

Week 5 – Deployment on Cloud

Name: Archana Devi Ramesh

Batch code: LISUM16

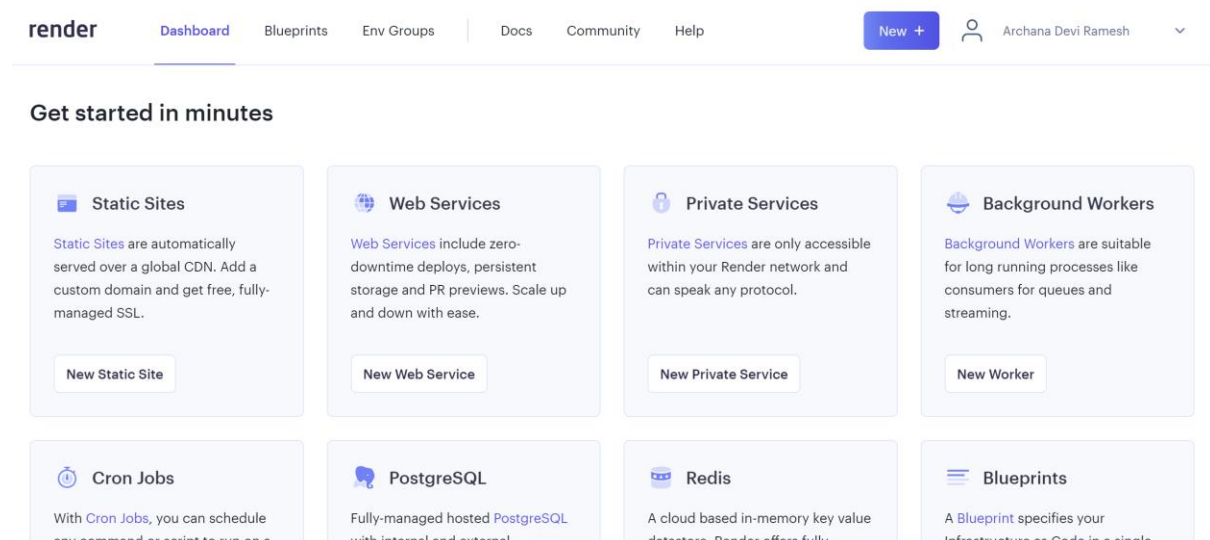
Submission date: 5th January 2023

Submitted to: Data Glacier

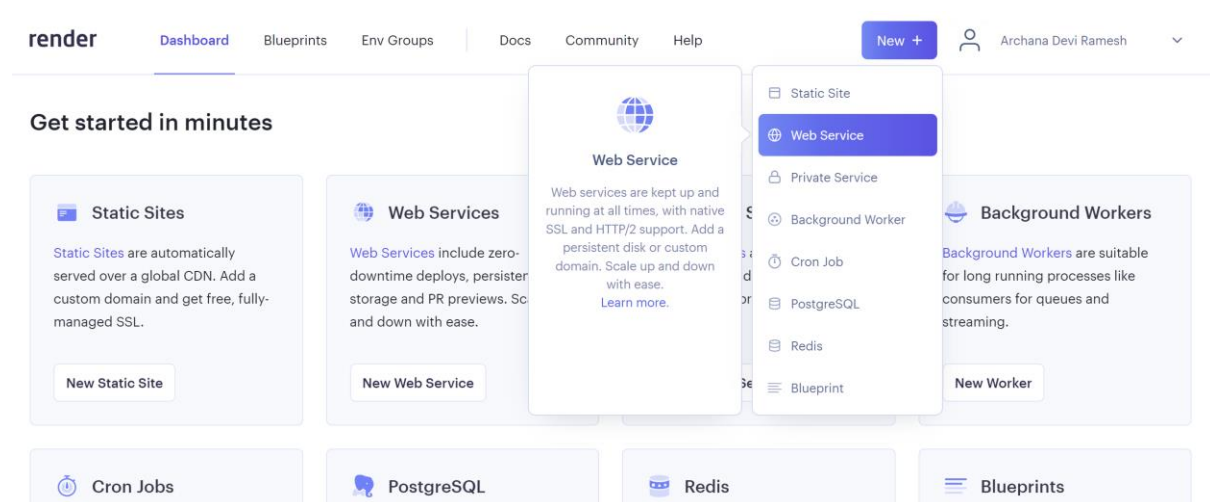
Submission Link: <https://github.com/ArchanaDeviRamesh/Data-Glacier-Week5>

Cloud Deployment steps

1. Cloud used – **Render** <https://render.com/>
2. Create an account in render and click on **New**



3. Click on **Web Service**



4. Connect to your Github account and select the repository to be deployed

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Create a new **Web Service**

Connect your Git repository or use an existing public repository URL.

Connect a repository

- ArchanaDeviRamesh / Data-Glacier-Week4 • a minute ago [Connect](#)
- ArchanaDeviRamesh / Data-Glacier • 7 days ago [Connect](#)
- ArchanaDeviRamesh / Data-Glacier-Week1 • a month ago [Connect](#)

GitHub

@ArchanaDeviRamesh [🔗](#) • 14 repos

[🔧 Configure account](#)

GitLab

[+ Connect account](#)

5. Provide a name to the service (**iris-flower-detection-cloud-deployment**)

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You are deploying a web service for [ArchanaDeviRamesh/Data-Glacier-Week4](#).

You seem to be using **Flask**, so we've autofilled some fields accordingly. Make sure the values look right to you!

Name
A unique name for your web service.

Region
The [region](#) where your web service runs.

Oregon (US West)

Branch
The repository branch used for your web service.

main

Root Directory Optional
Defaults to repository root. When you specify a [root directory](#) that is different from your repository root,

6. Enter **gunicorn app:flask_app** as the start command and click **Create Web Service** (flask_app is the name of my flask app in the file app.py)

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Environment
The runtime environment for your web service.

Python 3

Build Command
This command runs in the root directory of your repository when a new version of your code is pushed, or when you deploy manually. It is typically a script that installs libraries, runs migrations, or compiles resources needed by your app.

\$ pip install -r requirements.txt

Start Command
This command runs in the root directory of your app and is responsible for starting its processes. It is typically used to start a webserver for your app. It can access environment variables defined by you in Render.

\$ gunicorn app:flask_app

<input type="radio"/> Pro	4 GB	2 CPU	\$85 / month
<input type="radio"/> Pro Plus	8 GB	4 CPU	\$175 / month
<input type="radio"/> Pro Max	16 GB	4 CPU	\$225 / month
<input type="radio"/> Pro Ultra	32 GB	8 CPU	\$450 / month

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i Unlike paid services, free services scale down when inactive. They also have slower build times. Learn more about [free instance type limits](#).

Advanced

Create Web Service

7. It will start running and you can see the progress in the terminal

iris-flower-detection-cloud-deployment
Python 3
Free Plan
ArchanaDeviRamesh/Data-Glacier-Week4
main
Connect
Manual Deploy
https://iris-flower-detection-cloud-deployment.onrender.com

Events
Logs
Disks
Environment
Shell
PRs
Jobs

i Builds too slow? Upgrade to a paid plan to go faster. Learn more about [free instance type limits](#).

January 4, 2023 at 11:21 PM
*** In progress
66c4da0 Update requirements.txt

Search logs
Search
Maximize
Scroll to top

Jan 4 11:21:03 PM ==> Cloning from https://github.com/ArchanaDeviRamesh/Data-Glacier-Week4...
Jan 4 11:21:04 PM ==> Checking out commit 66c4da01bb2162ce0cde053563a5970348d696ff in branch main

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Scaling

66c4da0 Update requirements.txt

Search logs
Search
Maximize
Scroll to top

```

Jan 4 11:21:21 PM Collecting MarkupSafe>=2.1.1
Jan 4 11:21:21 PM Downloading MarkupSafe-2.1.1-cp37-cp37m-manylinux_2_17_x86_64.manylinux2014_x86_64.whl (25 kB)
Jan 4 11:21:21 PM Installing collected packages: numpy, scipy, joblib, threadpoolctl, scikit-learn, six, python-dateutil, pytz, p
andas, typing-extensions, zipp, importlib-metadata, itsdangerous, MarkupSafe, Werkzeug, Jinja2, click, flask, gunicorn
Jan 4 11:21:37 PM Successfully installed Jinja2-3.1.2 MarkupSafe-2.1.1 Werkzeug-2.2.2 click-8.1.3 flask-2.2.2 gunicorn-20.1.0 imp
ortlib-metadata-6.0.0 itsdangerous-2.1.2 joblib-1.2.0 numpy-1.21.6 pandas-1.3.5 python-dateutil-2.8.2 pytz-2022.7 scikit-learn-1.0
.2 scipy-1.7.3 six-1.16.0 threadpoolctl-3.1.0 typing-extensions-4.4.0 zipp-3.11.0
Jan 4 11:21:37 PM WARNING: You are using pip version 20.1.1; however, version 22.3.1 is available.
Jan 4 11:21:37 PM You should consider upgrading via the '/opt/render/project/src/.venv/bin/python -m pip install --upgrade pip' c
ommand.
Jan 4 11:21:38 PM ==> Generating container image from build. This may take a few minutes...

```

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```

Jan 4 11:21:37 PM Successfully installed Jinja2-3.1.2 MarkupSafe-2.1.1 Werkzeug-2.2.2 click-8.1.3 flask-2.2.2 gunicorn-20.1.0 imp
ortlib-metadata-6.0.0 itsdangerous-2.1.2 joblib-1.2.0 numpy-1.21.6 pandas-1.3.5 python-dateutil-2.8.2 pytz-2022.7 scikit-learn-1.0
.2 scipy-1.7.3 six-1.16.0 threadpoolctl-3.1.0 typing-extensions-4.4.0 zipp-3.11.0
Jan 4 11:21:37 PM WARNING: You are using pip version 20.1.1; however, version 22.3.1 is available.
Jan 4 11:21:37 PM You should consider upgrading via the '/opt/render/project/src/.venv/bin/python -m pip install --upgrade pip' c
ommand.
Jan 4 11:21:38 PM ==> Generating container image from build. This may take a few minutes...
Jan 4 11:23:09 PM ==> Uploading build...
Jan 4 11:23:43 PM ==> Build uploaded in 26s
Jan 4 11:23:43 PM ==> Build successful 🎉
Jan 4 11:23:43 PM ==> Deploying...
Jan 4 11:23:59 PM ==> Starting service with 'gunicorn app:flask_app'

```

8. After a successful build, the app will go live and click on the url provided below the web service name (<https://iris-flower-detection-cloud-deployment.onrender.com>)

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WEB SERVICE
iris-flower-detection-cloud-deployment
Python 3
Free Plan
ArchanaDeviRamesh/Data-Glacier-Week4
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Environment

Builds too slow? Upgrade to a paid plan to go faster. Learn more about free instance type limits.

January 4, 2023 at 11:21 PM
Live
66c4da0 Update requirements.txt

9. It will open the ML application on the web browser

iris-flower-detection-cloud-deployment.onrender.com

Gmail YouTube Maps Imported Python RFM (Recen... An RFM Analysis wi... Restaurant Brands L... Sign in How to rewrite you... 15 Python Coding L...

Predict Iris Flower

Sepal_Length

Sepal_Width

Petal_Length

Petal_Width

Predict

iris-flower-detection-cloud-deployment.onrender.com

Gmail YouTube Maps Imported Python RFM (Recen... An RFM Analysis wi... Restaurant Brands L... Sign in How to rewrite you... 15 Python Coding L...

Predict Iris Flower

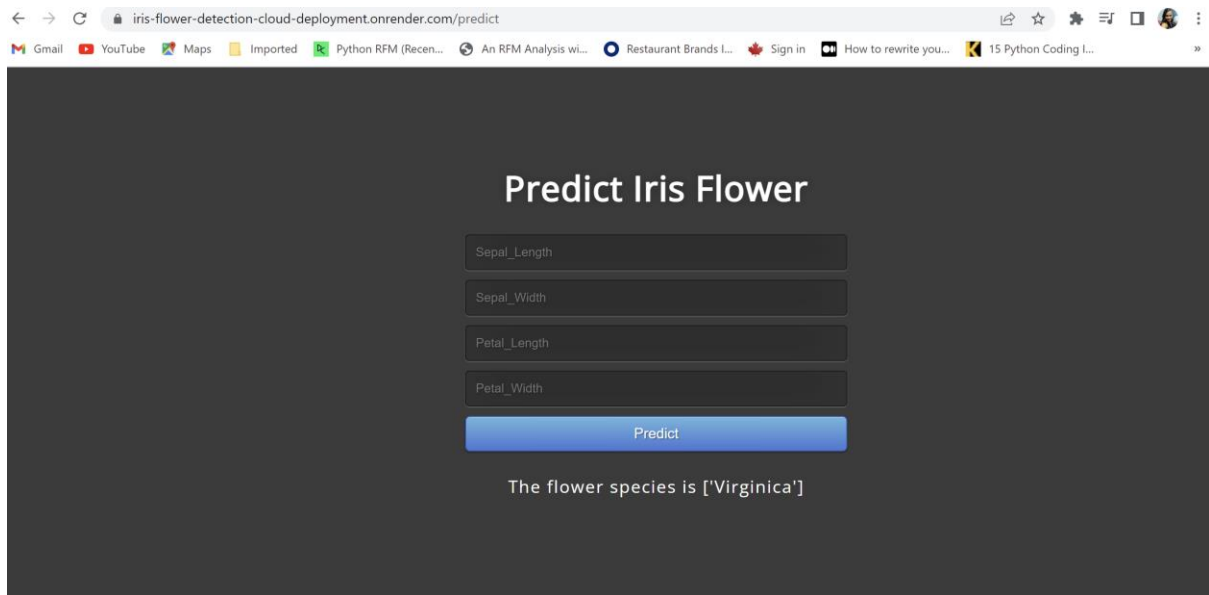
5.1

3.5

1.5

0.2

Predict



References:

1. Heroku Alternative | Learn to deploy Python application on Render | Step by step deployment guide, Raj Kapadia, <https://www.youtube.com/watch?v=OBGaCULCZzg>