Info Panel Option

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Info Panel Option Description

Info Panel option project is about getting information of the ip or domain the user wants such as basic ip information, location, and whois.

Number of HTML Pages - 4 pages

HTTP Method For the following pages/functions:

CURL-GET

IP info-POST/GET

Map-POST/GET

WHOIS-POST/GET

Logs - None

Libraries/ Modules & Lines of code

Language Used: Python HTML, CSS, & Javascript(<1%)

Libraries Used: Flask, Flask-SQLAlchemy, Whoisapi library, Json, Requests, datetime

Number of Lines of code: Less than 100 per HTML page except for map.html which as about 110 lines and app.py its about 135 lines

API Used:

Ip-api.com

Google Maps API

WhoisApi

State it's in and Challenges

What Works: IP Info, Maps, Whois and CURL

What needs work: transferring the IP to other pages without entering it again

Challenges /What doesn't work well: Logs only query the ip address

Getting Google Maps to work using python Ended up using JS with Jinjatext

Getting SQLALchemy to work databases files wouldn't make columns

Program was not recognizing Css location ended up putting the CSS in the same file as html

Whois JSON isn't loading in probably

Sources

W3Schools

Codecademy

Google Maps Documentation

DEMO

App.py used codeSnap for screenshots

```
1 from flask import Flask, render_template, url_for, request, redirect, jsonify
 2 from flask sqlalchemy import SQLAlchemy
 3 from datetime import datetime
 4 from requests import get
5 import ison
7 from whoisapi import *
9 app = Flask(__name__)
10 app.config['SQLALCHEMY_DATABASE_URI'] = 'sqlite:///ipdata.db'
11 app.config["SQLALCHEMY TRACK MODIFICATIONS"] = False
12 db = SQLAlchemy(app)
16 class IPS(db.Model):
       id = db.Column(db.Integer, primary key = True) ##ID
       ip = db.Column(db.String(200), nullable = False) ##
       date_create = db.Column(db.DateTime, default=datetime.utcnow)
       def __repr__(self):
28 @app.route("/<ip_address>", methods = ["GET", "POST"]) ##done
29 def curl(ip_address):
       if request.method == 'GET':
           urls += ip_address
           resp = requests.get(urls)
            ipdata = json.loads(resp.text)
            ips = ipdata
            if ipdata['status'] == "success":
                ipdatas = IPS(ip=ip address)
                db.session.add(ipdatas)
                db.session.commit()
           return indata
          return redirect('/ipinfo')
```

```
@app.errorhandler(404) ##DONE
    def page not found(e):
        return redirect("/ipinfo")
    @app.route('/ipinfo', methods=["GET", "POST"]) #DONE
58 def ipInfo():
        urls = "http://ip-api.com/json/"
        iper = {}
        ipd = ""
        if request.method == "POST":
            ipe = request.form.get("ip")
            if ipe == '':
                return "No IP Go Back and Enter a IP"
            ipd = ipe
            urls += ipd ##adds the url and ip together
            resp = requests.get(urls)
            ipdata = json.loads(resp.text)
            iper = ipdata
            if iper['status'] == "success":
                 ipdatas = IPS(ip=ipd)
                 db.session.add(ipdatas)
                 db.session.commit()
            return render template("ipInfo.html", show ip=iper)
        return render template('ipInfo.html', show ip = iper)
```

```
85 @app.route('/map/',methods = ['GET','POST']) #done
 86 def mapInfo():
             if request.method == "POST":
              iptomap = request.form.get("mapIP")
               ip = iptomap
                  return "No IP Go Back and Enter a IP"
               resp = requests.get(urls)
               data = ison.loads(resp.text) ###### #####
              lat = data['lat']
              long = data['lon']
              country = data['country']
            except KeyError:
            return render_template("map.html",newlat= lat,newlong = long,region = country)
            return render_template("map.html",newlat= lat,newlong = long,region = country)
111 @app.route('/whois/', methods=['GET', 'POST']) #DONE
112 def whoIs():
         final = {}
         if request.method == "POST":
            ipe = request.form.get("whoisip")
            client = Client(api key='at T9t1Z67gZ5NYozq5y88VT0XuSaU6p')
            client.parameters.output_format = 'json'
            final = json.loads(client.raw data(ipe))
            return render template("whois.html", show whois = final)
        return render_template("whois.html", show_whois = final)
127 @app.route("/log/")
128 def logs():
         ipdata = IPS.query.order_by(IPS.date_create.desc()).all()
        return render_template("logs.html",ipdata = ipdata)
        app.run(debug =True)
```

WhoIS HTML

CSS same for every page

```
18 header {
     background-color: #668;
     padding: 5px;
     text-align: center;
22 font-size: 35px;
     border-right: 1px solid #bbb;
    margin: 0;
     padding: 0;
     overflow: hidden;
     background-color: #333;
41 border-right: none;
47 padding: 8px;
48 background-color: #dddddd;
     padding: 20px;
     width: 100%;
     background-color: lightblue;
     height: 1900px;
```

```
<h2>IP Info</h2>
   <a href="/ipinfo">IP INFO</a>
   <a href="/map">Map</a>
   <a href="/whois">WhoIs</a>
   <a href="/log">LOGS</a>
 <div class="whoisform">
     <h1>WhoIs </h1>
     <form action="/whois/" method="POST">
         <input type="text" name="whoisip" id="whoisIP">
         <input type="submit" value="Enter">
 {% for key, value in show whois.items() %}
 {{key}} : {{"\n"}} {{value}}
 {%endfor%}
```

Map Html

```
<div class="mapIP">
            <h1>MAP </h1>
            <form action="/map/" method="POST">
                <input type="text" name="mapIP" id="mapsIP">
                <input type="submit" value="Enter" method = "POST">
             Location:{{region}} Latitude:{{newlat}} longitude {{newlong}}
          <div id="map"></div>
            var map;
            function initMap() {
             const location = {lat: {{newlat}}}, lng: {{newlong}}}
              map = new google.maps.Map(document.getElementById('map'), {
               center: location,
                zoom: 8
              const marker = new google.maps.Marker(
                 map:map
          <script src="https://maps.googleapis.com/maps/api/js?key=AIzaSyBQcEoZmnpCZIK8C_0FK-ETxSXDxNaD5-M&callback=initMap"</pre>
          async defer></script>
```

```
#map
    height: 700px;
    width: 75%;
```

IpInfo HTML

```
• • •
        <a href="/ipinfo">IP INFO</a>
        <a href="/map/">Map</a>
        <a href="/whois/">WhoIs</a>
          <a href="/log/">Log</a>
       <div class="form">
          <h1>Enter a IP address</h1>
          <form action="/ipinfo" method="POST">
              <input type="text" name="ip" id="ipAddress">
             <input type="submit" value="submit">
       {% for key, value in show_ip.items() %}
       {{key}} : {{value}}
       {%endfor%}
```

logs

```
• • •
     <h2>IP Info</h2>
        <a href="/ipinfo">IP INFO</a>
        <a href="/map">Map</a>
        <a href="/whois">WhoIs</a>
        <a href="/log/">LOGS</a>
     <article>
      <div class="Log">
          <h1>Logs </h1>
      {% for task in ipdata %}
    {{task.id}} : {{task.ip}}
    {%endfor%}
```