
AFCEA Systems Document

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Introduction

I. Purpose

The purpose of this document is to provide step by step assistance with screenshots on how to maintain the systems developed by the HPU team. This document will be divided by two systems. The first system is the AFCEA website, which is supported by the Wix framework. The second system is the ‘AFCEA HI’ iOS application. It is important to note that this document is a work in progress as not every aspect of the project has been completed and released at the time of the creation of this document. Therefore, this document should be maintained and developed as the project is finalized.

II. Project

This project has been developed by HPU students as part of their final capstone project to achieve real-world experience with clients in the field. The objective of this project was to apply the knowledge covered in the lecture to solve a problem that was faced by our client. This project required effective communication between the team and the client as well as communication between the team members. The team also had to document client meetings and the user requirements to establish an understanding of what was expected and what can be completed.

The client of this project is AFCEA and the general objective of the project was to streamline the content of two prior websites hosted on WordPress to a new modernized site on the Wix framework. The second objective was to increase community engagement with the system, so the HPU team has implemented several features discussed below. An iOS application was also developed to allow users to interact with the community and provide notifications to remain up to date on current and upcoming events.

Wix Instructions

I. Getting Started

1. The Public Webpage

The public webpage is the site that AFCEA members and new users may access to retrieve the current information about the AFCEA Hawaii Chapter including information such as upcoming events, ticketing, donations, AHEF information, and volunteer opportunities. Let's begin by locating the current website on any of the following browsers that are supported by Wix:

- Google Chrome
- Safari for Mac
- Microsoft Edge
- Firefox

**Note: Wix recommends the usage of the latest version of the browsers above*

<https://www.afceahawaii.org/>

The homepage of the website is shown here:



2. Administrative Login

Administrative access to the site allows the admins to modify site content, update event information, change site settings, and more. If you are a new employee and has recently been granted permission to manage this website, a previously registered admin user would need to register a new account for you and provide ‘Admin’ access on the site before continuing.

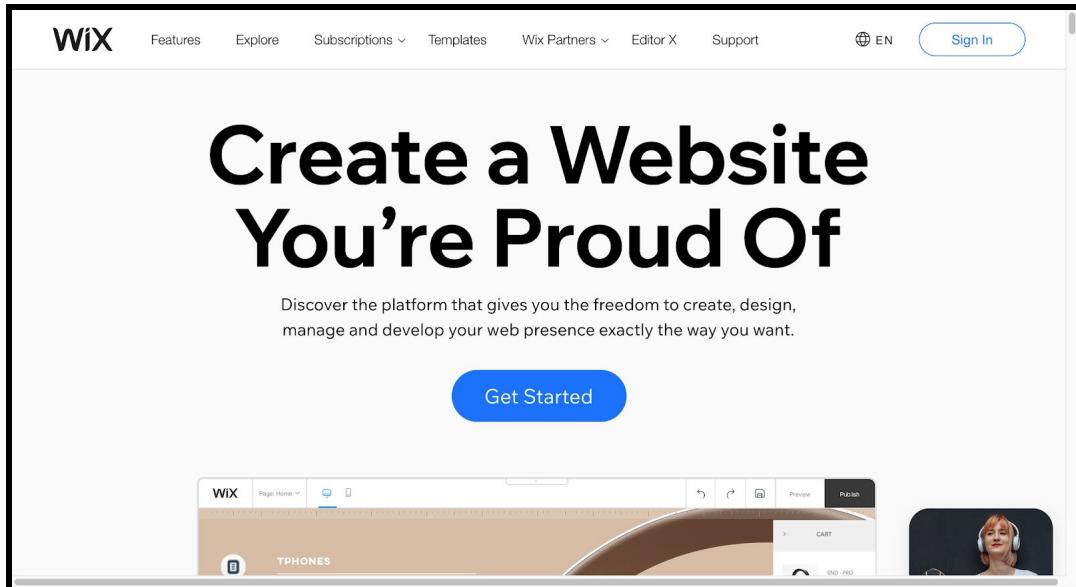
The screenshot shows the Wix website dashboard for 'AFCEA Hawaii'. The left sidebar includes links for Dashboard, Events, Ascend by Wix, Customer Management, Marketing & SEO, Analytics, Finances, Settings, Apps, and Content Manager. A central panel displays site information: 'AFCEA Hawaii' at <https://brandonlester5.wixsite.com/afcea>, with a 'PREMIUM' badge. It shows 'Domain: Not connected' and 'Website Manager'. The 'Contributors' section lists several email addresses. Below this is a 'Your Ticket Sales' section showing 'No tickets sold' and a link to 'Manage Roles and Permissions'. A 'Let's Set Up Your Site' guide is visible, with steps like 'Create Your First Event' and 'Accept Online Payments'. To the right, there are sections for 'Upcoming Tasks', 'Help', and a search bar.

Wix provides a variety of permissions that allows different administrators to contribute in a variety of ways. This tool ensures that the admins will not overstep in the editing roles or change edits from different admins. The difference in the roles is presented here: [Roles & Permissions](#).

This screenshot shows the 'Roles & Permissions' page. It starts with a heading 'My Contributors' and a table with columns for EMAIL, ROLE, and DATE. One contributor is listed: 'brandon.lester@afcea-hawaii.org' with the role 'OWNER'. There is also a note about viewing the site owner's email address or removing oneself as a contributor.

EMAIL	ROLE	DATE
brandon.lester@afcea-hawaii.org	OWNER	

Once you have an administrative account on Wix for this website, you would be required to login to the system each time to access the site. The login page and URL are shown below. Press the ‘Sign In’ button in the top right region of the page to login.

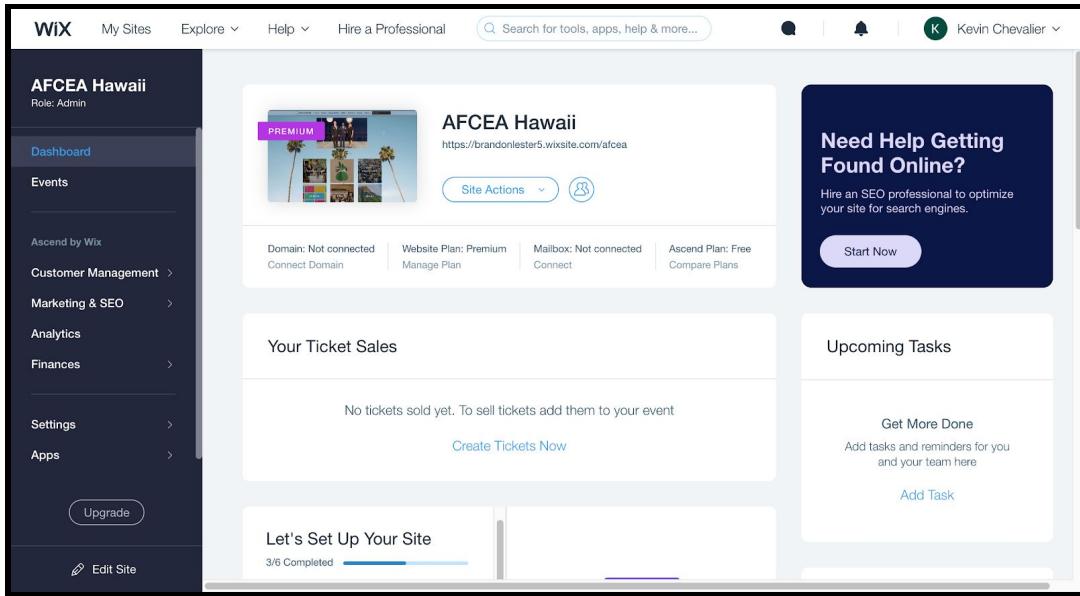


Admin Login URL: <https://www.wix.com/account/sites>

Provide your email and password information on the left section or select another method of logging in on the right section.

A screenshot of the Wix Log In page. The page has a clean, modern design with a white background. At the top left is the Wix logo, and at the top right is a close button (X). The main heading 'Log In' is centered above a sub-heading 'New to Wix? [Sign Up](#)'. Below the sub-heading are two input fields: 'Email' and 'Password'. To the right of the 'Email' field is a checkbox for 'Remember Me' and a link for 'Forgot Password?'. To the right of the 'Password' field is a 'Log In' button. On the right side of the page, there are two social login buttons: 'Continue with Facebook' (with a Facebook icon) and 'Continue with Google' (with a Google icon). At the bottom of the page, there is a small disclaimer: '* By logging in, you agree to our [Terms of Use](#) and to receive Wix emails & updates and acknowledge that you read our [Privacy Policy](#)'.

Once you have successfully logged into your account, you will be redirected into the main page of the internal system known as the Dashboard. The dashboard is the hub for everything that can be edited as far as content and admin permissions. On this page you would have access to several features that include: editing the site, adding/modifying the events, settings, adding new administrative users, and more. The Dashboard page is shown below:

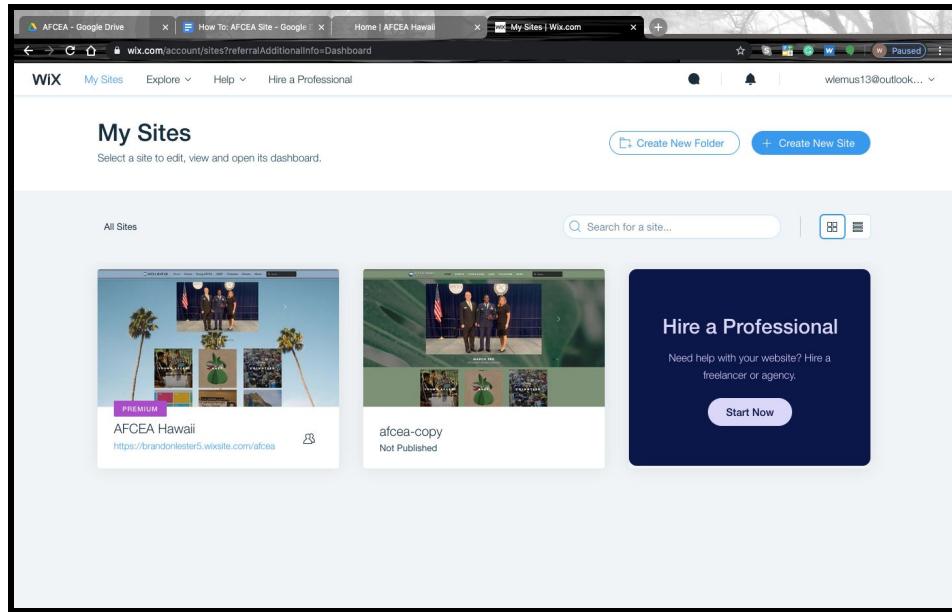


II. General Content Management

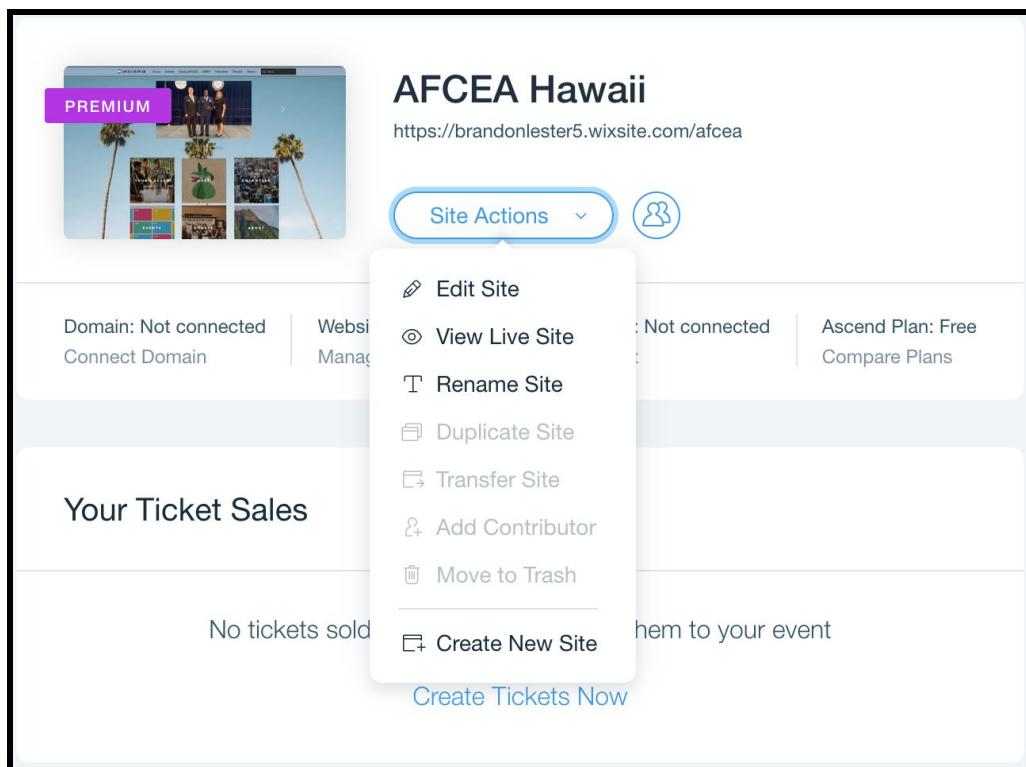
1. Wix Website Editor

Wix is a powerful website builder that will help propel the success and popularity of AFCEA website. Below is an easy step-by-step tutorial that guides any user to learn the basics of the Wix website builder. The tutorial includes choosing templates, customizing, adding pages, customizing the content, etc.

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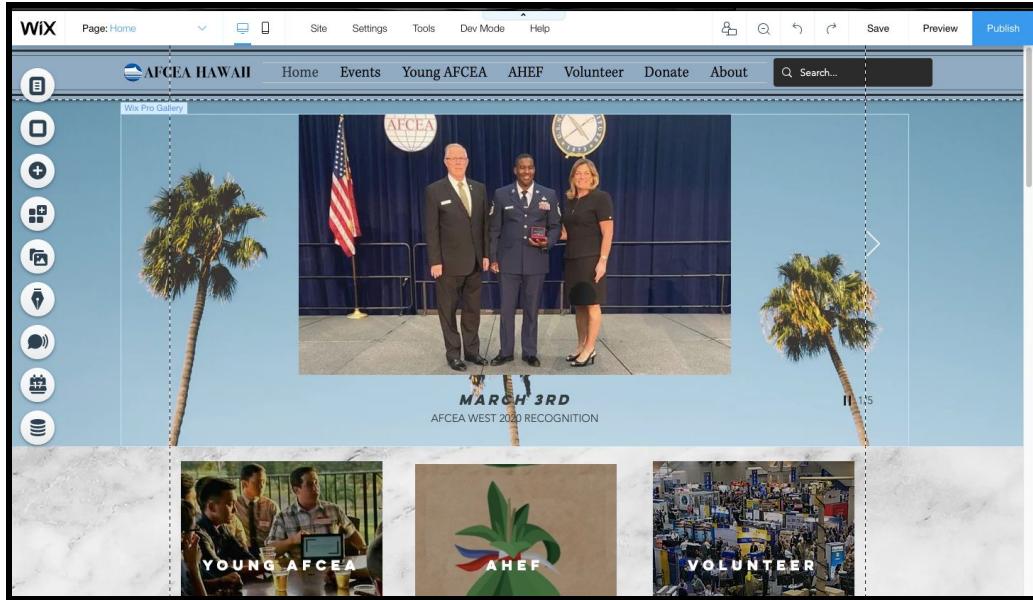


To access the editor, site actions need to be clicked and a drop-down menu will appear. The menu has the edit site option and this will open a new page with the editor as shown below:

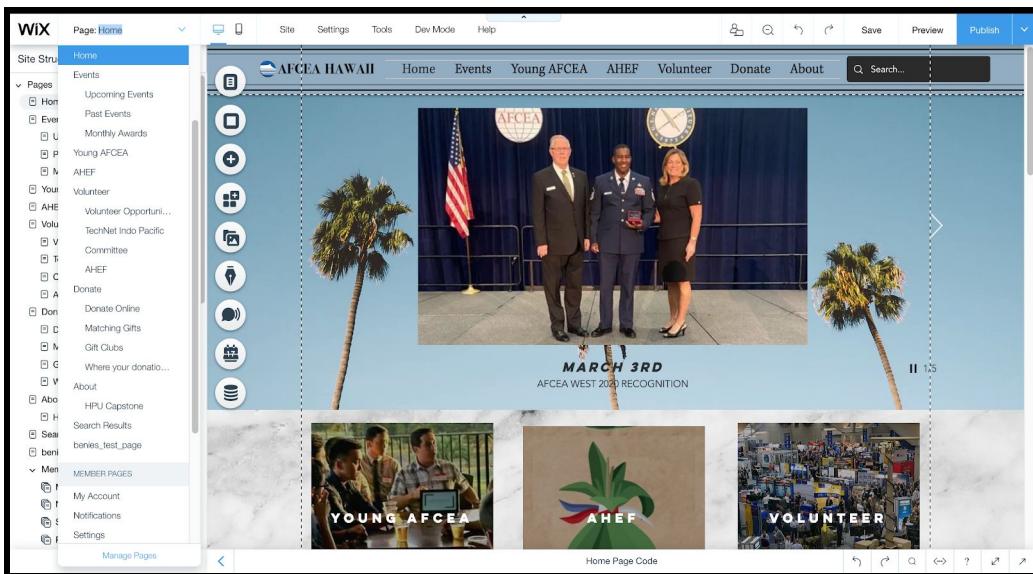


This is the main page of the Wix Website Editor:

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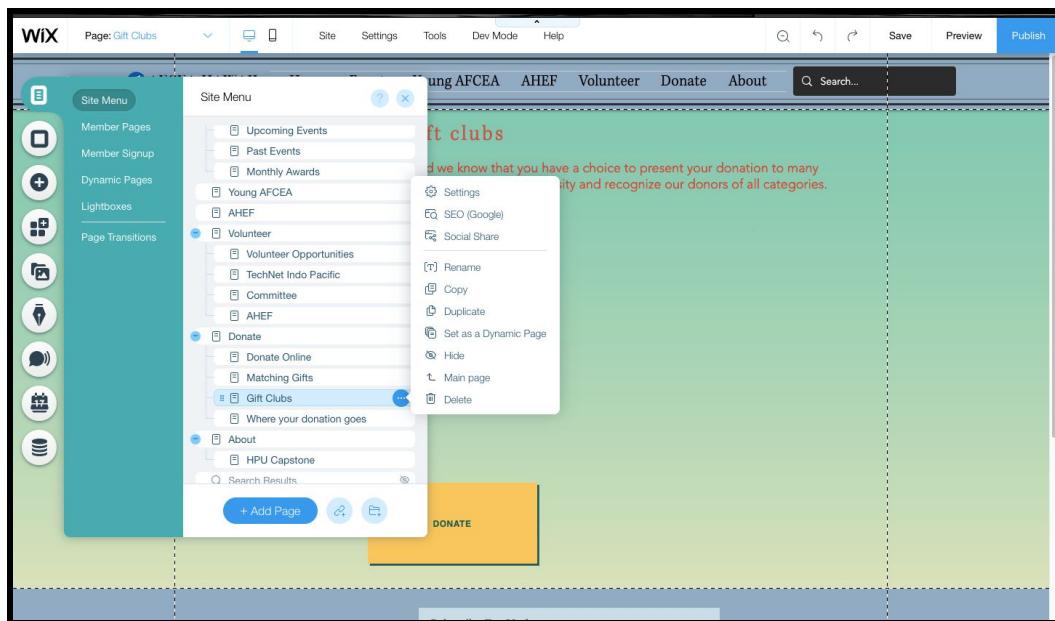
To navigate between pages, a drop-down menu is next to the Wix logo on the top left hand of the page. When clicked, the menu will show all available pages that can be navigated to.



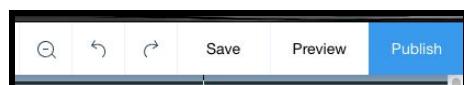
To create a new page, you have to navigate to the page directory as shown above and click manage pages at the bottom of the drop-down menu. There is another option on the left-hand side. The first bubble is the sites and menu and is another option to navigate and edit pages. Once in this menu, admins have access to edits all the pages including member and site pages. To add a new page, the bottom there is an add page button and by default, it will send it to the top of the directory. To move it around you click, hold, and drag it to the desired location. The indentation is the pages is how Wix does the drop-down menus, so to add under the main page

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when dragging, slide to the right and the indent will be automatically showing. The side button adds additional ways to edit or delete a page if need be.

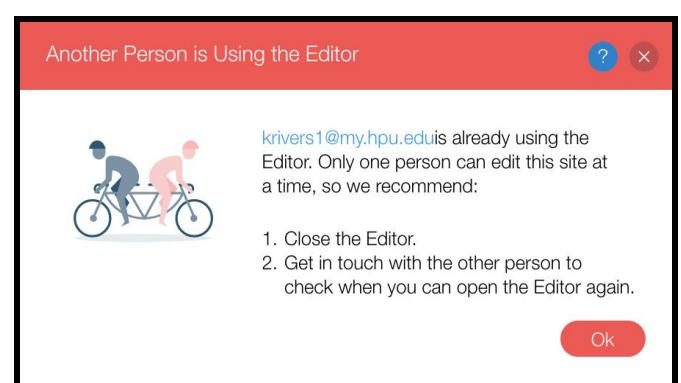


The save, preview, and publish button are on the top right corner of the editor. When making changes, the best practice is to save frequently. The save button does not make changes to the live site but will keep it in the editor. Preview allows the admin to see how the changes will appear on the live site before committing to them. Publish will send the saved changes to the live site. The editor will give a reminder if the attempted publish is not saved.



2. Collaborative Work on Site

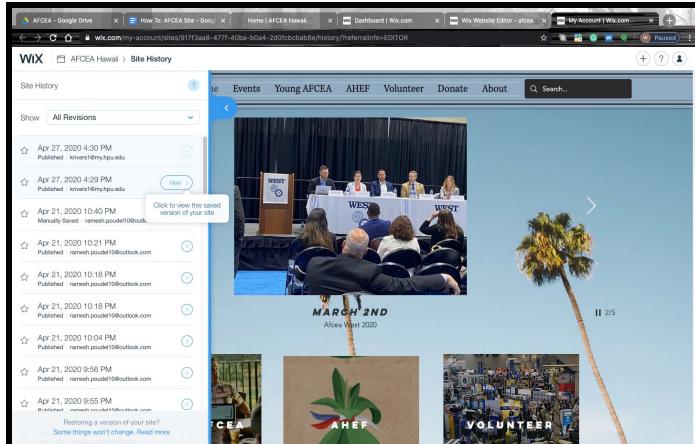
Wix will only allow one admin at a time to make changes and publish content. If there are multiple people on the editor the warning below will be shown. To ensure there is no overlap of published content it is best to communicate with the fellow admins to set up different times to edit the content.



3. Restoring The Site

In case any content was changed on accident Wix will hold a history version and the pages can be restored to a certain version. An admin user needs to be on the editor, once in there is the site button that will have a drop-down menu appear. In the middle of the drop-down menu, there is the site history button. The button will open a new tab and display the entire site history since creation. The admin who published a certain history will be shown along with the date and time. The last picture is when hovering on the arrow it displays the different site history, a preview is shown to ensure that is the correct restore is selected. Wix will give a notification to double-check that the restore was correct. Once the confirmation button is selected the website will restore back to that version.

Date	Time	Published By	Action
Apr 27, 2020	1:30 PM	krivers1@my.hpu.edu	
Apr 27, 2020	1:29 PM	krivers1@my.hpu.edu	Restore
Apr 21, 2020	7:40 PM	Manually Saved	
Apr 21, 2020	7:21 PM	Published	
Apr 21, 2020	7:18 PM	Published	
Apr 21, 2020	7:18 PM	Published	
Apr 21, 2020	7:04 PM	Published	



How to edit the site's backend

III. Page Content Management

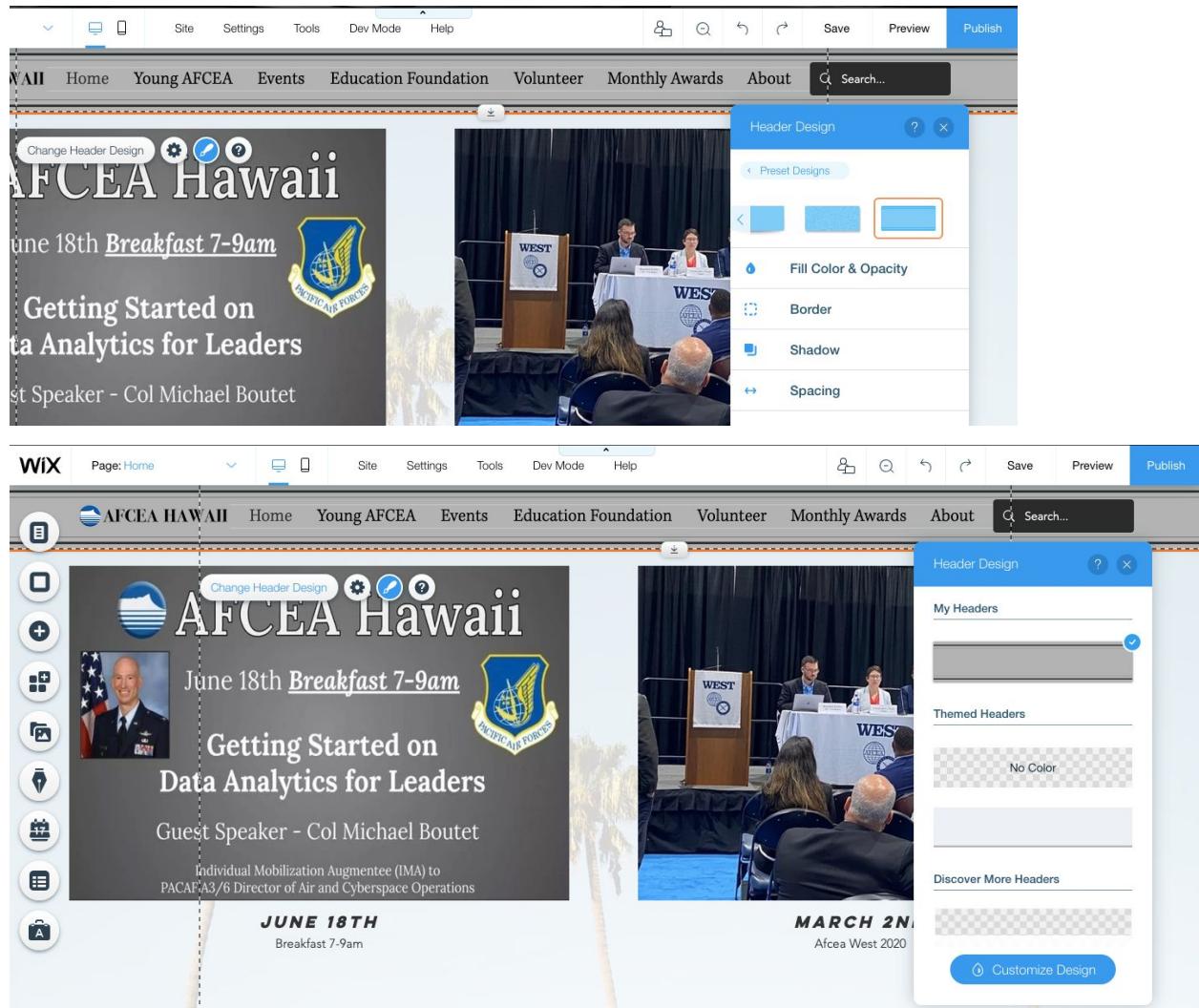
1. Homepage

How to update the navigation bar:

Click on the Design button (paintbrush to the right) or “Change Header Design” to change the look of the navigation bar. You will be able to change the font, the spacing, the shading, the style by the default provided, or customized design.

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Customized design tools will navigate to additional settings that include: fill color & opacity, border, shadow, and spacing. The edits will show immediately. Make sure to save!



How to edit the picture slider:

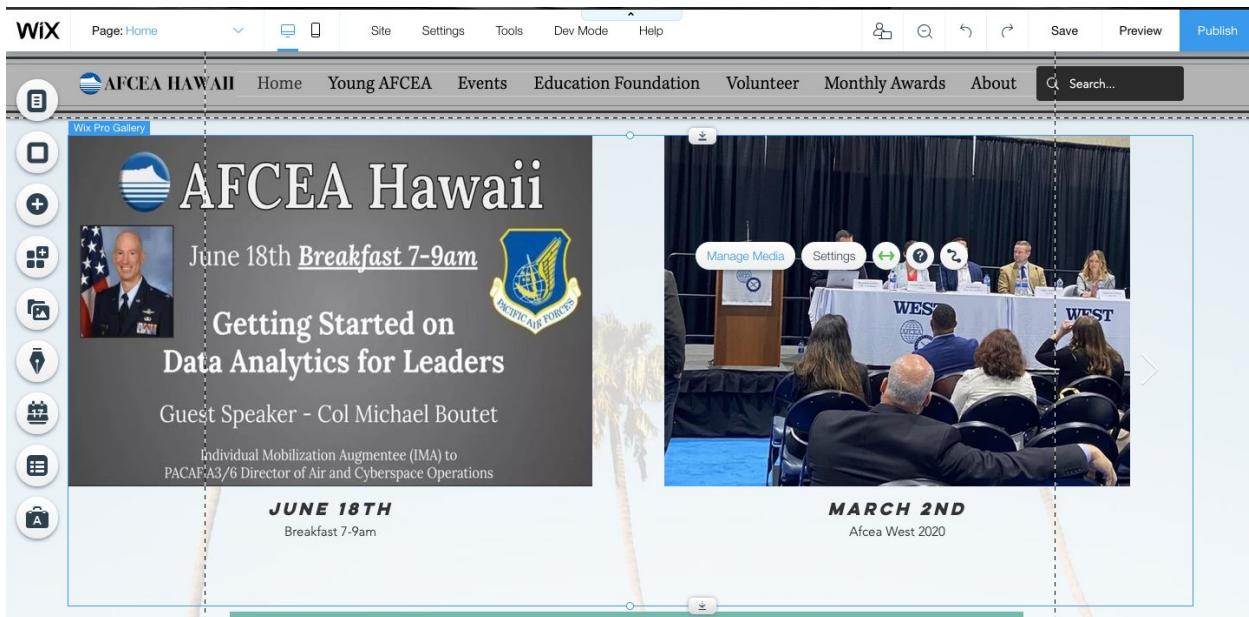
Click the slider, or the pictures, then click on “Manage Media”. A popup will appear showing an overview of what is being displayed currently. To edit the photos text and dates that are being used for the event slider. You are able to replace an Image, Title, description, and link it to another page. Click on replace the image, a popup appears with all the photos used in the sight. In the top left corner, there is an option to upload media from the user’s computer.

The slider is not linked to the events so you will have to update the photos and descriptions when you have a new event or reminder you want to display.

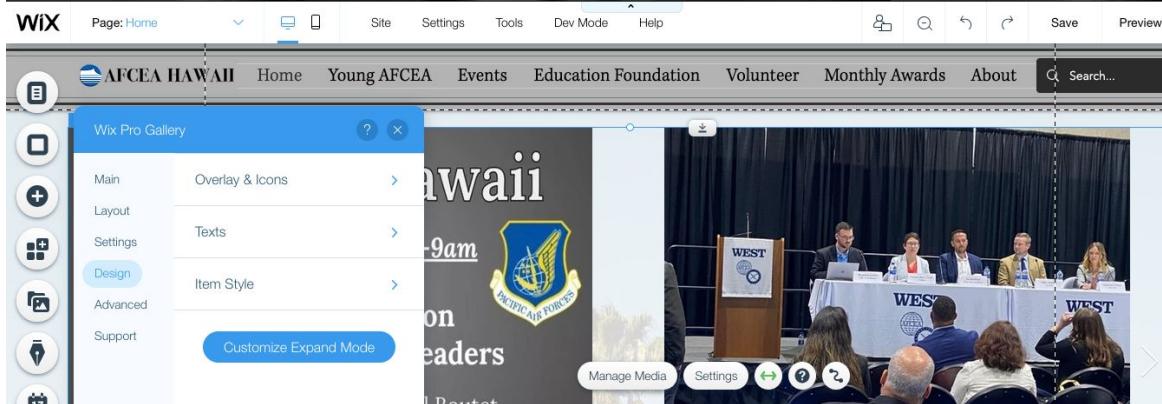
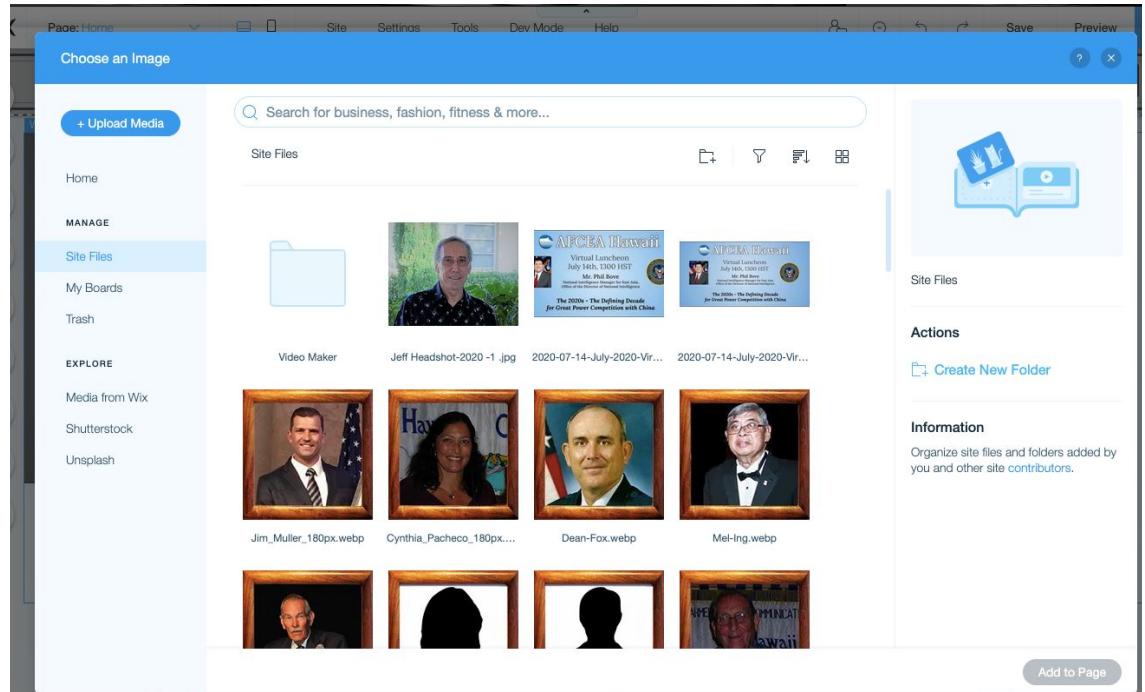
Click on the “Settings” button and a popup appears where you will be able to update the following:

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- MAIN:
 - go to the media storage page
- LAYOUT:
 - provides an option on the slider display
- SETTINGS:
 - choose an action that will occur when the media is clicked.
- DESIGN:
 - change overlay & icon design
 - modify text and item style
 - Customize expand mode
- ADVANCED:
 - Change image settings
 - Change the video setting



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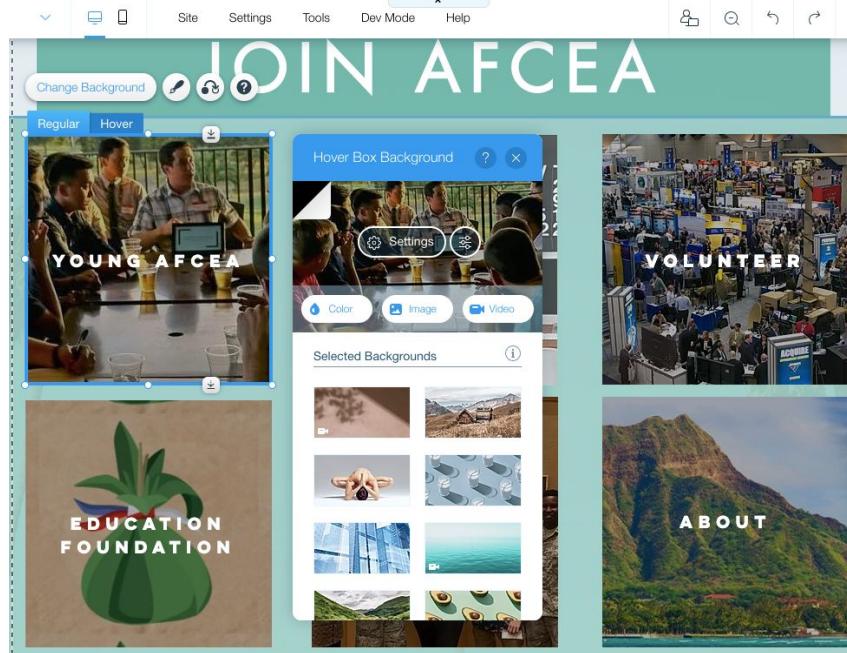


How to change photos on buttons:

The 6 buttons below the slider are clickable and will take you to each respective page on the website. To change the photos you need to click on the box you want to change, click on the “Change Background” button when it comes up. From there you can choose to change the image, color, and video. The settings button allows you to change image opacity (clearness) and color behind image.

To change the text of the box, click on the text you would like to edit and then click on the “Edit Text” button to be able to change the font, the size, and the color. The setting replicated a word editor.

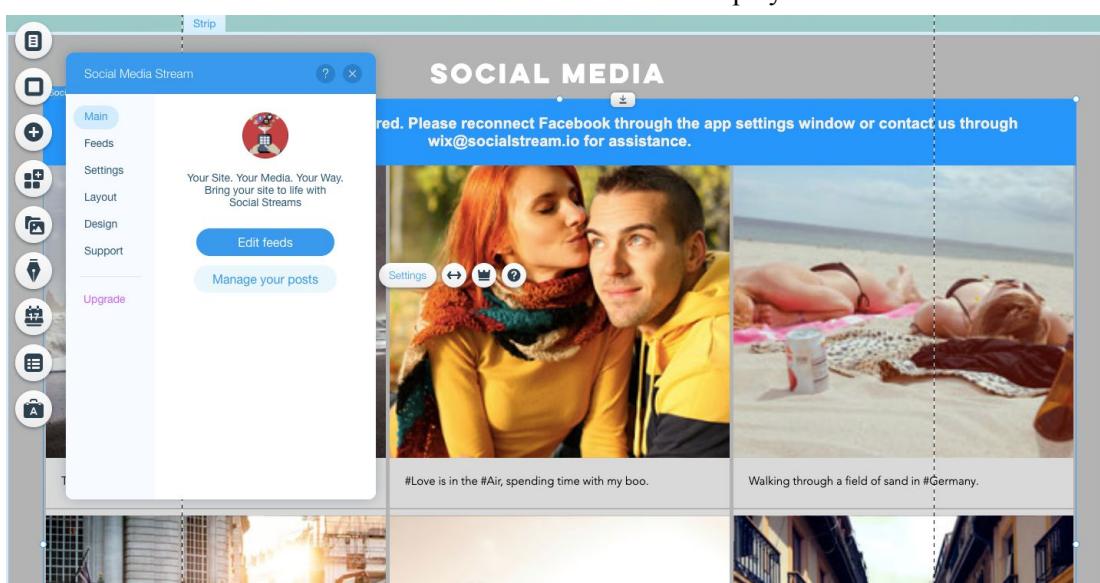
To change the style of the actual button, click the box, then click hover, and then click on the ‘view’, the click on the “Change Text” button to be able to change the style of the text, click on the paintbrush to ‘design’ what the button looks like and how it will function.



How to update social media:

Click anywhere on the social media box, then click on the “Settings” button when it appears. A menu will appear consisting of:

- MAIN: This will help edit the feeds and manage your posts
- FEEDS: displays the social media that is being fed to the website
- SETTINGS: how social media is going to update and display to the users
- LAYOUT: how the post will be displayed on the webpage
- DESIGN: choose the colors of the display boxes and the font



2. Young AFCEA:

Consist of text boxes, repeaters, and columns pictures (repetitive)

3. Education Foundation:

How to update the photo carousel?

To make changes to the photo, a user needs to click in the general areas. An option will appear to manage slides and depending on the slide that is to be changed will be navigated through the arrows. The slider can hold photos, plain colors, and videos.

The same edits [How to edit the picture slider](#) but just displayed a different way.

How to modify information strips and text?

The strips act as a secondary background in one area. They can be a color or picture and can be layered with text whatever the user desire. The strip editor will appear when clicked. The text when clicked displays an editor where the size, font, alignment, everything found in word documents, will open up. The text can be changed directly on the site.

4. About:

Text box

Button - Join AFCEA

Modifying slider with values & capstone

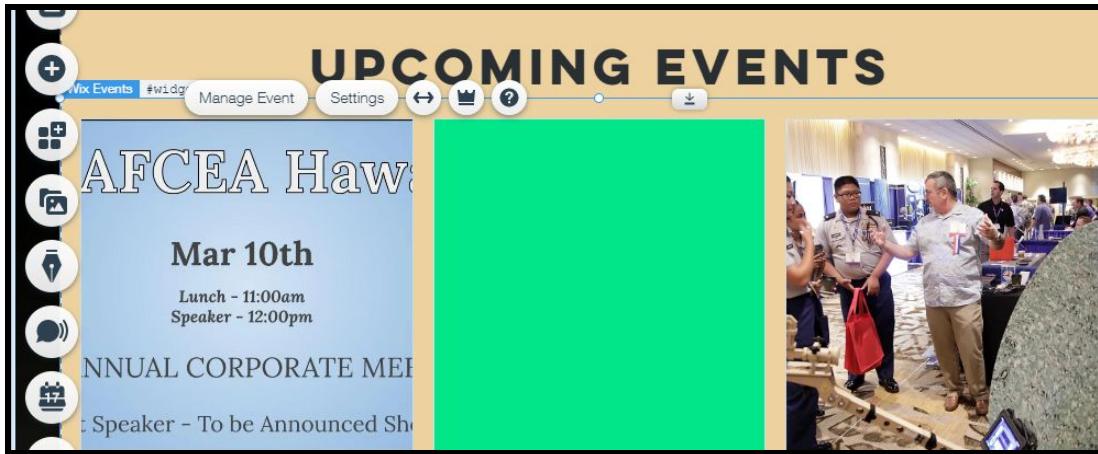
The slider will have the same edit options as the one in the Education Foundation homepage.

5. Events

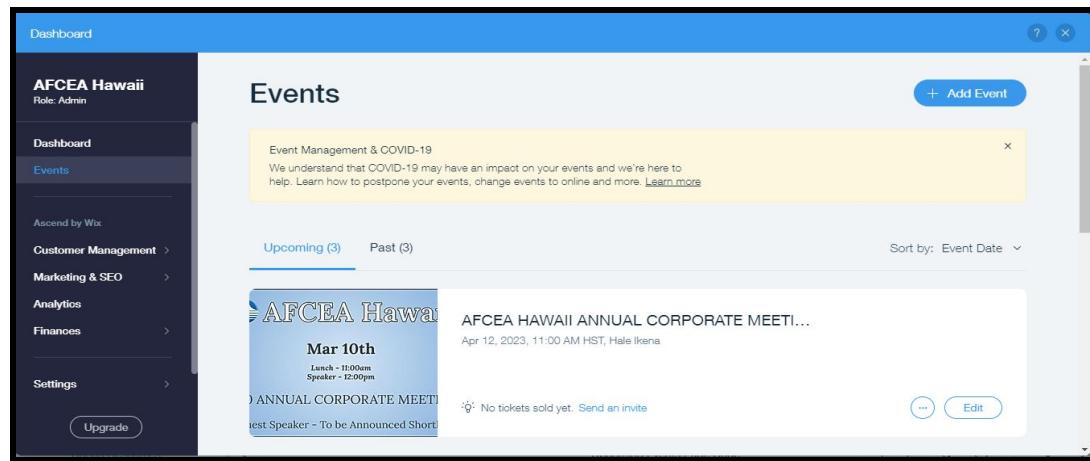
The event page consists of the information and descriptions of the events that AFCEA hosts and it includes the upcoming events, the past events, and the monthly awards.

How to add a new upcoming event

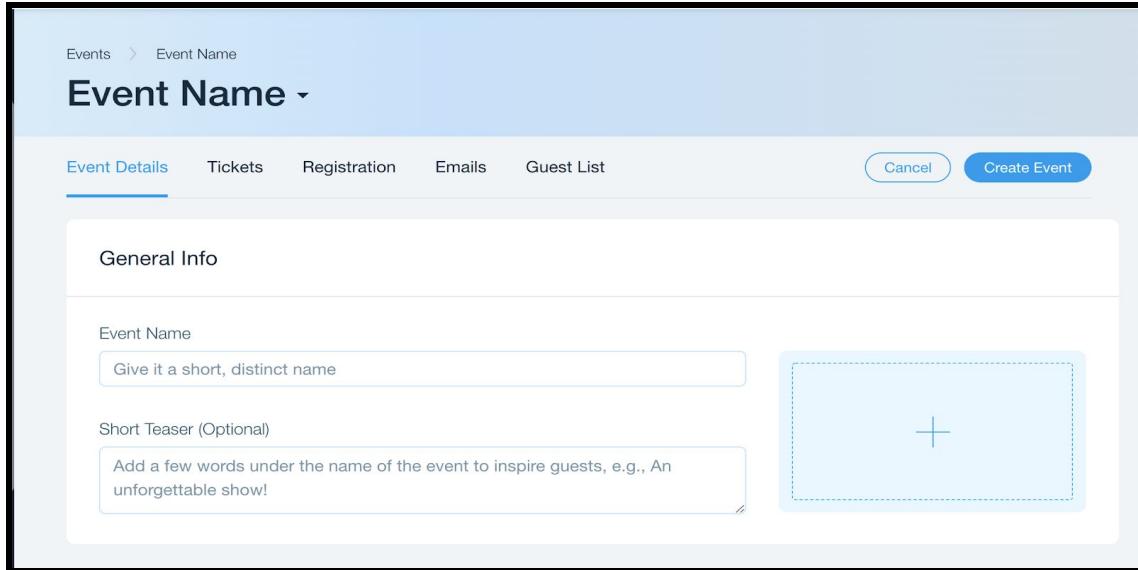
To add a new upcoming event, the admin user can begin in the Wix Website Builder and go to the “Manage Event” tab in the upcoming events subpage and select the upcoming events area as shown in the picture below.



Then, we get to the Events dashboard page and add an event by clicking the add event button which is on the top right of the page. The corresponding picture to the page is shown below:

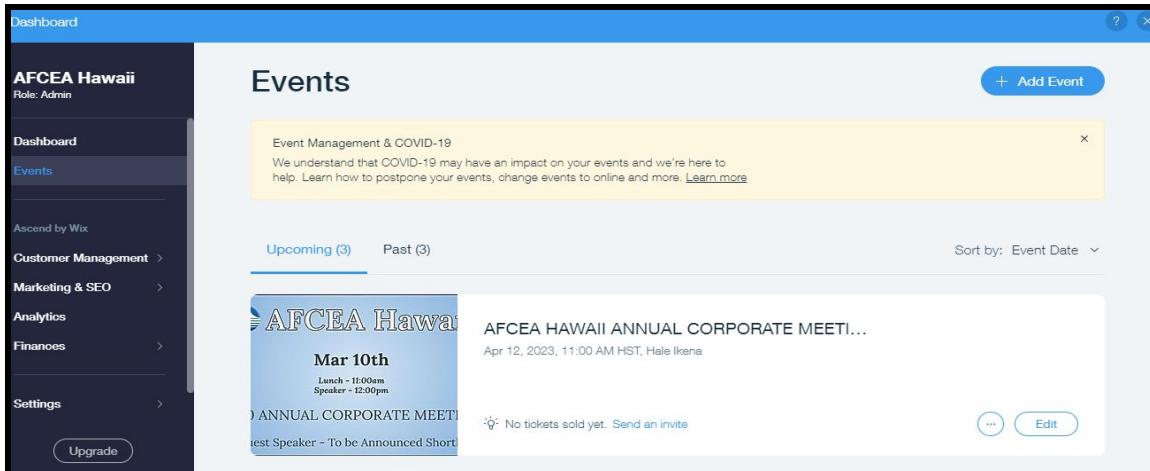


After clicking the “Add Event” button, we get to the “Event Name” page where we can input the information of the event and add a picture of the event. Finally, click on the “Create Event” button and we can input the details of the tickets, registration, emails, and guest list by going to the corresponding tabs. We can edit the event with the same steps.



How to delete an event

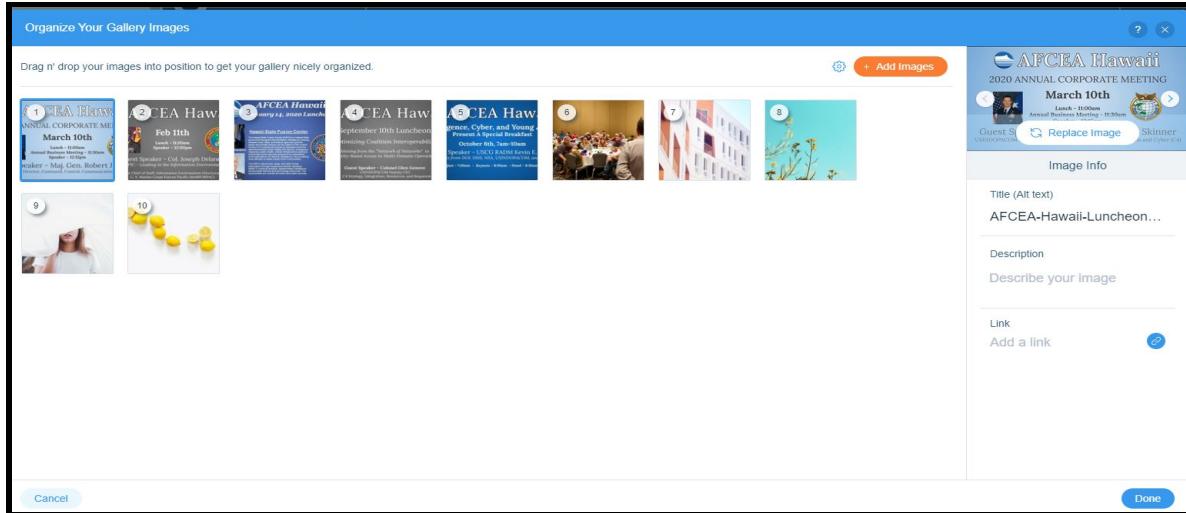
To delete an event we would have to go to the “Manage Events” tab again from the Wix Website Builder and get to the Events dashboard and click the edit button on the button next to the bottom right of the certain event and edit it. The picture can be deleted by hovering through the picture and selecting the delete button.



How to Add a Description to Event

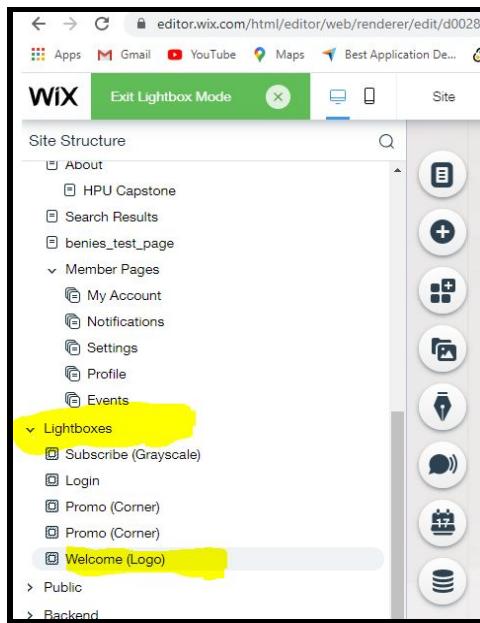
Description of the image can be edited by simply clicking the change image button and following the page as shown below, here you can edit the past events pictures by choosing the add images on the top right of the page and add description which is located in the top right of the corresponding page . You can also add more pictures and information of the past events and also input the link needed following the instructions on the template itself.

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How to add, edit, and delete Lightbox (Popup)

Select the “Selection Criteria “ box and click on the change design button. Similarly, the light that is linked to this box can be edited by clicking the title of the lightbox you wish to edit.



6. Volunteer

How to add / edit the Volunteer page

How to change photos on buttons

The 6 buttons below the slider are clickable and will take you to each respective page on the website. To change the photos you need to click on the box you want to change, click on the

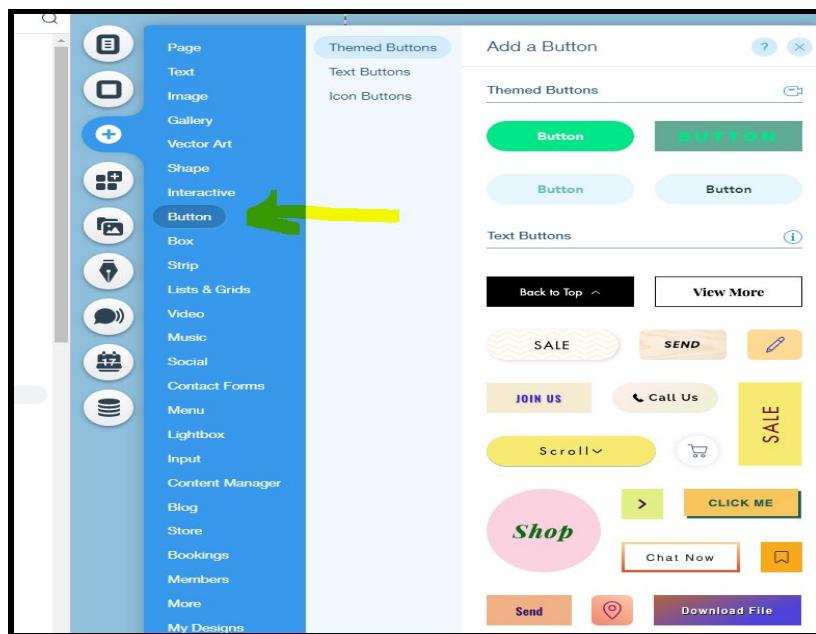
“Change Background” button when it comes up. From there you can choose to change the image, change it to a solid color, or even a video.

To change the text of the box, click on the text you would like to edit and then click on the “Edit Text” button to be able to change the font, the size and as well as the color.

To change the style of the actual button, click the box, then click hover, and then click on the ‘view’, the click on the “Change Text” button to be able to change the style of the text, click on the paintbrush to ‘design’ what the button looks like and how it will function.

How to build a button and add a pdf file on it

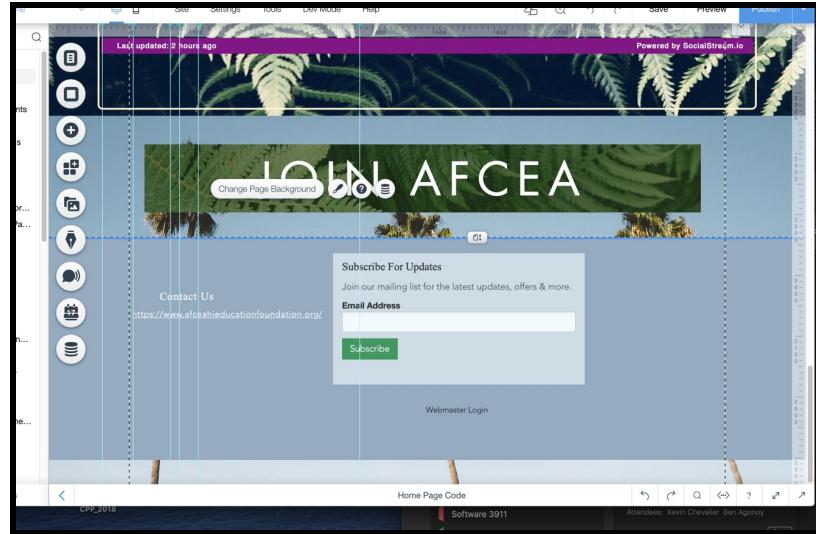
Where the money goes subpage uses this feature in the Scholarship recipients section, First you would need to add a button by selecting the + sign located on the left side of the editor page and selecting the templates for the buttons as preferred. You can refer to the following picture for it.



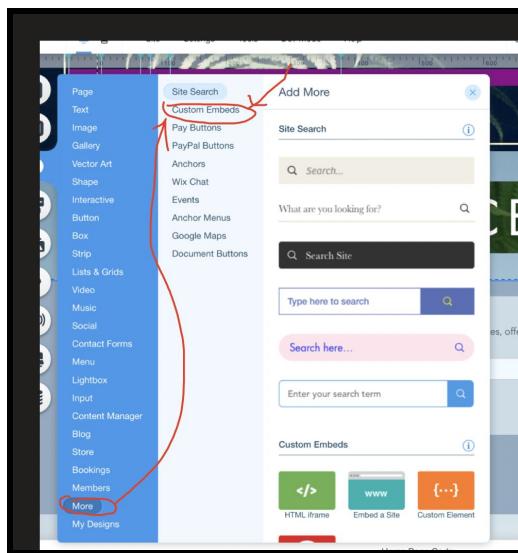
IV. Other Stuff

1. How to custom edit and embed your own code.

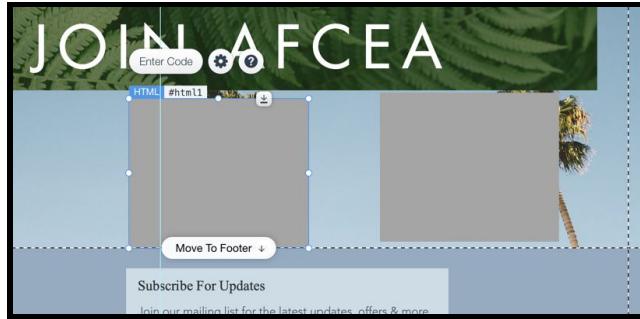
- To add custom edit, first select a page where you want to add the container. Example image below where the next container is placed.



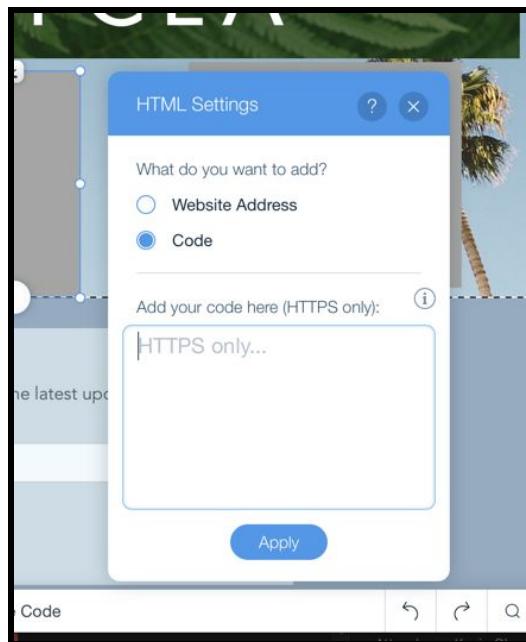
- b. Next, select the + sign to add the container. This container will hold the custom code.



- c. Upon selecting “custom embed” there will appear a custom embed to select from: HTML Iframe, Embed a Site, Custom Element. Feel free to experiment among the three selections.
- d. After selecting any one of the custom embeds, it will automatically appear on the web page where the location of the cursor is placed. There should now be a gray box, ready to be filled with custom code. See below image for further detail.



- e. Click on the gray area, and ready to embed any code chosen for the style. Important: the container can be resized and moved. Important: the container can be resized and moved.
- f. Ready to embed any code chosen for the style.



2. How to transfer ownership of website or Wix

On the Wix dashboard right next to site actions there is a button with two figures. When the mouse is hovering over the button a list of admins appear. On the bottom of the list, there is an option to manage roles and permission. The page will get directed to the complete list, from here the owner can change permission and transfer ownership of the site.

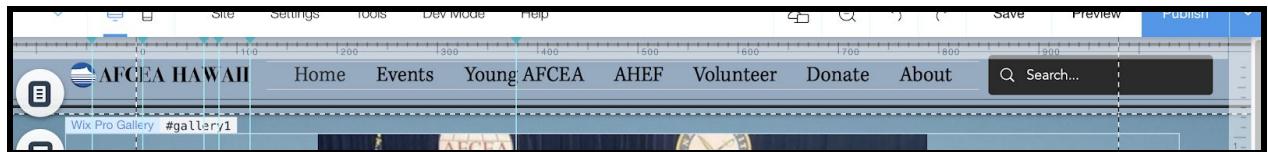
3. How to custom style AFCEA LOGO

The AFCEA logo can be changed with a different log or custom logo.

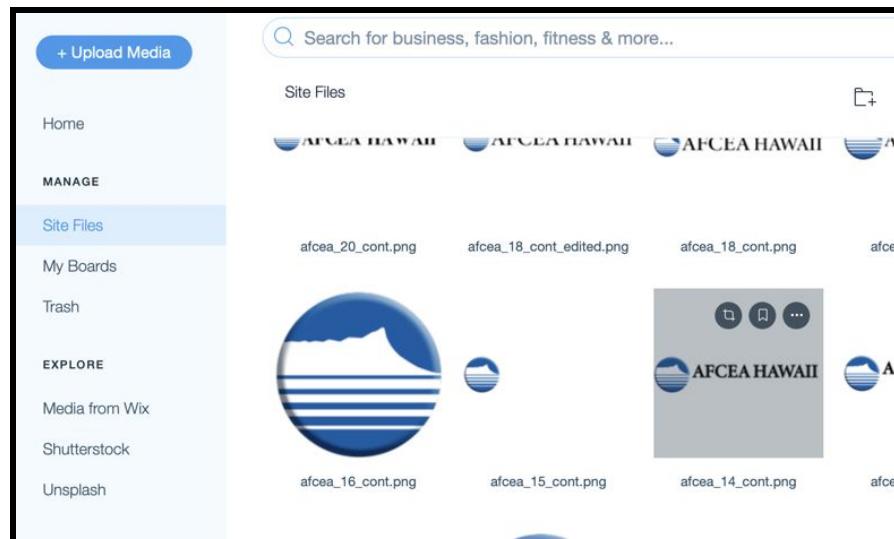
Important: When customizing logs, ensure that the best quality image is used. Unfortunately,

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Wix is unable to use .SVG format, so it is best to use .png format for transparency.



1. Click on logo
2. A window will appear



3. Select any image to be loaded as the Logo.
4. If there is any other logo that is not located on site, then it can be uploaded, using the “Upload Media”
5. NOTE: It is best to use Adobe Photoshop or Adobe Illustrator to create a logo for the best result. Additionally, original AFCEA logo can be found in the site



iOS & API Instructions

I. Getting Started

1. Downloading the Public App

This section is not ready at this time. Once the iOS Application has been finalized and approved for release then the developers may prepare the App Store release process and it would become publicly available for download in the Apple App Store.

2. Obtaining the Project Files

This project was developed on SwiftUI for iOS devices, such as the iPhone and iPad. It should also be noted that the project may be converted to a MacOS release, but results are not tested. The development of the application is required to be coded in a Mac environment in the Xcode IDE. It is recommended to use the latest MacOS and Xcode versions, but the minimum requirements are MacOS 15.0+ and Xcode 13.0+. The project files at the time of writing are currently maintained by a HPU developer in the following private GitHub link:

https://github.com/kchevali/AFCEA_HI

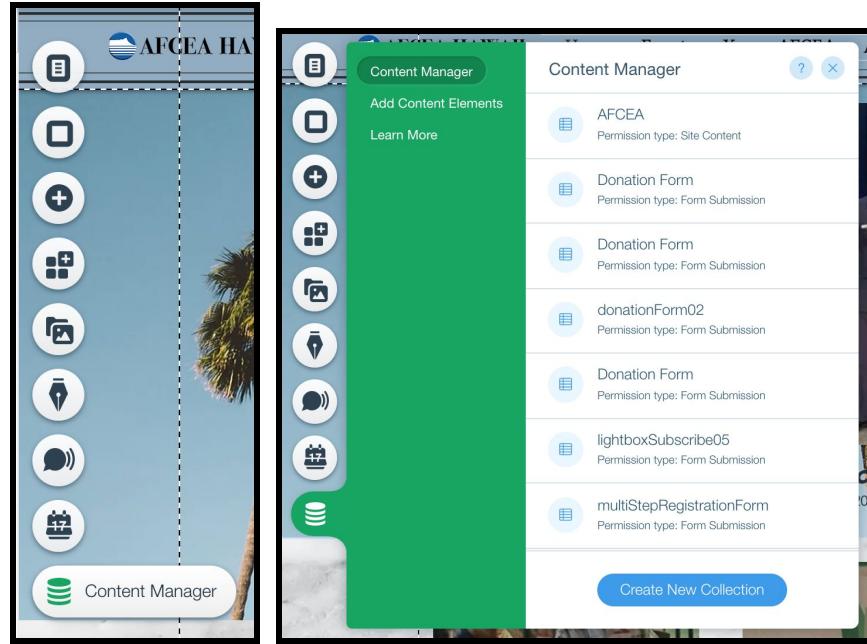
**Note: We may discuss transfer of ownership in the near future to an official AFCEA member*

II. Data Content Management

1. Create / View / Modify the Database

The events data for the iOS application is hosted by Wix and is shared on the same database that is used by the website. This means that updating the events for the website will automatically update the events for the iOS application. In this section, I will show how to access the Wix Database to show information that may not be available by other means, such as the specific table names and column names and types. First you will need to navigate to the Wix Website Editor as shown previously and select ‘Content Manager’. This will open a window as shown below. Click on the table that you would like to view or modify if possible.

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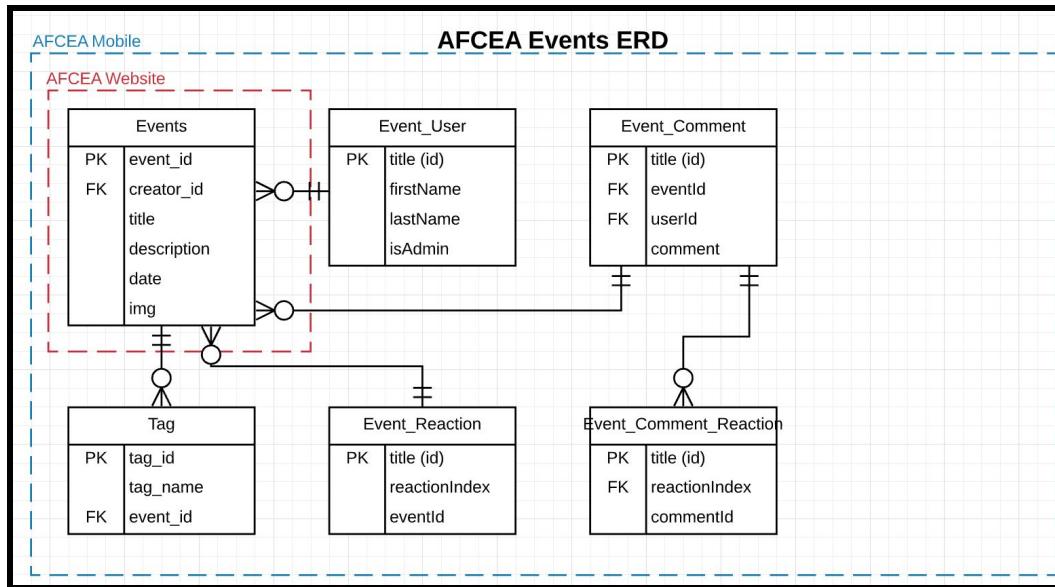


The following figure below shows an example of the main ‘Events’ table in the table editor. On this page, you will be able to view all the data that pertains to the table as well as useful functions to sort, filter and search the table for manual use. If the table is not ‘read-only’ as it is the case for this example, you may modify the table, including adding/removing new columns and rows, changing column names/types and more. Take note that certain changes are not allowed without deleting the column/table altogether and recreating it. If that is required, then data may be lost and should be backed up or exported to a csv before doing so.

The screenshot shows a Wix Content Manager interface. The left sidebar has sections for AFCEA Hawaii (Role: Admin), Dashboard, Events, Customer Management, Marketing & SEO, Analytics, Finances, Settings, and Content Manager. The main area shows a table titled 'Events' with a 'READ-ONLY' badge. The table has columns: Title, Slug, Description, About, Main image, and Start. There are 6 items listed:

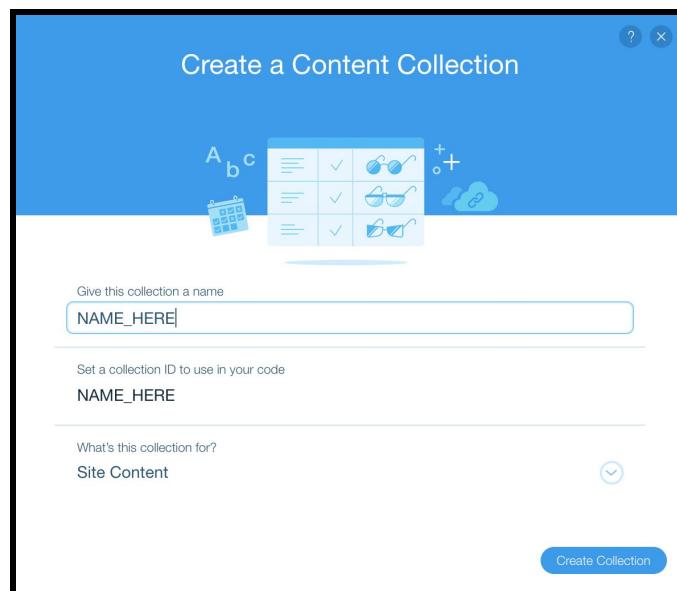
	Title	Slug	Description	About	Main image	Start
1	COVID-19 Updates	covid-19-updates	MINDFULNESS Headspac...	WORK FROM HOME SAFE...		Apr 14, 2020, 07:00 PM
2	Demo	demo	everyday meeting	weekly meeting		Mar 06, 2020, 07:00 PM
3	Feb 11th AFCEA Hawaii Lunche...	feb-11th-afcea-hawaii-lunc...	PREREGISTRATION CLOS...	Join AFCEA Hawaii Tuesda...		Feb 11, 2020, 11:30 AM
4	Technet Indo-Pacific	technet-indo-pacific	TechNet Indo-Pacific confe...	TechNet Indo-Pacific is the...		
5	April 14th AFCEA Hawaii Lunch...	april-14th-afcea-hawaii-lun...	Join AFCEA Hawaii Tuesda...	AFCEA Hawaii Organizer of...		Apr 14, 2023, 11:30 AM
6	AFCEA HAWAII ANNUAL CORP...	afcea-hawaii-annual-corpo...	Join AFCEA Hawaii Tuesda...	The agenda for the meetin...		Apr 12, 2023, 11:00 AM

The iOS application uses several tables to support the various features related to the events, including the actual content of the event (title, description, date...), the AFCEA users, reactions and comments. The main events table is called Events and it is a read only table, since it can only be edited through the Dashboard as shown before in this documentation. The ERD chart for this table only shows the key attributes as Wix has implemented an extensive array of attributes. The ERD is shown below and it is stored in LucidChart and has been extracted from the following URL:



https://www.lucidchart.com/documents/edit/a982aa72-7544-4d7a-aa97-3b17cd328a98/0_0

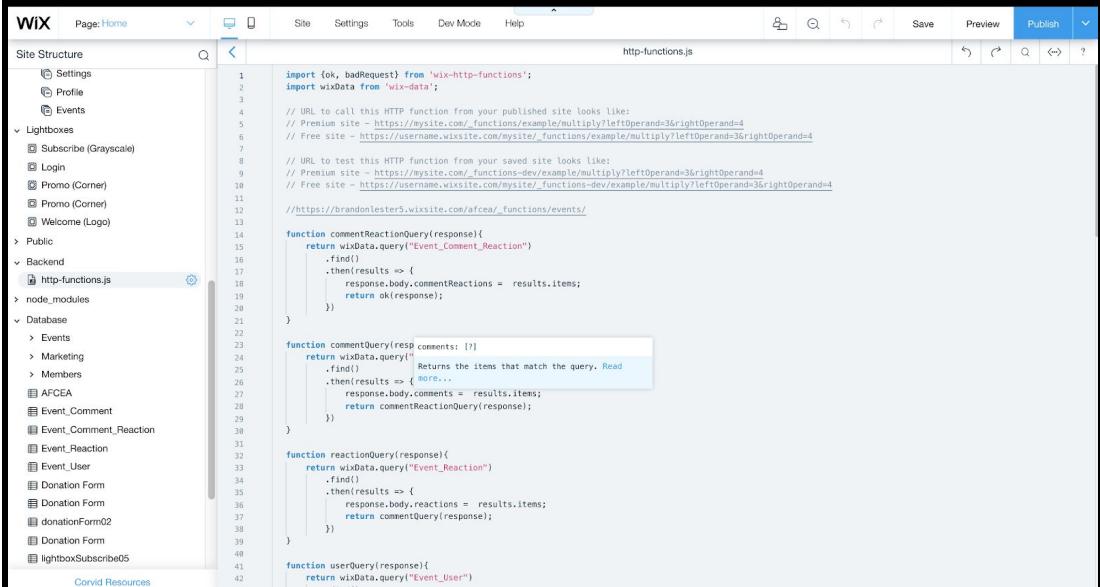
Finally in this section, we will cover how to create a new table. Navigate back to the ‘Content Manager’ and select ‘Create new Collection’. You will arrive on the following page:



Select the name of collection, allow the system to auto generate the collection ID and set the permission of the collection, which is under the “What’s this collection for” to ‘Site Content’. Afterwards, you will be guided to the table editor, which was described previously in this section where you may add columns and rows as needed or any other modifications.

2. WIX API

This section will cover the code that allows the internal data that is stored within Wix to become accessible outside the Wix framework. The Wix API allows the iOS application to have access to the same data that the website uses. First, we need to navigate to the Wix Website Editor as it has been covered previously. Next, we need to expose the ‘Site Structure’ by pressing the ‘<’ button at the top left of the editor. Finally, we need to open the ‘http-functions.js’ file that is found in the ‘Backend’ folder as shown below:



The screenshot shows the Wix Website Editor interface. On the left, the 'Site Structure' sidebar is expanded, showing various sections like 'Settings', 'Profile', 'Events', 'Lightboxes', 'Public', 'Backend', 'Database', and 'Events'. Under 'Backend', the 'http-functions.js' file is selected. The main workspace shows the code for this file:

```

1 import {ok, badRequest} from 'wix-http-functions';
2 import wixData from 'wix-data';
3
4 // URL to call this HTTP function from your published site looks like:
5 // Premium site - https://mysite.com/_functions/example/multiply?leftOperand=3&rightOperand=4
6 // Free site - https://username.wixsite.com/mysite/_functions/example/multiply?leftOperand=3&rightOperand=4
7
8 // URL to test this HTTP Function from your saved site looks like:
9 // Premium site - https://mysite.com/_functions-dev/example/multiply?leftOperand=3&rightOperand=4
10 // Free site - https://username.wixsite.com/mysite/_functions-dev/example/multiply?leftOperand=3&rightOperand=4
11
12 //https://brandonlester5.wixsite.com/afcea/_functions/events/
13
14 function commentReactionQuery(response){
15   return wixData.query("Event_Comment_Reaction")
16     .find()
17     .then(results => {
18       response.body.commentReactions = results.items;
19       return ok(response);
20     })
21 }
22
23
24 function commentQuery(response) {
25   return wixData.query("Event_Comment")
26     .find()
27     .then(results => {
28       response.body.comments = results.items;
29       return commentReactionQuery(response);
30     })
31 }
32
33 function reactionQuery(response){
34   return wixData.query("Event_Reaction")
35     .find()
36     .then(results => {
37       response.body.reactions = results.items;
38       return commentQuery(response);
39     })
40 }
41
42 function userQuery(response){
43   return wixData.query("Event_User")
44     .find()
45 }

```

There is a lot of information that is required to be understood before making any changes to the code that is already written here. I am linking the documentation that I used to complete this portion of the project here:

<https://www.wix.com/corvid/reference/wix-http-functions.html>

The key concepts to understand about this file is that it allows an application to pull data from the databases as JSON by using a get or post request encoded within the URL as shown in the following:

https://brandonlester5.wixsite.com/AFCEA/_functions-dev/events/

In the document ‘http-functions.js’, I created one function per table query and I was able to chain several queries together into one JSON to access all the data required in one call.