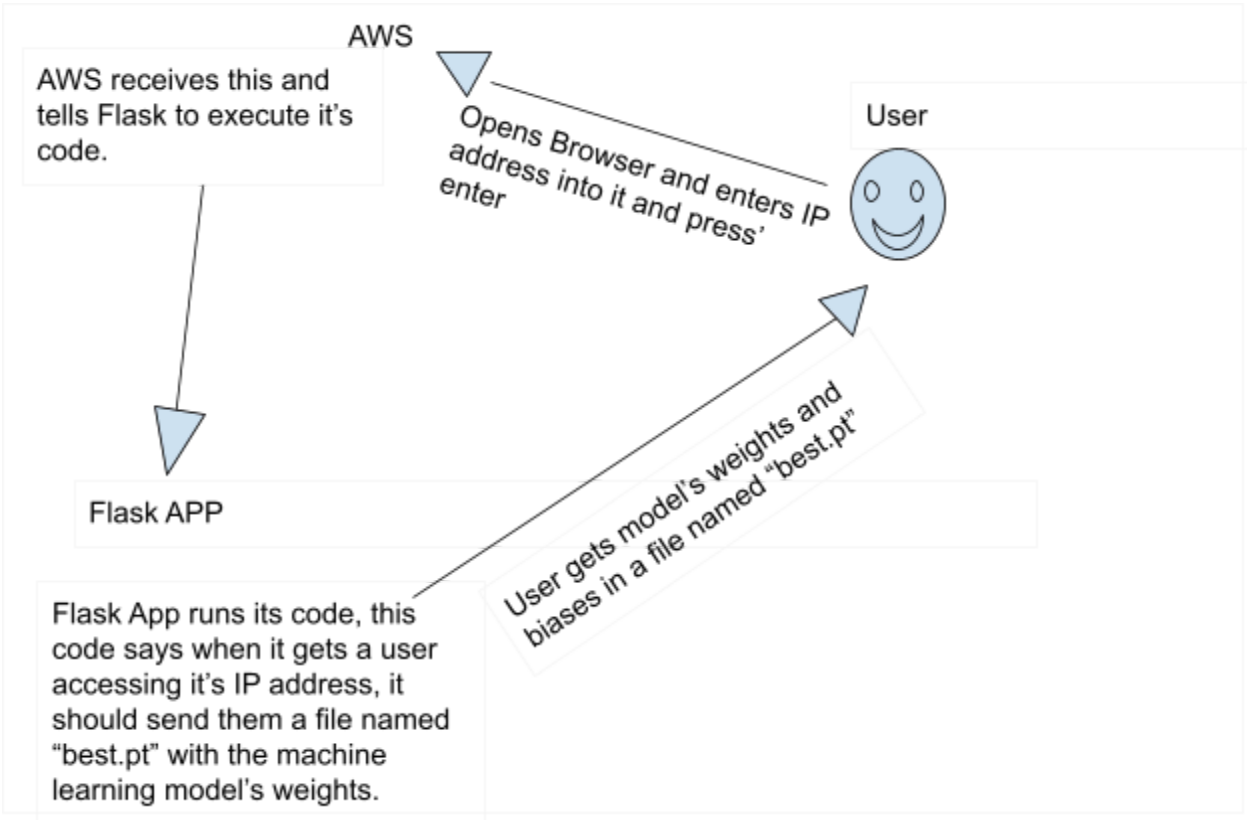
Using the API

The API is simple and lightweight in it's design.
It can be called by entering in the ip address 100.25.85.14 into any browser.
Here is a diagram of how it can be used.
The code to follow along and use this was outlined in Capstone step 12, but will be provided below.



Code to take "best.pt" and put it into a model and get to predictions

```
import numpy as np
import pandas as pd
import torch
import os
import cv2
from matplotlib import pyplot as plt
%matplotlib inline

# 1.
```

```
# open a browser and paste 100.25.85.14 , this will download the weights of the neural network in a file named
# best.pt. Save that file somewhere on your computer.

# 2.
# Type the following code and execute it. The path = parameter should have the path where best.pt is saved.

model = torch.hub.load("ultralytics/yolov5", "custom", path="path/to/where/best.pt is on your system", force_reload=True)

# 3.

# Define a path to an image with a card in it. For reference, the images were 416 by 416 pixels.
# Something like this.
img = os.path.join("yolov5", "data", "playing_card_dataset_object_detection", "test", "images", "199424464_jpg.rf.ab6dec831e4c29a3d9f220f82674eb15.jpg")

# 4.

# Pass the image into the model for classification
results = model(img)

# 5.

# Outputting "results" will give you information about that prediction.

results

# 6.

# To get the desired image with bounding boxes and classification,
# run code similar to the below,
plt.imshow(np.squeeze(results.render()))
plt.show()

# Congratulations, you have classified an image.
```