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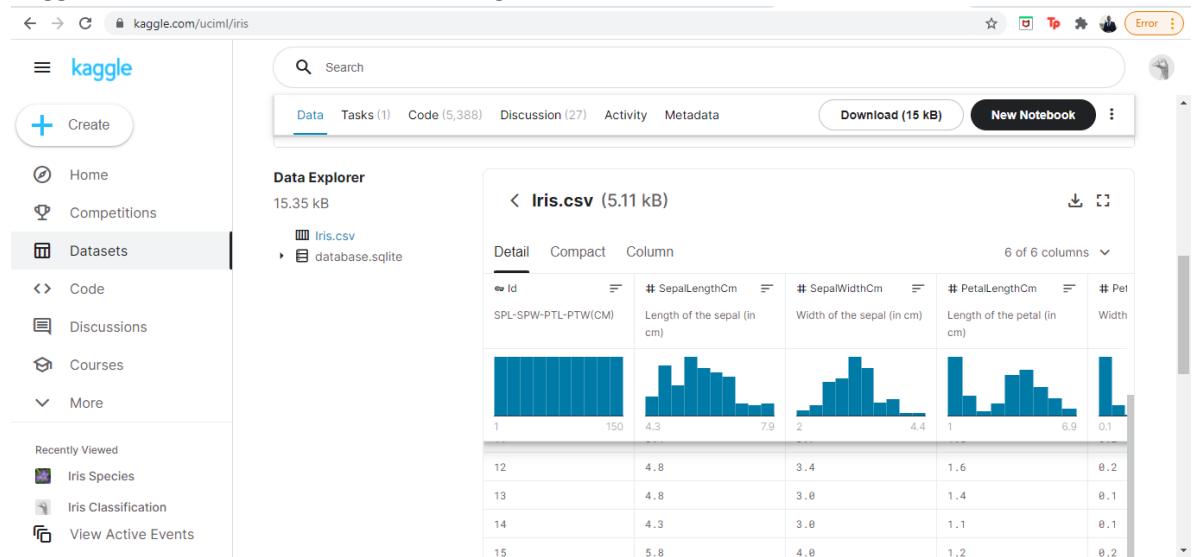
Batch code: 1

Submission date: Oct 29th, 2021

Submitted to: Data Glacier

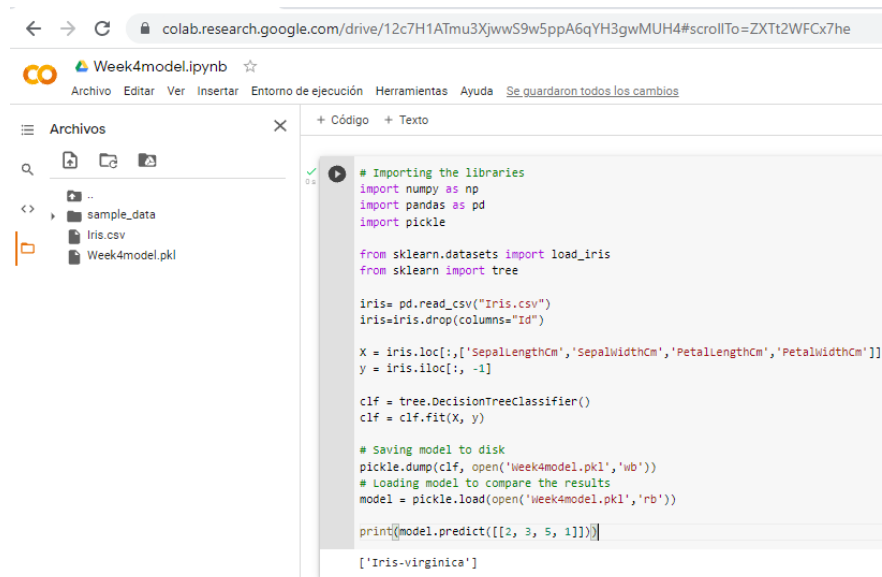
1. Selection of data

The data selected was the very popular dataframe called “Iris”. It was got from Kaggle.com. It was the same used in assignment of week 4.



2. Saving of Model

The model was created and tested



```
# Importing the libraries
import numpy as np
import pandas as pd
import pickle

from sklearn.datasets import load_iris
from sklearn import tree

iris= pd.read_csv("Iris.csv")
iris=iris.drop(columns="Id")

X = iris.loc[:,['SepalLengthCm','SepalwidthCm','PetalLengthCm','PetalwidthCm']]
y = iris.iloc[:, -1]

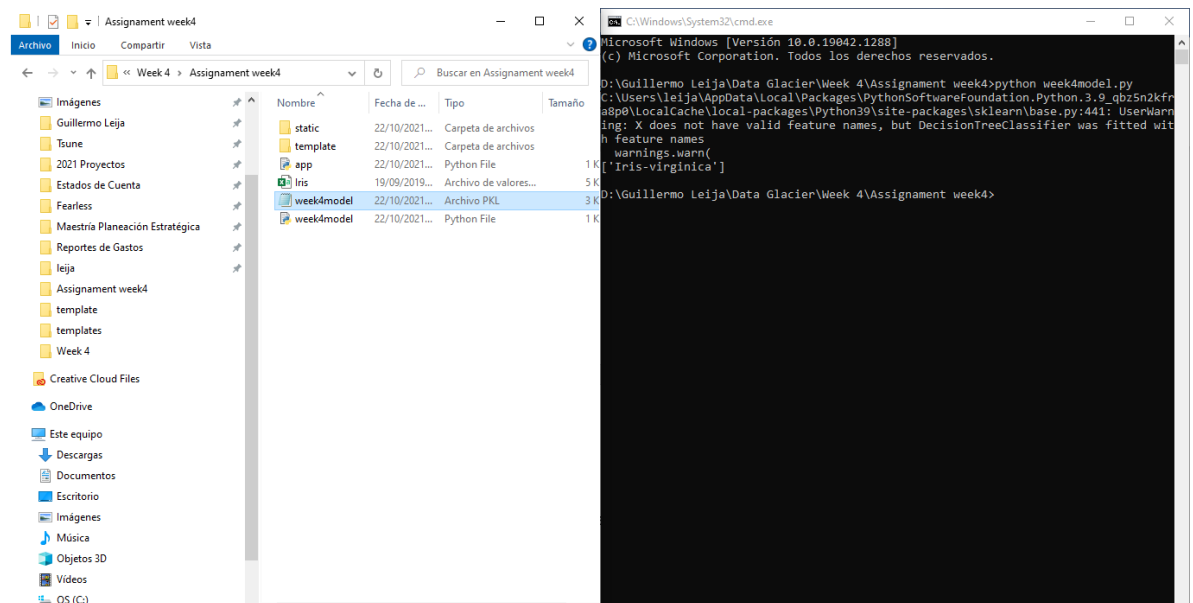
clf = tree.DecisionTreeClassifier()
clf = clf.fit(X, y)

# Saving model to disk
pickle.dump(clf, open('Week4model.pkl','wb'))
# Loading model to compare the results
model = pickle.load(open('Week4model.pkl','rb'))

print(model.predict([[2, 3, 5, 1]]))

['Iris-virginica']
```

Then, the file .fkl of the model was created by running the .py model file in the command prompt.



The template of the .html index was modified to be useful for this new application

```
15- <div class="login">
16-   <h1>Predict Flower Type</h1>
17-
18-   <!-- Main Input For Receiving Query to our ML -->
19-   <form action="{{ url_for('predict')}}" method="post">
20-     <input type="text" name="SepalLength" placeholder="Sepal Length" required="required" />
21-     <input type="text" name="SepalWidthCm" placeholder="Sepal Width" required="required" />
22-     <input type="text" name="PetalLengthCm" placeholder="Petal Length" required="required" />
23-     <input type="text" name="PetalWidthCm" placeholder="Petal Width" required="required" />
24-
25-     <button type="submit" class="btn btn-primary btn-block btn-large">Predict</button>
26-   </form>
27-
28-   <br>
29-   <br>
30-   {{ prediction_text }}
31-
32- </div>
33- 
```

3. Creation of an app in Heroku

An app called “wk5app” was created, which was connected to a repository from Github containing the model, the app and the dataset, called “Week5”

dashboard.heroku.com/apps/wk5app/deploy/github

HEROKU

Personal > wk5app

GitHub kaztyel/Week5

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 Connected

Container Registry Use Heroku CLI

App connected to GitHub

Code diffs, manual and auto deploys are available for this app.

Connected to kaztyel/Week5 by kaztyel

Disconnect

Releases in the activity feed link to GitHub to view commit diffs

4. Deployment of the app in Heroku

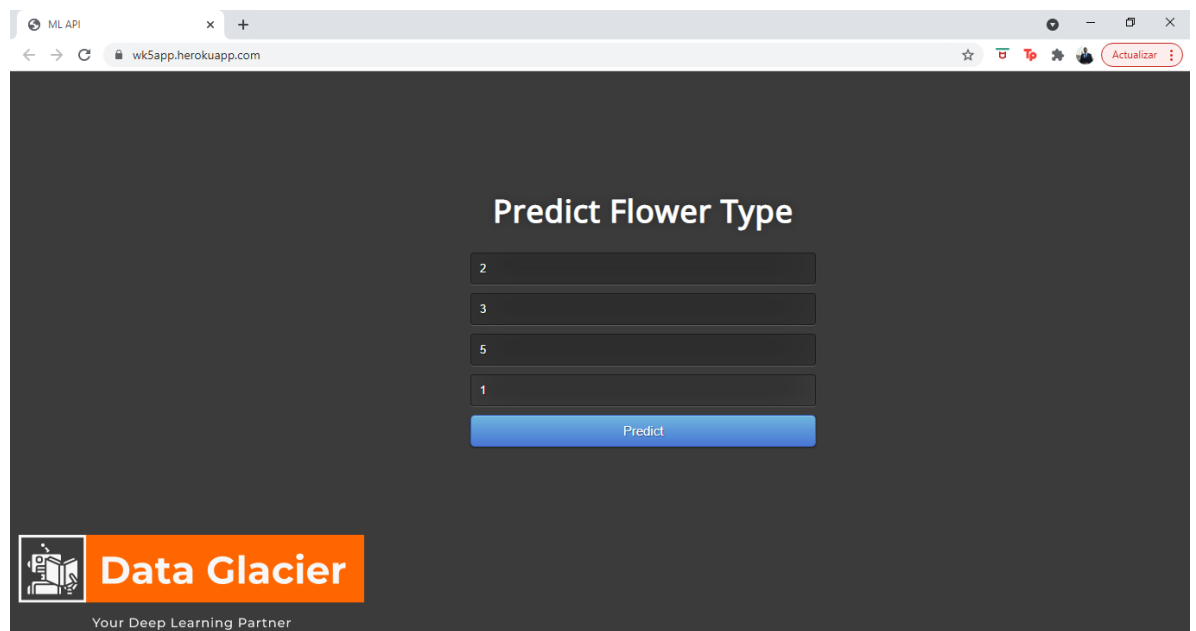
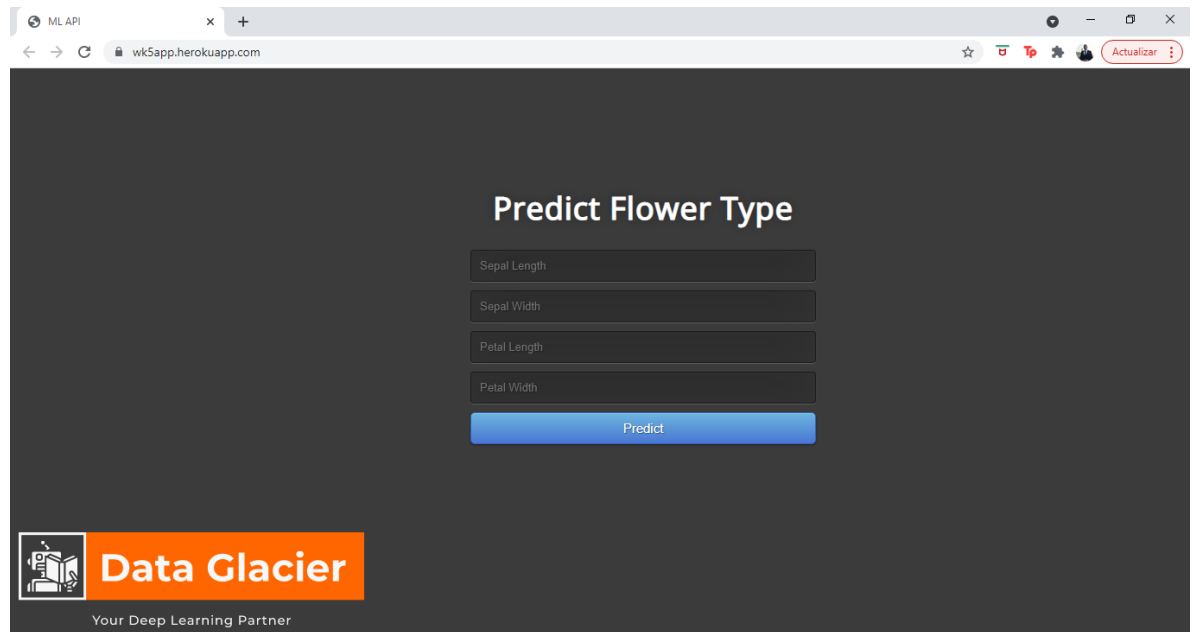
The app was deployed in Heroku

The screenshot shows the Heroku dashboard for an application. At the top, there's a navigation bar with the Heroku logo and a search bar. Below the navigation bar, there are two main sections: 'Automatic deploys' and 'Manual deploy'. The 'Automatic deploys' section has a sub-header 'Automatic deploys' and a description 'Enables a chosen branch to be automatically deployed to this app.' It also includes a blue callout box with a key icon stating: 'You can now change your main deploy branch from "master" to "main" for both manual and automatic deploys, please follow the instructions [here](#).' Below this, there's a section 'Enable automatic deploys from GitHub' with a description: '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](#).' There's a dropdown menu 'Choose a branch to deploy' with 'main' selected. Below that, there's a checkbox 'Wait for CI to pass before deploy' which is unchecked, and a note 'Only enable this option if you have a Continuous Integration service configured on your repo.' At the bottom of this section is a button 'Enable Automatic Deploys'. The 'Manual deploy' section has a sub-header 'Manual deploy' and a description 'Deploy the current state of a branch to this app.' It includes a section 'Deploy a GitHub branch' with a description 'This will deploy the current state of the branch you specify below. [Learn more](#).' There's a dropdown menu 'Choose a branch to deploy' with 'main' selected, and a button 'Deploy Branch'.

5. Testing of the web app in Heroku

Once deployed, the app was tested.

The screenshot shows the Heroku dashboard for an application, specifically the 'Manual deploy' section. The 'Manual deploy' section has a sub-header 'Manual deploy' and a description 'Deploy the current state of a branch to this app.' It includes a section 'Deploy a GitHub branch' with a description 'This will deploy the current state of the branch you specify below. [Learn more](#).' There's a dropdown menu 'Choose a branch to deploy' with 'main' selected, and a button 'Deploy Branch'. Below this, there's a section 'Receive code from GitHub' with a green checkmark. Below that, there's a section 'Build main' with the commit hash 'fefe6401' and a green checkmark. Below that, there's a section 'Release phase' with a green checkmark. Below that, there's a section 'Deploy to Heroku' with a green checkmark. At the bottom of this section, there's a message 'Your app was successfully deployed.' and a button 'View'. The bottom of the screenshot shows the Windows taskbar with various icons and the system clock displaying '02:13 p.m. 29/10/2021'.



ML API


wk5app.herokuapp.com/predict

Actualizar

Predict Flower Type

Predict

The flower is Iris-virginica



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