

Getting started with Tableau Developer tools

7 tips from my personal journey

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13 January 2021 | @Anyalitica | prosvetova.com





Hi, my name is Anya

- Background in economics, art history, and photojournalism
- Started using Tableau Developer tools in March 2020
- Tableau DataDev Ambassador since August 2020

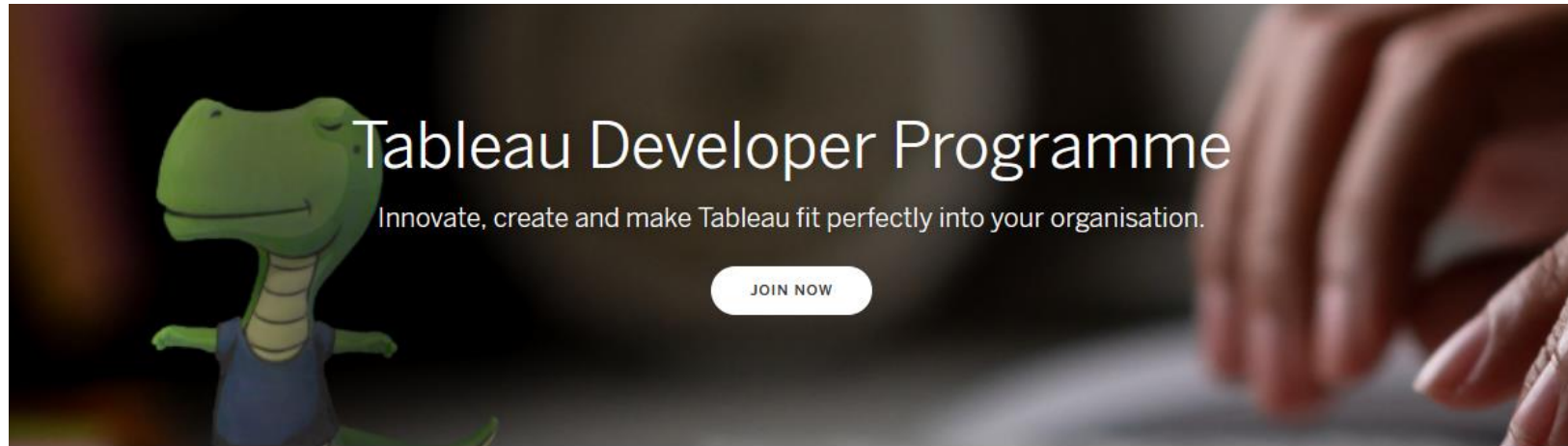
Why did I get interested in Developer tools?

- Explore new things
- Automate manual processes
- Solve puzzles

What have I learnt along the way?

- Basics of JavaScript and web development
- How to build custom tools in Tableau
- How to explain complex technical concepts to different audiences

1. Join Tableau Developer Programme



Hello (data) world.

Introducing the Tableau Developer Programme, which helps make it easy to customise, integrate and extend the Tableau platform to fit the needs of your organisation.

Keep up to date: Get news updates and participate in product sprint demos.

Code with confidence: Opt in to receive a personal development sandbox on Tableau Online.

Find your people: Connect with others in the Tableau Developer Community Forum.

www.tableau.com/developer

Personal Tableau Online sandbox & Slack Community

The screenshot displays the Tableau Online interface, specifically the 'Recents' view. On the left is a navigation sidebar with options: Home, Explore, Favourites, Recents (selected), Shared with Me, Recommendations, External Assets, Users, Groups, Schedules, Jobs, Tasks, Site Status, and Settings. The main area shows a grid of dashboard thumbnails. At the top right, there is a search bar and a 'Sort By: Last Accessed At (newest)' dropdown. The thumbnails include:

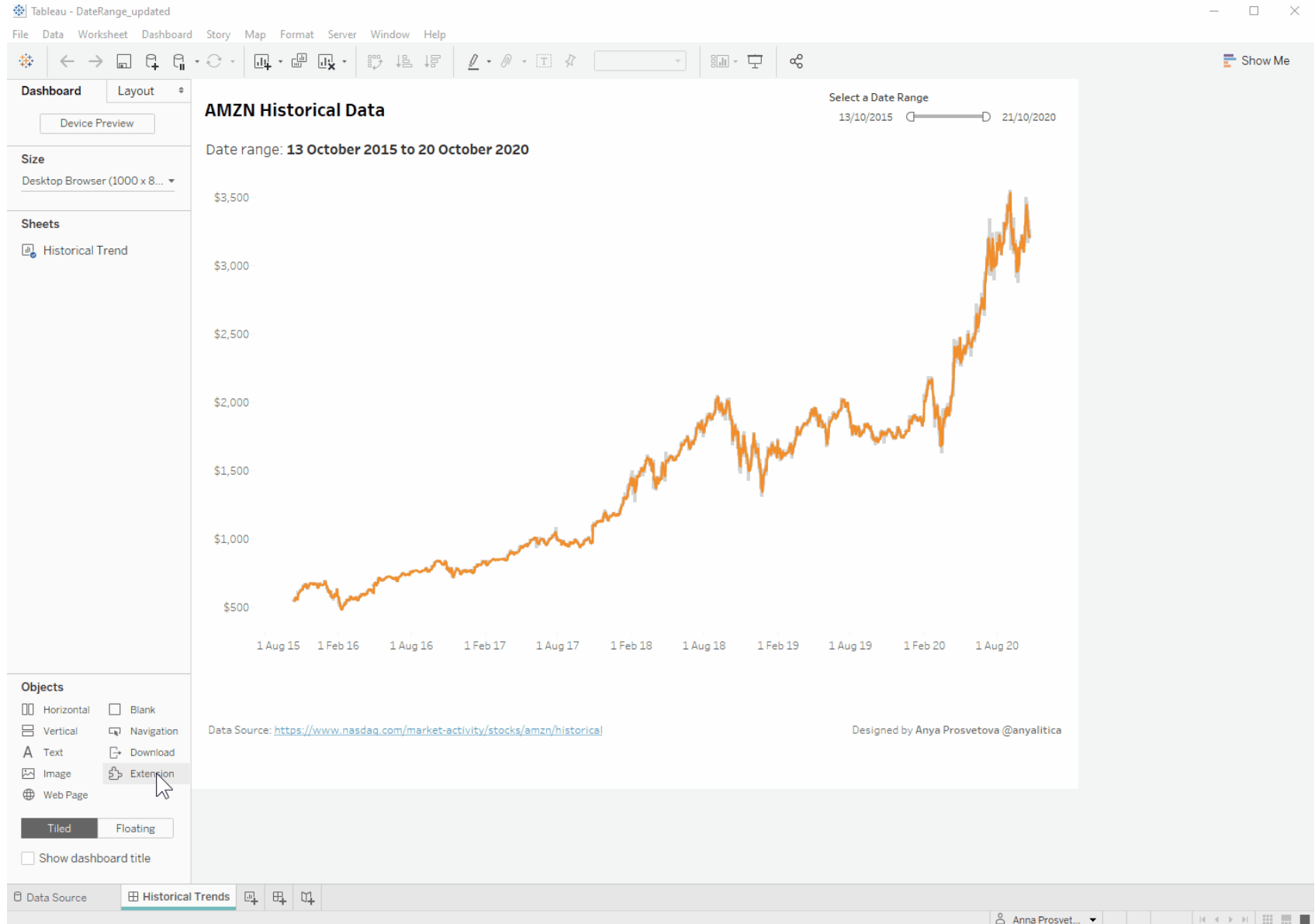
- Data dictionary**: 2 weeks ago
- User Specific View**: last month
- Map**: last month
- Sales by state**: last month
- Sales by state**: last month
- Sales and profits**: last month
- User Specific View**: 3 months ago
- London Fire Brigade: incidents attended between 2013 - 2017**: 3 months ago
- Historical Trend**: 3 months ago
- Historical Trends**: 3 months ago
- Tables in the East region**: 5 months ago
- Superstore Sales**: 5 months ago
- Sales by state**: 5 months ago
- Profit (Furniture, Profitable)**: 5 months ago
- Sales (Consumer, Profitable)**: 5 months ago



2. Don't overthink, start small



My first Tableau dashboard extension



3. Focus on one tool at a time



Participation in #DataDev Mini-Challenges

Past Mini-Challenges

POST Sign in (personal access token) POST Create a webhook GET List webhooks

Create a webhook

POST {{server}}/api/3.6/sites/{{site-id}}/webhooks

Params Authorization Headers (12) Body Pre-request Script Tests Settings

none form-data x-www-form-urlencoded raw binary GraphQL JSON

```

1 {
2   "webhook": {
3     "webhook-source": {
4       "webhook-source-api-event-name": {}
5     },
6     "webhook-destination": {
7       "webhook-destination-http": {
8         "method": "POST",
9         "url": "{{webhook-uri}}"
10      }
11    },
12    "name": "{{webhook-name}}"
13  }
14 }

```

Body Cookies (2) Headers (13) Test Results

Pretty Raw Preview Visualize JSON

```

1 {
2   "webhook": {
3     "webhook-source": {
4       "webhook-source-event-datasource-refresh-failed": {}
5     },
6     "webhook-destination": {
7       "webhook-destination-http": {
8         "method": "POST",
9         "url": "https://maker.ifttt.com/trigger/
10      }
11    },
12    "owner": {
13      "id": "
14      "name": "
15    },
16    "id": "
17    "name": "extract-failed",
18    "isEnabled": true,
19    "statusChangeReason": ""
20  }
21 }

```

temporary URL to point to your Webhook.

Jobs

Failed Jobs: 4 Completed Jobs: 2 Cancelled Jobs: 7

Sort By: Jk

ID	Status	Priority	Task Type	Job Requested Time	Run Time (min)	Queue Time (min)
9091780	Failed	50	Extract Refresh/Creation	14 Jun 2020, 08:22	0.0	11

Level 2: Create custom workflows triggered by events with Webhooks

Level 3: Please tweet every time an extract is failing

Now that you set up a Webhooks and tested it, the next step is to build processes

For level 3: Group submission. For the level 3 only, you can collaborate on the



Anya Prosvetova
@Anyalitica

Hi @illonage! The refresh of 'T-rex shopping list' extract failed on my #Tableau Online at June 14, 2020 at 08:23AM. #datadev











8:23 AM · Jun 14, 2020 · IFTTT

4. Try to solve a practical challenge



Data Dictionary with the Metadata API

List of calculated fields as of 21/10/2020 15:45:48

Workbook	Calculated Field	Formula	Data Type	Field Description	
How many workbooks I have created	Owner	SPLIT([OwnerName],@',1)	STRING	No description	
	Average attendance time in min	[FirstPumpArriving AttendanceTime]/60	REAL	No description	
London Fire Brigade incidents attended between 2013 - 2017	AVG arrival time - above/below	IF AVG([Average attendance time in min]) > AVG([Avg arrival time - goal]) THEN 'above' ELSE 'within' END	STRING	No description	
	Avg arrival time - goal	6	INTEGER	No description	
	Deliberate vs Accidental Colour	IF CONTAINS([Incident Type_LFB], "deliberate") then 'deliberate' else 'accidental' end	STRING	No description	
	Dynamic date	window_max (max ([Date_LFB]))	DATE	No description	
	Max date	WINDOW_MAX(Max([Date_LFB]))	DATE	No description	
	Max date - stations	WINDOW_MAX(Max([Date Of Call]))	DATE	No description	

FILTERS

Project Name
(All)



Workbook Name
(All)

Workbook Tag
(All)

Datasource
(All)

Calculation Name

Workbooks with warnings

-  OK
-  Warning

Designed by Anya Prosvetova / @anyaltica

5. Conquer your impostor syndrome



Illustration by Freepik Stories

Being inspired by the community

How to Add an the Airbnb Date Range Picker to your Tableau Dashboard



Envious of the Airbnb data picker? In this post, you'll learn how to combine Airbnb's date picker with Tableau via the JS API using React. By the time you're through this post, you'll have that date picker feel you've always wanted right in your Tableau Dashboard.

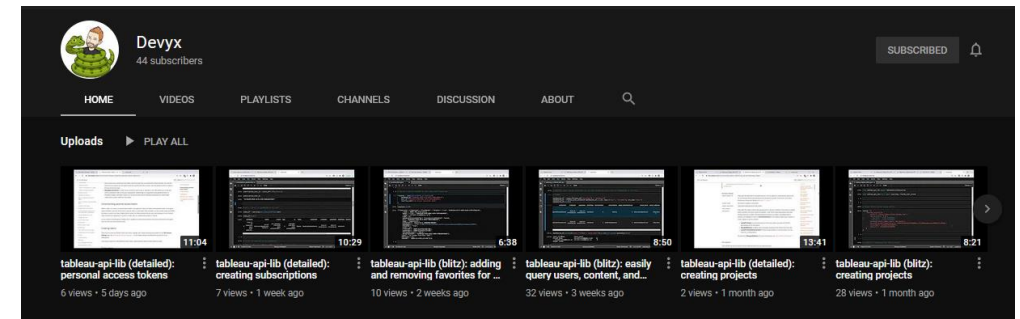
[READ MORE](#)

Comment Source 0 Likes Share
Tableau JS API
JS API, React, Tableau, Date Picker

Step-by-step Guide to Creating a Responsive KPI Dashboard with the Tableau JavaScript



If you have been looking for a step-by-step guide to a responsive Grid Layout leveraging the best of Tableau and React, then this is the tutorial for you. The Tableau JS API is simply too good to ignore and this only begins to scratch the surface of what's possible. Stoke your curiosity with this post and you're sure to be hooked.



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44 subscribers

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- tableau-api-lib (blitz): easily query users, content, and... 8:50 32 views • 3 weeks ago
- tableau-api-lib (detailed): creating projects 13:41 2 views • 1 month ago
- tableau-api-lib (blitz): creating projects 8:21 28 views • 1 month ago



Why Tableau Products Solutions Resources Partners COVID-19

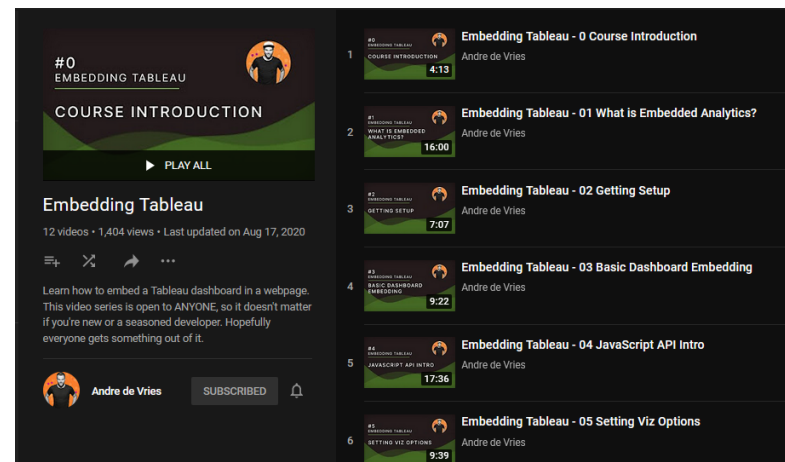
PRICING SIGN IN

December Developer Platform news: Personal Access Tokens update, auto-disabling Webhooks, and JupyterLab integration

SHARE



Every month is like Christmas for Developer Program members because we strive to delight our members as we showcase the latest projects from our internal developer platform and tools engineers. For the last Sprint Demos, we featured some exciting updates: Personal Access Token impersonation, auto-disabling Webhooks,



#0 EMBEDDING TABLEAU COURSE INTRODUCTION

PLAY ALL

Embedding Tableau
12 videos • 1,404 views • Last updated on Aug 17, 2020

Learn how to embed a Tableau dashboard in a webpage. This video series is open to ANYONE, so it doesn't matter if you're new or a seasoned developer. Hopefully everyone gets something out of it.

Andre de Vries SUBSCRIBED

- 1 Embedding Tableau - 0 Course Introduction 4:13 Andre de Vries
- 2 Embedding Tableau - 01 What is Embedded Analytics? 16:00 Andre de Vries
- 3 Embedding Tableau - 02 Getting Setup 7:07 Andre de Vries
- 4 Embedding Tableau - 03 Basic Dashboard Embedding 9:22 Andre de Vries
- 5 Embedding Tableau - 04 JavaScript API Intro 17:36 Andre de Vries
- 6 Embedding Tableau - 05 Setting Viz Options 9:39 Andre de Vries



6. Contribute to the community



Blog, webinars, and more

ANYA PROSVETOVA
Data analysis, photography, art

Blog
About
Photography

Sep 28, 2020
How I set up my blog using a static site generator

```
getpass, argparse, logging,
tableauclient on the
pandas or pd

for arguments which a user needs to enter to login to the server.

- argparse.ArgumentParser()
  add_argument("--logging-level", "-l", choices=["debug", "info", "error"],
               default="info", help="Logging level")
  add_argument("--site-url", "-s", required=True,
               help="Tableau site URL")
  add_argument("--site-username", "-u", required=True,
               help="Tableau site username")
  add_argument("--site-password", "-p", required=True,
               help="Tableau site password")
  add_argument("--token-name", "-t",
               help="Tableau OAuth token name")

parser.parse_args()
```

Sep 15, 2020
#DataDev Mini-Challenge 5: Setting up webhooks to receive Tableau event notifications

tableau

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Laine Caruzca

@andre3
Andre de Vries

Get to know our
Tableau DataDev
Ambassadors!



Anya Prosvetova
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Tableau DataDev Ambassador
Tableau & Alteryx Consultant

Tableau Prep
Geocoding using the
Script step and
Python

746,126 Views
8 December 2020

Anya Prosvetova
DataDev Tableau Ambassador
The Information Lab | DS17

Tableau Metadata API
Build a data dictionary using Metadata API!

3043 / 15417
174 Views - Oct 22, 2020

Tableau **DATadev**
developer.tableau.com

Happy Hour

tableau

DATADEV tableau

7. Don't forget to have fun!



My 2021 plans

- Participate in DataDev Bingo
- Write about my DataDev projects
- Continue Tableau DataDev Happy Hour
 - Next event is on 4 February at 6pm GMT
- Metadata deep-dive



Useful resources



Join Tableau Developer Programme

www.tableau.com/developer



Watch tutorials by Tableau DataDevs and the community

Search for 'Tableau datadev' on YouTube



Read Tableau documentation

github.com/tableau



Build #DataDev Bingo projects

tableau.com/developer/mini-challenges



Join me at Tableau DataDev Happy Hour

bit.ly/TableauDataDevHappyHour

Questions?

Get in touch



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Thank you!

