

**Summary:** For this lab, we decided to explore 2 API's one with authentication and one without. The PokeAPI <https://pokeapi.co/docs/v2.html/> did not require any authorization key and was very straightforward to use. We pulled the pokemon names and displayed them in a list using Flask. We also used Nasa's API <https://api.nasa.gov/> which did require an authorization key. We decided to see what lunar happening occurred on Cass' birthday and display that on a webpage using Flask. Very interesting to play around with the options available to us within Nasa's API like pulling other info.

## Task 1

We accomplished all of Lab 11

## Task 2

```
'''
Authors: Cassandra Cabrera & Miek Menenedez
Date: March 11,2020
Purpose:
- analyzes the Pokemon API
- populates Pokemons names
'''

from flask import Flask, render_template
import requests, json
from flask_bootstrap import Bootstrap

app = Flask(__name__)
bootstrap = Bootstrap(app)

endpoint = 'https://pokeapi.co/api/v2/pokemon'

@app.route('/')
def main():
    try:
        r = requests.get(endpoint)
        data = r.json()
    except:
        print('please try again')
    return render_template('home.html', data=data)
```

```

{% extends 'bootstrap/base.html' %}

{% block title %}
    CST 205 Lab 12
{% endblock %}

{% block content %}
<div class="container">

    <h1>Pokemon API <small>CST 205</small></h1>

    {% if data %}
        {% for thing in data['results'] %}
            <br>
            <h3>{{thing['name']}}</h3>
            <br><br>
        {% endfor %}
    {% else %}
        no data
    {% endif %}

</div>
{% endblock %}

```

## Results from Task2

←	→	↺	🔍 127.0.0.1:5000
<b>Pokemon API</b> CST 205			
bulbasaur			
ivysaur			
venusaur			
charmander			
charmeleon			
charizard			
squirtle			

## Task 3

```
'''
Authors: Cassandra Cabrera & Mke Menedez
Date: March 11,2020
Purpose:
    - uses the NASA API
    - populates the screen with a lunar happening
      from the day Cass was born :)
'''

from flask import Flask, render_template
import requests, json
from flask_bootstrap import Bootstrap

app = Flask(__name__)
bootstrap = Bootstrap(app)

my_key = 'E000jbMkmbNejDS9SduatRQnMqX8PMxr1QcevB9I'

payload = {
    'api_key': my_key,
    'start_date': '1999-10-25',
    'end_date': '1999-10-25'
}

endpoint = 'https://api.nasa.gov/planetary/apod'

@app.route('/')
def main():
    try:
        r = requests.get(endpoint, params=payload)
        data = r.json()
    except:
        print('please try again')
    return render_template('nasa.html', data=data)
```

```
{% extends 'bootstrap/base.html' %}

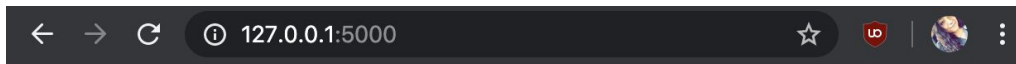
{% block content %}
<div class="container">

    <h1>Nasa from 1999 <small>CST 205</small></h1>

    {% if data %}
        {% for photo in data %}
            <br>
            <h3>{{photo['title']}}</h3>
            <div><small>{{photo['date']}}</small></div>
            <div></div>
            <p>{{photo['explanation']}}</p>
            <br><br>
        {% endfor %}
    {% else %}
        no data
    {% endif %}

</div>
{% endblock %}
```

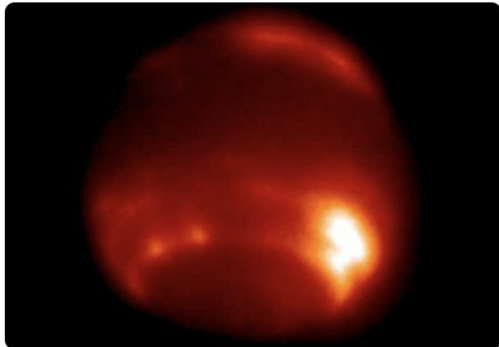
## Results from Task 3



# Nasa from 1999 CST 205

## Neptune in Infrared

1999-10-25



Neptune has never looked so clear in infrared light. Neptune is the eighth most distant planet from the Sun, thirty times the Earth-Sun distance. Neptune is the fourth largest planet, almost four times Earth's diameter. Surprisingly, Neptune radiates about twice as much energy as it receives from the Sun. A fascinating feature of the above photograph is that it was taken far from distant Neptune, through the Earth's normally blurry atmosphere. The great clarity of this recently released image was made possible by "rubber mirror" adaptive optics technology. Here, mirrors in the new Palomar High Angular Resolution Observer (PHARO) instrument connected to the 200-inch Hale Telescope flex to remove the effects of turbulence in the Earth's atmosphere.