

# Incoming Webhook Lab

## Purpose

This lab will work through the student creating incoming webhook in NetFORUM iWeb and creating Google form with scripting that utilizes the webhook and registers the user to free event “Capital Food Bank” with event code “CFP-2024” in NetFORUM.

The goal of this lab is to enable volunteers to sign up for sessions (morning and afternoon) utilizing Google form and saving the registration in NetForum via webhook. Lab is broken up into several sections that achieve this specific goal which makes up the complete lab steps.

## Prerequisites

- Students should have Google account, since lab requires student to utilize google forms.
- Programming knowledge, especially JavaScript will be useful
- Knowledge of NetFORUM
- Student must have administrator privileges in NetFORUM to perform iWeb setup.
  - Training site url: <https://train06.netforument.com/nftstrain2017/iWeb>
  - Username: student + StudentID
  - Password:
- Required NetFORUM version 2017.1.16 or later

## Task #1

Confirm xWeb Credentials for the incoming webhook in iWeb (No Action needed)

Step #	Student Action	Result
1	Login to iWeb and navigate to Admin → Users → confirm xweb_test user	Xweb_user exists in the system
2	Xweb_test user belongs to xweb user group and has access to the individual object	Confirmed user group and object access.

## Task #2

Confirm Event and Sessions in iWeb (No Action needed)

Step #	Student Action	Result
1	Login to iWeb and navigate to Events module, find event by event Code “CFB-2024”	Event exists in the system
2	Go the Track/Sessions tab and review the sessions There should be two sessions <ul style="list-style-type: none"><li>• Morning Session</li></ul>	Sessions exist in the system.

	<ul style="list-style-type: none"> <li>• Afternoon Session</li> </ul>	
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### Task #3

Setup Incoming Webhook in iWeb

Step #	Student Action	Result										
1	Login to iWeb and navigate to Admin → Integration → Integrations	Display Integrations child form										
2	Click “Add new record” of the integration’s child form <ul style="list-style-type: none"><li>• Name: Incoming Webhook “XXX” where “XXX” is student id</li><li>• Type: select “IncomingWebhook”</li><li>• Click the save button</li></ul>	New incoming webhook record that is ready for further configuration.										
3	Integration profile → Integration Setting child form, set the integration fields as follows: <table><tr><th>Name</th><th>Value</th></tr><tr><td>ReceiverAssembly</td><td>IncomingWebhooks</td></tr><tr><td>ReceiverType</td><td>IncomingWebhooks.Volunteer</td></tr><tr><td>SecurityObjectName</td><td>Individual</td></tr><tr><td>AuthorizedUsers</td><td>xweb_test</td></tr></table>	Name	Value	ReceiverAssembly	IncomingWebhooks	ReceiverType	IncomingWebhooks.Volunteer	SecurityObjectName	Individual	AuthorizedUsers	xweb_test	Updated integration setting for the custom incoming webhook
Name	Value											
ReceiverAssembly	IncomingWebhooks											
ReceiverType	IncomingWebhooks.Volunteer											
SecurityObjectName	Individual											
AuthorizedUsers	xweb_test											
4	Integration profile – Edit integration and set “Active” to true	Active integration that can be called by external applications										

### Task #4

Implementing incoming webhook (No Action needed)

Step #	Student Action	Result
1	Review the code sample, you can download the code from this GitHub repository ( <a href="https://github.com/jkahin/X24.git">https://github.com/jkahin/X24.git</a> )	Access the sample code and get familiar with it

### Notes:

1. Make sure to reference *netForum.Integration.Webhooks* and *netForum.Integration.Data* in your project and add using statement.
2. Override the *ProcessRequestMessage* method, *HttpRequestMessage* parameter contains the data payload. Implement your custom logic in the *ProcessRequest* method.

- Build the project dll and deploy into the iWeb/bin and xWeb/bin folders

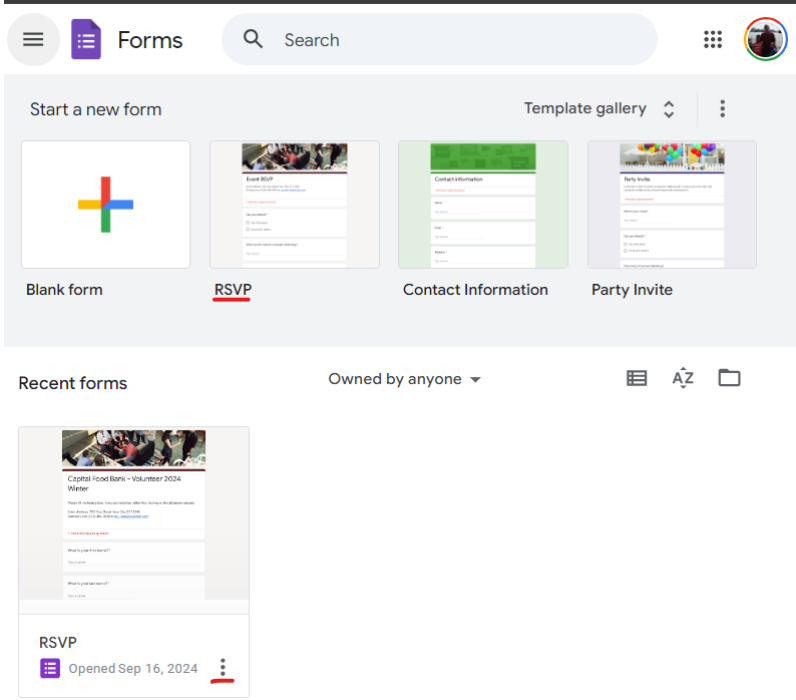
```

namespace IncomingWebhooks
{
    2 references
    public class Volunteer : WebhookReceiverBase
    {
        0 references
        public override HttpResponseMessage ProcessRequest(WebhookIntegration integrationSettings,
            HttpRequestMessage requestMessage)
        {
            var handler = new VolunteerHandler();
            return handler.ProcessVolunteer(integrationSettings, requestMessage);
        }
    }
}

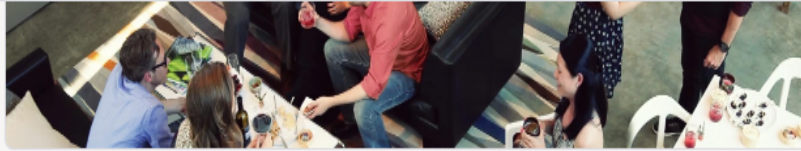
```

## Task #5

Modify Google RSVP form for event registration.

Step #	Student Action	Result
1	<p>Go to Google Forms then select the RSVP form then click on the form for editing</p> 	Starting with RSVP form template and changing for event registration purposes

2	<p>Change the form as follows:</p> <ol style="list-style-type: none"><li>1. You can change each section of the form, like deleting sections, adding new sections as needed.</li><li>2. Set the title so it shows the event title. The Image below shows that you can set more information like address, phone and email if needed. We don't need them for this Demo</li><li>3. Change the template form so it has the following fields</li><li>4. First Name, Last Name, Email and Sessions and make all of them required.</li></ol>	Modified Google form for event registration
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## Capital Food Bank - Volunteer 2024 Winter

Please fill the form below if you can volunteer either the morning or the afternoon session.

Event Address: 123 Your Street Your City, ST 12345

Contact us at (123) 456-7890 or [no\\_reply@example.com](mailto:no_reply@example.com)

What is your first name? \*

Long answer text

What is your last name? \*

Short answer text

What is your email address? \*

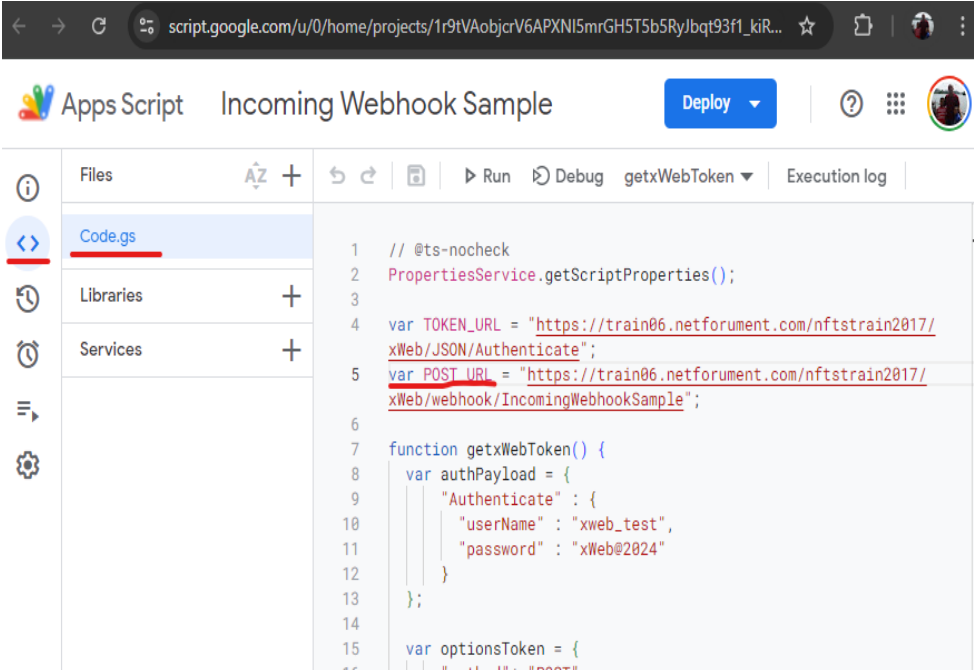
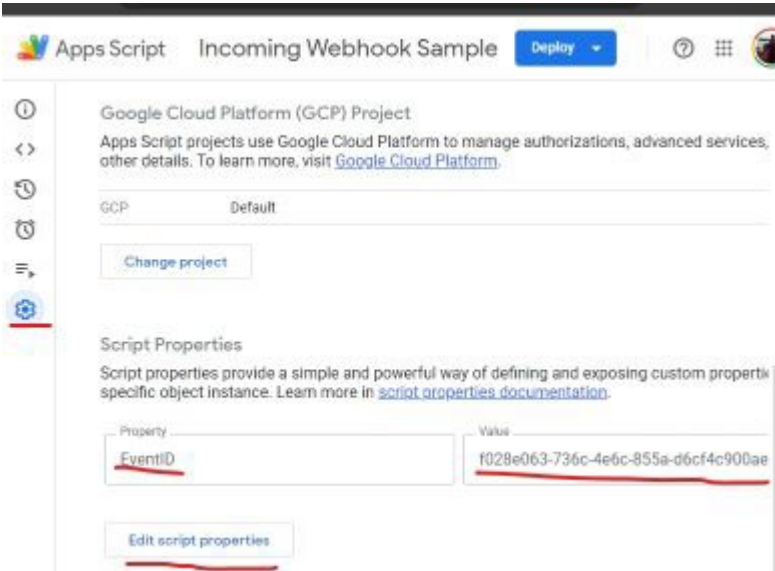
Short answer text

Volunteer Time Slot? \*

☐ Morning Session

☐ Afternoon Session



#3	<p>Add script to the Google form for collecting and submitting registration payload to NetForum</p> <ol style="list-style-type: none"> <li>1. Click on the script on “more” button and select script editor</li> <li>2. In the Code.gs file, paste the script file from GitHub download “GoogleFormJavaScript.js” in the Javascript folder.</li> <li>3. Change the POST_URL so it points to your incoming webhook sample you set up in iWeb. Url:  <a href="https://train06.netforum.com/nftstrain2017/xWeb/webhook/IncomingWebhookSample">https://train06.netforum.com/nftstrain2017/xWeb/webhook/IncomingWebhookSample</a> replace “incomingWebhookSample” with your incoming webhook name.</li> <li>4. Save your changes</li> </ol> 	Google form with script
#4		Set event key for the form.

#5

Add trigger that runs the form script “onSubmit”

1. Hover over the menu on the left then select “Trigger”
2. Click the Add Trigger button on the bottom right
3. Set the Choose which function to run as “onSubmit”
4. Set the Select event type as “On form submit”
5. Save your changes.

Google form with script and trigger configured.

The screenshot displays the Google Apps Script interface for a project named "Incoming Webhook Sample". At the top, there is a "Deploy" button. On the left sidebar, the "Triggers" icon is selected. The main area shows a table with one trigger configured. Below the table is a blue button labeled "+ Add Trigger".

Owned by	Last run	Deployment	Event	Function	Error rate
Me	-	Head	From form - On form submit	onSubmit	-

**Edit Trigger for Incoming Webhook Sample**

Choose which function to run: onSubmit

Failure notification settings: Notify me daily

Which runs at deployment: Head

Select event source: From form

Select event type: On form submit

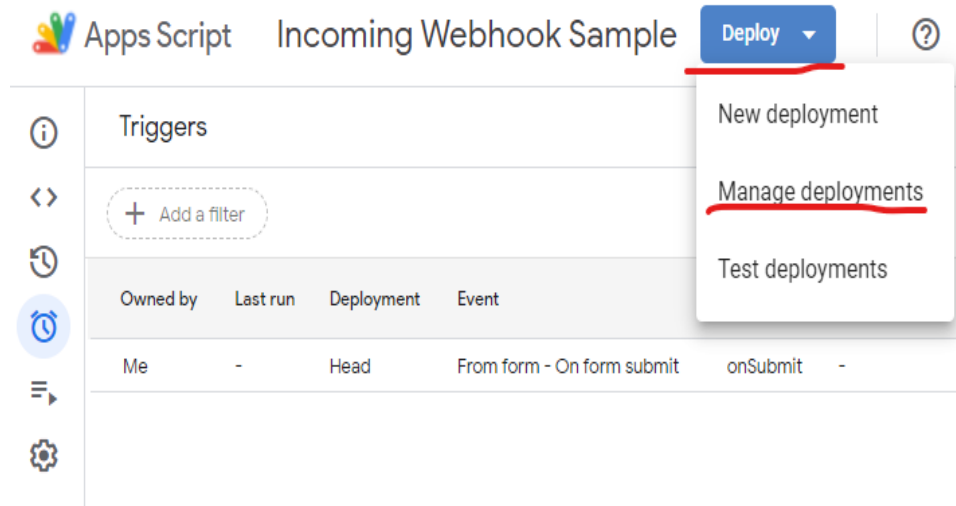
Buttons: Cancel, Save

#6

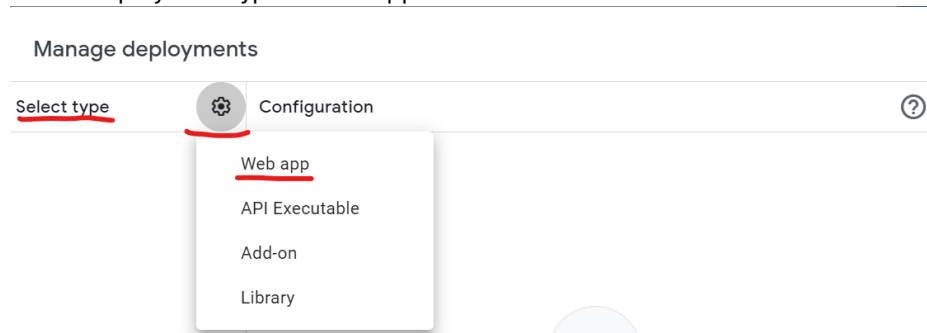
Deploy the new form:

1. Click the “Deploy” button carat and pick “Manage deployments”
2. When deploying the first time select type Web app (see the 2<sup>nd</sup> screenshot below)
3. Click the “edit pencil” at top right hand across the “Configuration”
4. No changes needed, click the deploy button.
5. Click the Done button

Deployed the form so it can be shared with your audience



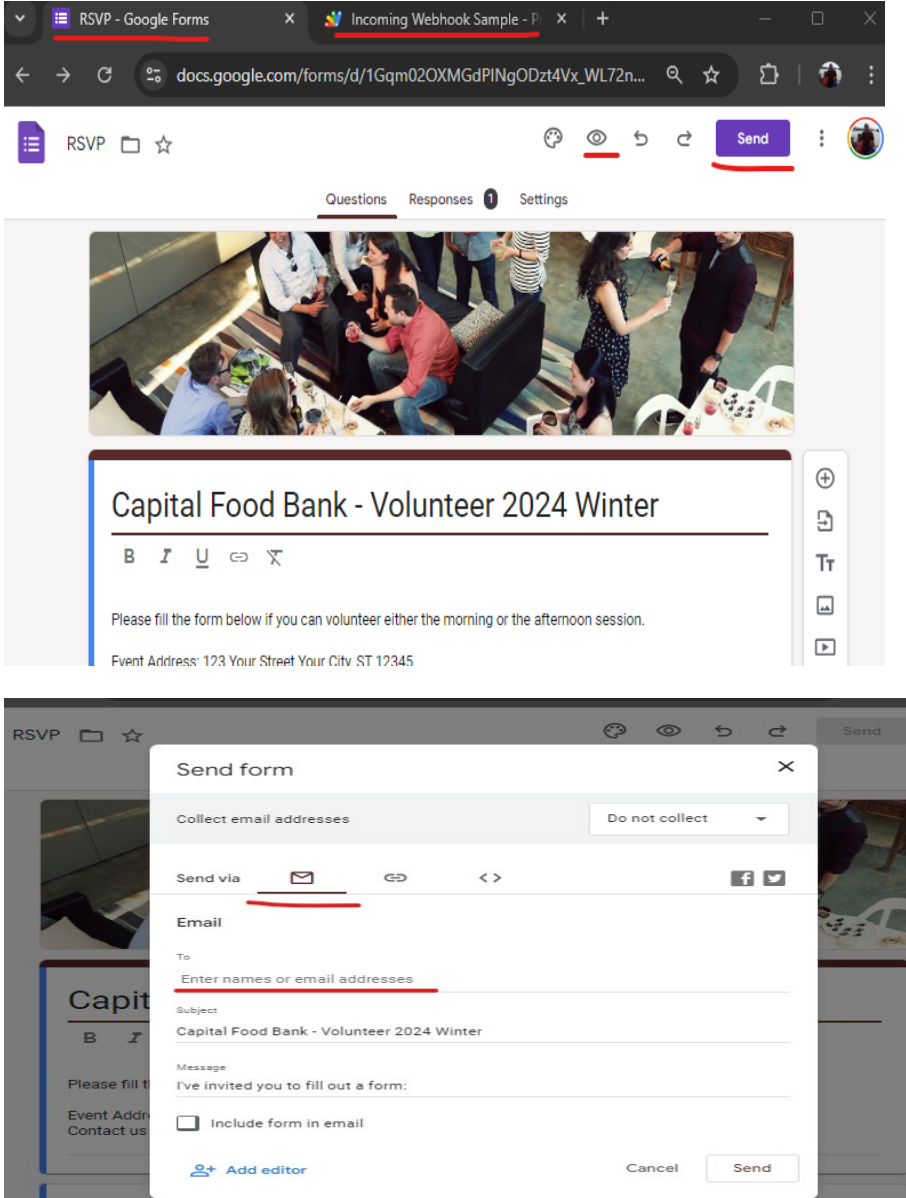
Select deployment type as web app

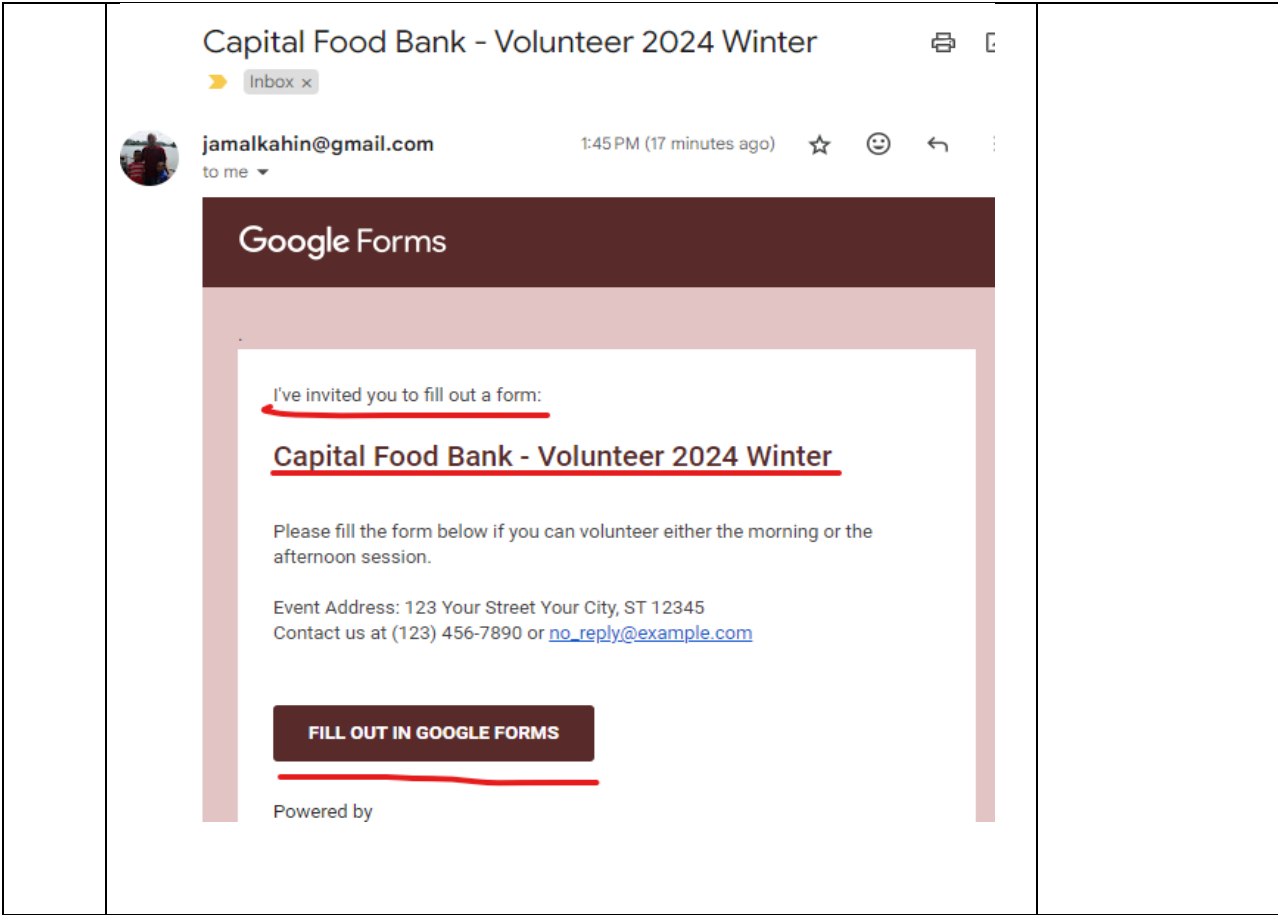




## Task #6

Preview and share the form with audience

Step #	Student Action	Result
1	Switch into the RSVP – Google Forms tab in the browser	
2	<p>You can Preview the form by click the preview button, which opens the form in new tab and allows you register and submit your registration.</p> <p>You can also send this form to your audience via email by clicking on “Send”</p> 	<p>Preview the form, and able to share with your audience.</p>



### Task #7

Review execution history in Google forms for checking submission status.

Step #	Student Action	Result
1	In form preview or link in the email get to the Google form	Access to the Google Form
2	Fill out the form and submit it	onSubmit the payload has been transmitted to NetForum using the incoming webhook

3

To check the submission result:

- Switch into the Apps Script tab of the browser.
- On the left navigation menu select the executions which will display the execution history.
- Expand by clicking on the Execution which will display communication log history

### Success Call

The screenshot shows the Google Apps Script interface for a project named 'Incoming Webhook Sample'. The 'Executions' tab is selected, showing a table of execution history. The first execution is highlighted with a red line. Below the table, the 'Cloud logs' section displays the debug logs for this execution. A red box highlights the JSON response from the webhook, and another red line highlights the 'Post Response' log entry.

Deployment	Function	Type	Start Time	Duration	Status
Head	onSubmit	Trigger	Sep 17, 2024, 2:56:25 PM	13.222 s	Completed

Cloud logs

Time	Level	Message
Sep 17, 2024, 2:56:29 PM	Debug	Get token successful: 18092007-5eed-4a77-84ef-0b75132709c0
Sep 17, 2024, 2:56:31 PM	Debug	[ 'Morning Session', 'Afternoon Session' ]
Sep 17, 2024, 2:56:31 PM	Debug	{ "id": "2_ABa0nufS1895Z6VVEh8FGb90VH62XG48ekZ1TPJ9TI2Y02Ke9x_Fb3slSgfPoE2Ig", "email": "", "ts": "2024-09-17T18:56:24.381Z", "Individual": { "FirstName": "Jamal", "LastName": "Kahin", "EmailAddress": "jamalkahin@gmail.com" }, "Event": { "Id": "f028e063-736c-4e6c-855a-d6cf4c900ae9", "Sessions": [ { "Title": "Morning Session", "Status": "register" }, { "Title": "Afternoon Session", "Status": "register" } ] } }
Sep 17, 2024, 2:56:38 PM	Debug	Post Response: { "reponseMessage": "Success!!" }

### Failed Call:

Just added "ss" on then Post\_URL incoming webhook name.

Apps Script
Incoming Webhook Sample
Deploy
?
⋮

Executions
Showing 3 executions over last 7 days
Show in real time: ☒

+ Add a filter

Cloud logs

Sep 17, 2024, 3:13:22 PM	Debug	Get token successful: fe411af4-af2c-49c3-9725-3c3453b1e3a1
Sep 17, 2024, 3:13:24 PM	Debug	[ 'Afternoon Session' ]
Sep 17, 2024, 3:13:24 PM	Debug	{ "id": "2_ABa0nufS1895Z6VVEKh8FGb90VH62XG48ekZ1TPJ9TIZY02Ke9x_Fb3s1SgfPoE2Ig", "email": "", "ts": "2024-09-17T19:13:21.404Z", "Individual": { "FirstName": "Jamal", "LastName": "Kahin", "EmailAddress": "jamaikahin@gmail.com" }, "Event": { "Id": "f028e063-736c-4e6c-855a-d6cf4c900ae9", "Sessions": [ { "Title": "Afternoon Session", "Status": "register" } ] } }
Sep 17, 2024, 3:13:24 PM	Error	Error: Exception: Request failed for https://train06.netforum.com returned code 401. Truncated server response: { "Message": "Authorization has been denied for this request." } (use muteHttpExceptions option to examine full response)

REFRESH

Head
onSubmit
Triqqr
Sep 17, 2024, 3:13:22 PM
13.222 s
Completed

## Task #8

Confirm event registration in iWeb (No Action needed)

Step #	Student Action	Result
1	Login to iWeb and navigate to Event and find event by event code "CFB-2024"	Displaying event profile page
2	Click registrant tab and find your registration record Click the Track/Sessions then navigate to the Session profile, where you can see your session registration under the registrations tab.	Registration confirmed.

Event Capital Food Bank - Volunteer 2024 Winter

Event Code:  
CFB-2024

Start Date:  
8/1/2024

End Date:  
12/31/2024

Event URL:  
[Click here to go to Event Page](#)

Registration Information

Pre-Reg:  
Early:  
Standard:  
Late:

Registration Options

Registration Required?:  
No

Free Event?:  
Yes

Automatic Registration From Wait-

HomeAddEditLinksReport

FeesGeneralTracks/sessionsFacultySponsorshipmore

Registrants

Search5

GOTO	NAME	WAIT LIST?	REG TYPE	BADGE	COMPANY	REG DATE	INVOICE	GUEST?	ACTIONS
<input checked="" type="checkbox"/>	Cork Arlene	N	Attendee	Arlene	Sentry Signs	2024-08-14			<input type="checkbox"/>
<input checked="" type="checkbox"/>	Flosi Fletcher	N		Fletcher	Chinese Translation Resources	2024-08-12			<input type="checkbox"/>
<input checked="" type="checkbox"/>	Kahin Jamal	N		Jamal		2024-09-17			<input type="checkbox"/>
<input checked="" type="checkbox"/>	Kahin Jamal	N		Jamal		2024-09-06			<input type="checkbox"/>
<input checked="" type="checkbox"/>	Kahin Jamal	N		Jamal		2024-09-06			<input type="checkbox"/>

Showing 1 to 5 of 12 entries

NetForum

Test Site

EventsSessionsMorning Session

Search

Session

Session Name:  
Morning Session

Begins On:  
8/1/2024

At:  
8:00 AM

Ends On:  
12/31/2024

At:  
12:00 PM

Registration Information

Pre-Reg:  
Early:  
Standard:  
Late:

Miscellaneous Information

HomeAddEdit

FeesGeneralFacultySponsorshipRegistrantsCourseCredits

Registrants

Search5

GOTO	NAME	BADGE	COMPANY	REGISTRATION DATE	WAIT LIST?	CEU	ACTIONS
<input checked="" type="checkbox"/>	Cork Arlene	Arlene	Sentry Signs	2024-08-14	N		<input type="checkbox"/>
<input checked="" type="checkbox"/>	Kahin Jamal	Jamal		2024-09-17	N		<input type="checkbox"/>
<input checked="" type="checkbox"/>	Last2 Test2	Test2		2024-08-14	N		<input type="checkbox"/>
<input checked="" type="checkbox"/>	Last3 Test3	Test3		2024-08-14	N		<input type="checkbox"/>
<input checked="" type="checkbox"/>	Last4 Test4	Test4		2024-08-14	N		<input type="checkbox"/>

Showing 1 to 5 of 8 entries