



Week 5: Cloud and API deployment

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1. Select toy data:

```
Entrée [7]: ...  
# head  
print(dataset.head(20))
```

	sepal-length	sepal-width	petal-length	petal-width	class
0	5.1	3.5	1.4	0.2	Iris-setosa
1	4.9	3.0	1.4	0.2	Iris-setosa
2	4.7	3.2	1.3	0.2	Iris-setosa
3	4.6	3.1	1.5	0.2	Iris-setosa
4	5.0	3.6	1.4	0.2	Iris-setosa
5	5.4	3.9	1.7	0.4	Iris-setosa
6	4.6	3.4	1.4	0.3	Iris-setosa
7	5.0	3.4	1.5	0.2	Iris-setosa
8	4.4	2.9	1.4	0.2	Iris-setosa
9	4.9	3.1	1.5	0.1	Iris-setosa
10	5.4	3.7	1.5	0.2	Iris-setosa
11	4.8	3.4	1.6	0.2	Iris-setosa
12	4.8	3.0	1.4	0.1	Iris-setosa
13	4.3	3.0	1.1	0.1	Iris-setosa
14	5.8	4.0	1.2	0.2	Iris-setosa
15	5.7	4.4	1.5	0.4	Iris-setosa
16	5.4	3.9	1.3	0.4	Iris-setosa
17	5.1	3.5	1.4	0.3	Iris-setosa
18	5.7	3.8	1.7	0.3	Iris-setosa
19	5.1	3.8	1.5	0.3	Iris-setosa

2. Save the model:

The model is available on github on: https://github.com/tess92/iris_classification_ML


3. Model deployment on Heroku

a. Create a new repository on github for the ML program

Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere?
[Import a repository.](#)


Owner * Repository name *


 tess92 ▾

 /

Great repository names are short and memorable. Need inspiration? How about [refactored-dollop?](#)

Description (optional)

☒  **Public**
Anyone on the internet can see this repository. You choose who can commit.

☐  **Private**
You choose who can see and commit to this repository.

Initialize this repository with:

Skip this step if you're importing an existing repository.

☐ Add a README file

b. Upload the Machine Learning program on github

tess92 / iris_classification_ML

Public

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Issues

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Projects

Wiki

...

main

Go to file

Add file

Code

About

tess92 Add files via upload ...

12 minutes ago 1

Procfile	Add files via upload	12 minutes ago
README.md	Add files via upload	12 minutes ago
iris_model.py	Add files via upload	12 minutes ago
iris_webap...	Add files via upload	12 minutes ago
lin_model.pkl	Add files via upload	12 minutes ago
log_model....	Add files via upload	12 minutes ago
requiremen...	Add files via upload	12 minutes ago
setup.sh	Add files via upload	12 minutes ago

No description, website, or topics provided.

Readme

0 stars

1 watching

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Releases

No releases published

Create a new release


c. create an account on Heroku

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Your app platform

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First name *

Tasnime

Last name *

Hamdeni

Email address *


hamdeni.tasnime@gmail.com


Company name

Company name



Phone *



d. Create a new app


 Salesforce Platform


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Now that your account has been set up, here's how to get started.

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 irisclassificationml 

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e. Connect the app to github

Salesforce Platform

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irisclassificationml Open app More

Overview Resources Deploy Metrics Activity Access Settings

Add this app to a pipeline

Create a new pipeline or choose an existing one and add this app to a stage in it.

Add this app to a stage in a pipeline to enable additional features

Pipelines let you connect multiple apps together and **promote code** between them. [Learn more.](#)

Pipelines connected to GitHub can enable **review apps**, and create apps for new pull requests. [Learn more.](#)

Choose a pipeline

Deployment method

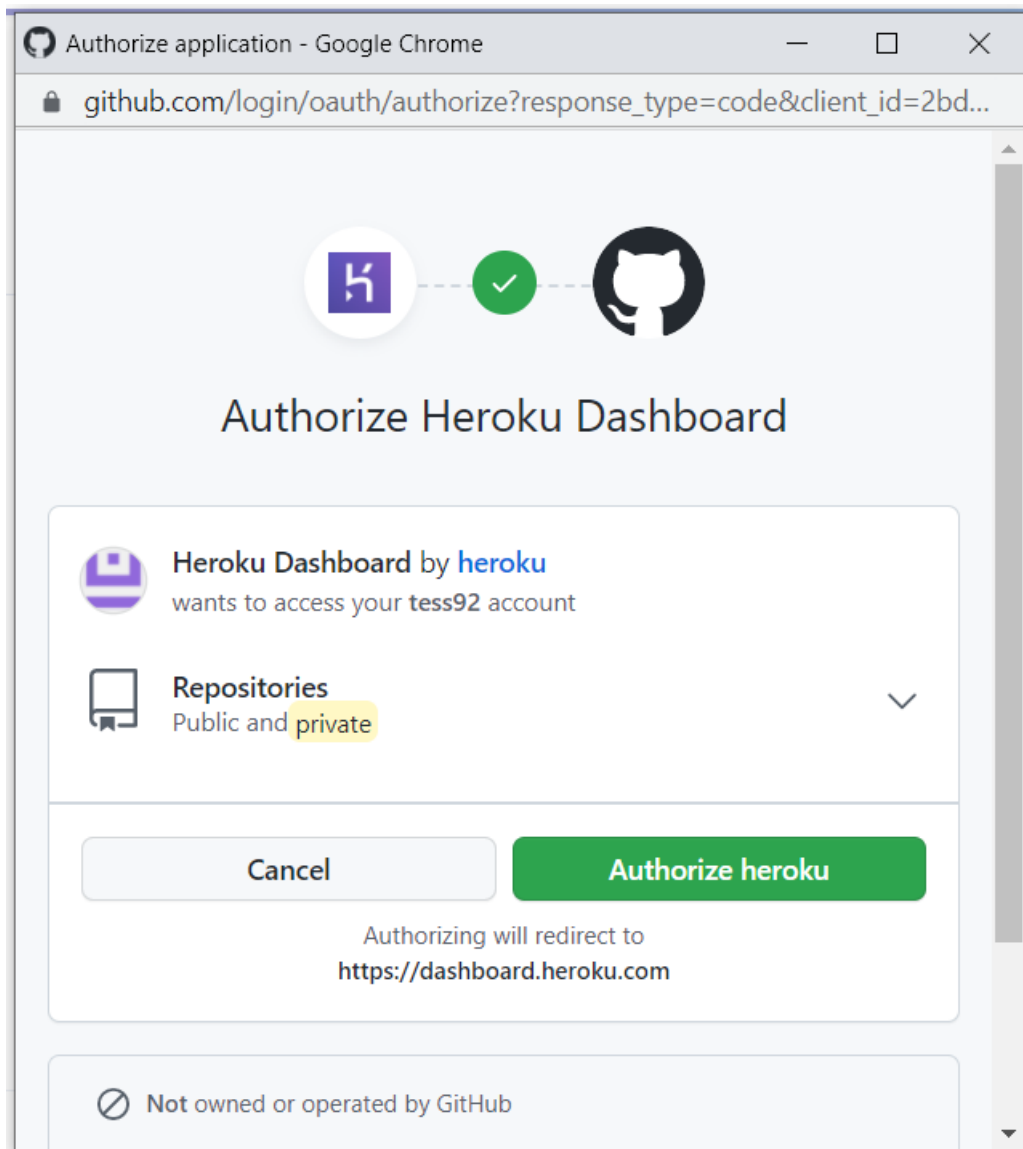
Heroku Git Use Heroku CLI

GitHub Connect to GitHub

Container Registry

<https://dashboard.heroku.com/apps/irisclassificationml/deploy/github>

f. Authorize heroku to connect to the repositories in my github



g. Search for the ML repository to connect

Deployment method



Heroku Git
Use Heroku CLI



GitHub
Connect to GitHub



Container Registry
Use Heroku CLI

Connect to GitHub

Connect this app to GitHub to enable code diffs and deploys.

Search for a repository to connect to



tess92



iris_classification_ML

Search


Missing a GitHub organization? [Ensure Heroku Dashboard has team access.](#)

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Support

h. If you make constant changes in the program, click on automatic deploy, if not click on manual deploy and deploy branch

 **HEROKU**

Jump to Favorites, Apps, Pipelines, Spaces...



Automatic deploys


Enables a chosen branch to be automatically deployed to this app.

You can now change your main deploy branch from "master" to "main" for both manual and automatic deploys, please follow the instructions [here](#).

Enable automatic deploys from GitHub

Every push to the branch you specify here will deploy a new version of this app. **Deploys happen automatically:** be sure that this branch is always in a deployable state and any tests have passed before you push. [Learn more](#).

Choose a branch to deploy

 main

☐ Wait for CI to pass before deploy

Only enable this option if you have a Continuous Integration service configured on your repo.

Enable Automatic Deploys


Manual deploy

Deploy the current state of a branch to this app.

Deploy a GitHub branch

This will deploy the current state of the branch you specify below. [Learn more](#).


Choose a branch to deploy

 main

Deploy Branch

i. build and deploy

Choose a branch to deploy

 main

Deploy Branch

Receive code from GitHub 

Build **main** 7181bc82 

```
-----> Building on the Heroku-20 stack
-----> Determining which buildpack to use for this app
-----> Python app detected
-----> No Python version was specified. Using the buildpack default: python-3.9.9
      To use a different version, see: https://devcenter.heroku.com/articles/python-runtimes
-----> Installing python-3.9.9
-----> Installing pip 21.3.1, setuptools 57.5.0 and wheel 0.37.0
-----> Installing SQLite3
```

☒ Autoscroll with output [View build log](#)

Release phase

Deploy to Heroku