

Introduction

This document captures Mike's 1st bootstrap learning of Pipedream, an integration platform that I am going to use to route data from the Helium Console to Google Sheets.

This document goes through a step-by-step analysis and copy of a 4 minute Pipedream YouTube video demonstrating how to Analyze Twitter Sentiment in Real-Time and to save the results to a Google Sheet. If you follow the steps in this document, you should have your own working solution for Twitter-to-Google Sheets.

References

The table below captures the learning resources used in the bootstrap effort.

ID	Topic	Reference	Description
1	Example Project	https://www.youtube.com/watch?v=hJ-KRbp6EO8	04:30 video - Using Event Sources and Workflows: Analyze Twitter Sentiment in Real-Time and Save to Google Sheets
2	Pipedream	<ul style="list-style-type: none"> https://docs.pipedream.com/ 	<ul style="list-style-type: none"> Pipedream documentation
5	npm	<ul style="list-style-type: none"> https://nodejs.org/en/knowledge/getting-started/npm/what-is-npm/ https://www.npmjs.com/ 	<ul style="list-style-type: none"> What is npm NPM Resource Home Page
	Node.js	<ul style="list-style-type: none"> https://www.w3schools.com/nodejs/nodejs_intro.asp https://www.w3schools.com/nodejs/default.asp 	<ul style="list-style-type: none"> What is Node.js Node.js tutorial

Research Node.js and npm

Q: What is Node.js

A: (from [here](#))

- Node.js is an open source server environment
- Node.js is free
- Node.js runs on various platforms (Windows, Linux, Unix, Mac OS X, etc.)
- Node.js uses JavaScript on the server
- Node.js uses asynchronous programming!

Q: What is npm?

A: (from [here](#)) npm, short for Node Package Manager, is two things: first and foremost, **it is an online repository for the publishing of open-source Node.js projects**; second, **it is a command-line utility for interacting with said repository that aids in package installation, version management, and dependency management**. A plethora of Node.js libraries and applications are published on npm, and many more are added every day. These applications can be searched for on <http://npmjs.org/>. Once you have a package you want to install, it can be installed with a single command-line command.

Pipedream YouTube Video - Using Event Sources and Workflows: Analyze Twitter Sentiment in Real-Time and Save to Google Sheets

<https://www.youtube.com/watch?v=hJ-KRbp6EO8>

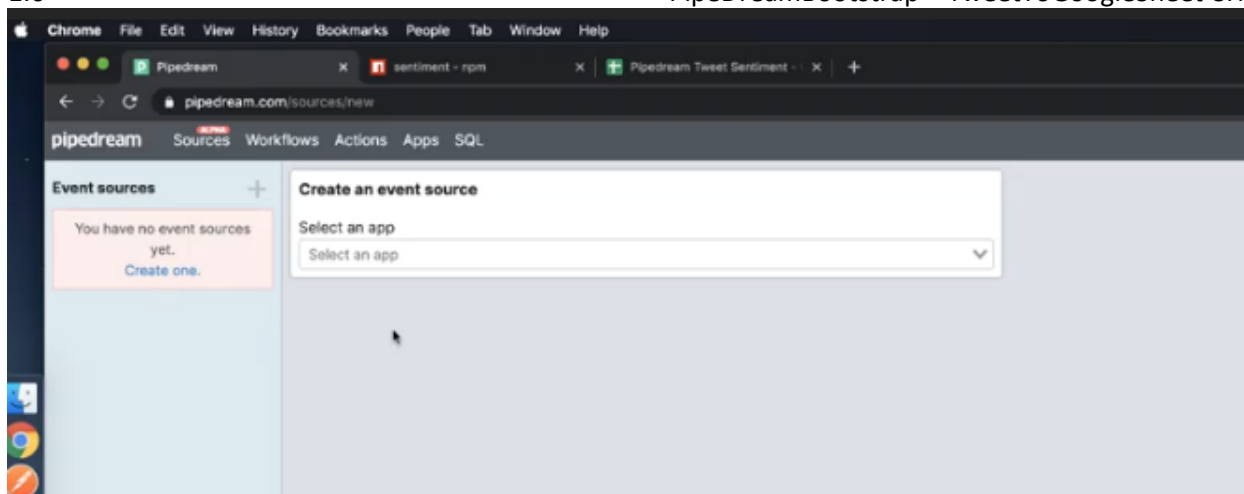
The video shows how to use event sources and workflows to listen to a stream of tweets, analyze the sentiment using Node.js and npm, save that data to Google Sheets, and run it 24 hours a day, 7 days a week.

The high level steps are as follows:

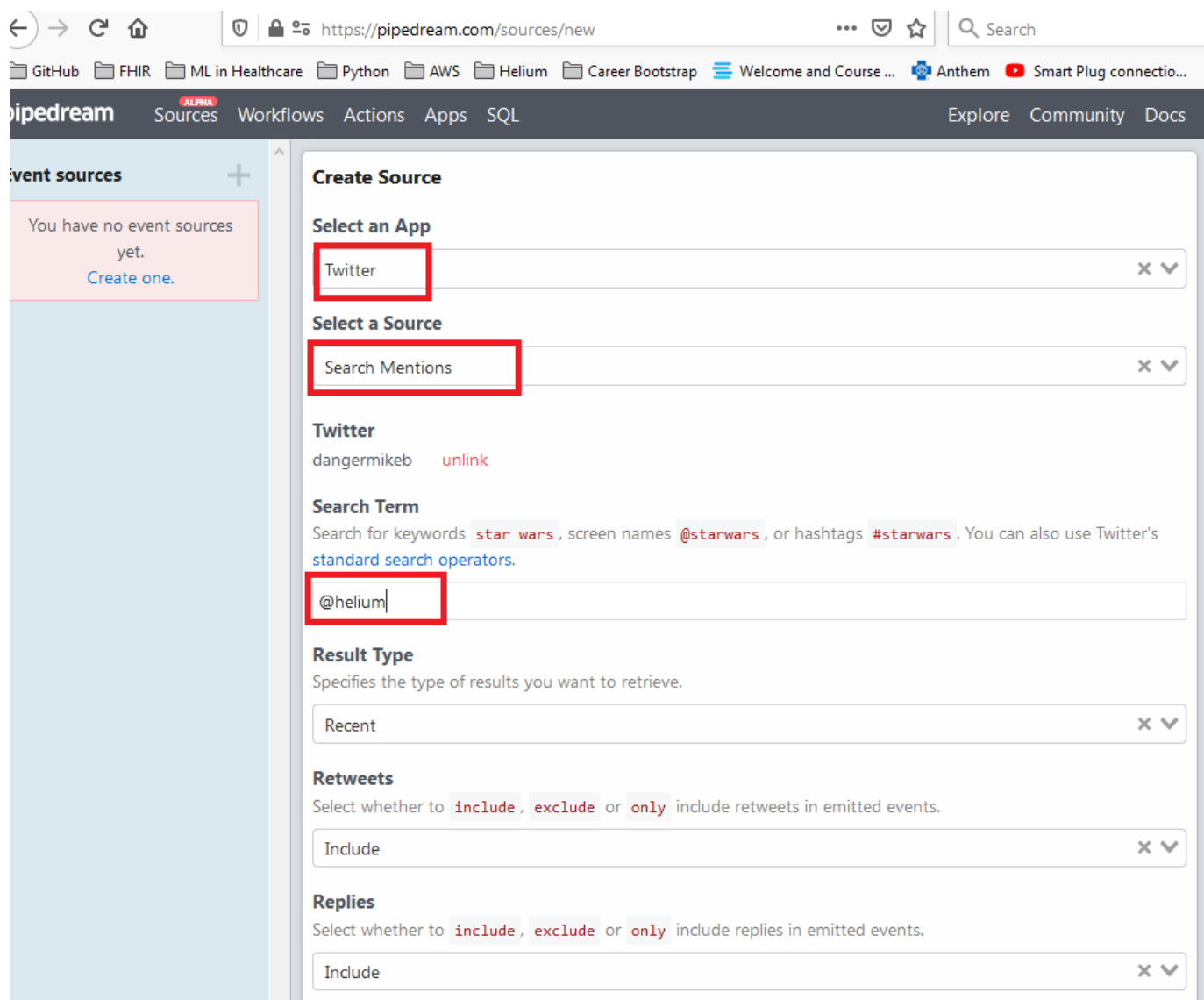
1. Create event source, selecting the Twitter App and Search Mentions as the source, specify “@Helium” as the term
2. Create event workflow
3. Deploy the workflow to production
4. Select a test event and send it to the workflow
5. Add a Node.js code step and customize the name of the code step to steps.sentiment
6. (in another browser window) Find the npm sentiment package
7. Copy and paste the example usage from the npm sentiment package into the code portion of steps.sentiment code step
8. Modify the example code to return the full_text value of the event
9. Name your workflow so you can find it again next time you login
10. Return result from steps.sentiment to prepare for exporting to Google Sheets
11. Create a Google Sheet with 3 columns for Sentiment Score, User, and Tweet
12. Add an action to send data to Google Sheets by selectin the Action type ‘Send Single Row to a Sheet’:
steps.add_single_row_to_sheet
 - a. add 3 parameters for Sentiment Score, User, and Tweet
 - b. Configure the spreadsheet ID and sheet ID in the action
13. Enable the trigger step so that any new events emitted by the source will be processed by this workflow

Details of the steps are provided below. The only pre-conditions are having a Pipedream account (free) and a Google account (free) so you can create and use your own Google Sheet.

1. Create an event source to get new tweets



(above) Create a new event source



(above) select Twitter and connect to my dangermikeb twitter account, and add Helium's twitter handle as a the search key word for anytime someone mentions Helium in a tweet

Timer

☒ every 15 minutes

☐ 0 ****

Name

helium mentions

CREATE SOURCE

[Show component code](#)

(above) name your source, then click create

helium mentions

name slug: helium-mentions • created: 5 seconds ago

EVENTS **LOGS** **CONFIGURATION**

100 over last 24 hours

Today

5:20 AM	The Jovial Heather Weasel is no...
5:20 AM	@diskandartweet @tbr90 Thru the...
5:20 AM	The Hot Sangria Mongoose is now...
5:20 AM	The Jolly Felt Finch is now onl...
5:20 AM	The Old Ocean Newt is now onlin...
5:20 AM	The Mini Leather Shell is now o...
5:20 AM	The Wonderful Parchment Badger ...
5:20 AM	The Prehistoric Brown Monkey is...
5:20 AM	The Dazzling Smoke Deer is now ...
5:20 AM	The Dry Burlap Dolphin is now o...
5:20 AM	I like @helium #HNT https://t.c...
5:20 AM	The Bright Grey Newt is now onl...
5:20 AM	The Creamy Wool Locust is now o...
5:20 AM	The Brief Hemp Bull is now onli...
5:20 AM	The Ambitious Blonde Starfish i...
5:20 AM	The Petite Ceramic Monkey is no...
5:20 AM	The Original Teal Chameleon is ...
5:20 AM	The Zany Fern Butterfly is now ...
5:20 AM	The Witty Cedar Oyster is now o...
5:20 AM	The Young Admiral Nuthatch is n...
5:20 AM	RT @HSpotbot: The Passive Sangr...

CONFIGURATION

TWITTER: SEARCH MENTIONS
Emit new Tweets that matches your search criteria

Next execution in
approximately 14 minutes

Account:	Twitter (dangermikeb)
Search Term:	@helium
Result Type:	recent
Retweets:	include
Replies:	include
Language:	-
Locale:	-
Geocode:	-
Enrich Tweets:	true
Count (Advanced):	100
Max API Requests Per Execution (Advanced):	1
Timer:	Every 15 minutes

[Edit code and configuration](#)

RUN NOW

INTEGRATIONS

Workflows

CREATE WORKFLOW

- Trigger serverless workflows on each event
- Write Node.js and use any npm package, or use community-built actions
- Use OAuth tokens and API keys with managed auth for 200+ apps

(above) Event source has been created. The twitter even runs when you first create it and will emit the most recent data returned from Twitter's API. Each run after that will only emit new tweets.

2. Create an Event workflow

The screenshot displays the PipeDream web application interface. The browser address bar shows the URL `https://pipedream.com/sources/dc_wDuDZW`. The navigation bar includes links for Sources, Workflows, Actions, Apps, and SQL. The main content area is titled 'helium mentions' and shows a list of tweets under the 'EVENTS' tab. A 'LOGS' tab is also visible. On the right, the 'CONFIGURATION' tab is active, showing settings for 'TWITTER: SEARCH MENTIONS'. The configuration includes fields for Account, Search Term, Result Type, Retweets, Replies, Language, Locale, Geocode, Enrich Tweets, Count (Advanced), Max API Requests Per Execution (Advanced), and Timer. A 'RUN NOW' button is present. Below the configuration, the 'INTEGRATIONS' section shows a 'Workflows' button, which is highlighted with a red rectangle. The 'CREATE WORKFLOW' button is also visible within the Workflows section.

Event sources

helium-mentions

helium mentions

name slug: helium-mentions • created: 5 seconds ago

EVENTS LOGS CONFIGURATION

100 over last 24 hours

Today

12:00 AM The Jovial Heather Weasel is now onli...

12:00 AM @diskandartweet @tbr90 Thru the...

12:00 AM The Hot Sangria Mongoose is now onli...

12:00 AM The Jolly Felt Finch is now onli...

12:00 AM The Old Ocean Nuxt is now onli...

12:00 AM The Mini Leather Shell is now o...

12:00 AM The Wonderful Parchment Badger ...

12:00 AM The Prehistoric Brown Monkey is...

12:00 AM The Dazzling Smoke Deer is now ...

12:00 AM The Dry Burlap Dolphin is now o...

12:00 AM I like @helium WHY? https://t.c...

12:00 AM The Bright Grey Nuxt is now onli...

12:00 AM The Creamy Wool Locust is now o...

12:00 AM The Brief Hesp Bull is now onli...

12:00 AM The Ambitious Blonde Starfish i...

12:00 AM The Petite Ceramic Monkey is no...

12:00 AM The Original Teal Chameleon is ...

12:00 AM The Zany Fern Butterfly is now ...

12:00 AM The Witty Cedar Oyster is now o...

12:00 AM The Young Admiral Nuthatch is n...

12:00 AM RT @HSpotbot: The Passive Sangr...

DELETE ALL EVENTS

Next execution in approximately 14 minutes

Account: Twitter (dangermikeb)

Search Term: @helium

Result Type: recent

Retweets: include

Replies: include

Language: -

Locale: -

Geocode: -

Enrich Tweets: true

Count (Advanced): 100

Max API Requests Per Execution (Advanced): 1

Timer: Every 15 minutes

Edit code and configuration

RUN NOW

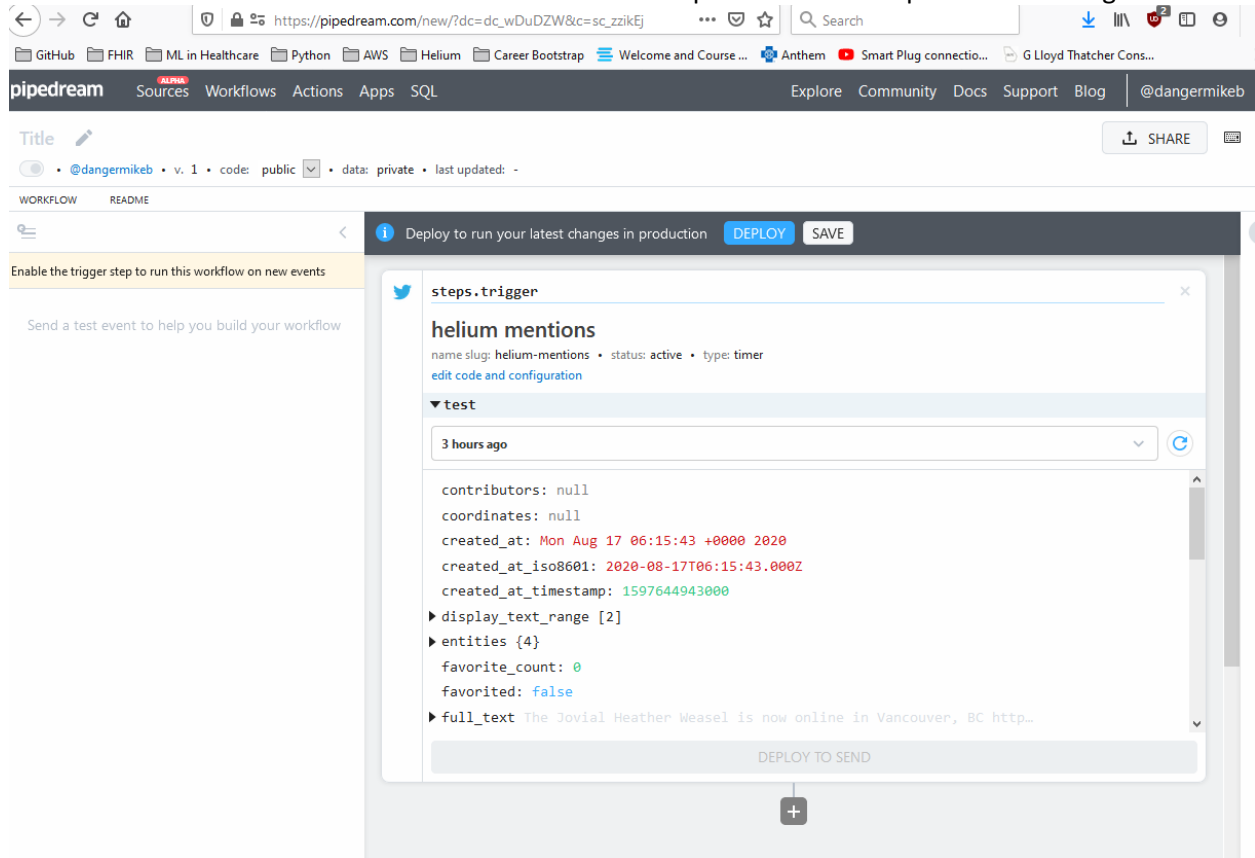
INTEGRATIONS

Workflows

CREATE WORKFLOW

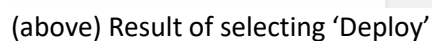
- Trigger serverless workflows on each event
- Write Node.js and use any npm package, or use community-built actions
- Use OAuth tokens and API keys with managed auth for 200+ apps

(above) Create a workflow



(above) The result of hitting the 'Create workflow' button

3. Deploy the workflow to production



- 7

The screenshot shows the PipeDream workflow editor. On the left, a sidebar contains 'Title', 'WORKFLOW', 'README', and 'SETTINGS' tabs. The main area displays a 'steps.trigger' configuration for 'helium mentions'. The 'test' dropdown is open, showing a list of tweets. The first tweet is highlighted with a red box. Below the list, the 'entities' and 'full_text' fields are visible. At the bottom of the configuration, there is a blue 'SEND TEST EVENT' button.

(above) Select the event you want to test

This screenshot shows the same PipeDream workflow editor. The 'test' dropdown is open, and the 'SEND TEST EVENT' button at the bottom of the configuration is highlighted with a red box. The 'test' dropdown shows a list of tweets, with the first one selected. The 'entities' and 'full_text' fields are visible below the list.

(above) Send the test event to your workflow

pipedream

ALPHA

Sources

Workflows

Actions

Apps

SQL

Explore

Community

Docs

Support

Blog

@dangermikeb

Title

@dangermikeb • v. 1 • code: public • data: private • last updated: 1 second ago

SHARE

WORKFLOW

README

SETTINGS

Enable the trigger step to run this workflow on new events

Type to search live events

Today

5:36:28 AM

steps.trigger

Off

helium mentions

name slug: helium-mentions • status: active • type: timer

edit code and configuration

test

steps.trigger.context {8}

steps.trigger.event {19}

created_at: Mon Aug 17 06:15:43 +0000 2020

created_at_iso8601: 2020-08-17T06:15:43.000Z

created_at_timestamp: 1597644943000

display_text_range [2]

entities {4}

favorite_count: 0

favorited: false

full_text The Jovial Heather Weasel is now online in Vancouver, BC htt...

id: 1295242888041783300

id_str: 1295242888041783296

is_quote_status: false

lang: en Copy Path Copy Value

metadata {2}

possibly_sensitive: false

retweet_count: 0

retweeted: false

source Helium SpotBot<...

truncated: false

user {37}

steps.trigger.pd_event_type: test

steps.trigger.raw_event {19}

(above) The result of sending the test event to your workflow

5. Add a Node.js code step, customize the name, and use the npm sentiment package

pipedream ALPHA Sources Workflows Actions Apps SQL Explore Community Docs Support Blog @dangermike

Title

• @dangermike • v. 1 • code: public • data: private • last updated: 1 second ago

WORKFLOW README SETTINGS

Enable the trigger step to run this workflow on new events

Type to search live events

Today

5:36:28 AM

possibly_sensitive: false
retweet_count: 0
retweeted: false
source: Helium SpotBot
truncated: false
user: {37}

steps.trigger.pd_event_type: test
steps.trigger.raw_event: {19}

Search over 200 apps and 1000s of actions...

- Pipedream Run Node.js code Require any npm package and connect to 100+ apps with managed auth
- Pipedream Send HTTP Request Make an HTTP or webhook request and return the response as a step export.
- Google Sheets Add Single Row to a Sheet Add a single row of data to Google Sheets
- Google Sheets Add Multiple Rows to a Sheet Add multiple rows of data to Google Sheets
- Twilio Send an SMS Sends a new SMS message

(above) Adding a Node.js code step

pipedream ALPHA Sources Workflows Actions Apps SQL Explore Community Docs Support Blog @dangermike

Title

• @dangermike • v. 1 • code: public • data: private • last updated: 1 second ago

WORKFLOW README SETTINGS

Enable the trigger step to run this workflow on new events

Type to search live events

Today

5:36:28 AM

Deploy to run your latest changes in production **DEPLOY** **SAVE** Discard Changes

source: Helium SpotBot
truncated: false
user: {37}

steps.trigger.pd_event_type: test
steps.trigger.raw_event: {19}

+

steps.nodejs

auth

Connect apps to use OAuth tokens and API keys in code via the [auths object](#)

code

Write any Node.js code and use any npm package. You can also export data for use in later steps via return or this.key = 'value', pass input data to your code via params, and maintain state across invocations with [Checkpoint](#).

```
1 async (event, steps) => {
2   // const axios = require('axios')
3 }
```

Not Executed - No return values or exports for this step

+

(above) Result of adding a Node.js code step

The screenshot shows the PipeDream web interface. At the top, there's a navigation bar with 'Sources', 'Workflows', 'Actions', 'Apps', and 'SQL'. The main header area includes a title 'Title', a user '@dangermikeb', version 'v. 1', code status 'public', data status 'private', and a timestamp 'last updated: 1 second ago'. Below this, there are tabs for 'WORKFLOW', 'README', and 'SETTINGS'. The left sidebar contains a search bar 'Type to search live events' and a 'Today' section showing '5:36:28 AM'. The main content area displays a workflow step configuration. The step is named 'steps.nodejs' (highlighted with a red box). It has a 'source' field with a URL, a 'truncated' field set to 'false', a 'user' field set to '{37}', and 'steps.trigger.pd_event_type' set to 'test'. Below the configuration, there's a 'code' section with a JavaScript snippet:


```
1 async (event, steps) => {
2   // const axios = require('axios')
3 }
```

 The status at the bottom of the step is 'Not Executed - No return values or exports for this step'.

(above) About to customize the name

This screenshot is similar to the previous one, showing the same workflow configuration. However, the step name 'steps.nodejs' has been changed to 'steps.sentiment' (highlighted with a red box). The 'code' section now contains a different JavaScript snippet:

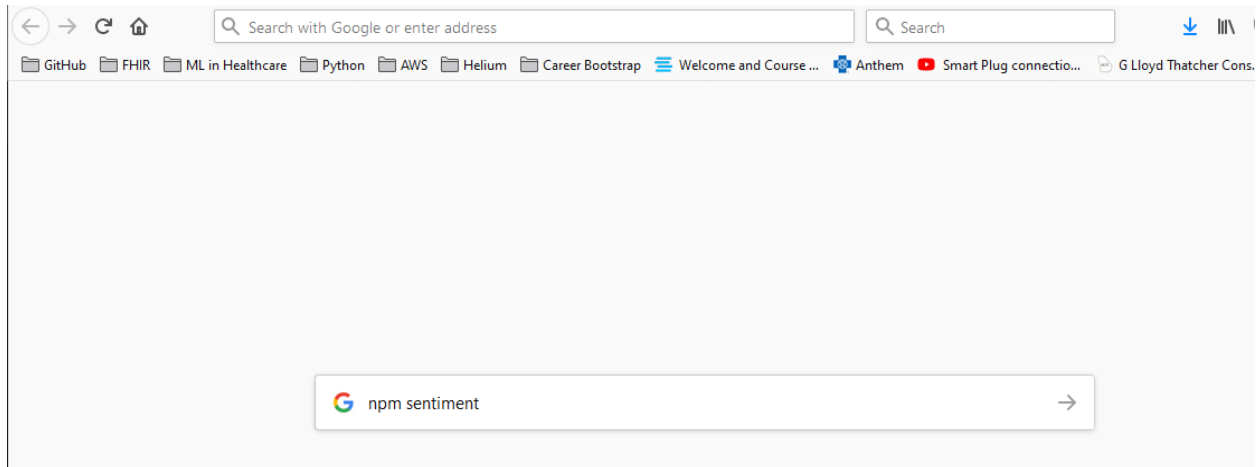

```
1 async (event, steps) => {
2   // const axios = require('axios')
3 }
```

 The status remains 'Not Executed - No return values or exports for this step'.

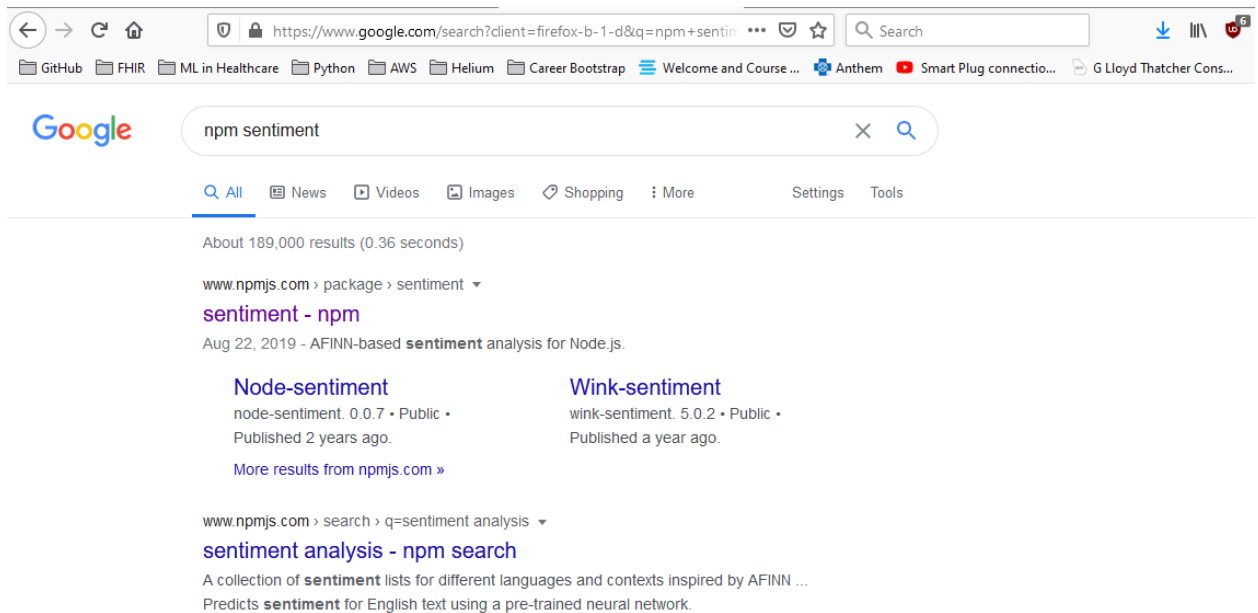
(above) Result of customizing the name from *steps.nodejs* to *steps.sentiment*

6. Find the npm package, sentiment

Open another browser window and find the npm sentiment package



(above) Googling for 'npm sentiment'



(above) Result of googling, the first result is what you want

The screenshot shows the npm package page for 'sentiment'. At the top, there's a navigation bar with 'npm is now a part of GitHub' and a search bar. Below the navigation bar, there's a section for 'No Particular Method' and links to 'Products', 'Pricing', 'Documentation', and 'Community'. The main content area features the package name 'sentiment' with its version '5.0.2', a 'Public' status, and a note that it was 'Published a year ago'. There are buttons for 'Readme', 'Explore', '0 Dependencies', '109 Dependents', and '24 Versions'. The description states: 'AFINN-based sentiment analysis for Node.js'. It mentions 'PASSED' status, 'Greenkeeper', and 'Move to Snyk'. The description continues: 'Sentiment is a Node.js module that uses the AFINN-165 wordlist and Emoji Sentiment Ranking to perform sentiment analysis on arbitrary blocks of input text. Sentiment provides several things:'. A list of features follows: 'Performance (see benchmarks below)', 'The ability to append and overwrite word / value pairs from the AFINN wordlist', 'The ability to easily add support for new languages', and 'The ability to easily define custom strategies for negation, emphasis, etc. on a per-language basis'. On the right side, there's an 'Install' section with a code block: '> npm i sentiment'. Below that, a 'Weekly Downloads' chart shows 24,626 downloads. A table lists 'Version' (5.0.2) and 'License' (MIT). Another table lists 'Unpacked Size' (457 kB) and 'Total Files' (47).

(above) npm sentiment package

- Copy and paste the example usage of the npm sentiment package into the code portion of steps.sentiment code step

The screenshot shows the GitHub repository page for 'thisandagain/sentiment'. The repository name is 'github.com/thisandagain/sentiment'. It shows 'Last publish a year ago' and 'Collaborators' with a profile picture. There are buttons for 'Try on RunKit' and 'Report a vulnerability'. The 'Installation' section shows the command: 'npm install sentiment'. The 'Usage example' section contains a code block:

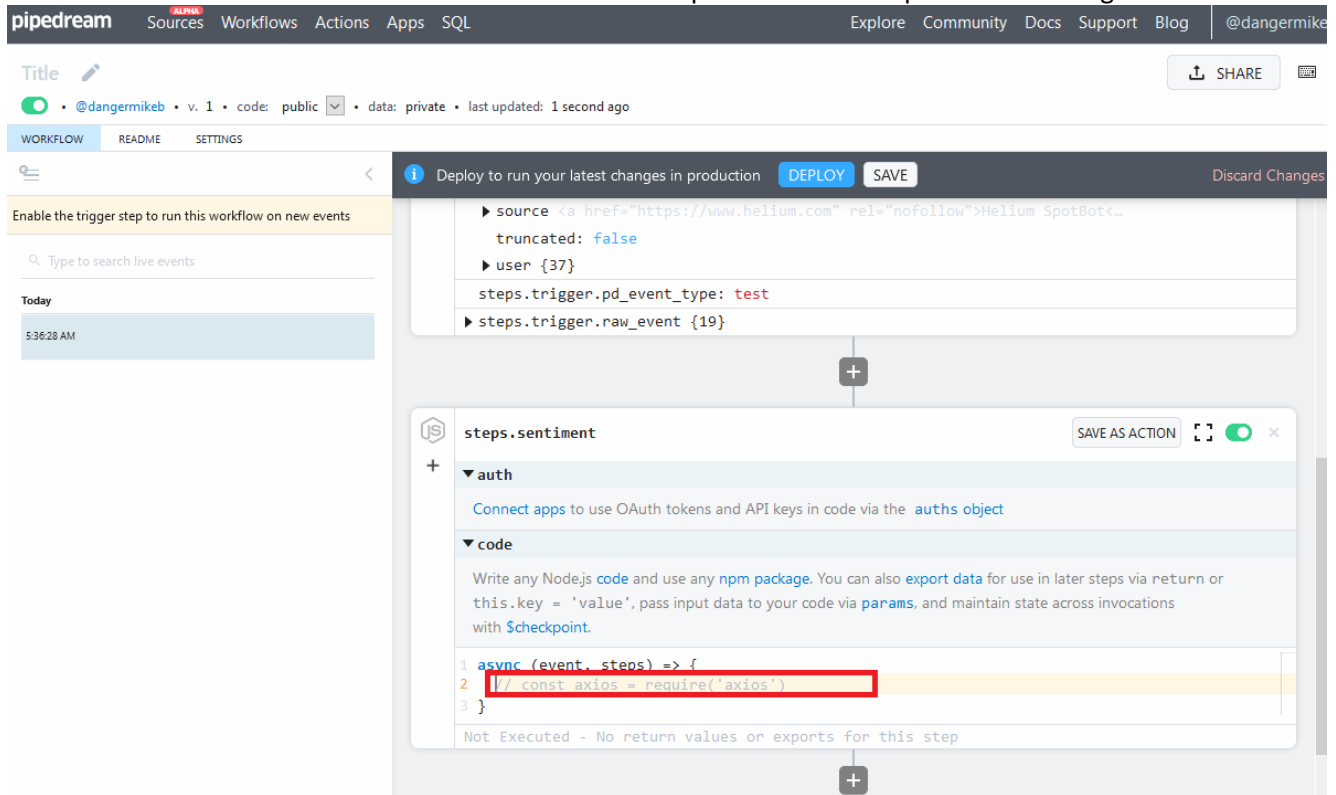
```
var Sentiment = require('sentiment');
var sentiment = new Sentiment();
var result = sentiment.analyze('Cats are stupid.');
```

 The output of the code is:

```
console.dir(result); // Score: -2, Comparative: -0.666
```

. The 'Adding new languages' section is partially visible at the bottom.

(above) Copy the usage example code from npm sentiment



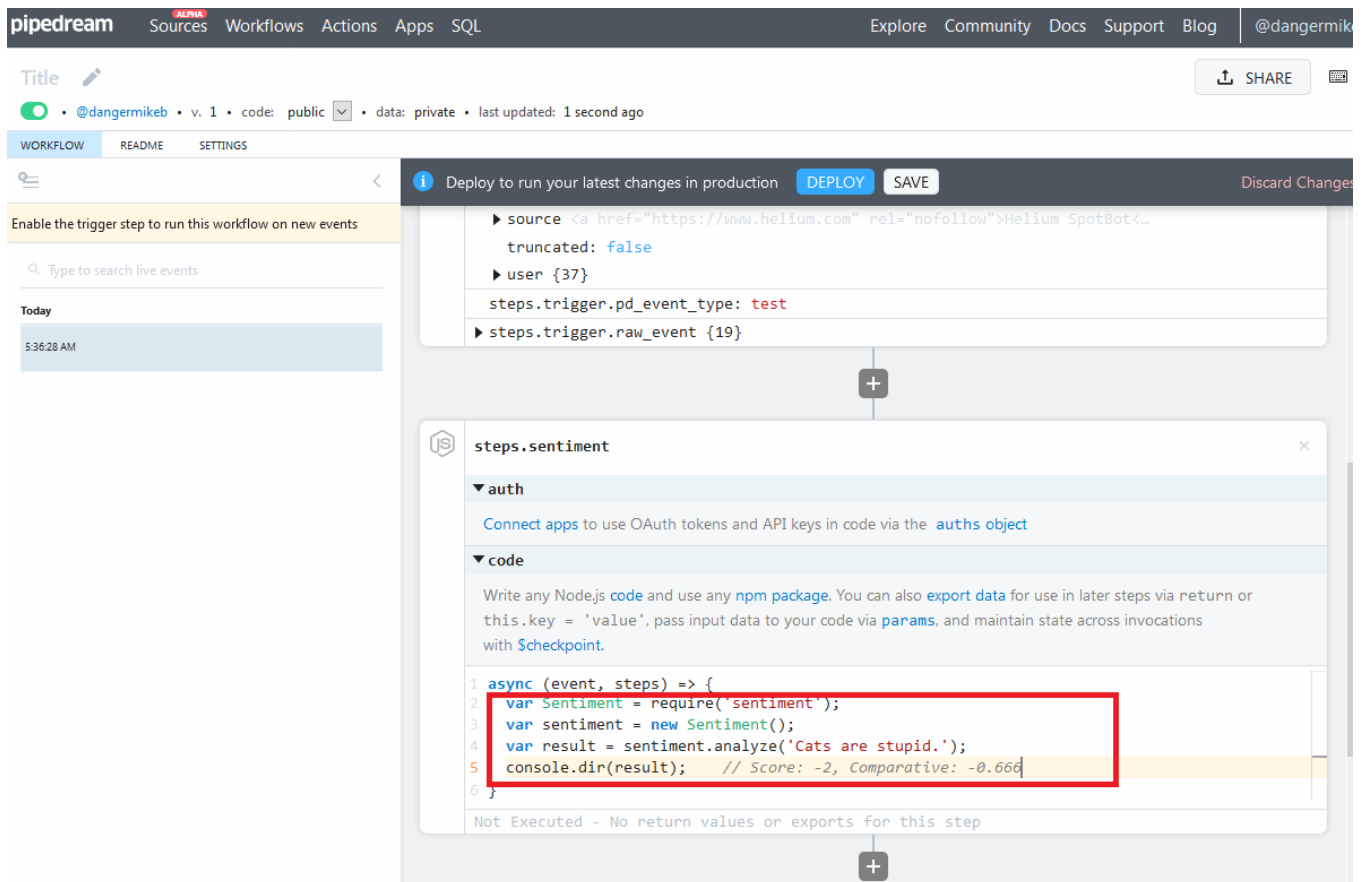
The screenshot shows the PipeDream interface with a workflow configuration. The 'steps.sentiment' step is highlighted, and its code is shown in a red box. The code is a simple placeholder using 'axios'.

```

1 async (event, steps) => {
2   // const axios = require('axios')
3 }

```

(above) Where you will paste the example code into your pipedream program



The screenshot shows the PipeDream interface with a workflow configuration. The 'steps.sentiment' step is highlighted, and its code is shown in a red box. The code is a more complex example using the 'sentiment' package.

```

1 async (event, steps) => {
2   var Sentiment = require('sentiment');
3   var sentiment = new Sentiment();
4   var result = sentiment.analyze('Cats are stupid. ');
5   console.dir(result); // Score: -2, Comparative: -0.666
6 }

```

(above) Result of copying and pasting the example usage of the npm sentiment package into the code portion of steps.sentiment code step

8. Modify the example code to return the full_text value of the event

```

1 async (event, steps) => {
2   var Sentiment = require('sentiment');
3   var sentiment = new Sentiment();
4   var result = sentiment.analyze(event.full_text);
5   console.dir(result);    // Score: -2, Comparative: -0.666
6 }

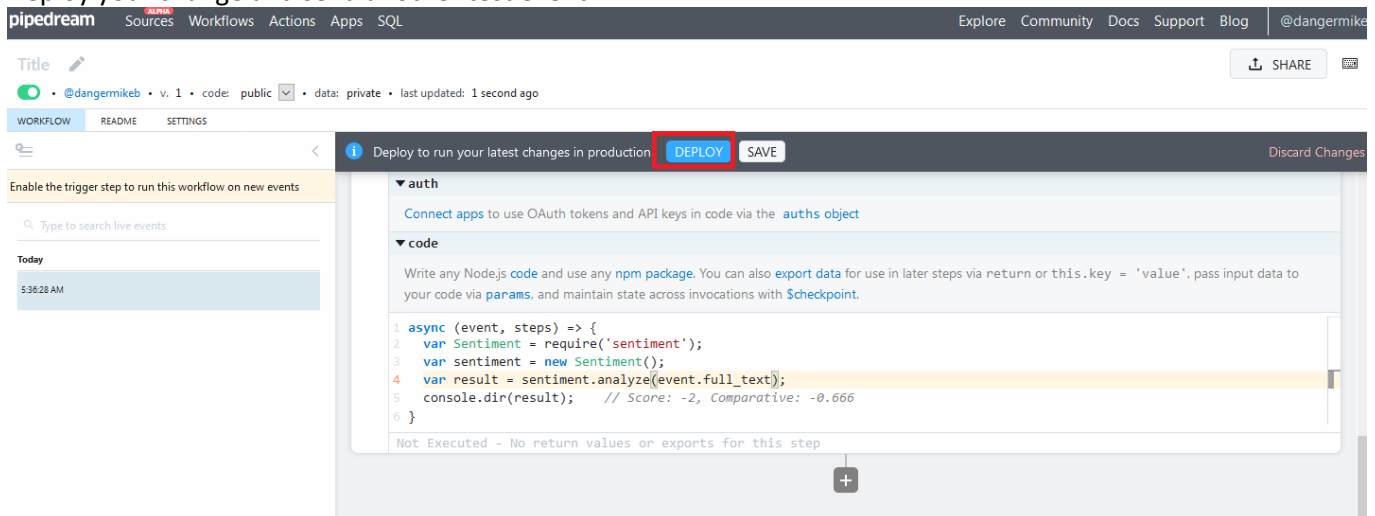
```

Not Executed - No return values or exports for this step

(above) Modify the result line to return the full_text value from the event

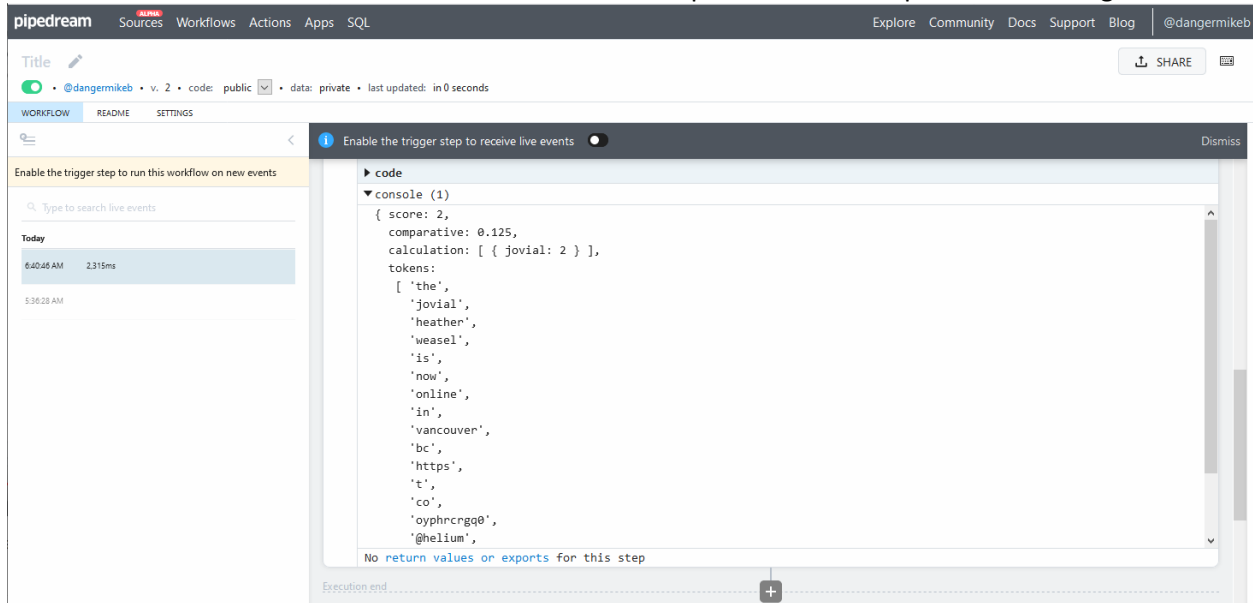
STOP: 1:44 of the video, <https://www.youtube.com/watch?v=hJ-KRbp6EO8>

9. Deploy your change and send another test event



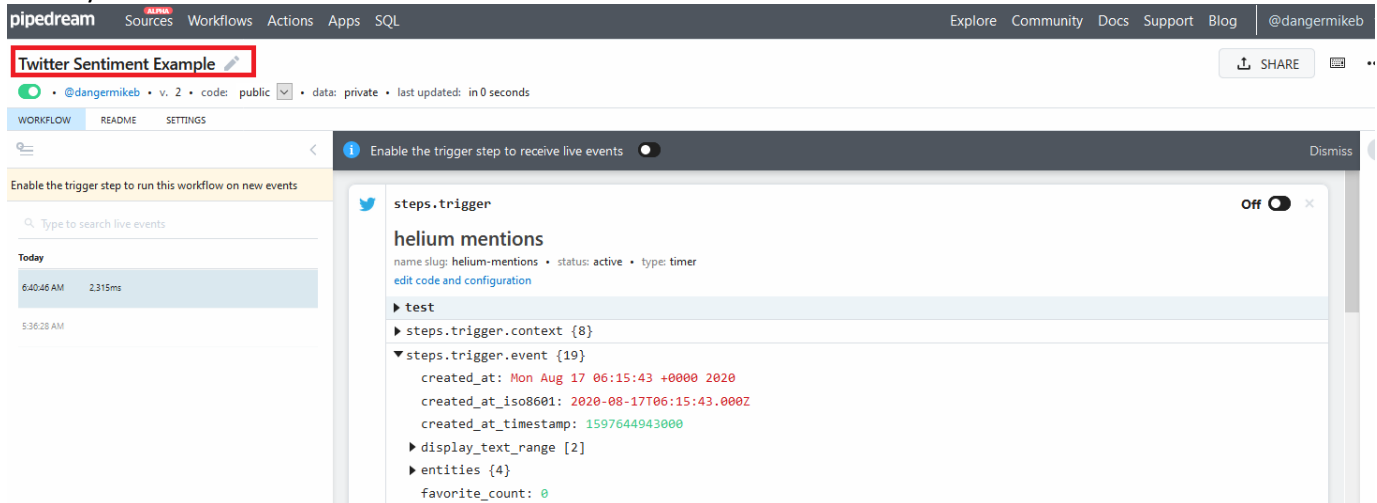
(above) Deploy your change

Select 'send test event' – no screenshot

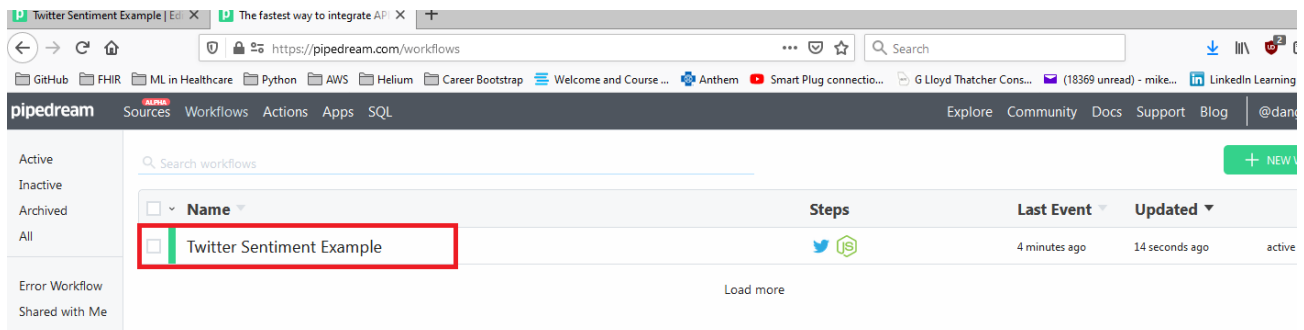


(above) Result of deploying and sending the test event. In the console, you can see the score calculated by the sentiment function.

10. Name your workflow

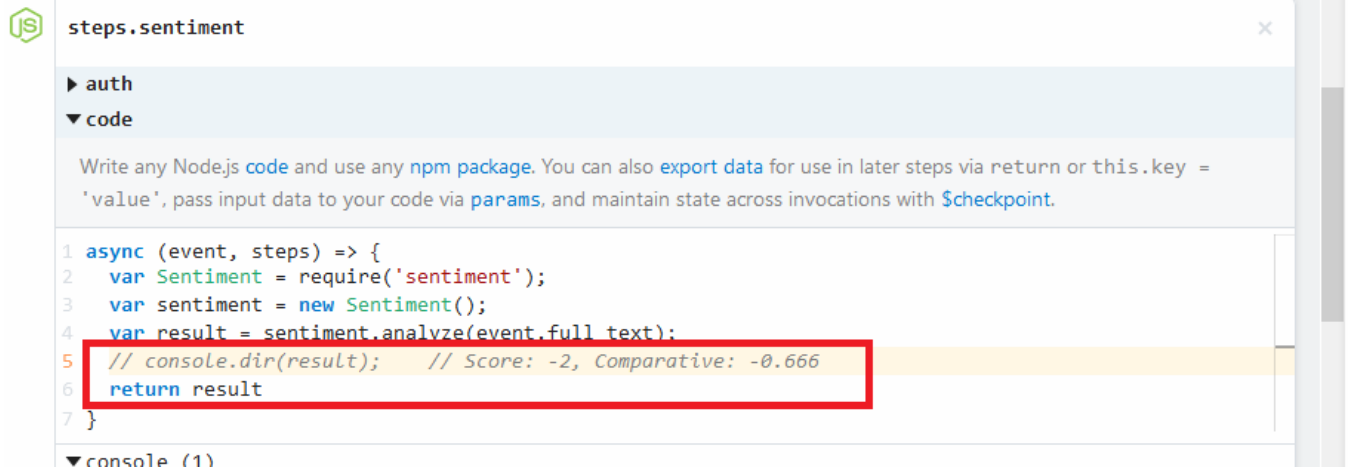


(above) Give your workflow a name so you can find it next time you login



(above) Logging in and finding the workflow you were working on

11. Return result from steps.sentiment to prepare for exporting to Google Sheets

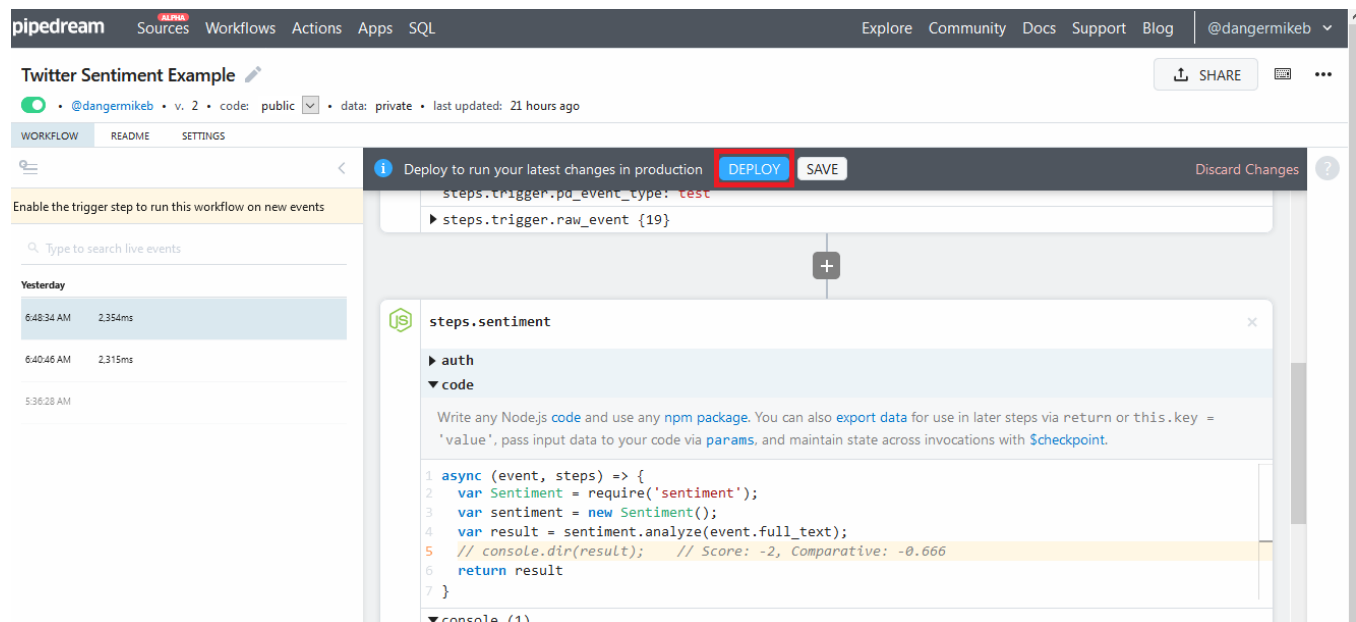


```

1 async (event, steps) => {
2   var Sentiment = require('sentiment');
3   var sentiment = new Sentiment();
4   var result = sentiment.analyze(event.full_text);
5   // console.dir(result); // Score: -2, Comparative: -0.666
6   return result
7 }

```

(above) Comment out the write to the console AND add 'return result'



pipedream Sources Workflows Actions Apps SQL Explore Community Docs Support Blog @dangermikeb

Twitter Sentiment Example

• @dangermikeb • v. 2 • code: public • data: private • last updated: 21 hours ago

WORKFLOW README SETTINGS

Deploy to run your latest changes in production **DEPLOY** SAVE Discard Changes

steps.trigger.raw_event {19}

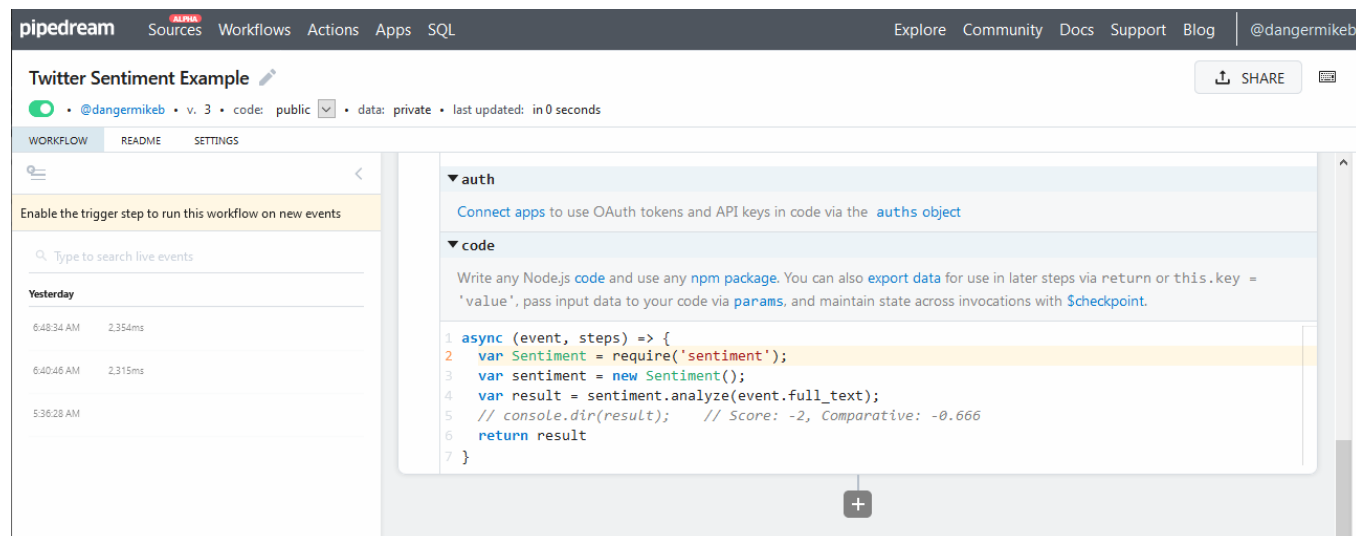
steps.sentiment

```

1 async (event, steps) => {
2   var Sentiment = require('sentiment');
3   var sentiment = new Sentiment();
4   var result = sentiment.analyze(event.full_text);
5   // console.dir(result); // Score: -2, Comparative: -0.666
6   return result
7 }

```

(above) Deploy the change



pipedream Sources Workflows Actions Apps SQL Explore Community Docs Support Blog @dangermikeb

Twitter Sentiment Example

• @dangermikeb • v. 3 • code: public • data: private • last updated: in 0 seconds

WORKFLOW README SETTINGS

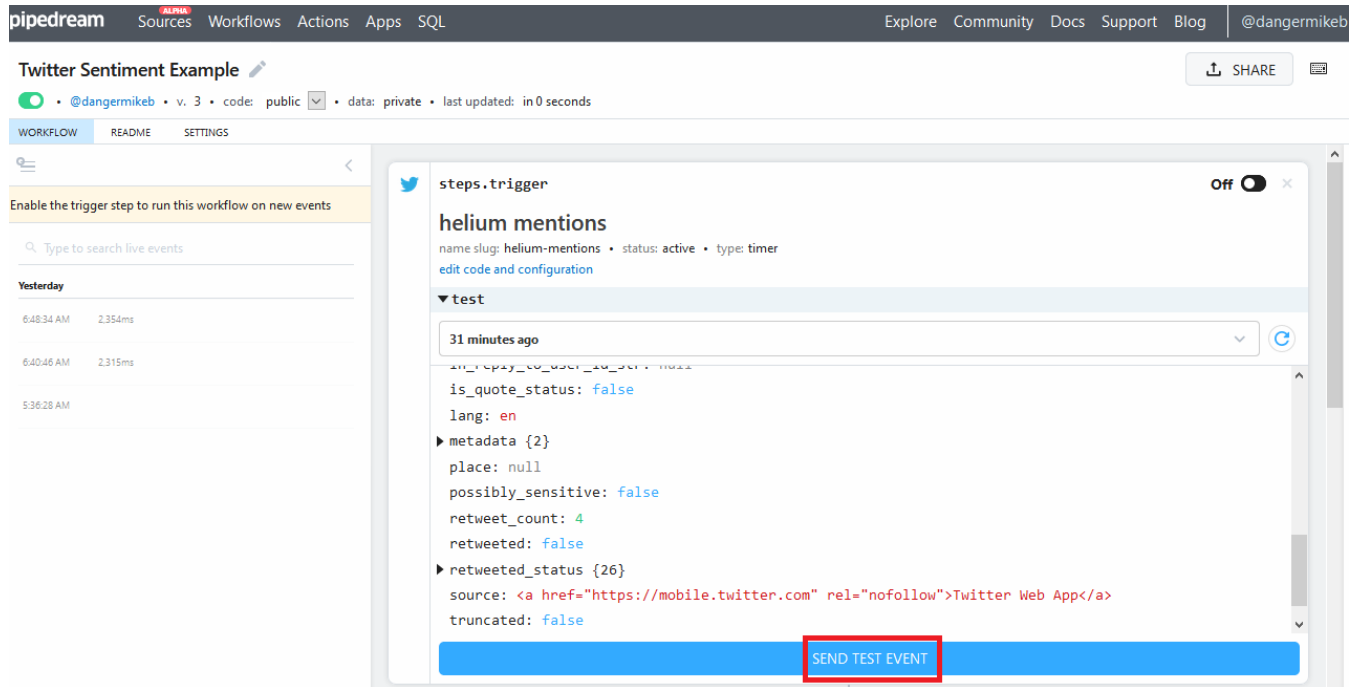
steps.trigger.raw_event {19}

steps.sentiment

```

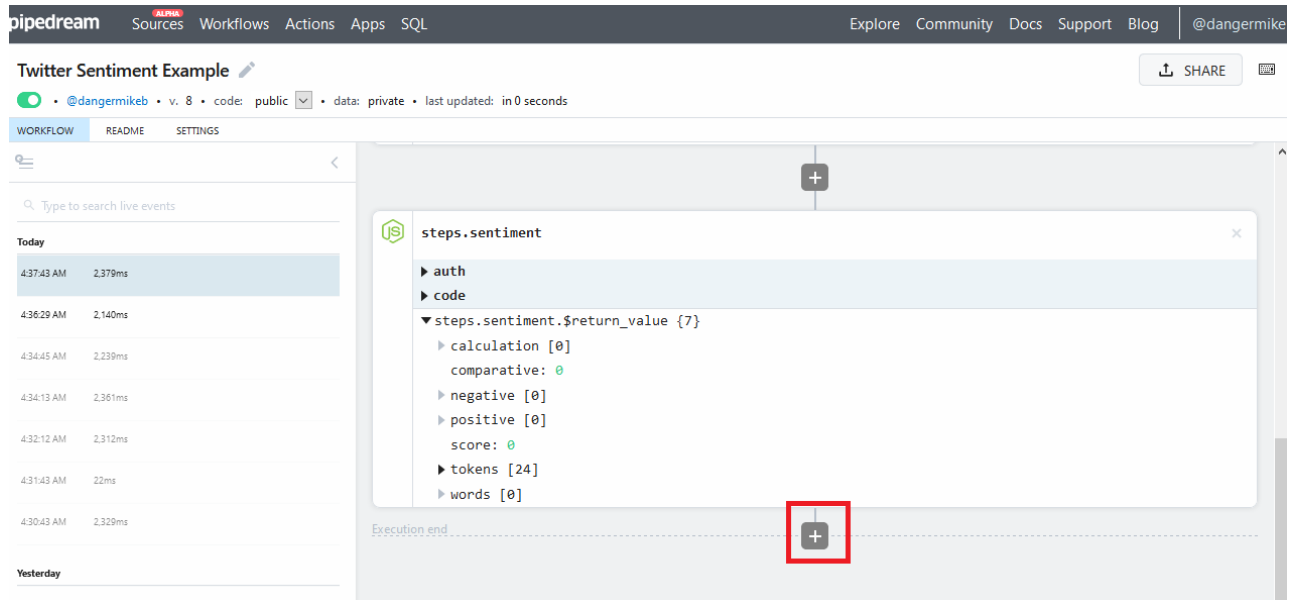
1 async (event, steps) => {
2   var Sentiment = require('sentiment');
3   var sentiment = new Sentiment();
4   var result = sentiment.analyze(event.full_text);
5   // console.dir(result); // Score: -2, Comparative: -0.666
6   return result
7 }

```

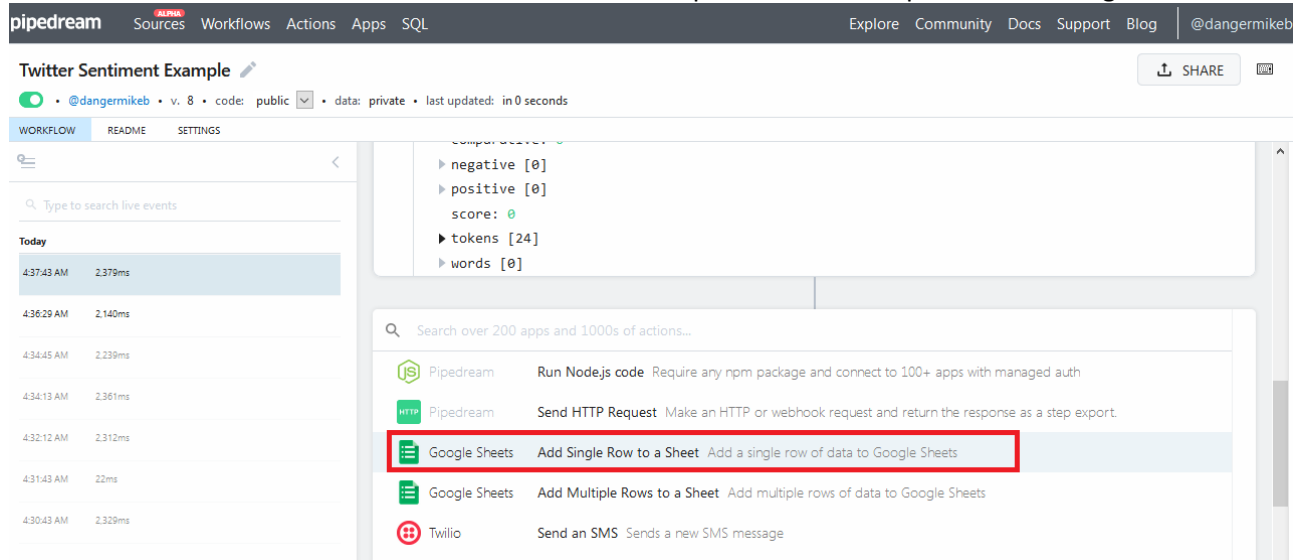


(above) About to Send Test Event

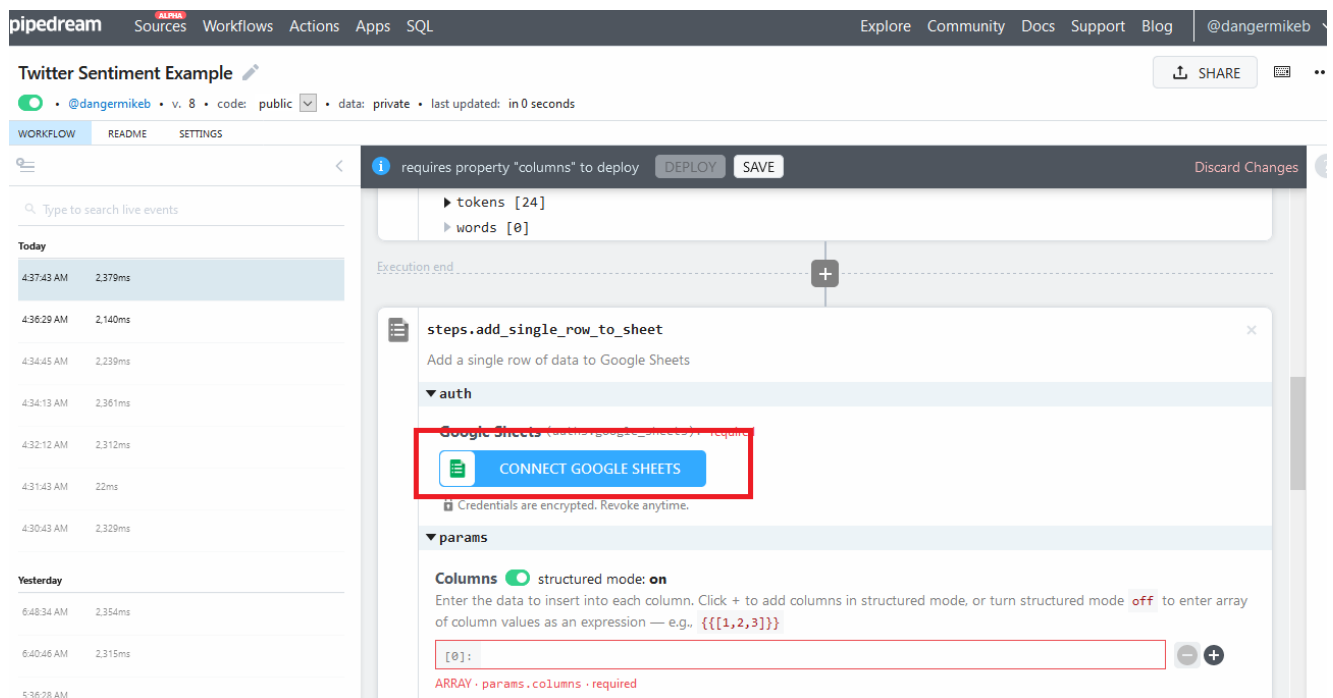
12. Add an action to send data to Google Sheets



(above) Add a new action



(above) Select 'Add Single Row to a Sheet'



(above) Connect to Google Sheets

requires property "columns" to deploy

tokens [24]
words [0]

Execution end

steps.add_single_row_to_sheet

Add a single row of data to Google Sheets

auth

Google Sheets (auths.google_sheets):

params

Columns structured mode: on

Enter the data to insert into each column. Click + to add columns in structured mode, or turn structured mode off to enter array of column values as an expression — e.g., `{{[1,2,3]}}`

[0]:

ARRAY · params.columns · required

(above) Result of connecting to Google Sheets

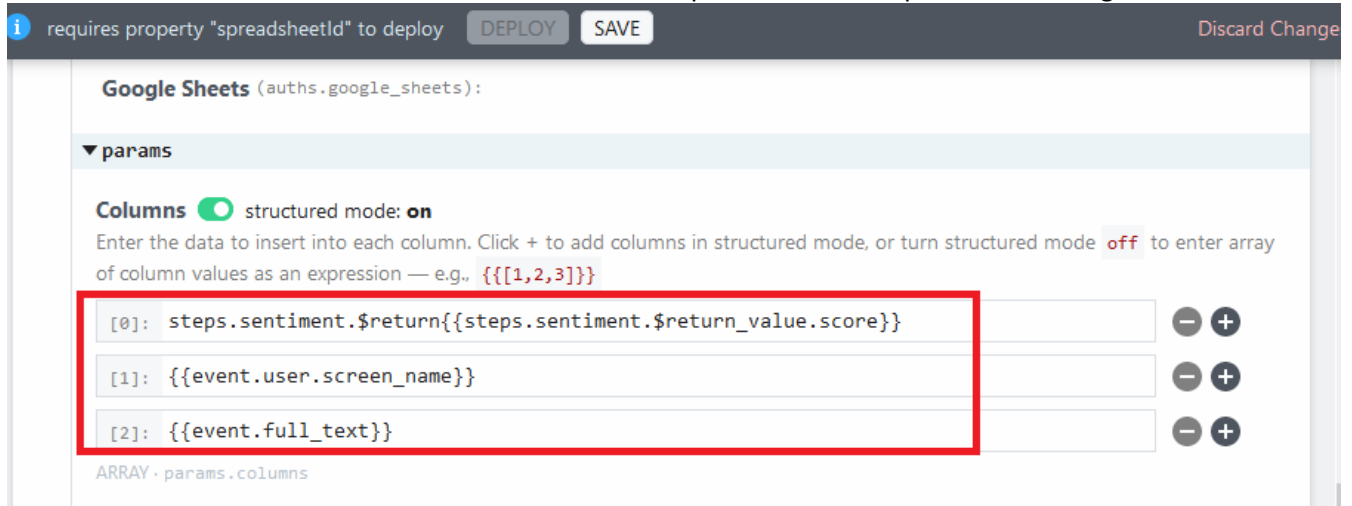
13. Create a Google Sheet with 3 columns for Sentiment Score, User, and Tweet

Pipedream Tweet Sentiment

File Edit View Insert Format Data Tools Add-ons Help Last edit was seconds ago

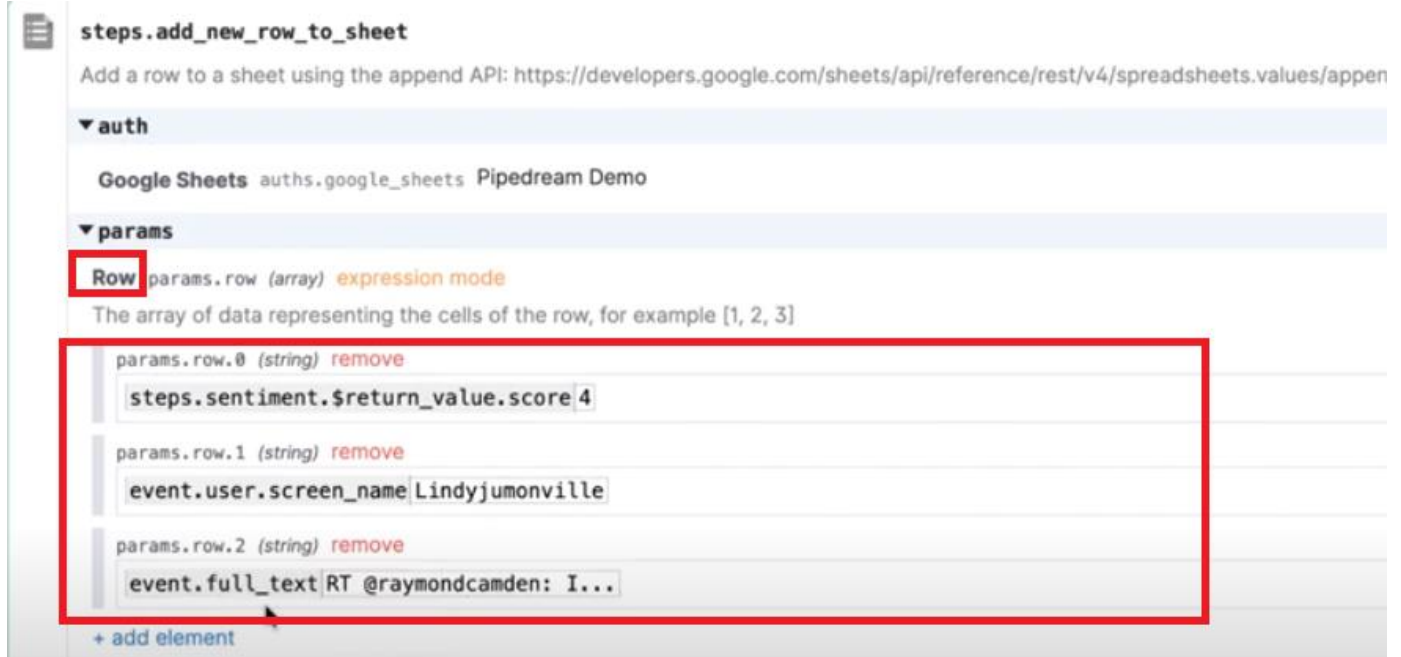
	A	B	C	D	E	F	G	H
1	Sentiment Score	User	Tweet					
2								
3								
4								
5								
6								
7								
8								
9								
10								

14. In the add_new_row_to_sheet action, add an element for each column



(above) Specify data source for each of the 3 columns: Sentiment Score, User, Tweet text

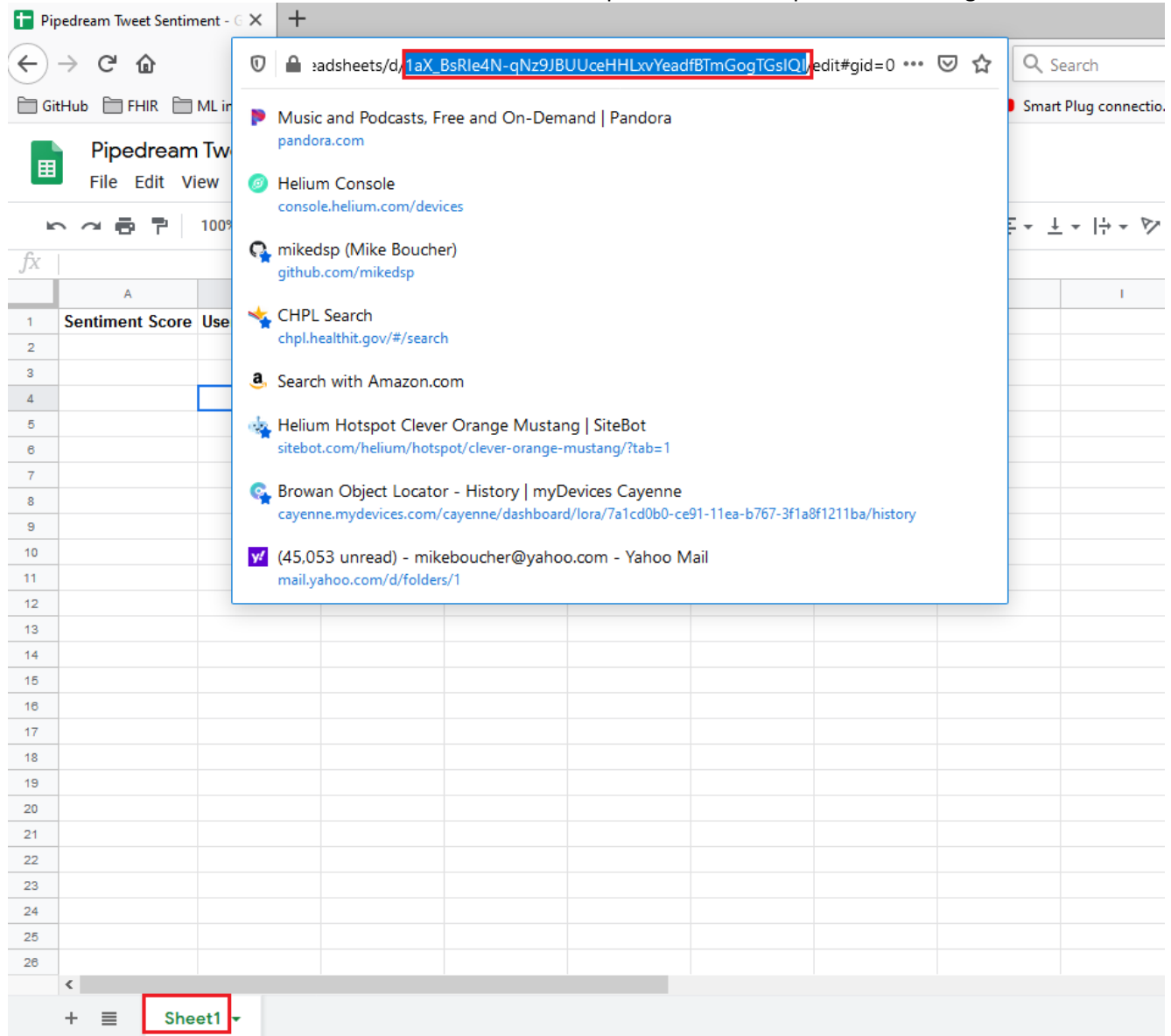
NOTE – my Pipedream app operated a little differently from the Video demo at this step. The screenshot below shows what the video demo looked like.



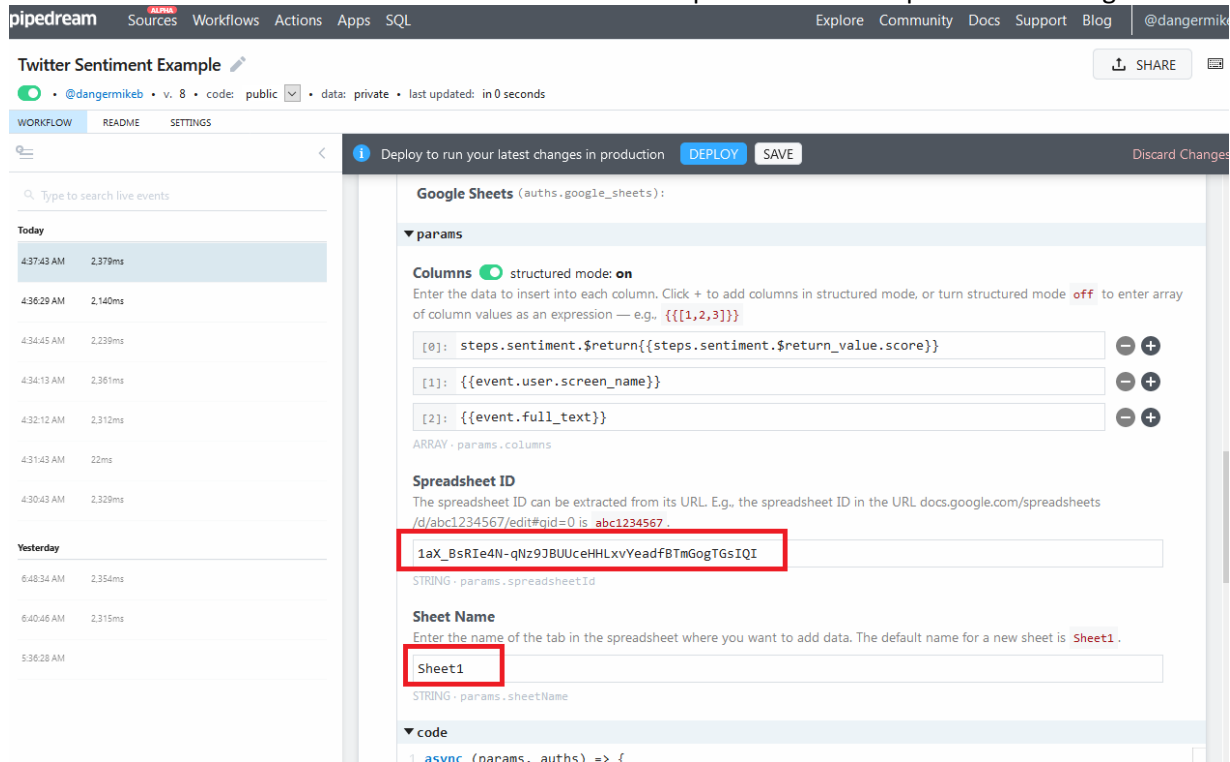
(above) What the video demo looked like at this step

15. Configure the spreadsheet ID and sheet ID in the step

https://docs.google.com/spreadsheets/d/1aX_BsRle4N-qNz9JBUUceHHLxvYeadfBTmGogTGsIQI/edit#gid=0



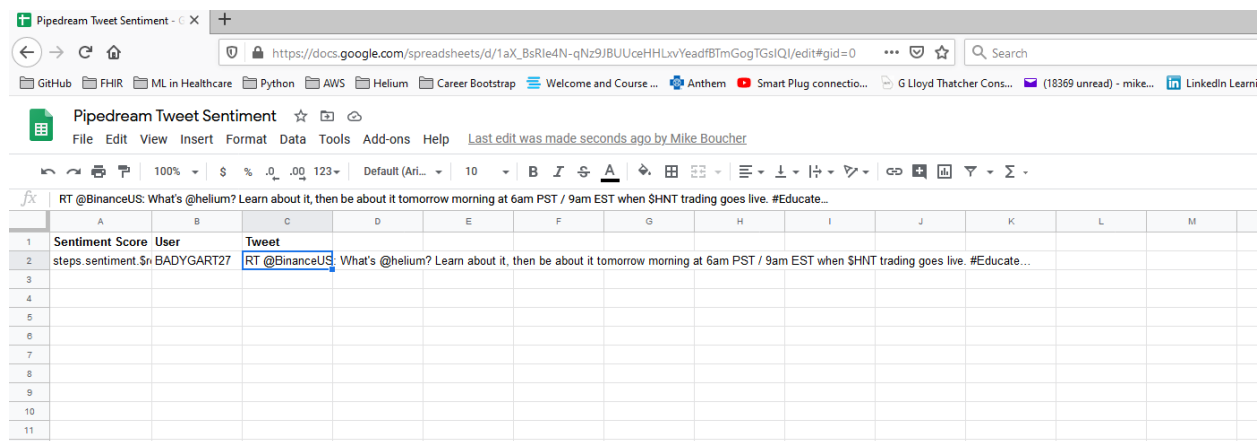
(above) Getting the spreadsheet ID



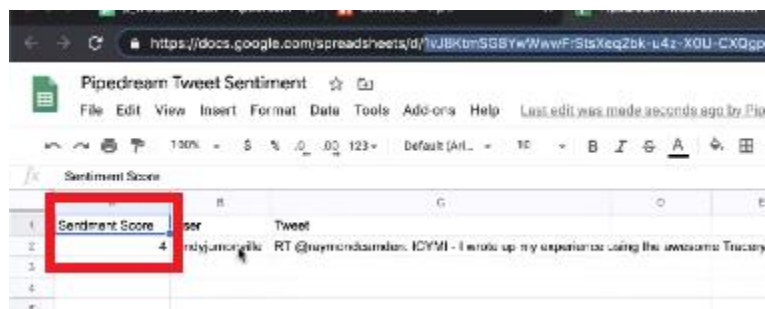
(above) Putting the Spreadsheet ID and the Sheet name into steps.add_single_row_to_sheet

16. Deploy the change, trigger test, then check your Spreadsheet

17.



(above) Result of Deploy > Test, I got a row in my spreadsheet. Looks like the Sentiment Score is not populating correctly. In the video demo, there is a number there (see screenshot below).



(above) Screenshot of video demo – with a score of 4 from the test event

18. Fix the value being put in the score column

Go back and re-create the first parameter in steps.add_single_row_to_sheet

steps.add_single_row_to_sheet

Add a single row of data to Google Sheets

auth

params

Columns ☒ structured mode: **on**

Enter the data to insert into each column. Click + to add columns in structured mode, or turn structured mode **off** to enter array of column values as an expression — e.g., `{{[1,2,3]}}`

[0]: `{{steps.sentiment.$return_value.score}}`

[1]: `{{event.user.screen_name}}`

[2]: `{{event.full_text}}`

ARRAY · params.columns

(above) recreated param 0 – this one sends a score to the Sheet

(below) shot of the original param 0 – you can see the syntax was different

params

Columns ☒ structured mode: **on**

Enter the data to insert into each column. Click + to add columns in structured mode, or turn structured mode **off** to enter array of column values as an expression — e.g., `{{[1,2,3]}}`

[0]: `steps.sentiment.$return({{steps.sentiment.$return_value.score}})`

[1]: `{{event.user.screen_name}}`

[2]: `{{event.full_text}}`

ARRAY · params.columns

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Pipedream Tweet Sentiment - C X +

https://docs.google.com/spreadsheets/d/1aX_BsRle4N-qNz9JBuUceHHLxvYeadfBTmGogTGsIQI/edit#gid=

GitHub FHIR ML in Healthcare Python AWS Helium Career Bootstrap Welcome and Course ... Anthem Smart Plug connect

Pipedream Tweet Sentiment ☆ ⓘ

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	A	B	C	D	E	F	G	H
1	Sentiment Score	User	Tweet					
2	2	HSpotbot	The Attractive Daisy Grasshopper is now online in Los Angeles, CA https://t.co/C8CC4kwy6N @h					
3								
4								
5								

(above) Google Sheet with a proper Score value in the 1st column (I deleted the 2 previous rows with invalid scores)

19. Send a couple more test events

Twitter Sentiment Example

• @dangermikeb • v. 11 • code: public • data: private • last updated: in 0 seconds

WORKFLOW **README** **SETTINGS**

steps.trigger

helium mentions

name slug: helium-mentions • status: active • type: timer

[edit code and configuration](#)

test

2 hours ago

2 hours ago The Attractive Daisy Grasshopper is now online in Los Angeles, CA https://t.co/C8CC4kwy6N @helium #ThePeoplesNetwork

2 hours ago @TheSafeSpace @BinanceUS @helium What, Like Pled Piper?

2 hours ago @helium Hotspot is another #Laravie gateway that earns #cryptocurrency, namely HTN tokens. Earnings vary a lot from a few c...

2 hours ago The Sleepy Daisy Cobra is now online in Brooklyn, NY https://t.co/Y5Gd0LVec @helium #ThePeoplesNetwork

2 hours ago The Energetic Tangerine Orca is now online in Brooklyn, NY https://t.co/E0sQZ000H @helium #ThePeoplesNetwork

2 hours ago The Precise Plastic Pigeon is now online in Brooklyn, NY https://t.co/FqNC2XOn1U @helium #ThePeoplesNetwork

2 hours ago The Gentle Heather Nightingale is now online in Brooklyn, NY https://t.co/K5kELLxzbG @helium #ThePeoplesNetwork

favorite_count: 0

favorited: false

full_text The Gentle Heather Nightingale is now online in Brooklyn, NY https://t...

SEND TEST EVENT

steps.trigger.context {8}

steps.trigger.event {19}

created_at: Tue Aug 18 06:57:02 +0000 2020

(above) Select and send another test event

https://docs.google.com/spreadsheets/d/1aX_BsRle4N-qNz9JBuUceHHLxvYeadfBTmGogTgSIQ/edit#gid=0

Pipedream Tweet Sentiment

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100% \$ % .0 .00 123 Default (Ari...) 10 B I S A

	A	B	C	D	E	F	G	H	I
1	Sentiment Score	User	Tweet						
2		2 HSpotbot	The Attractive Daisy Grasshopper is now online in Los Angeles, CA https://t.co/C8CC4kwy6N @helium #ThePeoplesN						
3		2 HSpotbot	The Attractive Daisy Grasshopper is now online in Los Angeles, CA https://t.co/C8CC4kwy6N @helium #ThePeoplesN						
4		0 HSpotbot	The Gentle Heather Nightingale is now online in Brooklyn, NY https://t.co/k5kELLxzbG @helium #ThePeoplesNetwork						
5		0 HSpotbot	The Precise Plastic Pigeon is now online in Brooklyn, NY https://t.co/FqNC2XOn1U @helium #ThePeoplesNetwork						
6									

(above) See the test event in the Google Sheet

20. Enable the trigger step so that any new events emitted by the source will be processed by this workflow

The screenshot shows the PipeDream interface for a workflow named "Twitter Sentiment Example". The workflow is public and has been updated in the last 0 seconds. The "steps.trigger" step is highlighted, showing it is listening for new events. The "helium mentions" step is also visible, showing its configuration.

steps.trigger

name slug: helium-mentions • status: active • type: timer

edit code and configuration

test

steps.trigger.context {8}

steps.trigger.event {19}

created_at: Tue Aug 18 07:09:02 +0000 2020

created_at_iso8601: 2020-08-18T07:09:02.000Z

created_at_timestamp: 1597734542000

display_text_range [2]

entities {4}

favorite_count: 0

(above) Setting the trigger to listen to new events

The screenshot below shows the contents of the Google Sheet after several days continuous running.

Pipedream Tweet Sentiment															
File Edit View Insert Format Data Tools Add-ons Help Last edit was seconds ago															
100% 123 Default (Arial) 10 B I U A															
1	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
335	Sentiment Score	User	Tweet												
336		0 HSpotbot	The Festive Camine Mammoth is now online in Harrah, OK https://t.co/5wOzspeR8q @helium #ThePeoplesNetwork												
337		0 HSpotbot	The Ancient Violet Barbel is now online in Pawtucket, RI https://t.co/DrUkh0f1GO @helium #ThePeoplesNetwork												
338		0 HSpotbot	The Digital Sangria Hamster is now online in Passaic, NJ https://t.co/N9YfnLaHNN @helium #ThePeoplesNetwork												
339		0 HSpotbot	The Original Glossy Griffin is now online in Los Angeles, CA https://t.co/JbDeDxkmT @helium #ThePeoplesNetwork												
340		-2 HSpotbot	The Bitter Camine Dove is now online in Wexford, PA https://t.co/9N768FAP7n @helium #ThePeoplesNetwork												
341		2 HSpotbot	The Proud Violet Iguana is now online in Livingston, MT https://t.co/g2uJ9y2L @helium #ThePeoplesNetwork												
			Cryptocurrency over #LoRaWAN is a success. 🤖🤖🤖												
			Able to send any token from any chain completely offline, zero fee.												
			Just wrapped up an evening of tests, were able to get 20km offline, but with we figure we can do 60!												
342		2 SysEnfr	Next: send Assets back and forth over @helium https://t.co/L77aSzK3j												
343		0 HSpotbot	The Narrow Chocolate Unicorn is now online in League City, TX https://t.co/cotdWn3IAx @helium #ThePeoplesNetwork												
344		3 HSpotbot	The Delightful Spruce Ant is now online in San Francisco, CA https://t.co/MRUOIVic6 @helium #ThePeoplesNetwork												
345		6 vishrutubna	@sajithpai Couple of interesting attempts in crypto — the entire yield farming "trend craze" going on right now eg. @learnfinance @synthetix_io etc. and projects like @helium — someone more informed than me can p												
346		0 HSpotbot	The Immense Gunmetal Cow is now online in Dublin, CA https://t.co/OdcCpDMewB @helium #ThePeoplesNetwork												
347		0 HSpotbot	The Square Mauve Caterpillar is now online in Dublin, CA https://t.co/3pEcWCP0op @helium #ThePeoplesNetwork												
348		2 VesalMinen3	@helium Hi, I would like to ask if I should buy one device. I'm living in a small city in Finland and I'm considering that whether it makes sense or not buy this device because of my location.												
349		0 tam_ratina	@NischalShetty @vishrutubna @sajithpai @learnfinance @synthetix_io @helium Yup all crypto does this. If you're specifically looking for equity differentiated from usage then platforms that segregate governance token												
350		0 HSpotbot	The Young Candy Woodpecker is now online in Everett, WA https://t.co/CAJCyj1zCw @helium #ThePeoplesNetwork												
351		0 GalaxyLio	RT @johnnyrocketGIG: Any one can own a Hotspot and start earning SHNT, a new cryptocurrency, for providing coverage for #ThePeoplesNetwork!												
352		0 Tech_Examiner	RT @cnxsoft: @helium Hotspot is another #LoRaWAN gateway that earns #cryptocurrency, namely HTN tokens. Earnings vary a lot from a few cen...												
353		0 nseki	RT @Austin_Federa: This morning I ran an errand to midtown and took my LoRa mapper. 100% packet delivery in nyc over @helium - it's astonis...												
353		3 HSpotbot	The Cheery Ultraviolet Aphid is now online in Chicago, IL https://t.co/PwQELUF3v @helium #ThePeoplesNetwork												