

TP1

Today's tutorial will contain 4 parts:

- create a small python application with [Flask](#)
- version your code with [github](#)
- deploy it with [Deta](#)
- Track your application usage using [google analytics](#)

Create a sample python app on Deta

1. Log in or sign up in [Deta](#)
2. Follow the [Getting started](#) of Deta Micro (you don't have to do Creating a Micro Under a Specific Project)
3. Deploy your app
4. Go your [dashboard](#) on Deta, under the micro there should be the app that you created
5. Go to the URL generated, should look like this



← → ↻ 🔒 588giy.deta.dev

Hello World

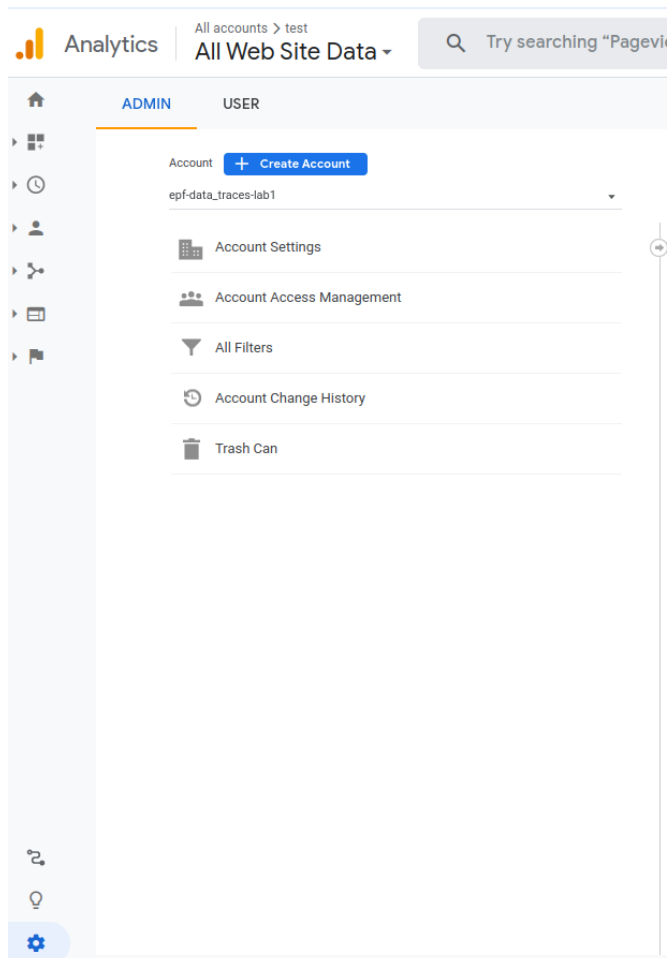
Versioning with github

1. Log in github.com or create an account
2. Create a new repository with the app name you choose before
3. Execute in you terminal (in the directory where your app is):
 - a. `git init`
 - b. `git add app.py`
 - c. `git commit -m "first commit"`
 - d. `git branch -M main`
 - e. `git remote add origin https://github.com/your_username/your_repo_name.git`
 - f. `git push -u origin main`
4. Create the following files:
 - a. README.md (You can add a description of your app in this one)

- b. .gitignore (add the line `venv` in this one so git knows that the `venv` mustn't be versionned)
 - c. requirements.txt (add the only dependency: flask)
5. Commit and push the files on github:
- a. `git add --all`
 - b. `git commit -m "second commit"`
 - c. `git push origin main`

Google analytics

1. Log in to <https://analytics.google.com/> with your google account (create one if needed)
2. Click on admin and create an account



The small blue engine is the admin

3. Under this account, create a property, go in advanced details and write the URL of your Deta app, and select "create a universal analytic property"
4. An id has been generated: "UA-XXXXXXXXX-4"
5. In the top of the code in the file app.py, add (replace by your own google-id):

```

...
def hello_world():
    prefix_google = """
    <!-- Google tag (gtag.js) -->
    <script async
    src="https://www.googletagmanager.com/gtag/js?id=YOUR_GA_CODE"></script>
    <script>
    window.dataLayer = window.dataLayer || [];
    function gtag(){dataLayer.push(arguments);}
    gtag('js', new Date());

    gtag('config', 'YOUR_GA_CODE');
    </script>
    """
    return prefix_google + "Hello World"

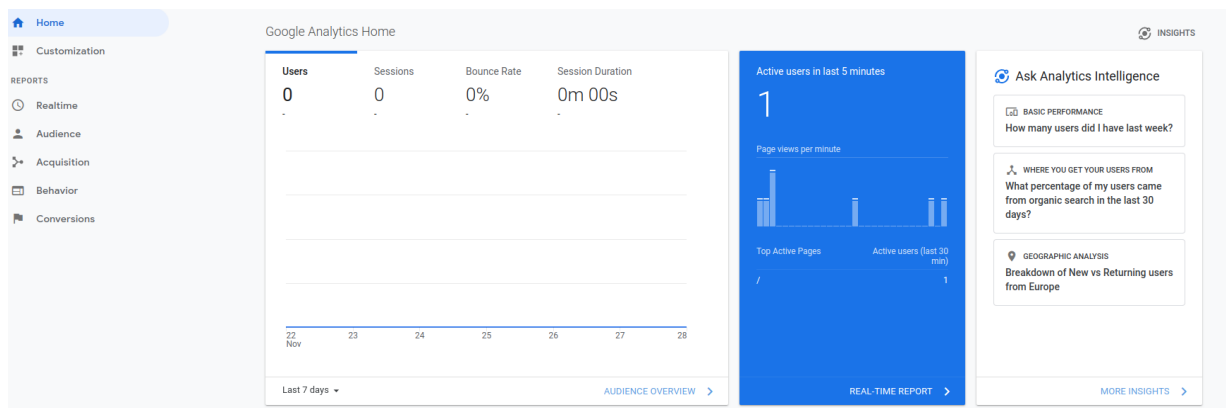
```

6. Commit and push this code in github
7. Redeploy your app to Deta

Grab your cafe, finish it and test that ganalytics has been correctly installed by visiting your app from another browser and using the private mode of your browser :)

Visit your website with a VPN and / or with tor browser to check the behaviour of ganalytics
You can also check the other functionalities of ganalytics.

8. Go to your [Google Analytics Dashboard](#) and check your app, you should see users connecting



Report

Create a PDF with the following information:

- your full name
- the URL of your web-app
- a screenshot of your ganalytics panel (cf. the example after)

- The URL of your git project (should be public but nobody should be able to push beside you)

Extras

- Add a button to your app, that is connected to google analytics, so when you press it, there is a new event in Google Analytics
- Do the lab using Streamlit + Github instead of Flask + Deta