Hosting your First Web App on Streamlit with VSCode

An Introduction to Streamlit, a Web Python Framework

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There's no substitute for hands-on experience, but for most students, real-world tools can be cost prohibitive. That's why we created the Pack with some of our partners and friends, like:

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DigitalOcean   Canva

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To qualify for student benefits, you must:

- Be currently enrolled in a degree or diploma granting course of study such as a high school, secondary school, college, university, homeschool, or similar educational institution.

- Have a verifiable school-issued email address or upload documents that prove your current student status.

- Have a GitHub user account.

- Be at least 13 years old.

Offer availability:

- All partner offers are subject to the partner company's terms and conditions and may not be available in all regions.

You've already submitted 1 request

Approved   Submitted Nov 1, 2020

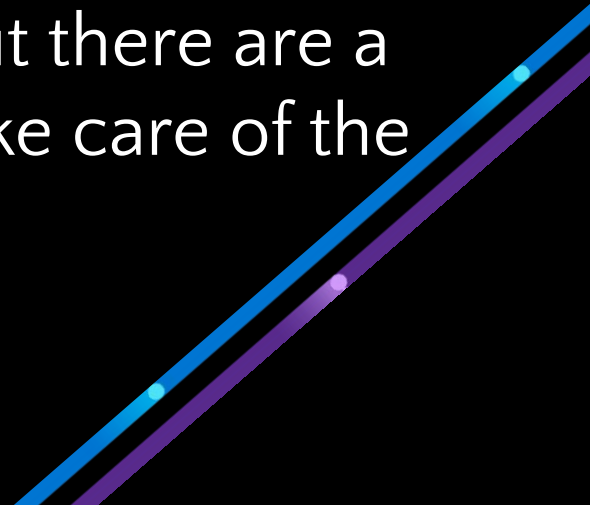Congrats! Your request for @supershivam13 was approved.

Event Flow

- What is a Python WebApp?
- What is Streamlit
- What it do?
- How the deployment works?
- What is the advantage of Streamlit?
- How to install?
- How to setup on your local machine
- Hello World with Streamlit
- Taking simple user inputs and reflecting on screen
- Hosting on Streamlit Share
- Applying for the Streamlit account

- Graphs, Text Output types, Data Science features
- How we can build a ML model with Streamlit?
- How can we convert our previously coded python script to be Streamlit-ready?
- How to setup your local machine to work optimizely?
- Different projects you can work on
- QnA session

What is a Python WebApp ?

· Python-driven web applications use Python code to determine what actions to take and what content to show. Your code is run by the web server that hosts your website, which means that your users don't need to install anything. All they need to interact with your code is a Browser and an Internet connection.

Getting Python to run on a website can be complicated, but there are a number of different web frameworks that automatically take care of the details.

What is Streamlit ? What it do ?

Streamlit is an open-source Python Framework that makes it easy to create and share beautiful, custom web apps for machine learning and data science (but not just limited to it).

It is fast, responsive and connects directly with your GitHub repository to provide one tap deployment service.

In just a few minutes you can build and deploy your own powerful web apps.
So let's get started !!

How Deployment works ?

RUKO ZARA, SABAR KARO

Before looking at How the Streamlit deployment works, let's first install Streamlit and do the required setup on our local machine to create and run our own very first web App.

We'll be covering this section along with the Hands-on demo when we'll be hosting our first web app on Streamlit Share.

Installing Streamlit

Prerequisites –
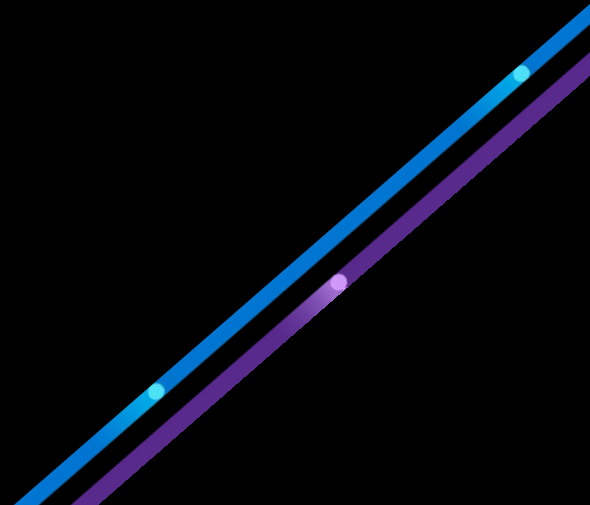
- VS Code (or any Text Editor)
- Python 3.6 or higher
- PIP

Run these commands in your environment to install Streamlit :

- pip install streamlit
  (This will install Streamlit and other required libraries on your PC)
- streamlit hello
  (Run the hello world app to make sure everything working fine)
- pip install scikit-learn
  (a very important library for ML models and functions)

Hosting on Streamlit Share

- Go to https://streamlit.io/sharing-sign-up

- Sign up on the Streamlit Sharing invite form.

- After signing-up, you will receive your Streamlit Share invite link on the registered email within few days.

- Put your app on GitHub.

- Sign into Streamlit Share account.

- DEPLOY AND SHARE !!!!

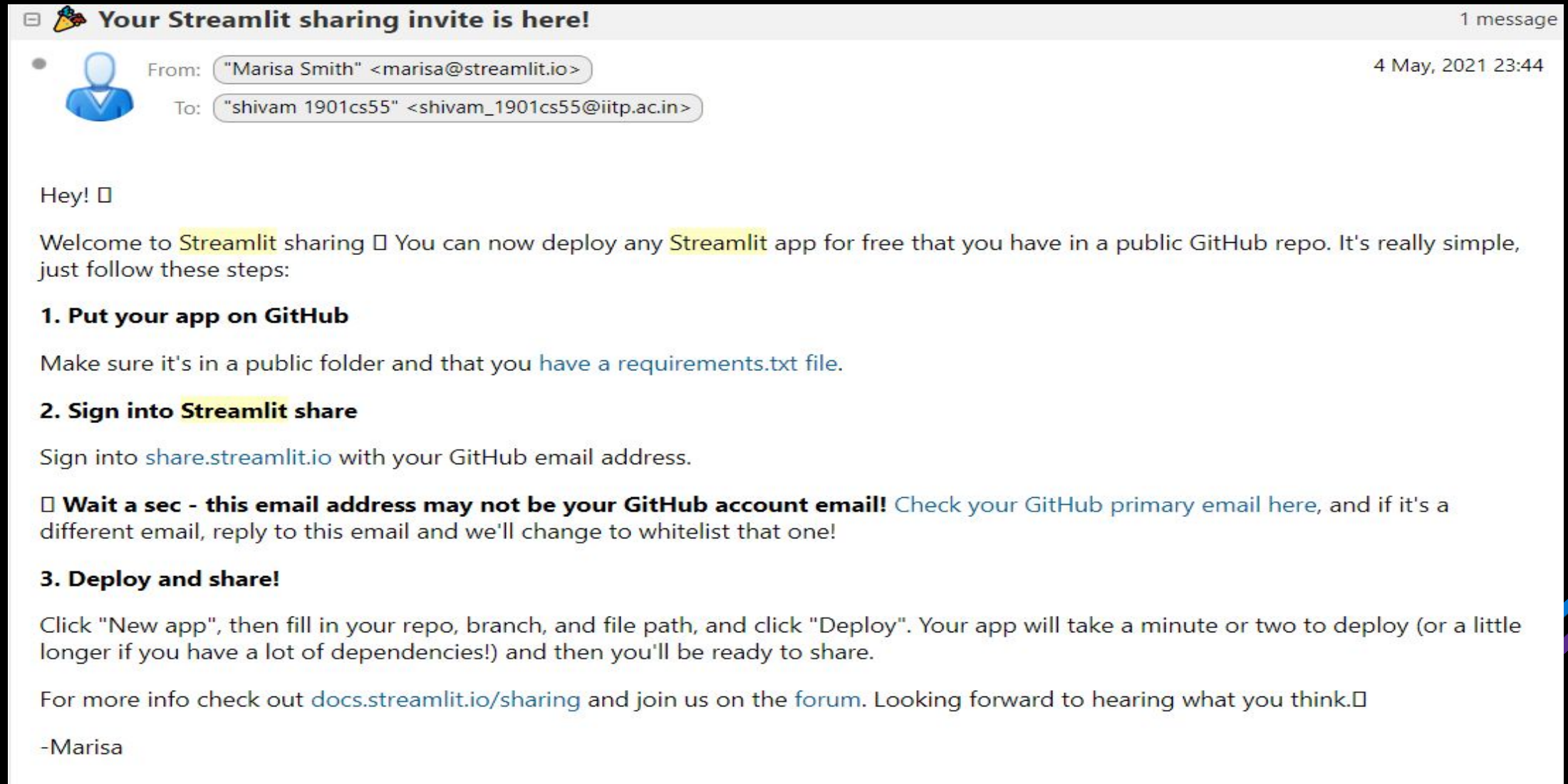# After signing–up on the Streamlit Share, you'll receive a mail like this.
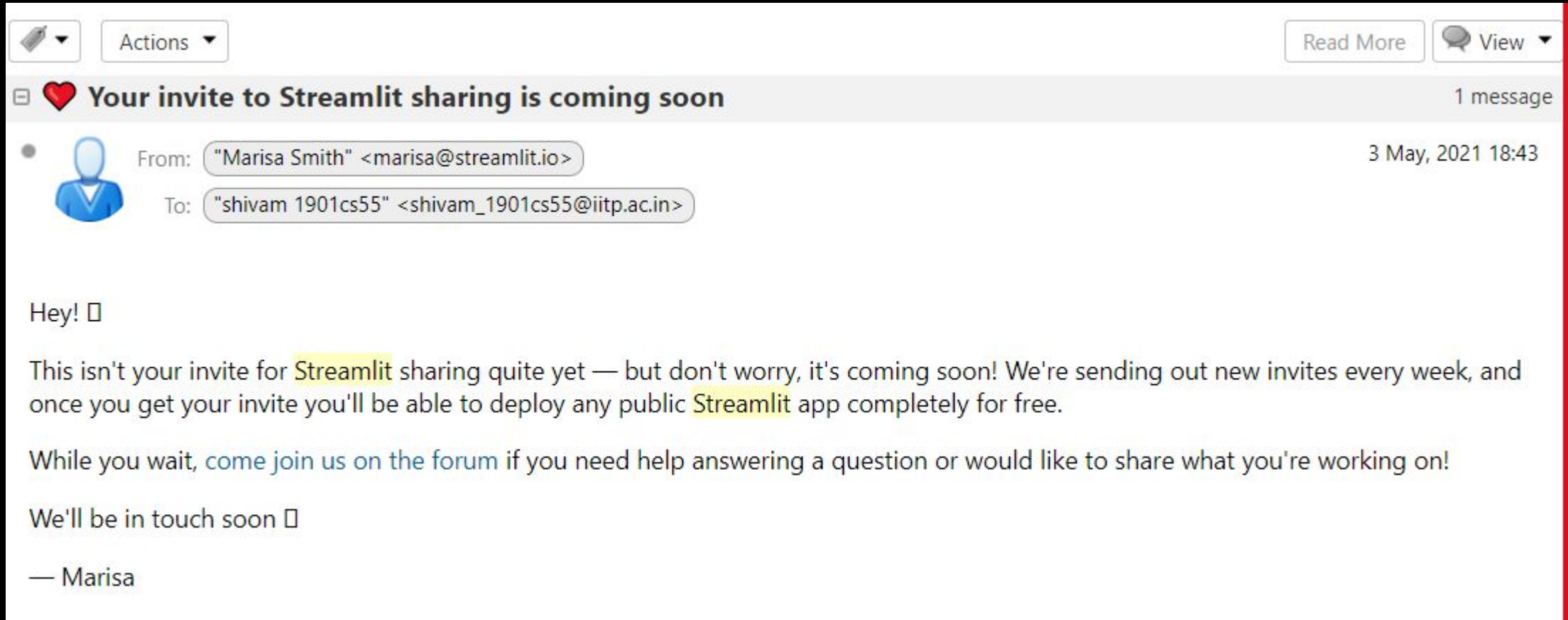
Within 2-3 days after signing up, you'll receive your Streamlit Share Account link. You'll receive a mail similar to this one.

Your Streamlit sharing invite is here!   1 message

From: "Marisa Smith" <marisa@streamlit.io>   4 May, 2021 23:44
To: "shivam 1901cs55" <shivam_1901cs55@iitp.ac.in>

Hey! 🎉

Welcome to Streamlit sharing 🎉 You can now deploy any Streamlit app for free that you have in a public GitHub repo. It's really simple, just follow these steps:

1. Put your app on GitHub

Make sure it's in a public folder and that you have a requirements.txt file.

2. Sign into Streamlit share

Sign into share.streamlit.io with your GitHub email address.

🛑 **Wait a sec - this email address may not be your GitHub account email!** Check your GitHub primary email here, and if it's a different email, reply to this email and we'll change to whitelist that one!

3. Deploy and share!

Click "New app", then fill in your repo, branch, and file path, and click "Deploy". Your app will take a minute or two to deploy (or a little longer if you have a lot of dependencies!) and then you'll be ready to share.

For more info check out docs.streamlit.io/sharing and join us on the forum. Looking forward to hearing what you think.🎉

-Marisa

HANDS-ON PROJECT BUILDING WITH STREAMLIT

Sagnik Mitra

Explore different classifier

Select Dataset

Iris ▾

Select Classifier

KNN ▾

K
1
●————————————————
1   15

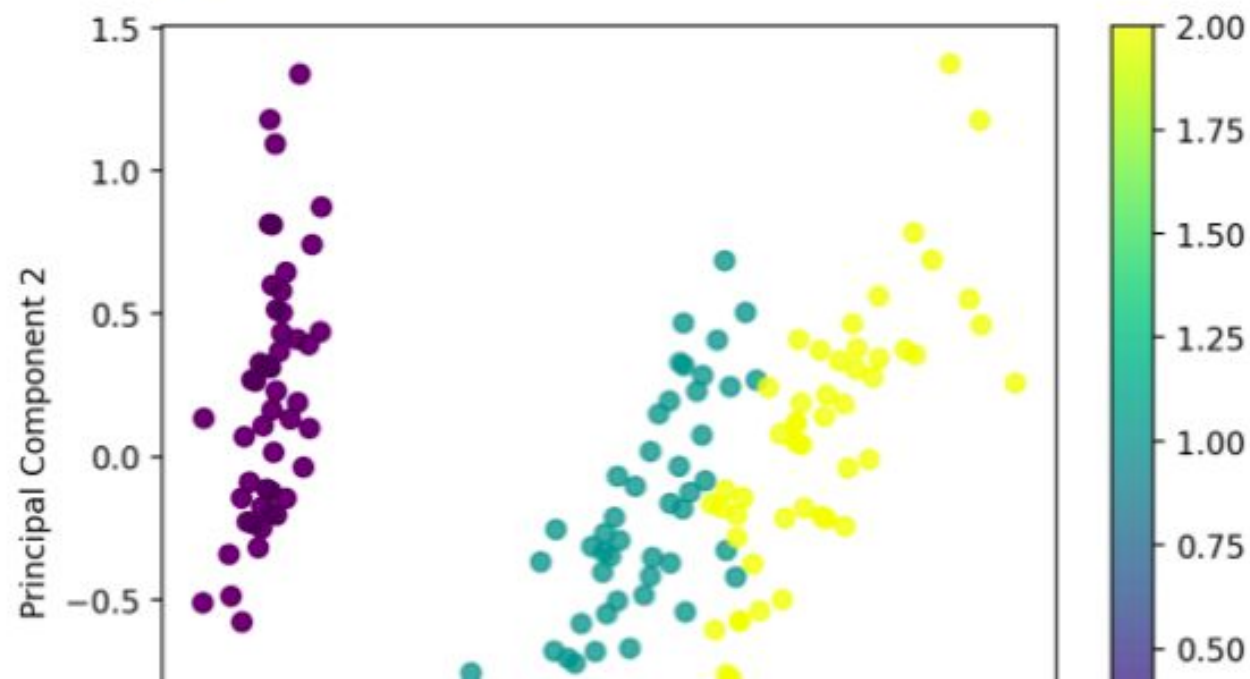Name of the Dataset: Iris

Shape of Dataset: `(150, 4)`

Number of classes: `3`

Classifier = KNN

Accuracy = 1.0

THANK YOU !!!!

QnA

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