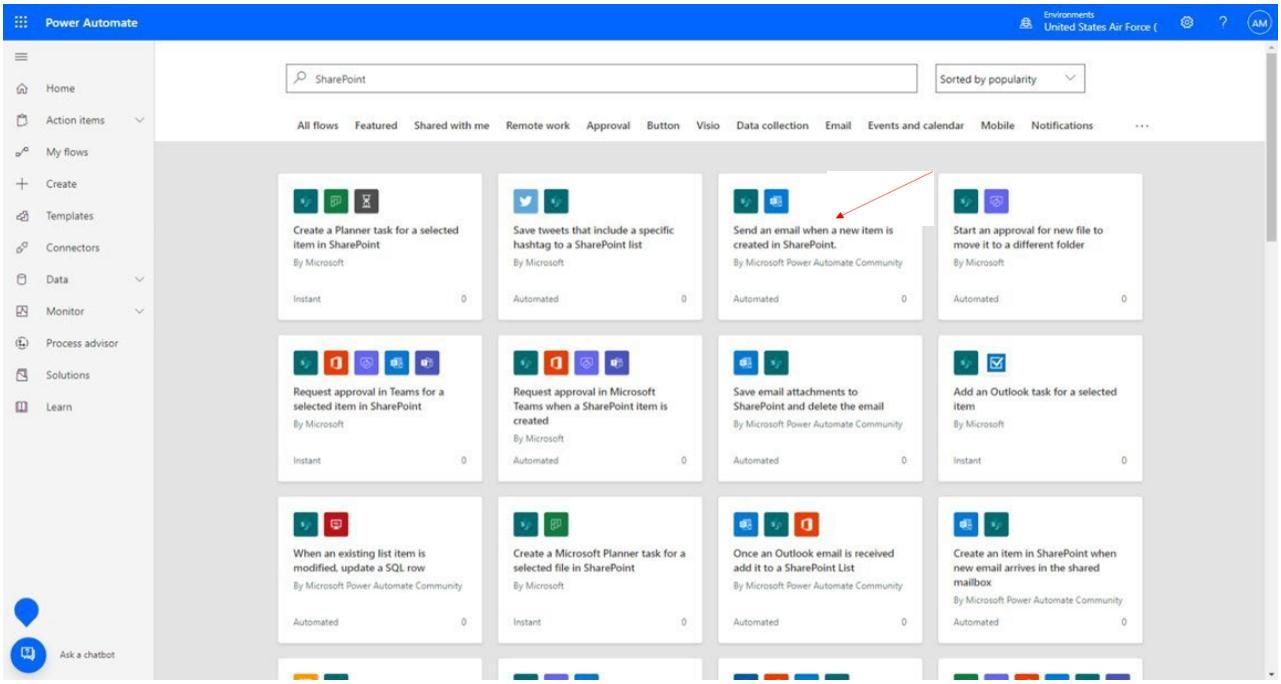
From your "Student Background Info" List Select "Integrate" dropdown
"Power Automate"
"Create a flow"



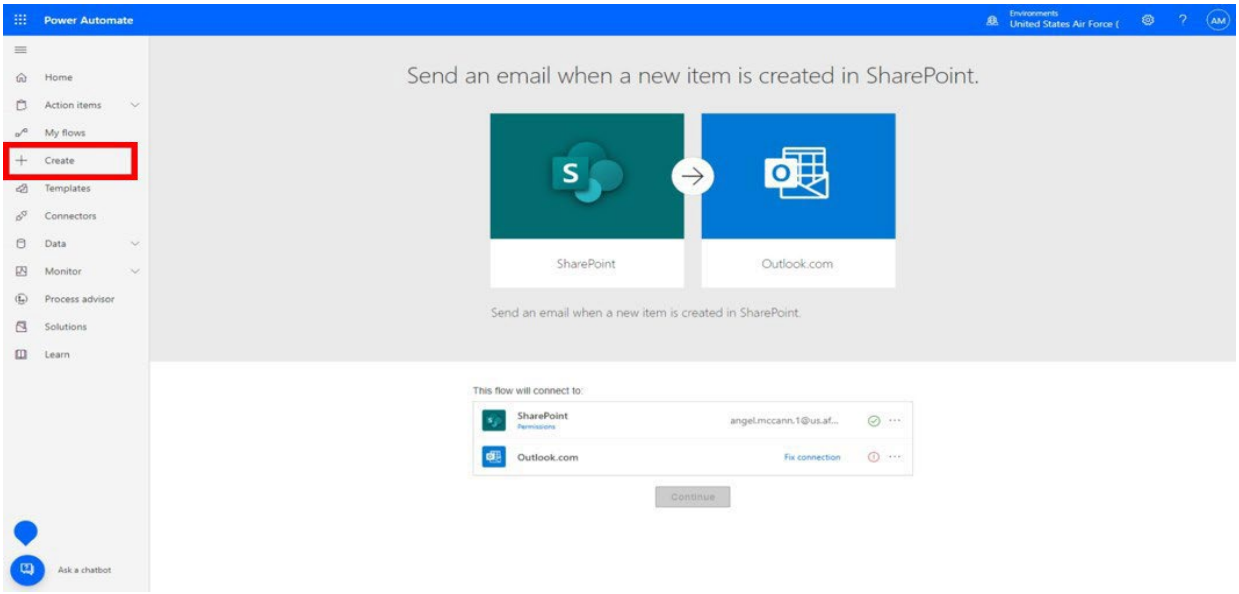
On the right, the "Create a flow" options will appear. You can click "Show more" dropdown to view other options.



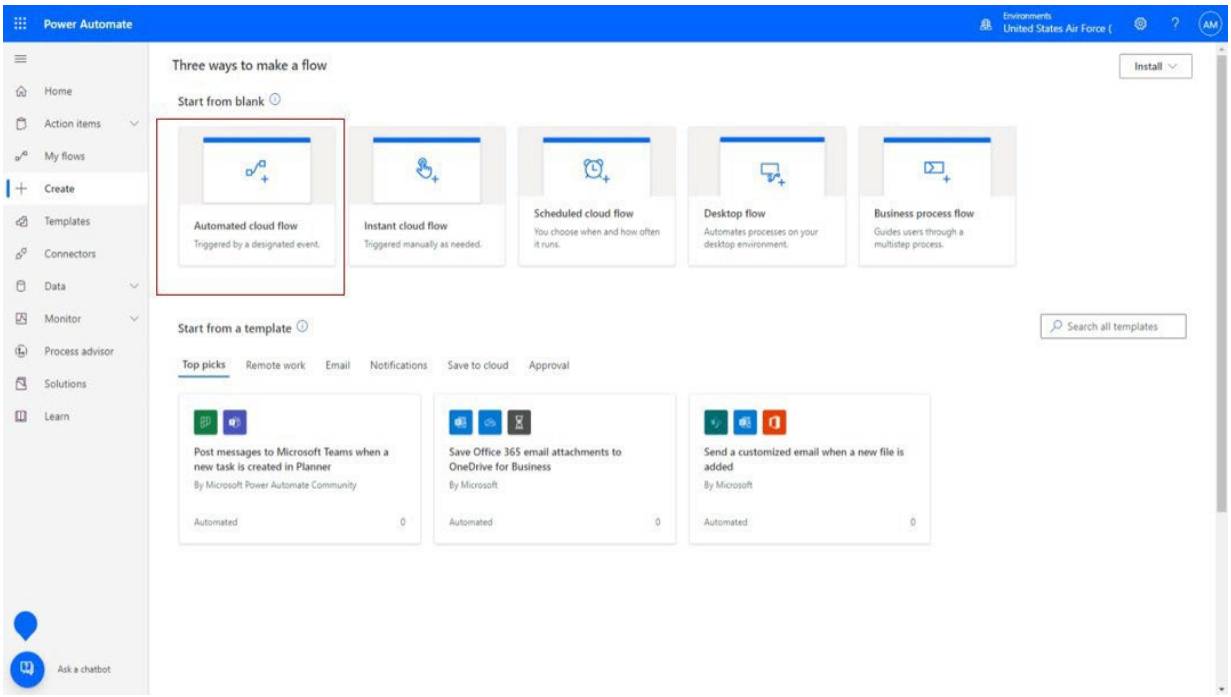
Select the option "See more templates" **A New browser tab will open**



Depending on what you are trying to accomplish there are many templates to choose from
We will use **"Send an email when a new item is created in SharePoint"**



Click "Create"

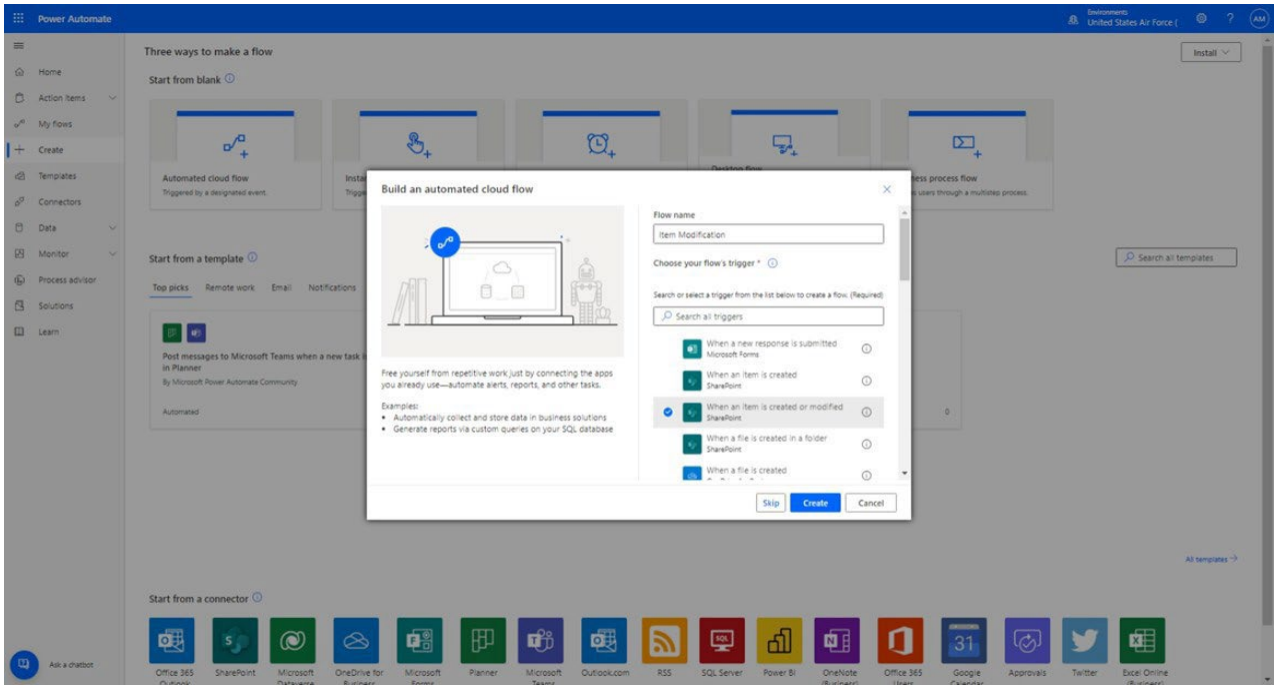


Select "Automated cloud flow"

Every flow has two main parts: a trigger, and one or more actions.

Trigger: You can think of the trigger as the starting action for the flow. The trigger can be something like a new email arriving in your inbox or a new item being added to a list in Microsoft Lists.

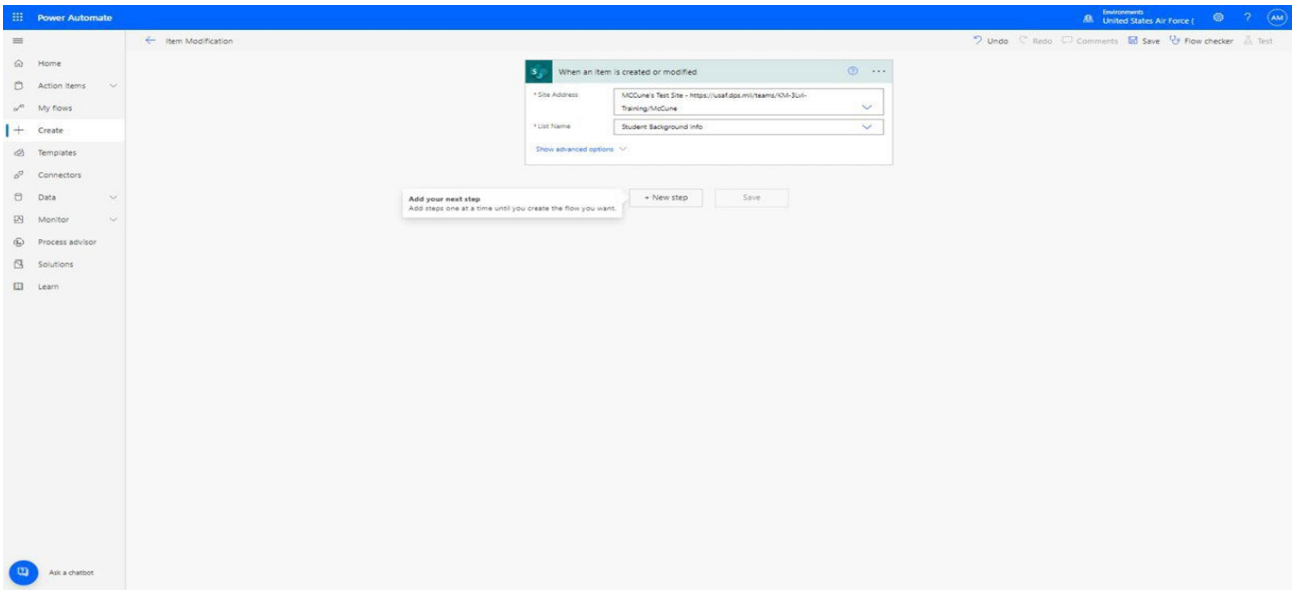
Actions: Are what you want to happen when a trigger is invoked. For example, the new email trigger will start the action of creating a new file on OneDrive for Business. Other examples of actions include sending an email, posting a tweet, and starting an approval.
These concepts will come into play later when you build your own flows from scratch.



Type the "Flow name": List Item Modification

Choose the trigger: "When and item is created or modified SharePoint" and click "Create"

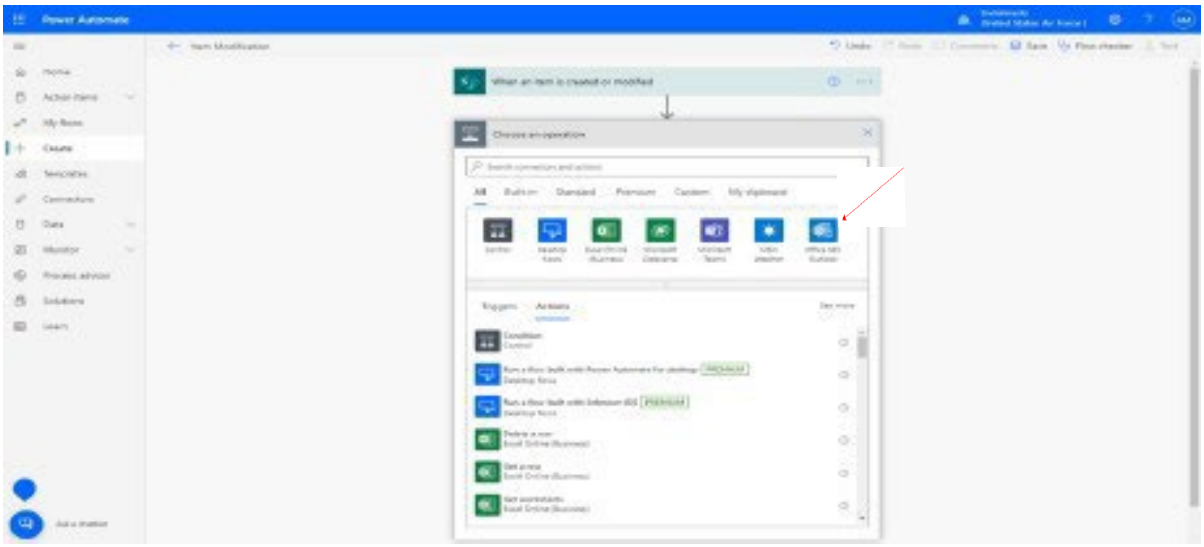
*NOTE: This triggers an email notification when an item is created, and also each time it i modified.



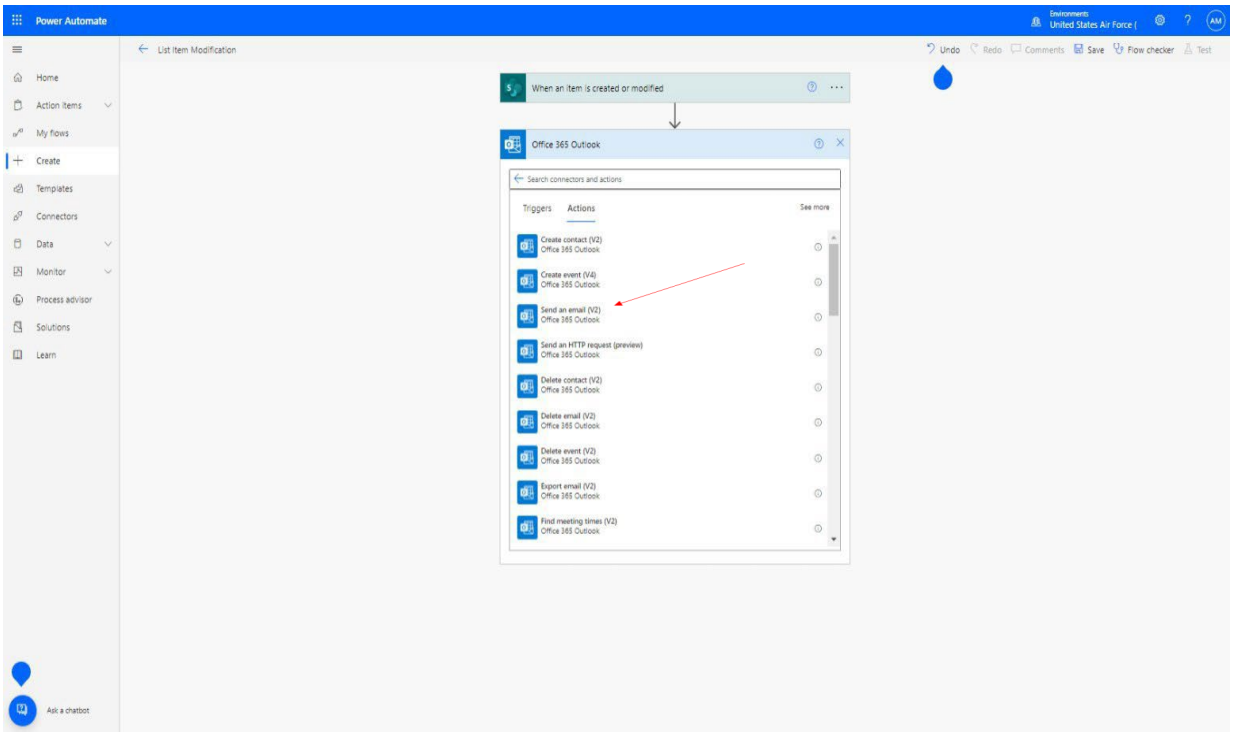
Site Address: Insert or copy and paste your Test Site address:
https://usaf.dps.mil/teams/KM-3Lvl-Training/**YOURLASTNAME**

List Name: Select the "Squadron Background Info and click "+New step"

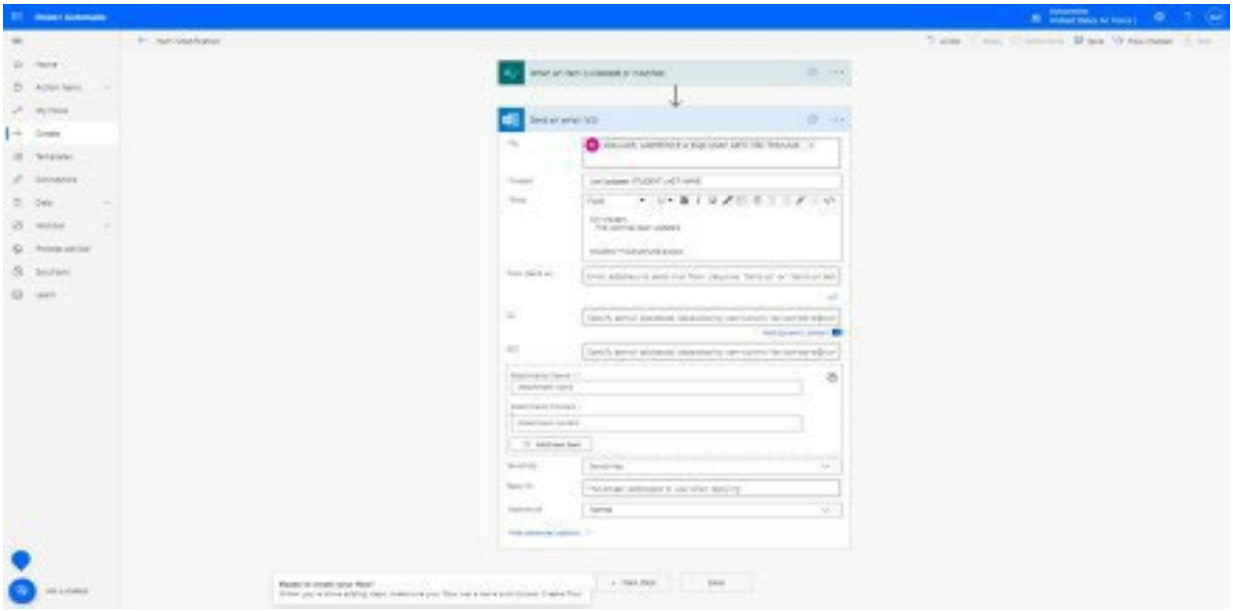
** Trigger has now been created. Now let's add the Action!



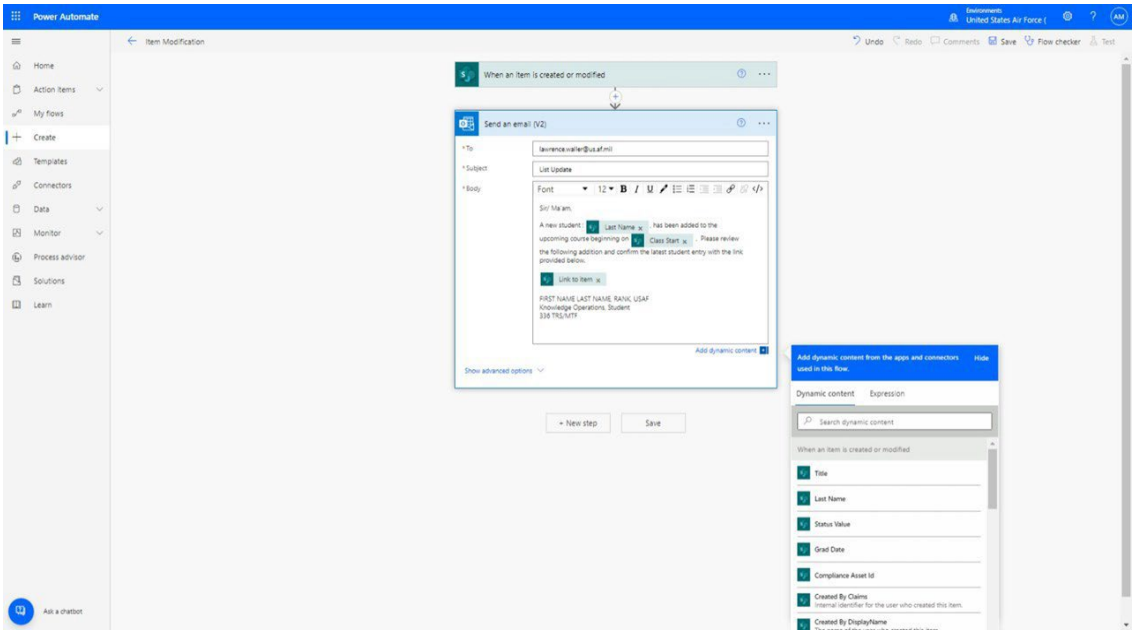
Choose the operation "Office 365 Outlook"



Choose "Send an email (V2)"



Send email To your instructor
Subject: List Modification Update



In the Body Click "Add Dynamic content"
Type the below message and Add the Dynamic content as seen in the above screenshot and in the text below:

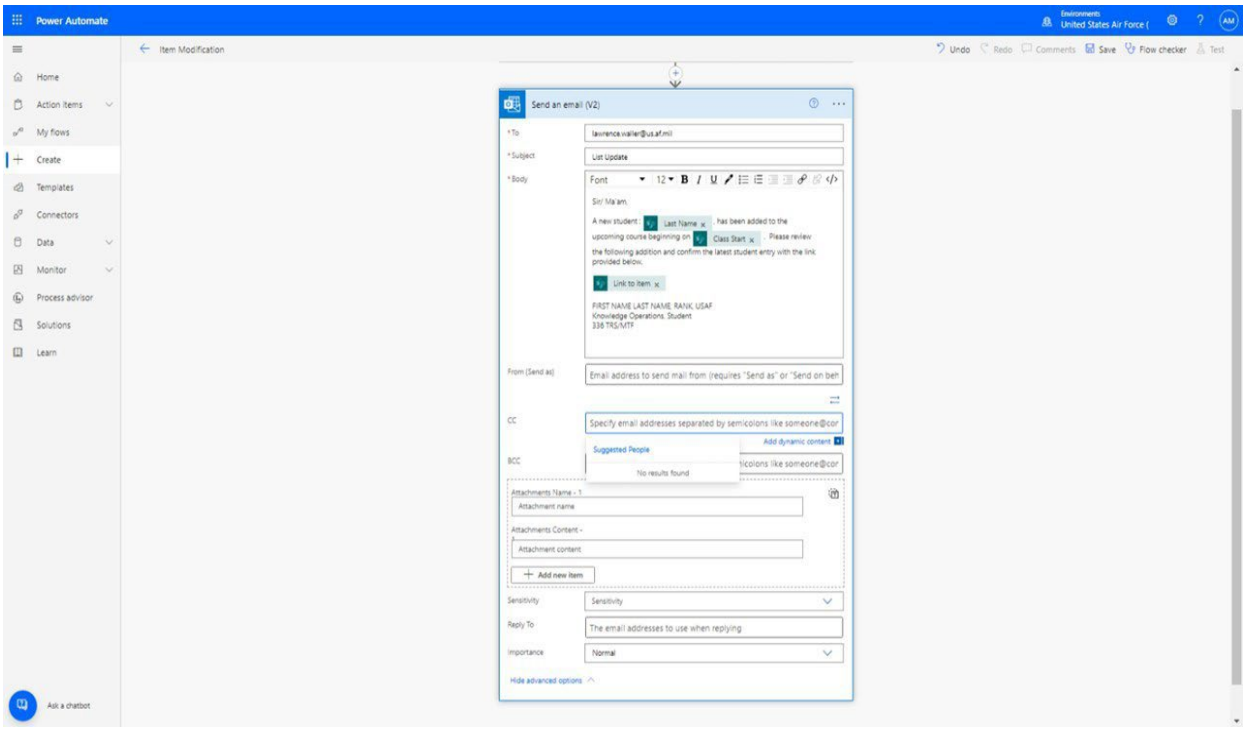
Sir/Ma'am

A new student: "Last name" (dynamic content), has been added to the upcoming course beginning on "Start Date" (dynamic content). Please review the following addition and confirm the latest student entry with the link provided below.

Link to Item (dynamic content)

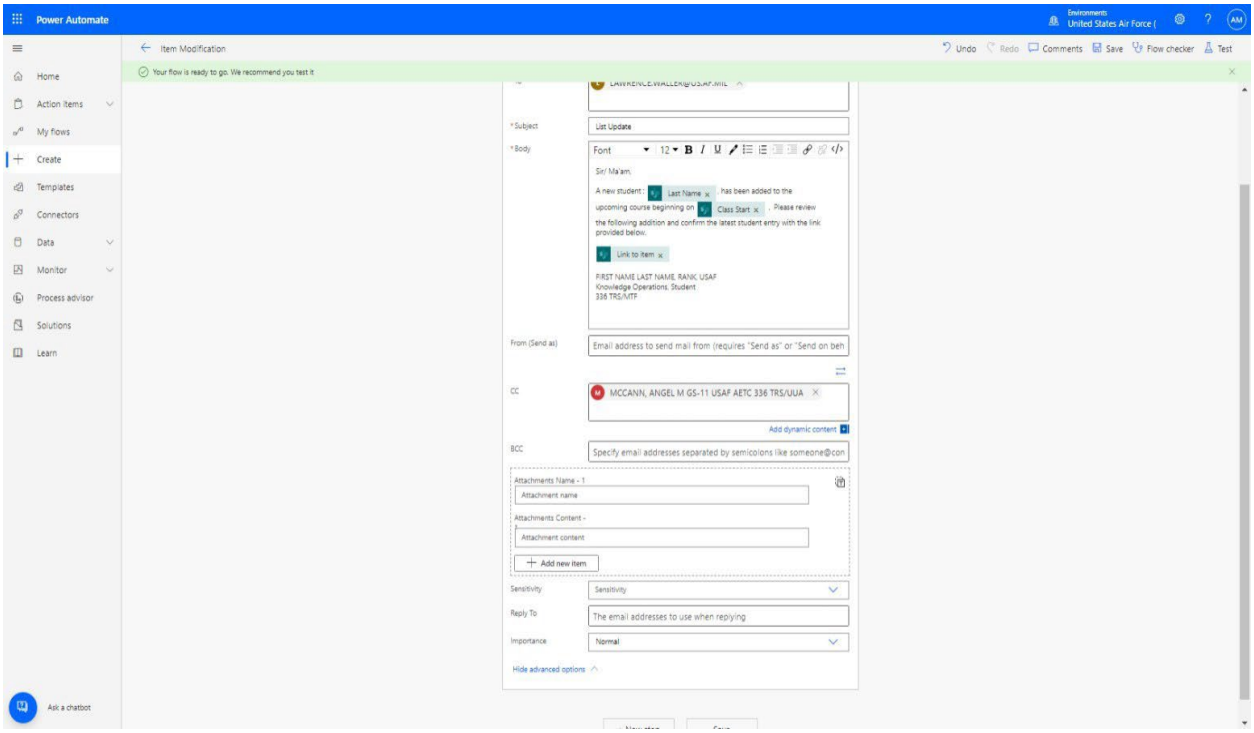
FIRST NAME LAST NAME, RANK, USAF
Knowledge Operations, Student
336 TRS/MTF

Click "Show Advanced Options"



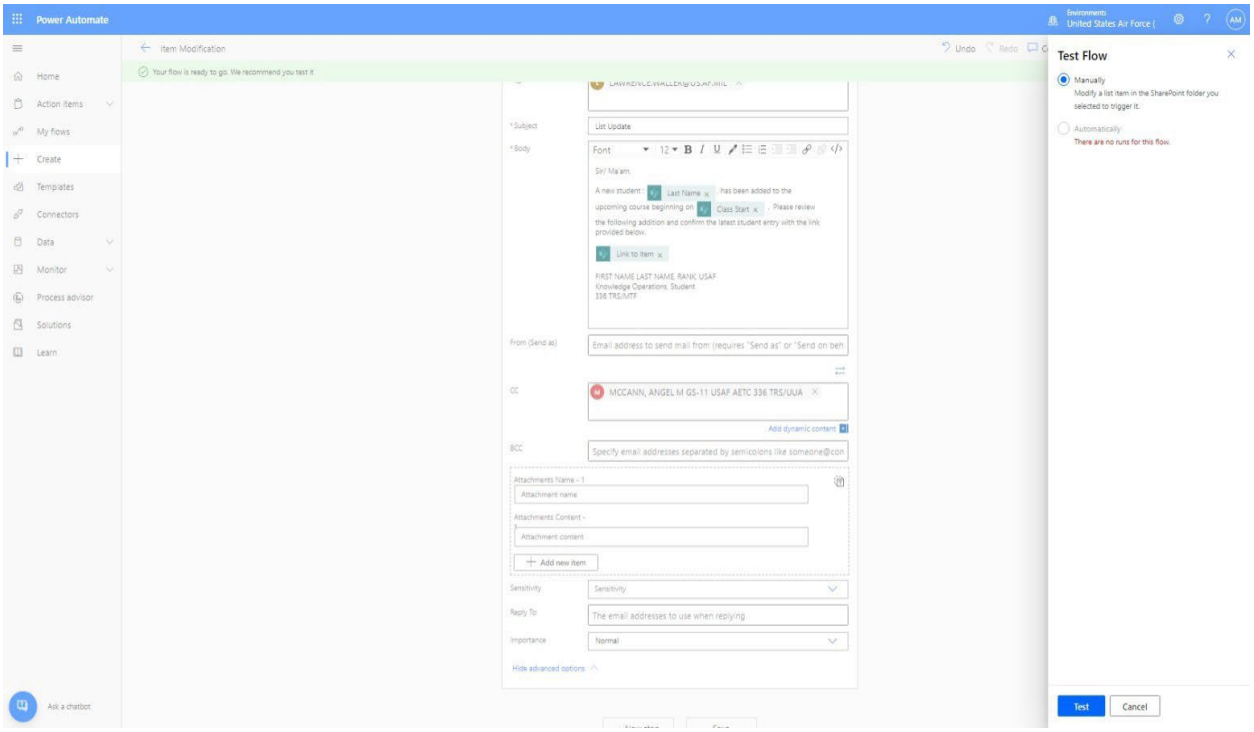
In the "CC" add YOUR .mil email address

*There is additional content you can add to be included in the email notification, i.e., attachments

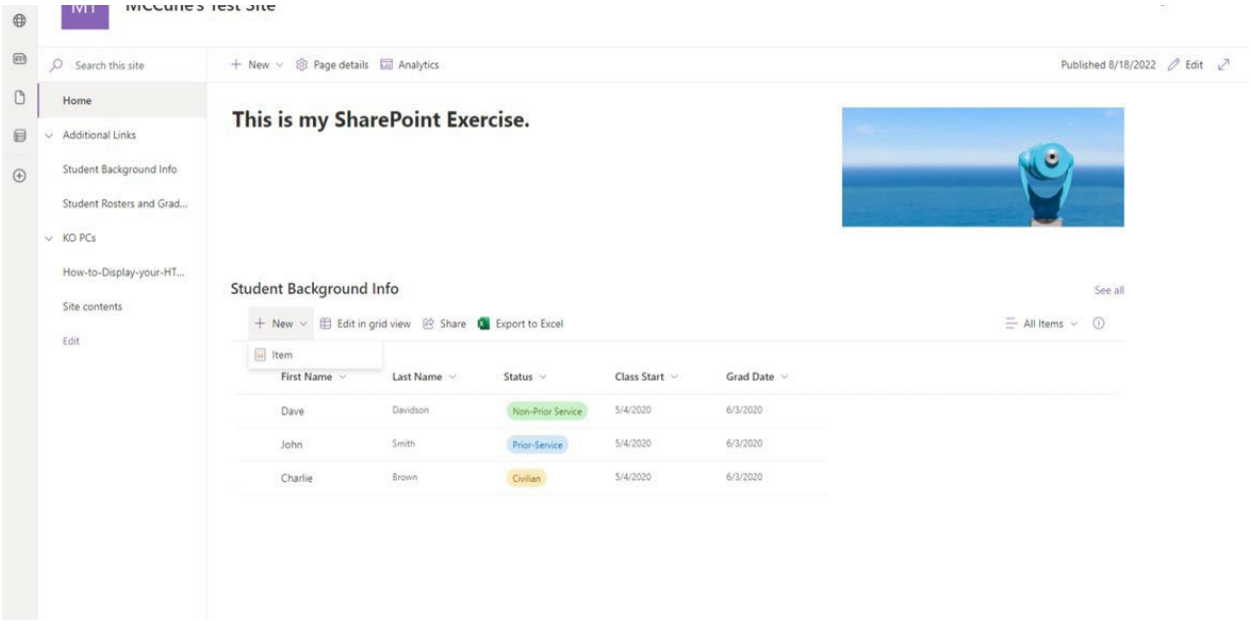


Click Save!

At the top of your screen, you should receive "Your flow is ready to go. Now test it!"
In the upper right-hand corner, select "Test"

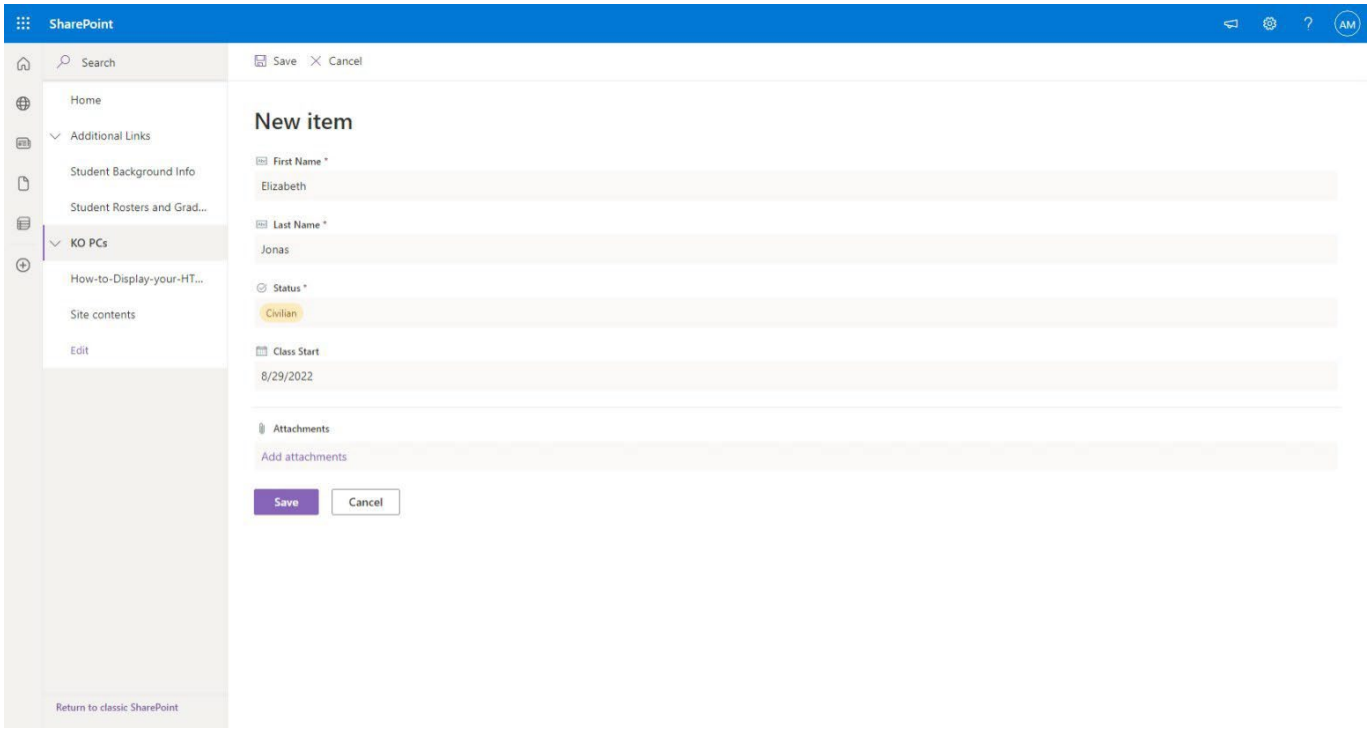


Choose to "Manually" Test Flow and click "Test"



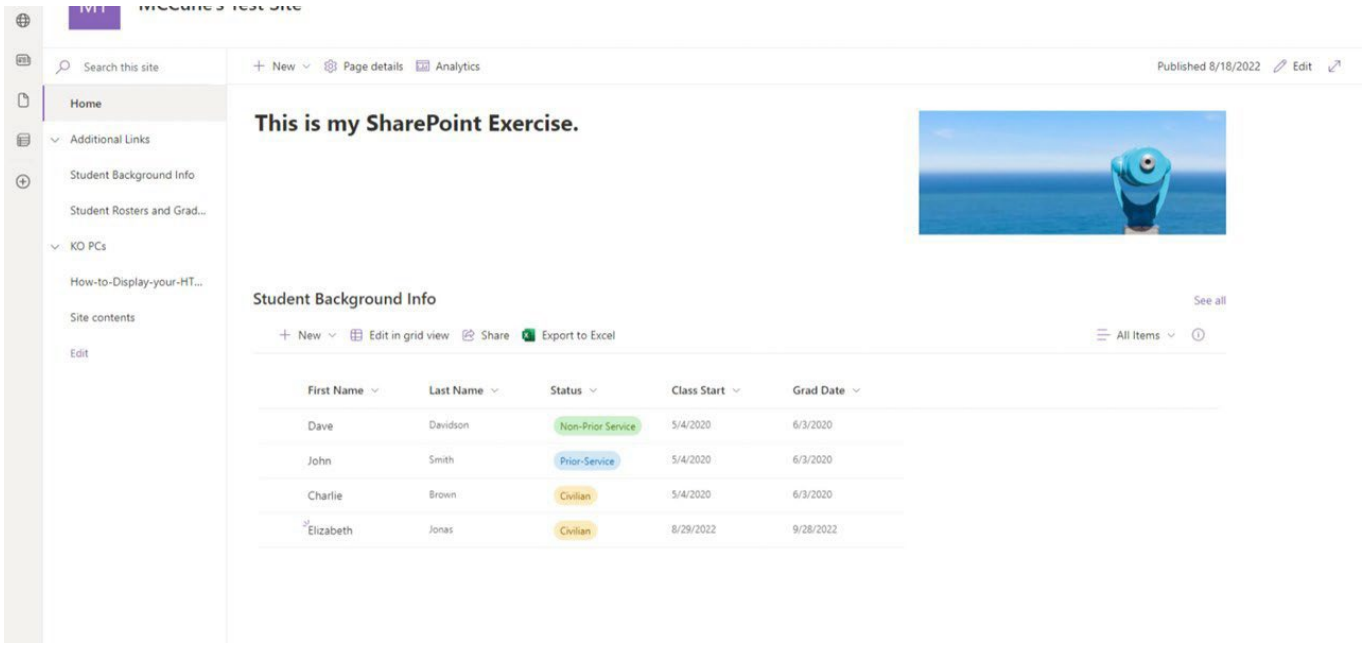
To see your flow in action, modify a list item from the "Student Background Info" List
Go back to your Test Site **(the Browser Tab should still be open)**

Click "+New" to add a new item to the list.

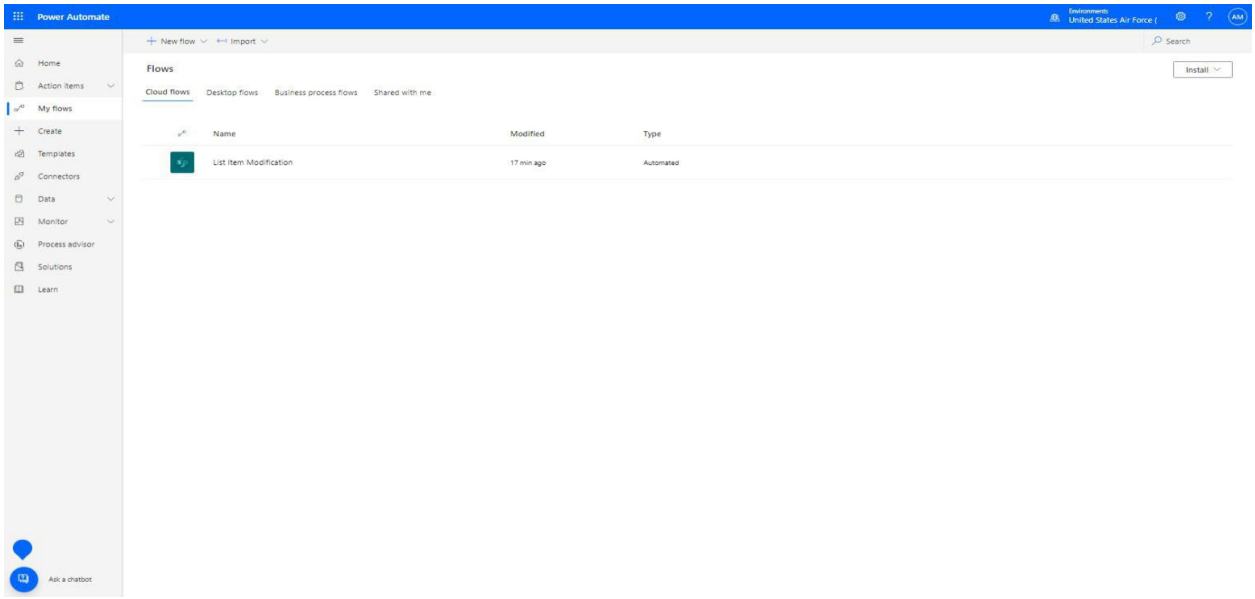


First Name: Elizabeth
Last Name: Jonas
Status: Civilian
Class Start: A week from today

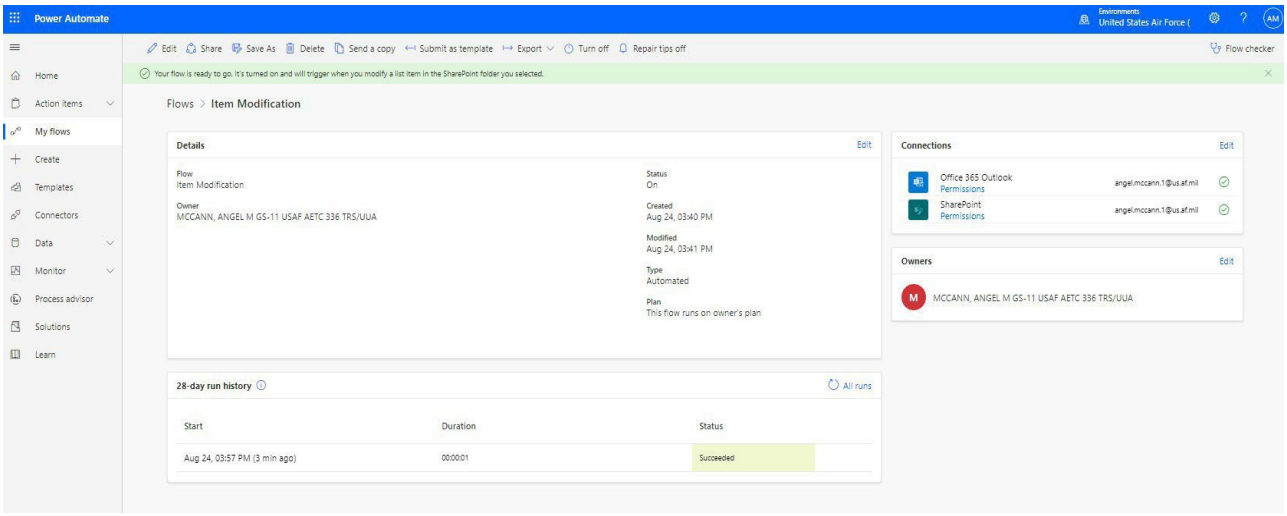
Click Save



Now, Check your email!
You and your instructor should receive and email notifying of changes to the list.



Go back to the Power Automate browser tab and Click "My Flows"
You will see your flow with any changes made to the list.



Select the flow to view details.

Congratulations…you've successfully created a workflow!

Back to working with content within our Document Library; let's change the name of our Excel workbook. Hover your mouse over the Excel workbook we just created (Book.xlsx or KM 20009 Grades.xlsx). Click the three vertical dots to open the Actions menu. Select "Rename". Change the name of the document to "KM 20009 Performance".
Now let's take another look at some of the library settings we can access and modify.
Library Settings: We've visited this page before but didn't discuss it much. Modifications to these settings will only affect the library/list named at the top of the page in large text. To access Library Settings, ensure you are in the library you wish to access the settings for, then click the settings menu (gear/cog icon) in the top-right of the page and select "Library Settings".

List Name, Description and Navigation

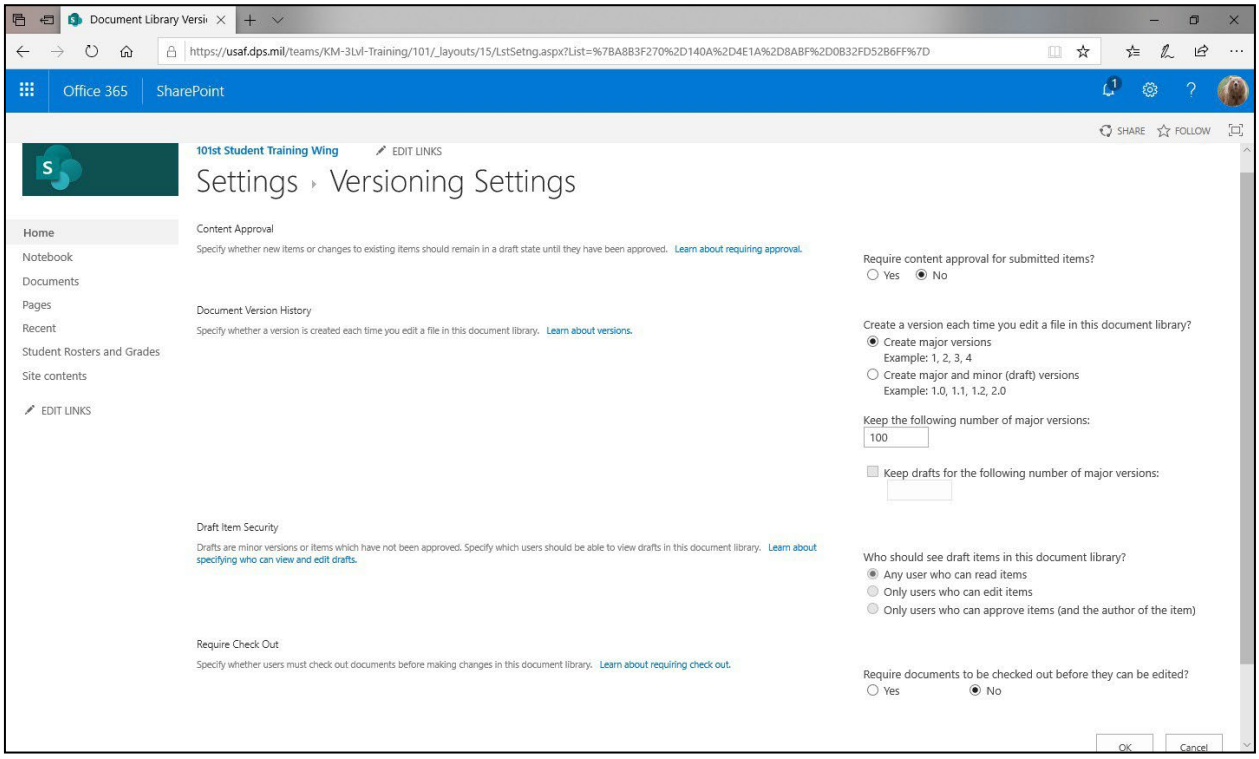
Delete this document Library

Permissions

Versioning: Also known as Version Control and Version History, enables older drafts of a document to be retained. As changes are made, the newest version is selected by default, but older versions (without changes) can be referenced through the document's drop-down menu. While this setting can use a lot of storage, it can be a useful setting when enabled sparingly. Namely, this setting is useful for documents that a lot of users have the ability to edit. This will allow other users to reference older versions that may have not been edited so heavily. Depending on your MAJCOM's practices, this is usually defaulted to retaining a maximum of 500 major versions.

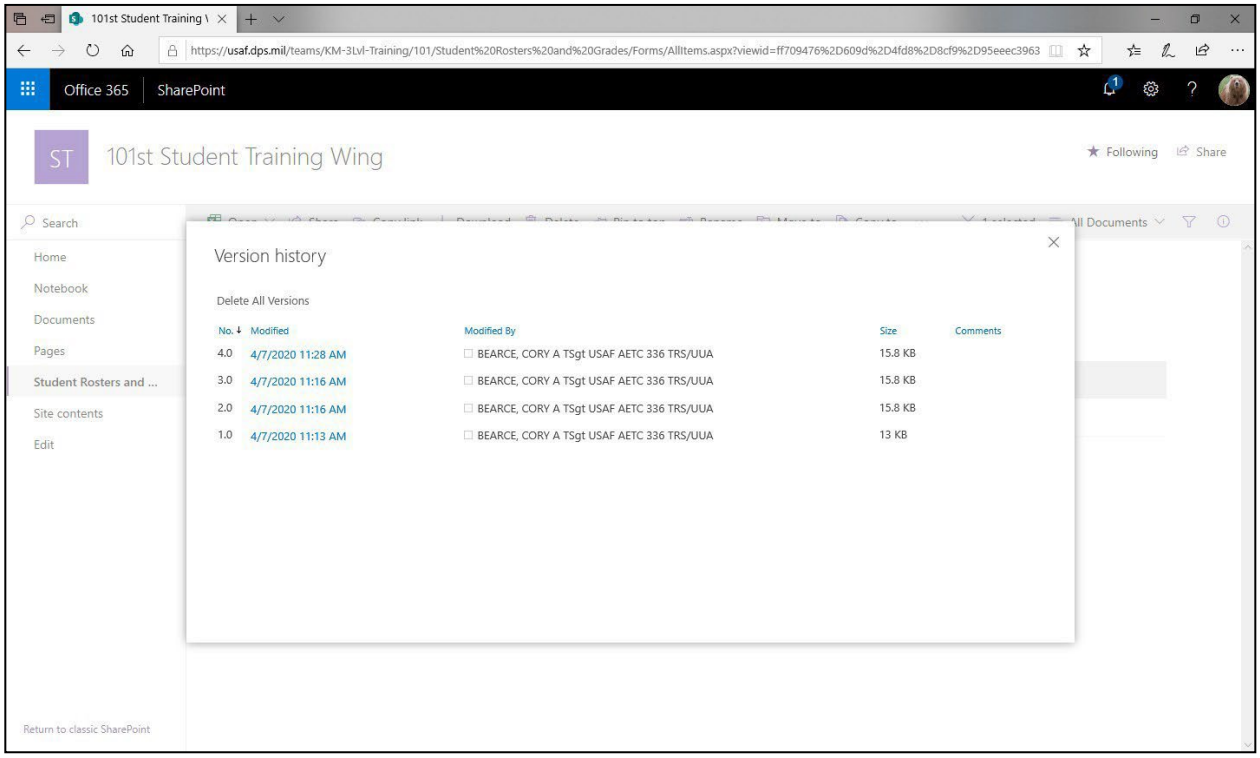
To modify the number of versions retained (or to conserve space and shut it off completely), simply access Library settings via the settings menu (gear/cog icon) in the top-right of the page. Next, select Versioning Settings.

Most of the options are self-explanatory, let's make an adjustment to the number of major versions kept; from 500 to 100 (the minimum value).



Then click OK at the bottom.

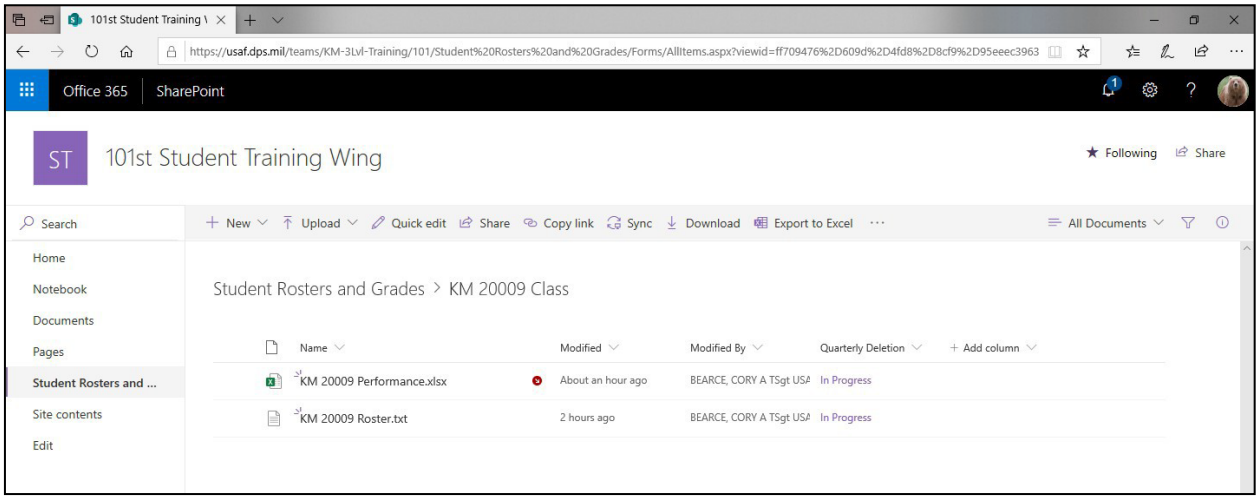
If we return to the library and view our KM 20009 Performance.xlsx workbook, we should see all the versions present. To do so, click on the document Library's name, "Student Rosters and Grades" in large text at the top. Next, click on the folder labeled "KM 20009 Class". Open the Actions menu for the KM 20009 Performance.xlsx workbook by hover your cursor over its title, then clicking the three vertical dots, then click "Version history". A pop-up will appear showing you all the save points of the document in question.



Click the X in the top-right of the popup window to return to your library.

Check in/Check out: Much like a real-life library, SharePoint Libraries allow users to check-out (and subsequently check-in) documents. This prevents other users from making changes until the document is checked back in. This function, while useful in some environments, is a double-edged sword. Users often forget they have checked a document out, and thus can prevent other users from making modifications because the document is indefinitely checked out. Users are able to partially circumvent this by saving the document with a different name. It is generally good practice to disable this function.

Let's experience this in our own library (Student Rosters and Grades). Access the Actions menu of KM 20009 Performance.xlsx via clicking the three vertical dots. Select "More >" from the bottom of the menu, then click "Check out".



Notice how there is now a red arrow to the right of the document's name. This indicates the document is checked out, and other users will not be able to save changes to it (overwrite it) until the document is checked back in.

Follow the same course of action, and check the workbook back in.

This concludes Document Libraries, creating and uploading files to SharePoint and Workflows.

Web Parts

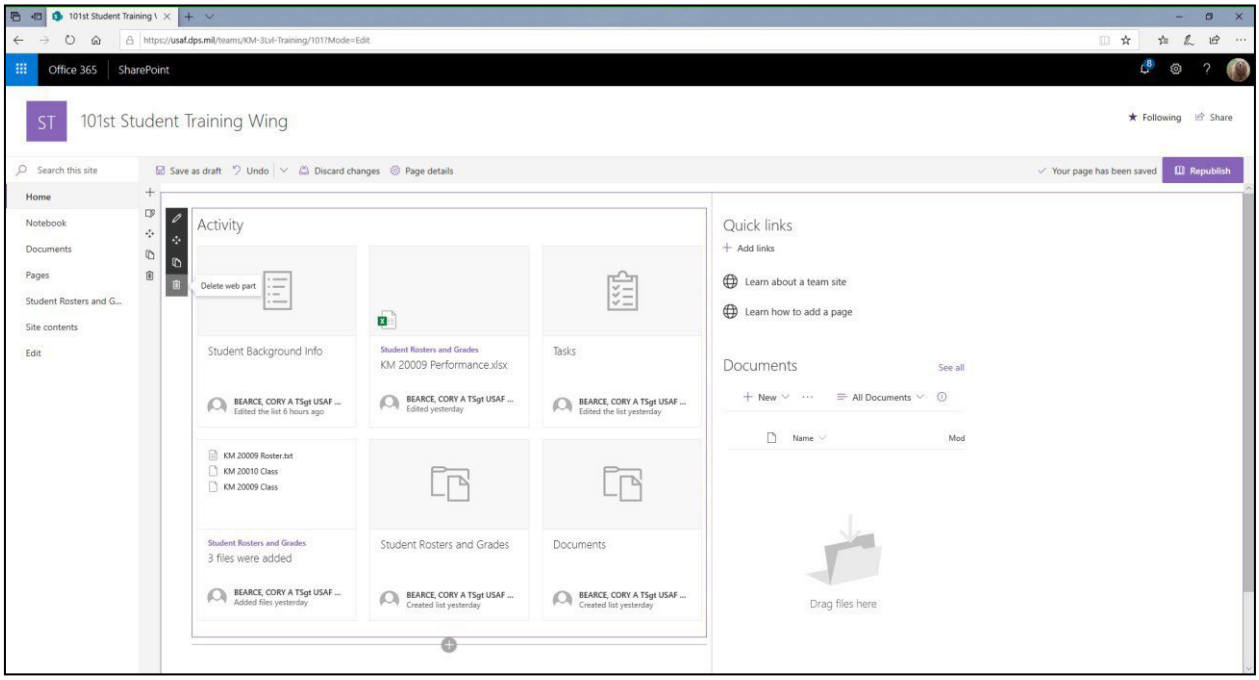
Return to the front page of your site by clicking the ST in the top-left of the page.

A web part is a modular unit of content that forms the visual building block of a SharePoint site. It's the vessel containing the information on the front page of a SharePoint site. SharePoint Online makes Web parts a little more inconspicuous, as compared to SharePoint 2007-2013.

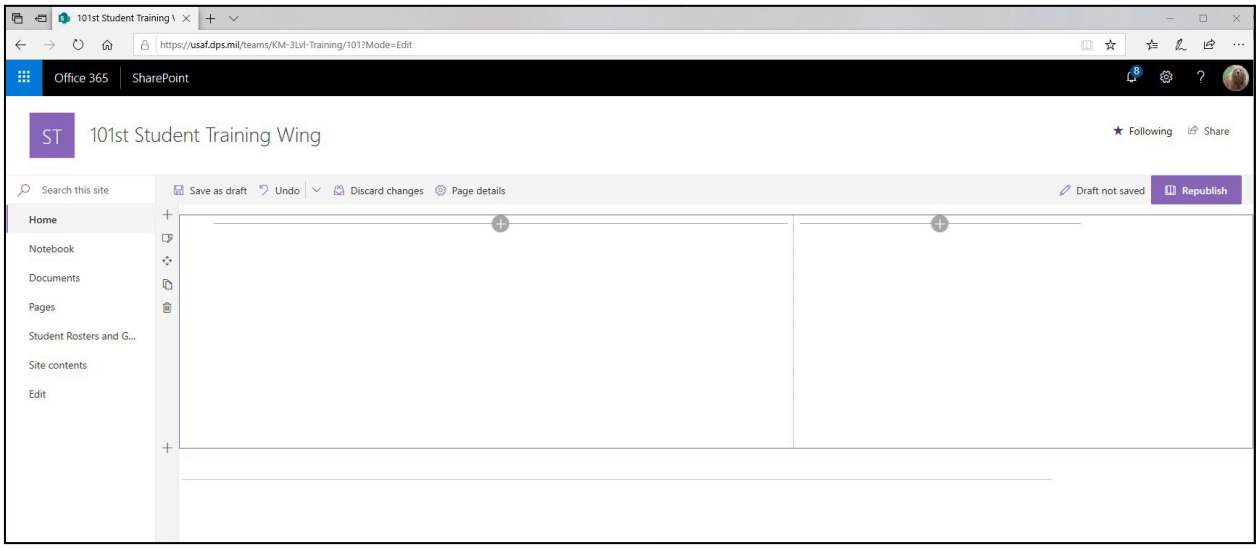
Our site has a fair number of web parts already on it, but most of them aren't particularly useful, and they make our page a bit overwhelming. Let's clean up our page by deleting the existing web parts, then we'll examine what different web parts do, and which ones may be the most useful.

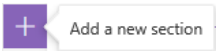
To start, click the Edit button Edit located towards the top-right of the page.

As stated earlier, our first objective is to clean up all the existing web parts. To do so, click on an empty part within a web part. A black, vertical toolbar with four icons should appear to the upper-left of the web part. Click the bottom-most trashcan icon to delete the web part (see image below).



Repeat this action until no content exists within this inner square. You should see the following:



Those two squares with the grey are sections. Sections (formerly known as Web Part Zones) help SharePoint developers organize content via a structural system. Sections can be added and deleted as desired. Let's add a one column section by clicking the grey plus button in in the grey bar to the left side of the page. 

Ensure the section is beneath the two column section.

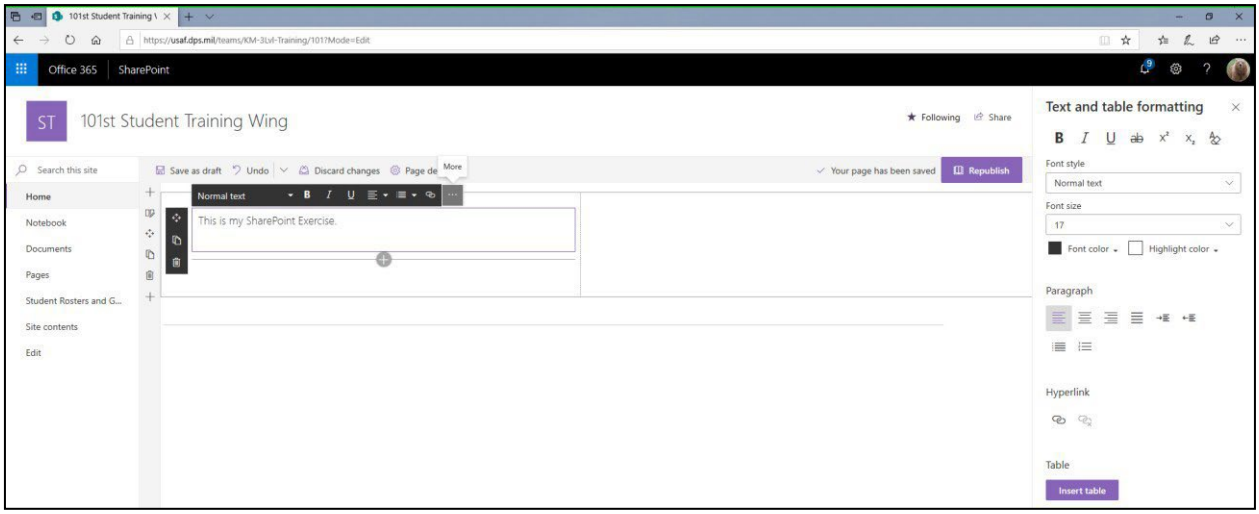
Now let's add a section. Click the  in the left column. A variety of web parts will be listed. Hovering your cursor over each will provide a description of the functionality each web part provides. Let's begin by adding some text to our page.

Add a Text web part to the left column.

Type (or copy and paste) the following text into the Text web part:

This is my SharePoint Exercise.

Next, click on the three dots for more options (see below); highlight the text, change the font size to 28 and make it bold. Notice that as you make changes, the saved status will change in the corner just above the right column (next to the purple Republish button).



In the right column, let's add an image (picture/photo).

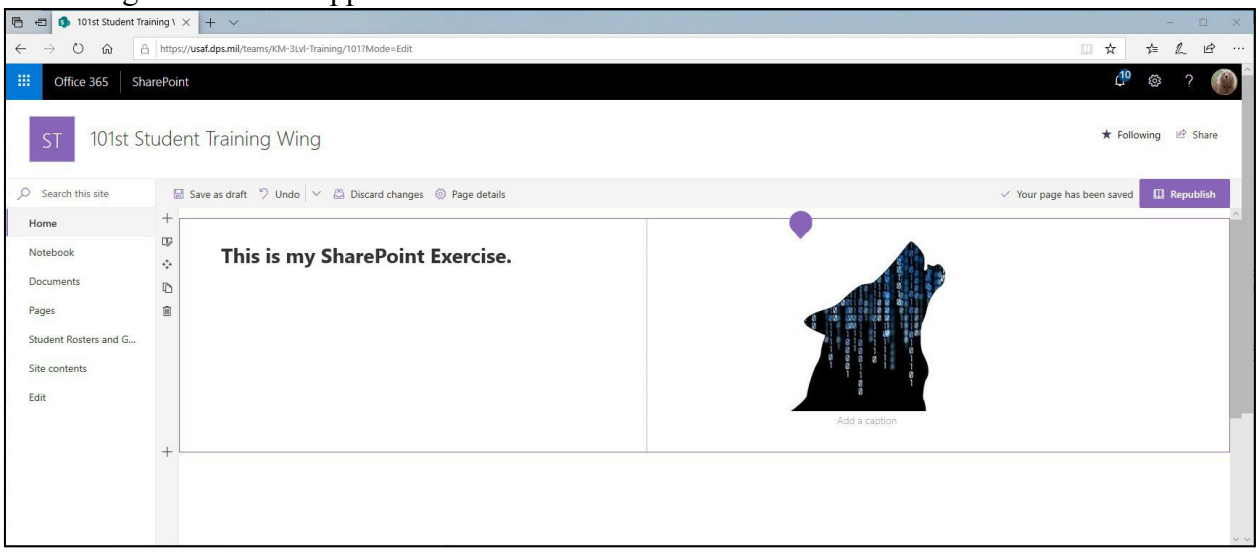
Hover your cursor over the empty space in the right column, then click the grey circled plus button to add a new web part. This time, we'll select the image web part.

When the image web part appears, click the Add Image button.

Select "Web Search" from the options on the left-side of the pop-up window.

Use the search bar to find a work appropriate image you'd like to add. Click the image, then click the "Open" button in the bottom-right.

Your image should now appear:



Let's add one more web part, this time a list web part. Click the  button to add a web part to the bottom section, then locate (search if you so desire) and click the "List" web part.

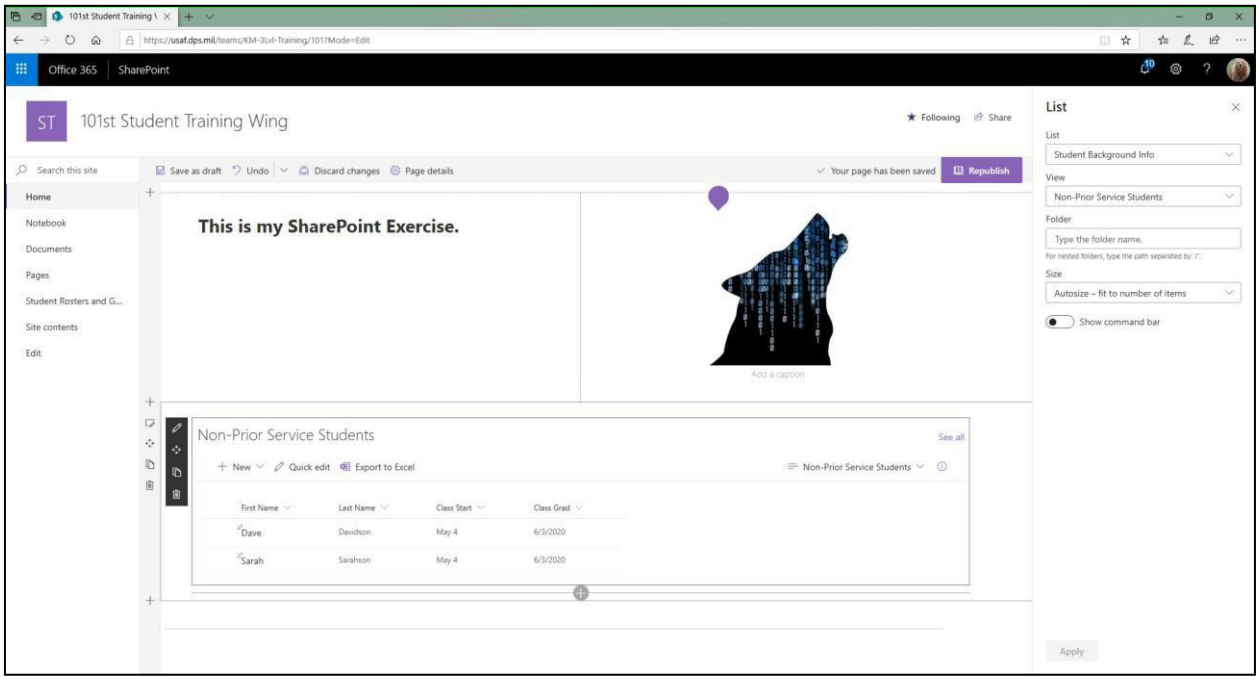
Give SharePoint a minute to index all lists on the current site, then select the list you want. In our scenario, we're going to click the Student Background Info list we created earlier.

The Student Background Info list should now render. Let's perform one last action before we finish exploring web parts; we're going to modify this web part to display the Non-Prior Service Students view we created earlier.

To modify/edit a web part, click the web part, then click the Edit web part icon from the web part toolbar on the upper-left corner of the web part. 

A web part pane for the List web part will appear on the right side of the page. Change the View drop-down to "Non-Prior Service Students". Click the Apply button in the bottom right corner.

Next, within the Student Background Info web part, click the title (Student Background Info) and replace that text with "Non-Prior Service Students". You should see the following:



Click the Republish button in the top-right corner of the page to exit Edit mode and experience your page as any regular user would.

You have successfully completed the Web Part portion of this exercise.

Site Settings: Now that we've learned how to create information "containers" on SharePoint in the form of Lists and Libraries; covered how to add, edit and delete that content; and practiced displaying information on the front pages via Web Parts, it is now time to dig into the background of SharePoint via the Site Settings.

To access Site Settings from any location within that site, simply click the Settings menu (gear/cog) icon in the top-right of the site, and select "Site Information".

The Site Information pane will open on the right-side of the page, find the link "View all site settings" and click it.

Welcome to the Site Settings for your Student Training Wing SharePoint site. Just like the settings on your phone, many modifications to the way the site functions can be found here.

We'll discuss Permissions, Navigation, Site Columns, and Web Analytics (formerly known as audits). As you learned in your reading before this objective, you can also Manage Site Features, change the aesthetics (Theme) of your site and modify the Title, Description and Logo of the site from here. Let's begin with permissions.

Permissions: Synonymous with Access. Permissions allow users to perform certain functions based upon their level of access (permissions) to a site via its settings. Permissions can also be more specifically applied to individual lists, libraries and items/files. Be careful how granular you apply permissions however, both in individual files and individual people as this can make managing permissions a full time job. It is therefore recommended you rely on group policies (also covered in a later module) as well as rely on permission inheritance.

User Permissions: User permissions are exactly that, the permission for an individual user to perform an action with varying levels of restriction.

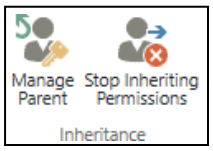
Group Permissions: Permission groups function similarly to user permissions in that various levels of restriction can be applied. However, the term group informs us that this is a collection (or folder) of users whom have the same restrictions applied to all members of the group. Groups are significantly easier to manage than individual users.

As people come and go (PCS or PCA) it can be problematic identifying everything they had or will need access to. By establishing SharePoint permission groups, initial setup can be a bit tedious, but from that point on, simply remove a user from a group and then no longer have access to all of those sites/lists/libraries/items/documents they once had access to, and just as easily you can add their replacement to that one group and they will instantly have access to everything.

Optionally, SharePoint can make use of existing Microsoft security groups, often used for email purposes, minimizing a duplication of effort there as well.

Permission Inheritance: Inheritance means to derive, or receive, from one's parents. SharePoint follows this same principle, referring to top level content as the "parent" and subordinate content as the "child".

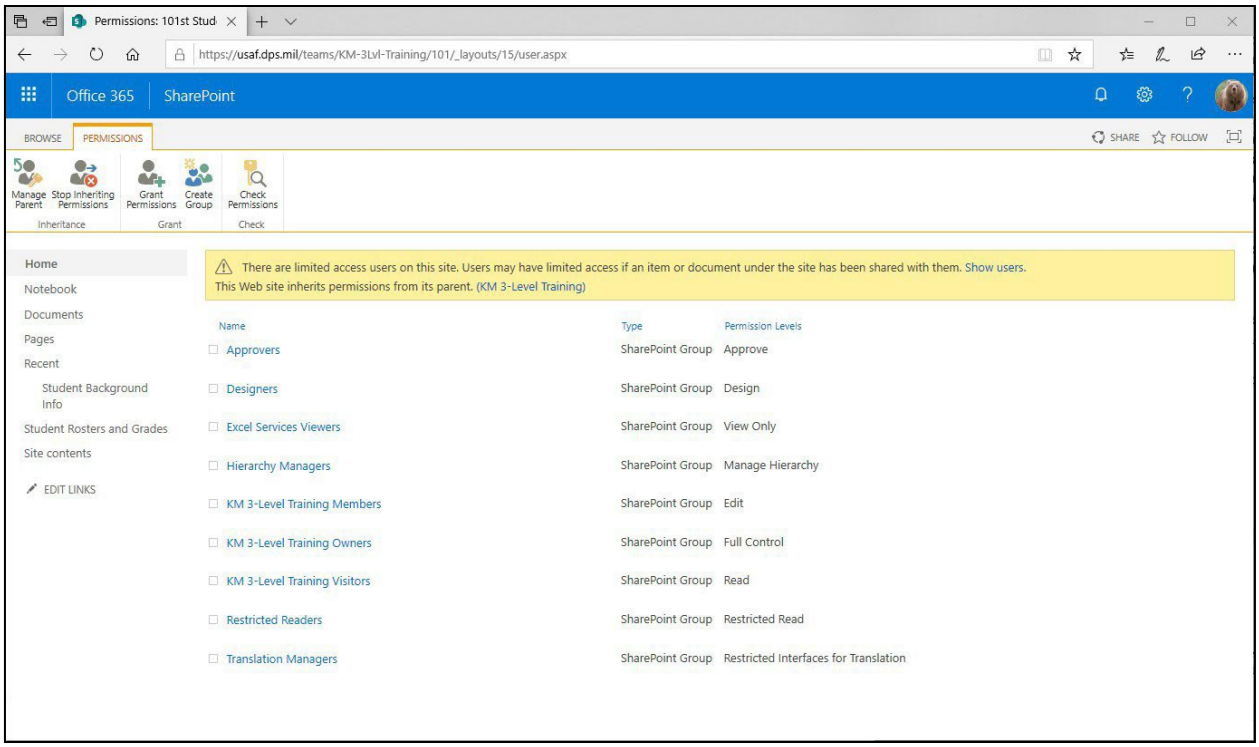
If we were on Lackland AFB's SharePoint Site collection, and we looked at the 737th Training Group's SharePoint site, the 37th Training Wing would be the parent site of the 737th TRG, and the 320th/321st/322nd/323rd/324th/331st Training Squadrons would all be child sites. Similarly, on our site; the document library we created earlier (Student Rosters and Grades) would be the child library of the Student Training Wing site we've been modifying. By default, our child content will automatically inherit permissions from the parent site/content. We did not break inheritance for our Student Rosters and Grades library, nor for the files we've uploaded. Therefore the KM 20009 Roster should have the same permissions as the Student Rosters and Grades library as well as the Student Training Wing site we've been working on.



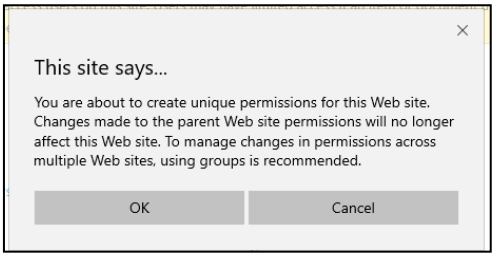
Any permissions changes we make to a parent content (site/library/folder) will have the same effect on the child content (sites/libraries/folders) that are inheriting those permissions. If we do not want this to happen, we must go to the permissions for that content, and select "Stop Inheriting Permissions".

Permission Hierarchy: Permission Hierarchy refers to a tiered system of unrestricted access to the site, typically done via groups. In most cases, a Parent Site Owner group will manage the Owners group of child content, and subsequently that child content's Owner group manages Member and visitor groups (management includes add/removing members within each group).

Now that we've defined all those terms, let's manage some permissions! Begin by clicking "Site Permissions" from within the Site Settings page.

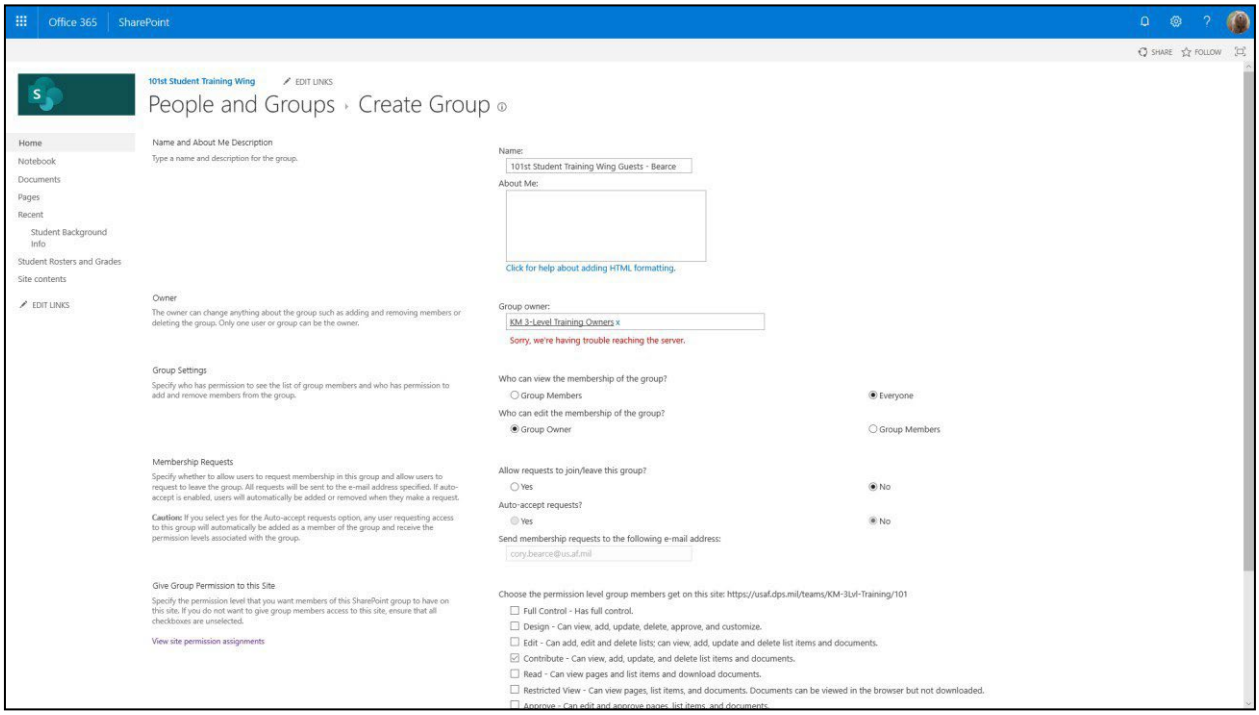


Let's begin by clicking the "Stop Inheriting Permissions" button at the top. This will allow us to make changes to whom has access to the site. A popup warning message will appear, select "OK" to continue.



The page will reload and inquire what groups you want to establish for the hierarchy of this site. For now, we'll use all existing groups (otherwise, we may block ourselves from having access). Simply click "OK". If we ever want to revert back to the permissions of our parent site, we will click the "Delete Unique Permissions" icon in the ribbon at the top (where "Manage Parent" was formerly).

Now let's create a permission group. Click the "Create Group" icon in the ribbon at the top of the page. Your base may have a particular naming convention for permission and security groups, so be sure to ask in the operational environment. For our purposes here, we'll use the following format "### Student Training Wing Guests – [your last name]". See image below for an example. https://usaf.dps.mil/teams/KM-3Lvl-Training



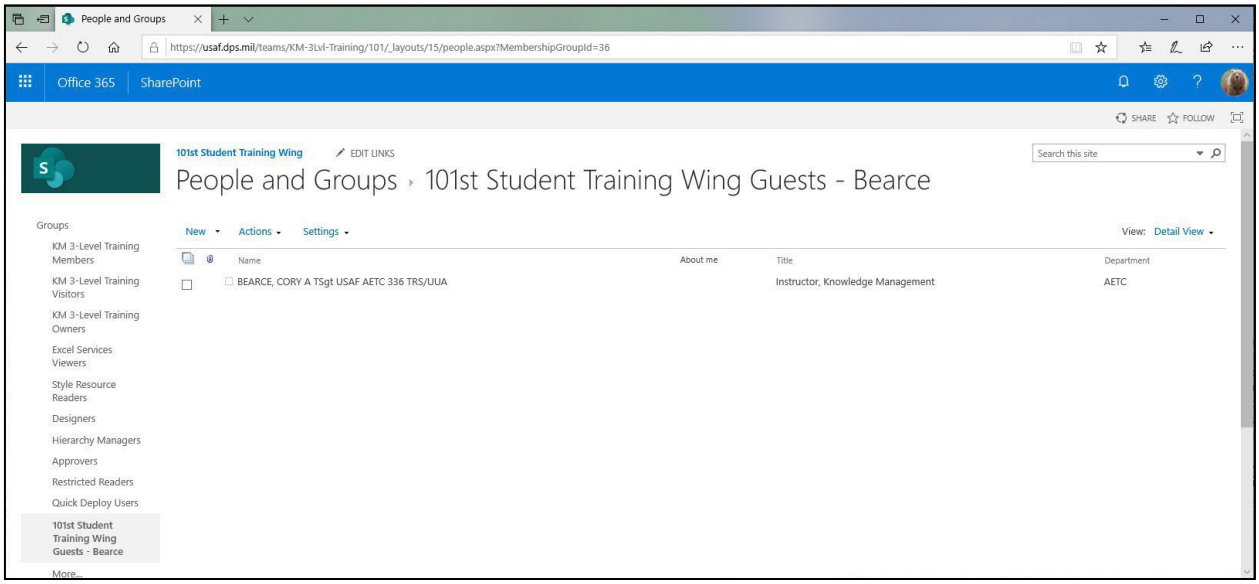
Next, as you can see, your name is inserted by default as the group owner. Thus, we need to change the owner of this group. This is critical to ensuring continuity of operations (ensuring someone else can manage the group if you leave), and this helps minimize the number of phone calls/emails you receive of this nature when you leave. We'll set this to the site collection owner's group: "KM 3-Level Training Owners". Setting the owner of a group to the parent site's owners group is good practice. Generally that group will be occupied by an active member, and there also is likely to be multiple points of contact within that group, as opposed to a single user.

Group Settings: The ability to view membership should always be set to "everyone" (except in very rare circumstances involving security concerns). This ensures everyone is fully aware of any potential privacy issues related to whom has access via the group, as well as better enable inquires and access requests to/from the group, minimizing owner's management. It is recommended only the owner of the group (usually another group) be authorized to grant access to new group members.

Membership Requests: If you would like to be contacted via email by people requesting access to this group, set this to "Yes" and specify an email. In our example, we're going to leave this set to "No".

Give Group Permissions to this Site: Here we can specify what level of access the group should have over the site. Only 1 checkbox needs to be selected as all permission levels nest control

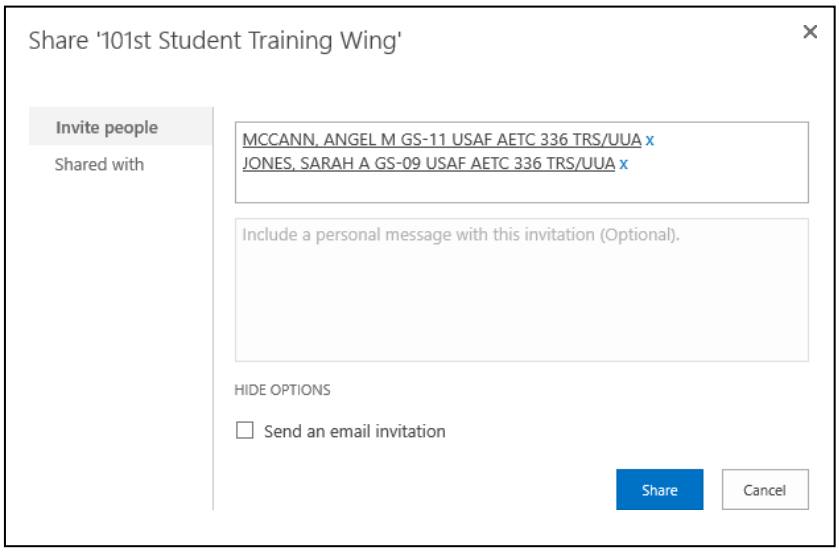
over the ones beneath them (Full Control has Design rights, plus the ability to manage permissions). For our scenario, we'll select the "Contribute" checkbox. Then click "Create".



Once the page reloads, you should be looking at your new group, with only yourself as a member.

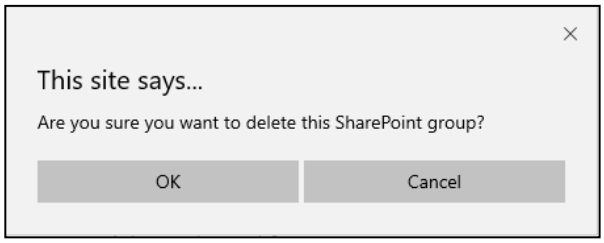
Let's add a user to your new group. Click the "New" option at the top of the page and select "Add User".

A popup window will appear. In the first box, we simply type the "lastname, firstname" of the person we want to add. Their name should dynamically appear in a list below as you type. Simply click their name as it appears. Go ahead and add two of your coworkers or classmates to this section. Next, click the "SHOW OPTIONS" text-link at the bottom and uncheck the box at that appears, labeled "Send an email invitation". The personal message textbox above will grey-out.



Lastly, click "Share" to commit your addition of new members to the group. There should now be three users listed within your group.

Before we move on, we must also practice deleting a group (the one we've just made will work nicely). To do so, click "Settings" just above our list of users. The page will reload to the settings for the group we just created; scroll down and click the "Delete" button. A confirmation popup will appear, select "OK".



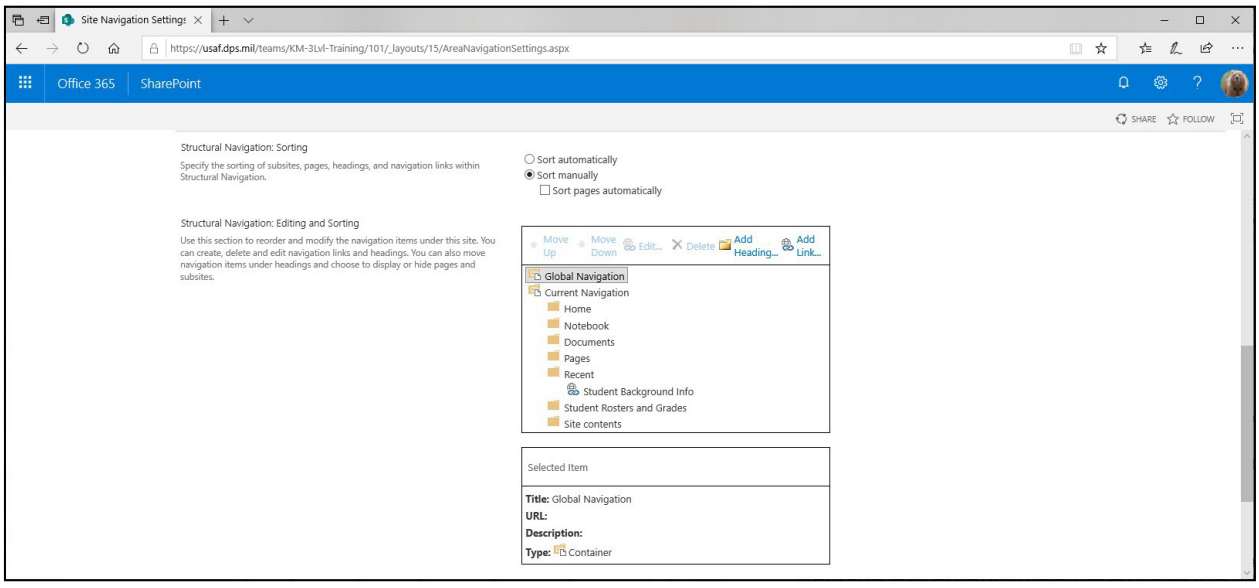
Your group should now be deleted, and you should be looking at the empty membership of another group. This concludes the permissions portion of this exercise.

Let's return to Site Settings via the Settings menu (cog/gear) icon in the top-right of the site, where we can next discuss Navigation. (If "Site Settings" is not visible, select "Site Information" then when the Site Information pane appears on the right-side, select "Site Settings"). Once in Site Settings, select "Navigation".

Navigation: Just like the navigation system in a car or on a phone, SharePoint navigation helps us move around the site and easily locate content. Using the Navigation option within Site Settings, we can easily customize the top navigation bar (also known as Global Navigation) as well as the left navigation bar (known as the Current Navigation or Quick Launch).

From within Navigation Settings, we can see there are many options available, but ultimately can summarized into three categories; Global Navigation, Current Navigation and Structural Navigation. Our efforts in this exercise will be spent on the how to modify the Structural Navigation, as the other two categories are fairly well defined on the page.

Scroll down to the Structural Navigation section.



Changes we make within this box will directly affect the links at the top of the page, as well as those on the left side of the page when users are looking at it, or accessing subordinate content.

Let's begin by deleting some of the Headings we don't have content for – *why show placeholders for content we don't have?* Simply click the small folder icon next to "Notebook" and click the Delete button from the toolbar above.

Repeat this for the "Documents", "Pages" and "Recent" headings.

Now it's worth noting that you may have noticed the Student Background Info link moved from being indented underneath "Recent" to its current location - aligned under the "Home" heading. Headings act as sections for organizing links underneath themselves, but may also feature linked content too. "Student Rosters and Grades" is a good example of this. Its folder icon clearly indicates this is a header, but users can also click on it (from the front page of our site) to be directed to the Student Rosters and Grades library we created earlier.

Let's Add a Heading. Click the "Current Navigation" item above "Home" and then click "Add Heading" from the toolbar above.

A popup window will appear; let's name this Heading "Additional Links". Now click "OK" to close the popup and add our heading to the bottom of our Structural Navigation list.

Before we move forward, let's quickly alphabetize our list. Click on the existing headers/links and then use the Move Up, Move Down buttons in the toolbar to manually alphabetize our navigation. Optionally, you can click the radio button above the Structural Navigation box labeled "Sort Automatically". NOTE: it is generally good practice to leave "Home" as the topmost link/header so it's easy for users to find.

Now that things are a little more orderly, let's add two links under our Additional links heading. Click "Additional Links" so that it is highlighted within the box, then click "Add Link" from the toolbar above. In the popup window that appears, fill in the boxes as follows, then repeat the process to create a second link with the subsequent information.

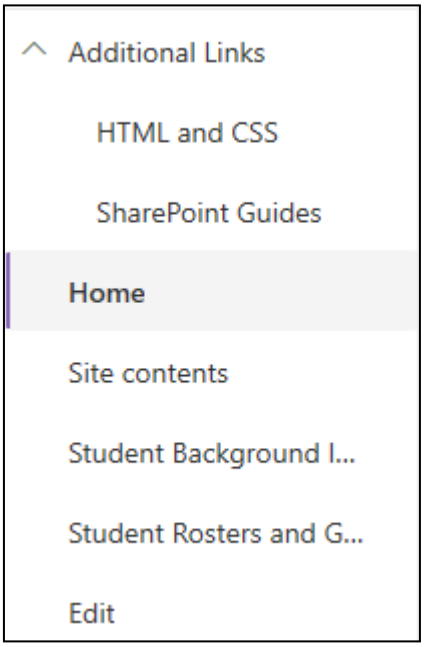
First Link:

Title: HTML and CSS URL: https://www.w3schools.com Description: Environment used in Module 3 & 4

Second link:

Title: SharePoint Guides URL: https://sharepoint.stackexchange.com Description: An operationally useful environment for resolving SharePoint issues.

Whatever is placed in the Description field will be visible when users hover their cursor over the link. This is a good place to provide additional information of where or why the link is directing users to a certain location, without negatively affecting the length of the link (i.e. keeping your page clean).



Once done, your links should automatically alphabetize, regardless of the order you created them in. Now click "OK" at the bottom of the page to be brought back to the front of your SharePoint site.

Notice how your links on the left side of your site are neatly arranged, with the two links you created nestled under the expansive menu header of Additional Links. Also take note of how those longer titles (Student Background Info and Student Rosters and Grades) don't fit within the narrow width of the Quick Launch. This is why it's important to use concise

(short) titles. Student Info would have been a better name for our list.

This concludes the Navigation portion of our exercise.

Now that we have links and contents, let's look at how we can identify popular content and utilize those navigation principles we just learned, to make the most used content more accessible.

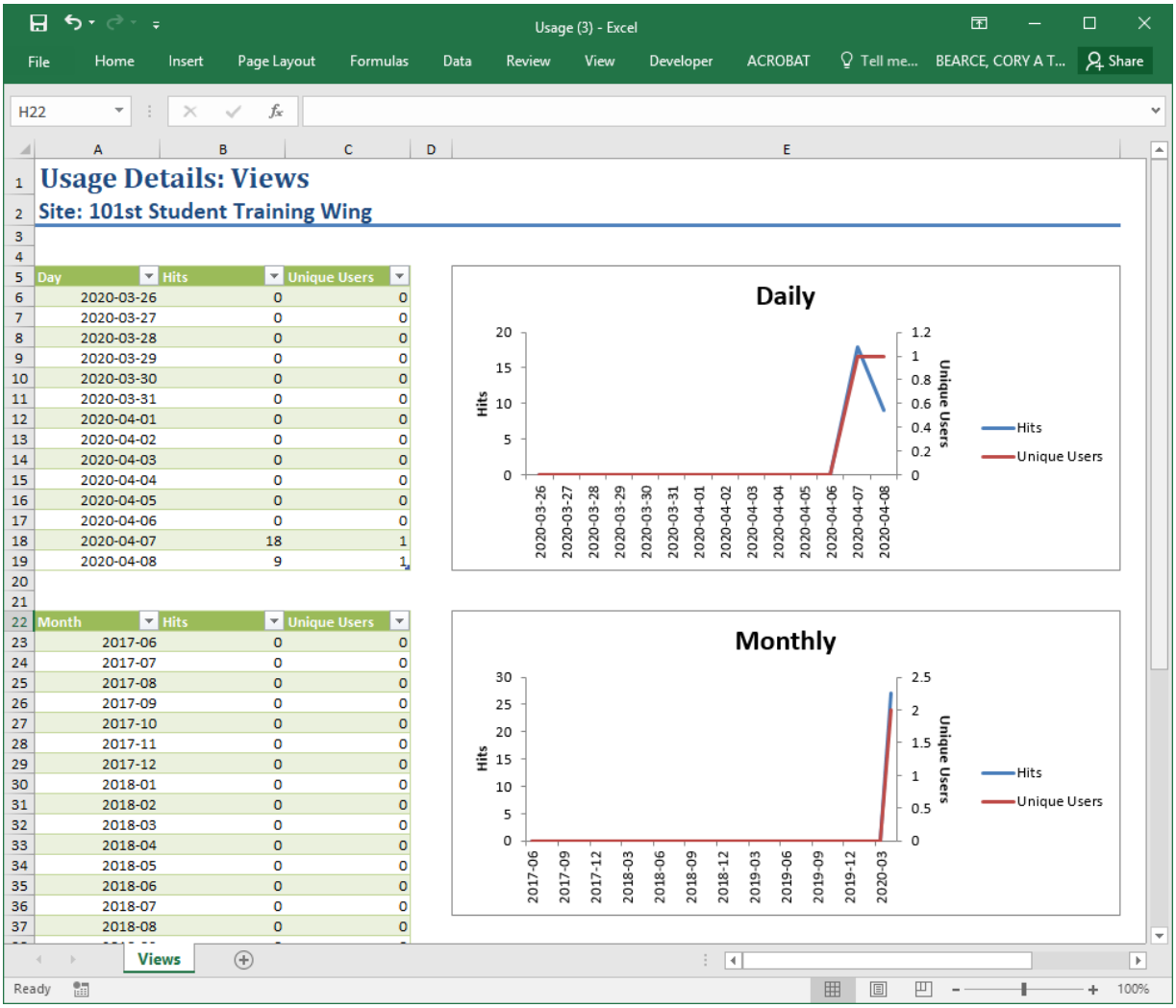
Web Analytics: You can utilize the Site Usage report (via the Settings menu) however, depending on your connection, this can prove temperamental. I

Once again, we're going to go to Site Settings, which can be accessed by clicking the Settings menu (cog/gear) icon in the top-right of the site, then selecting "Site Usage".

When the page loads, click "Download" (down arrow over a line) in the right corner of your page for a Usage report which will help us better understand who and what is being most utilized on our site.

Click "Open" at the bottom of your browser to download and open the Excel workbook containing the information.

You should see a spreadsheet similar to the one below.



We could perform this for each site in our site collection, or that we maintain control over, to identify what is significant enough to warrant a direct link from our top level site, or possibly extend an invitation to the Site Owner to identify ways we can improve their site or processes using SharePoint and thus, make it more useful.

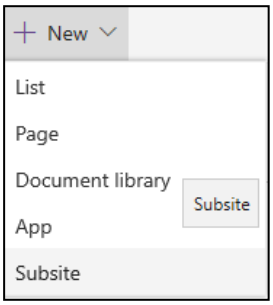
This concludes the Web Analytics portion of our exercise.

To explore some of the other features SharePoint has, let's create a new site.

Creating a Site

Sometimes, offices, flights, or projects may warrant multiple aspects of what SharePoint has to offer. It is therefore, occasionally, appropriate to establish subsites dedicated to these functions.

To create a subsite, click the Settings menu (cog/gear) icon and select "Site Contents".



The page will reload. Click the New button and select Subsite (pictured). Again, the page will reload and you will this time be brought to the New SharePoint Site page. Several fields are available for us to customize our site, let's discuss each before moving on.

Title: Also known as a name, this is what your site will be titled. Its good practice to make this specific yet concise. Keeping the title short helps with appearance/spacing concerns when your site is functional. Specificity is important, because the whole point of SharePoint is to make finding information as easy as possible. I.e. 336TRSTestSite

Description: This field allows you to elaborate on the purpose of the site you're creating. Granted, the title field should fully communicate the intent of the site, sometimes additional information is relevant to include, particularly in keeping the title short. Feel free to leave this blank, or, include additional details that aren't important enough for the Title field. This could include physical address of a Squadron/Unit, a summary of why the site exists ("This is a test subsite for practice.").

Web Site Address: This field allows you to customize the ending of the web address (URL). It is recommended you have this mirror your title, but do not use spaces and instead use dashes, underscores or Capitalization. Using spaces will cause the URL to substitute **%20** for every space you use and thus, can make the URL impossible to remember and inconvenient for customers to type. Personal preference would suggest it is uncomely as well.

Template Selection: SharePoint comes conveniently packaged with numerous pre-crafted content which can ease/hasten the creation of structural components (sites, libraries, lists) and thus minimize the amount of work we must perform to bring content online. Typically, a brief description of the intent of the template is included below the selection box. These packages of structural content are comprised of selectively enabled features/settings, incorporated lists/libraries/web parts and can include items/documents. Custom templates can be created by users with Full Control access.

Permissions: Selecting "Use Same Permissions as Parent Site" for this field will cause the site we're creating to allow users the same level of access to users as they have on the site above it (the site from which we are creating this site). Selecting "Use Unique Permissions" will

strip away all permissions for the site we are creating and only you (the creator of that site) will have [Full Control] access.

Navigation Inheritance: This last option displays a small icon of what it is inquiring about affecting. By default, "No" is selected and will cause the site you are creating to have its own top-navigation, independent from the parent site. This is appropriate for sub-sites that are objectively-separated from their parent-sites (i.e. a Squadron site would not generally want to use the navigation of the Group site above it). Selecting "Yes" will cause the sub-site to inherit the top (global) navigation bar from its parent site. This is common for unit program sites where content is not as expansive and users will likely want to move between the parent- and "sister-" sites.

Deleting a Site

If a site or subsite is no longer needed, it can be deleted. To delete a subsite, click the Settings menu (cog/gear) icon and select "Site settings".

The Site Settings page will load. Locate "Site Actions, and click "Delete this site".

A Warning message will display, confirming the deleting of the site. Click "Delete", and "OK" to another Pop up message verifying deletion.

Creating a Site (continued)

Navigate back to your test site and let's create another subsite for use.

To create a subsite, click the Settings menu (cog/gear) icon and select "Site Contents". Click the New button and select Subsite .

Again, the page will reload and you will this time be brought to the New SharePoint Site page. Several fields are available for us to customize our site, let's discuss each before moving on

> **Title:** I.e. "336thTRS" is a better name than "336th Training Squadron" (too long) or "Red Wolves Unit" (not specific enough for most users).
>
> **Description: I.e.**"To facilitate the communication of the 336th TRS Booster Club") or to direct users how to gain access ("Please direct all access requests/questions to TSgt Cory Bearce at…").

Web Site Address: This field allows you to customize the ending of the web address (URL). It is recommended you have this mirror your title, but do not use spaces and instead use dashes, underscores or Capitalization. Using spaces will cause the URL to substitute **%20** for every space you use and thus, can make the URL impossible to remember and inconvenient for customers to type. Personal preference would suggest it is uncomely as well.

Template Selection: SharePoint comes conveniently packaged with numerous pre-crafted content which can ease/hasten the creation of structural components (sites, libraries, lists) and thus minimize the amount of work we must perform to bring content online. Typically, a brief description of the intent of the template is included below the selection box. These packages of structural content are comprised of selectively enabled features/settings, incorporated lists/libraries/web parts and can include items/documents. Custom templates can be created by users with Full Control access.

Permissions: Selecting "Use Same Permissions as Parent Site" for this field will cause the site we're creating to allow users the same level of access to users as they have on the site

above it (the site from which we are creating this site). Selecting "Use Unique Permissions" will strip away all permissions for the site we are creating and only you (the creator of that site) will have [Full Control] access.

Navigation Inheritance: This last option displays a small icon of what it is inquiring about affecting. By default, "No" is selected and will cause the site you are creating to have its own top-navigation, independent from the parent site. This is appropriate for sub-sites that are objectively-separated from their parent-sites (i.e. a Squadron site would not generally want to use the navigation of the Group site above it). Selecting "Yes" will cause the sub-site to inherit the top (global) navigation bar from its parent site. This is common for unit program sites where content is not as expansive and users will likely want to move between the parent- and "sister-" sites.

Now that we've discussed each of those, let's fill them in for our scenario and finish creating our subsite.

Title: 101st CC Dashboard

Description: Information relevant to the command of the 101st Student Training Wing.

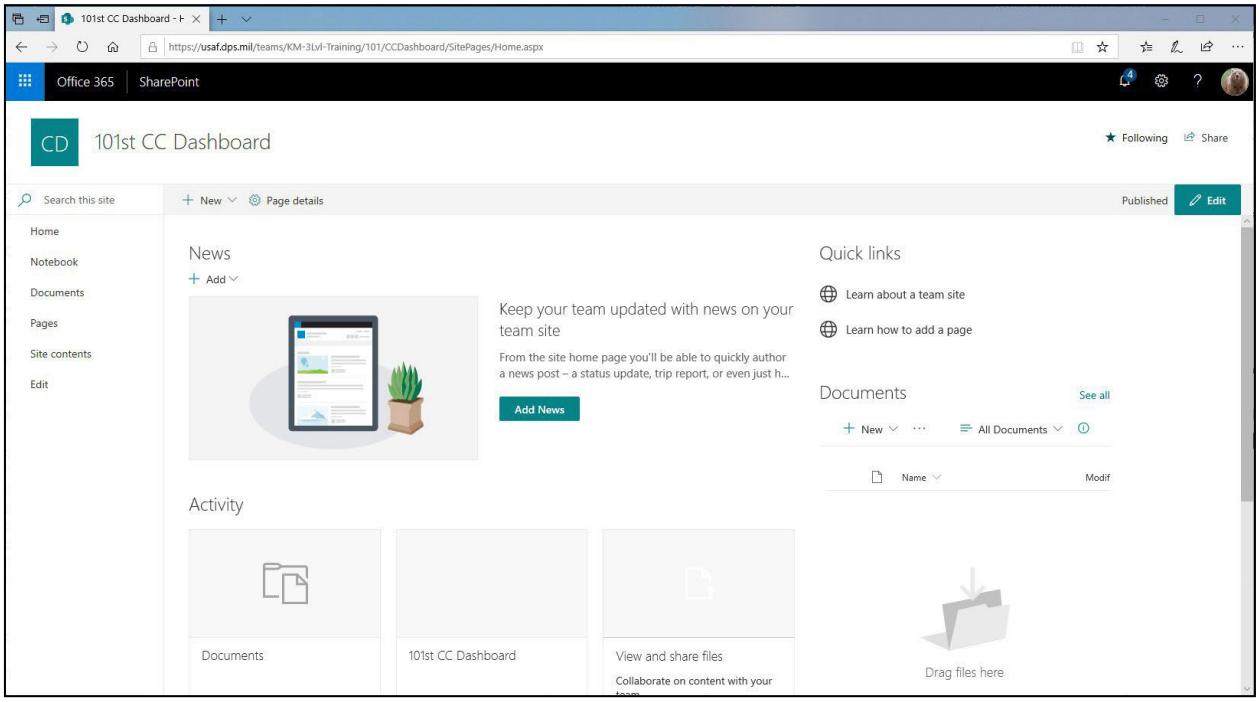
URL Name: CCDashboard

Template: Team site (no office 365 group)

Permissions: Use same permissions as parent site

Navigation Inheritance: No

Once those options have been selected/entered, click "Create". You should now be looking at a screen similar to the one you encountered when you first started this exercise:

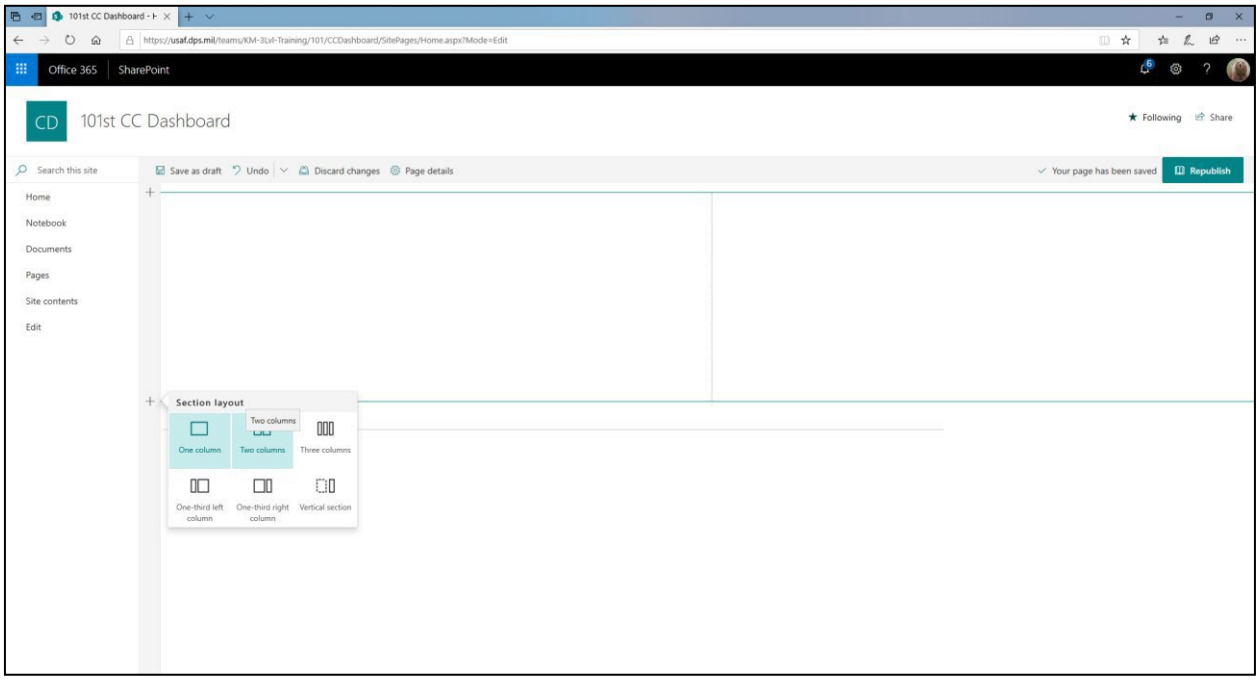


We're going to take this basic site, and turn it into a dashboard of information relevant to the 101st Student Training Wing's Commander (CC). We'll make use of web parts to do this.

Let's begin by editing our page, click the Edit button in the top-right corner of the page.

Delete all the old web parts; remember, this can be done by clicking on a web part (an area of the page that isn't blank) and then clicking the trashcan icon that appears in the webpart toolbar to the left of the web part.

Now that you have a blank canvas to work with, let's paint some magic into this page. First, let's add a new section to the bottom of the page. Click the grey + to the left of where the web parts were. When prompted, select the option for "Two columns".

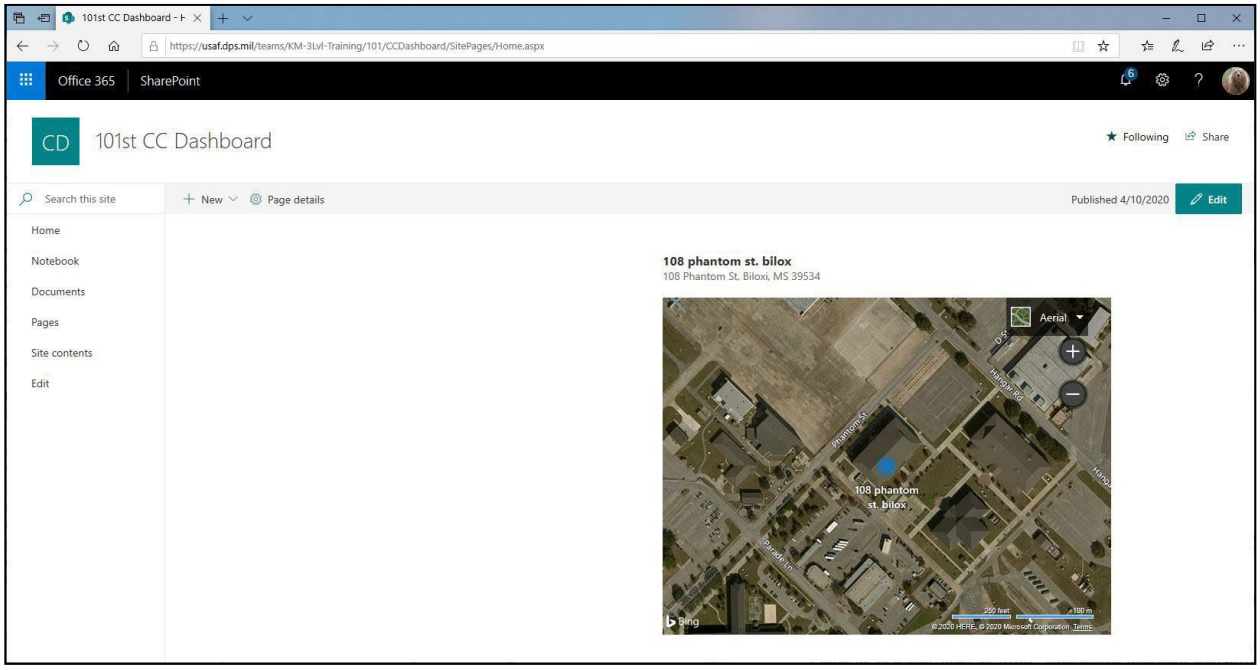


A fundamental aspect of being a good commander is knowing the local area and being able to direct VIP visitors on how to get to your facilities. Let's make use of the maps web part to centralize this information for the Commander.

Add a web part using the grey circle with a + towards the middle of the page, then select the Maps web part.

Enter the address for 336's home location (Thomson Hall): 108 Phantom Street Biloxi, MS. Change the view from "Road" to "Aerial", zoom in to the point where you can comfortably identify buildings.

Republish your page when done.

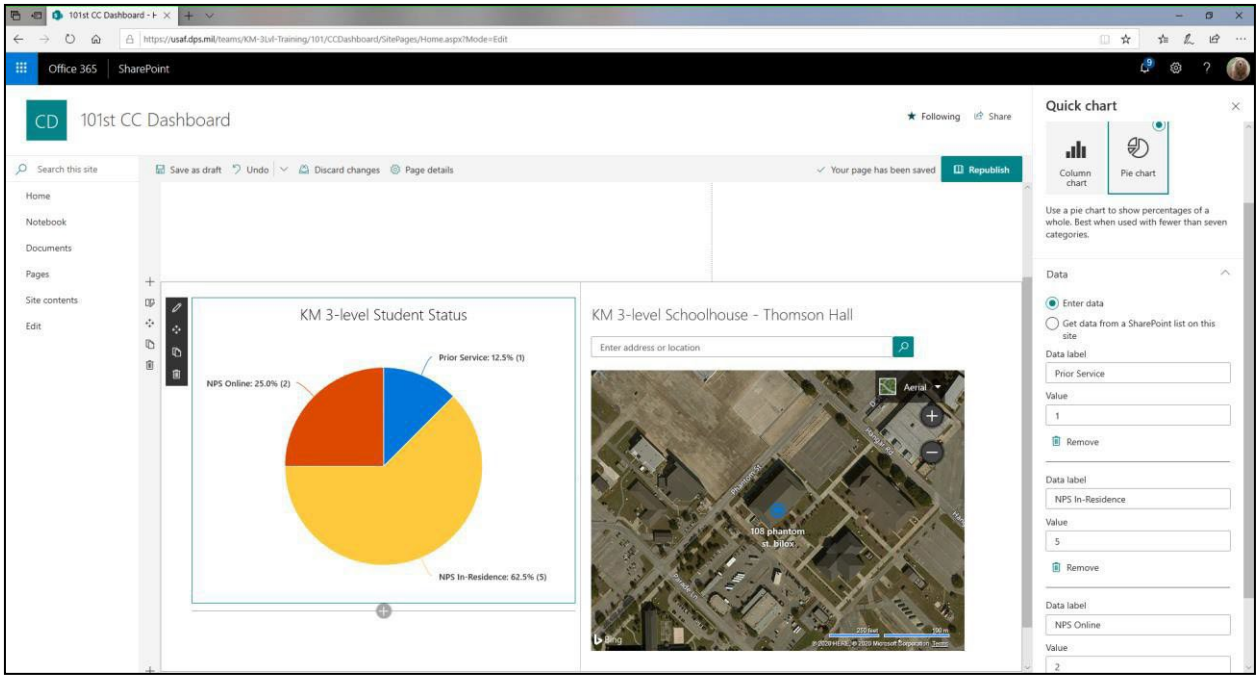


While maps are useful, Commanders truly depend on information. Let's add a Quick Chart web part to display our KM student load out.

Click the Edit button in the top-right corner to continue.

Add the Quick Chart web part to the bottom section's left column. If you added it to another region, simply click the web part, then click the  in the web part's toolbar to move the web part.

Now let's add some data and make this chart useful. Click the web part and then the Edit web part (pencil) icon. The Edit web part pane should appear on the right side of the page, if not already open. Next, let's change this to a pie chart. Select the Pie Chart Type and fill in the information as identified in the image below:



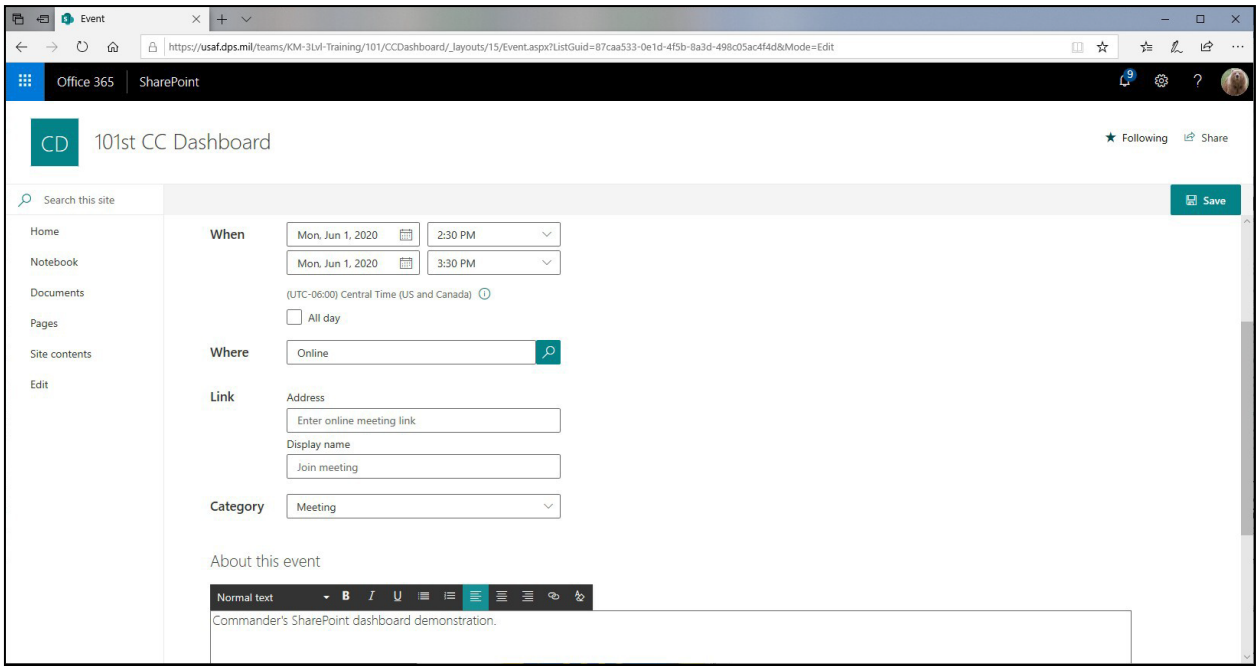
This diagram reflects how many Prior Service Students are attending the KM 3-level course, how many Non-Prior Service (NPS) Students are attending class in person, and the number of

Non-Prior Service Students that are in class online. Of course these numbers are fictitious, but in real life we could make use of actively managed (updated) SharePoint lists to source this information from. Alternatively, we could have created an Excel spreadsheet with the information and graphs we wanted, then utilized a file viewer web part to display the information.

There are many ways to do everything in SharePoint. Operationally, it's up to you to identify which combination is the best solution for a given scenario.

We still have a few more web parts that would make this a reliable source of information for a Commander (CC) – something commonly referred to as a dashboard. Let's add an Events web part so the CC can keep track of his/her upcoming appointments.

Add the Events web part to the right column in the top section. Click the Republish button. Next, click "Add Event" to the web part you just created. Fill in the information as illustrated in the image below:



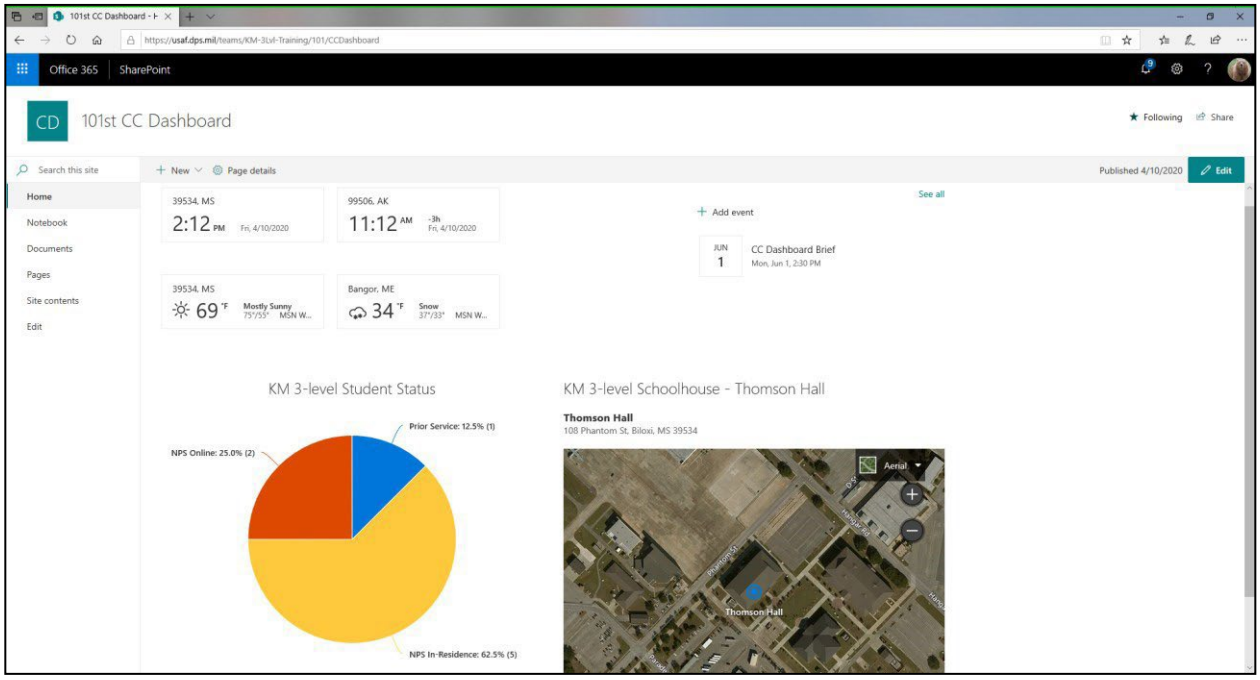
Once all information has been entered as it appears in the image above, click "Save". You'll be returned to the event's information. Navigate back to your front page by clicking the "CD" icon in the top-left. Your event should now be visible above the Map web part.

Let's wrap with up by adding the World Clock web part, as well as the Weather web Part.

Click the Edit button to modify the page. Add two web parts, the first being the World Clock, and the second being the Weather web part. Next, click the "Add a location" textbox within the World Clock web part and type "39534", select "Biloxi, MS" from the drop down. Then, add your hometown as another location.

Lastly, repeat these actions for the weather web part; add 39534 and your home town as weather locations.

Once complete, click the "Republish" button in the top-right corner. Your site should appear similar to the image below.



Congratulations, you've successfully fused multiple concepts from this exercise together to create a dashboard! We have just a few more steps before we can finish with this site completely.

Site Columns - As we've just witnessed, subsites can be customized to meet all sorts of unique needs. One more feature unique to sites, are the customization and creation of independent site columns. Let's explore this by accessing the Site Settings via the Settings menu (cog/gear) icon in the top-right of the site. Select "Site Information" from the Settings menu, then when the Site Information pane appears on the right side of the screen, click "View all Site Settings".

Once the Site Settings page loads, located "Site Columns" under the Web Designer Galleries heading in the left column.

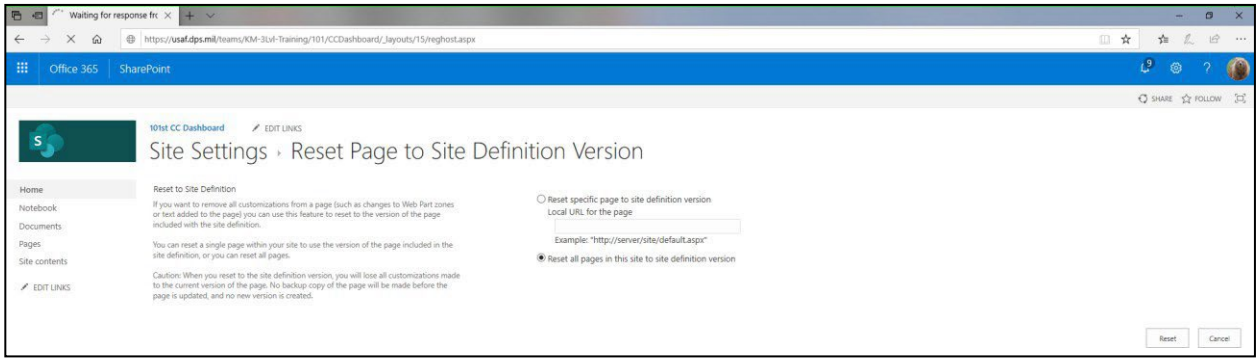
Locate the "Create" text option, towards the top-left of the page (just under "Site Settings" in large text); click "Create".

This screen should look familiar to the create column screen we witnessed when we were Creating and customizing lists. It's essentially the same screen, it's just the column we're creating here can be utilized all across the site. Let's create a simple column named, "My Column – [lastname]", then click "OK" in the bottom-right of the page.

If we scroll down about half way, you'll find the Custom Columns category, and your column will be visible in blue alongside the site that it is sourced from.

Custom Columns		
Category Picture	Hyperlink or Picture	KM 3-Level Training
Description	Single line of text	KM 3-Level Training
My Column - Bearce	Single line of text	101st CC Dashboard
Task Outcome	Outcome choice	KM 3-Level Training
Wiki Categories	Managed Metadata	KM 3-Level Training
WSEnabled	Yes/No	KM 3-Level Training

While not frequently used, some KMers have identified useful shortcuts utilizing the site columns as a centralized source for creating metadata fields or basing workflows upon.



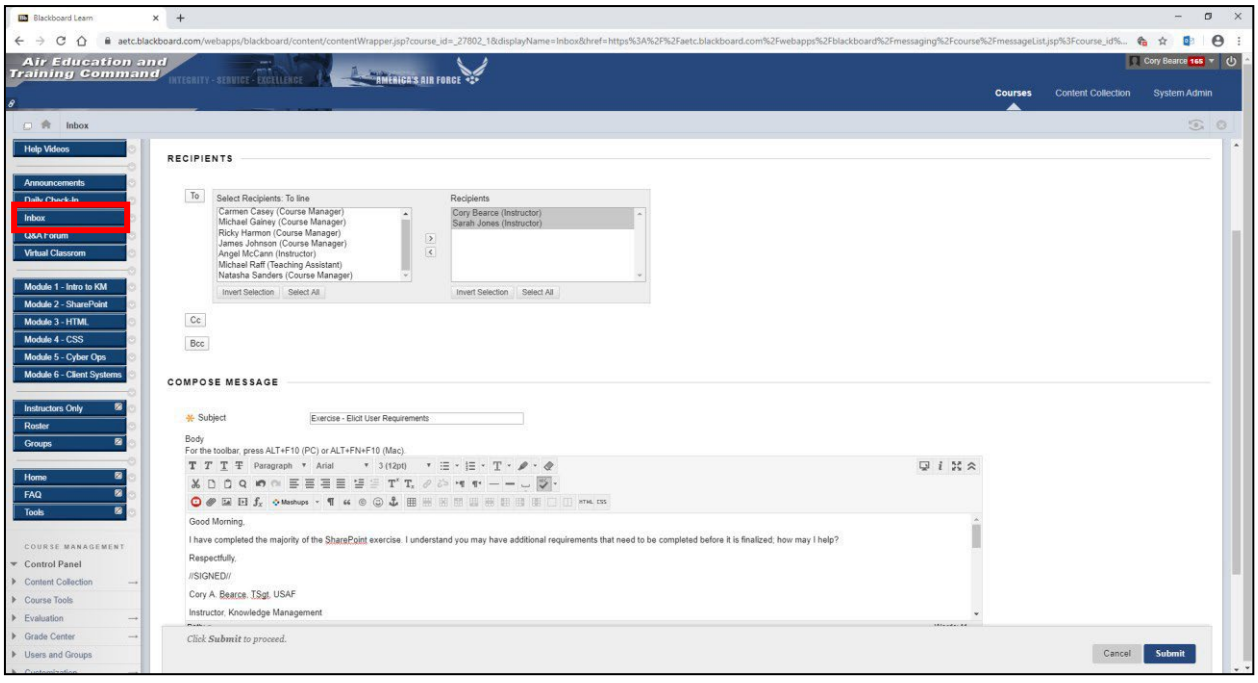
You should be returned to Site Settings. Notify your instructor once you've completed this step, and await their further instructions. Failure to do so will result in you needing to repeat the creation of the subsite and all content therein.

Elicit User Requirements – Before continuing on, let's discuss user requirements. Foremost, users are the whole point of SharePoint. Without users, why do we need permissions, or content or even a SharePoint site? As such, it's imperative we understand how best to interpret, inquire and ultimately aide those users – our customers.

There are innumerable models, flowcharts and techniques to achieving user requirements, but it ultimately comes down to communication, technical proficiency and patience. Perhaps the best way to summarize this is in the following five core principles. When applied correctly, customer satisfaction will follow.

1. Initiate communication professionally; politely and formally.
2. Use language appropriate for your audience.
3. Ask, don't assume.
4. Define or agree to a timeframe.
5. Communicate limitations as they are identified, ideally in the request/planning phase.

To practice this, use the Inbox feature within BlackBoard to communicate to your instructor, asking if there are any modifications they would like to see enacted on the site you have created.



If you have difficulty in understanding your instructor's request, follow up with them for more details. Be sure to follow the five core principles of requirement elicitation as noted above.

Once you have attended to the new user requirements you elicited from your instructor, move on to the remainder of the module.

Return to your Student Training Wing SharePoint site and notify your instructor of your completion of the exercise. Prepare for the Progress Check while you wait.

This concludes the SharePoint Exercise. If you wish, you may revisit content for practice.