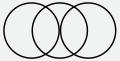
CHILL BEATS | MISC



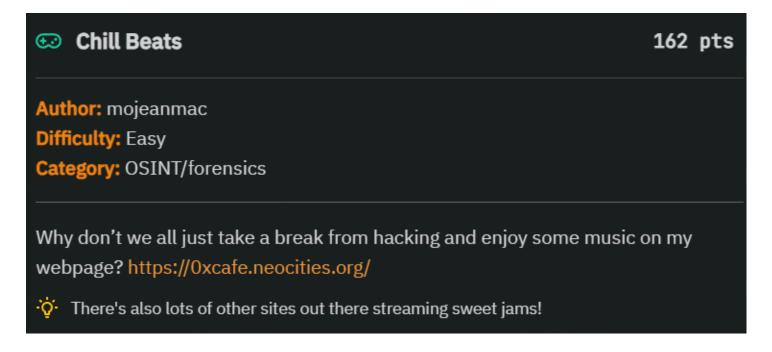
SDCTF 2024

by: meadow

In May 2024, me and my Team **World Wide Flags** competed in the San Diego CTF hosted by undergraduates at the University of California, San Diego (UCSD). We had a lot of fun!

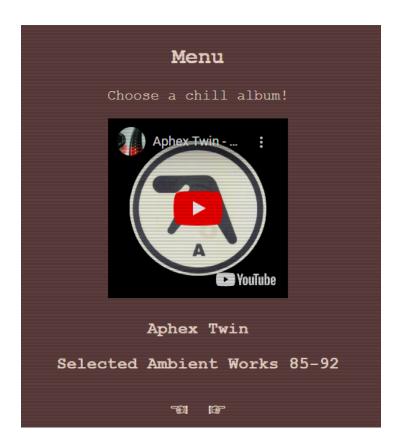
Chill Beats

This was a Misc challenge with elements of both OSINT and forensics.



Opening up the challenge we get a link: https://Oxcafe.neocities.org/

Entering the site we find ourselves in a music cafe where we can chose our preferred music to listen to.



After clicking around for a bit we try and have a look at the source code. (In Google Chrome Browser you can do this by using right click → examine. The tab "source code" lets us view the script.js.)

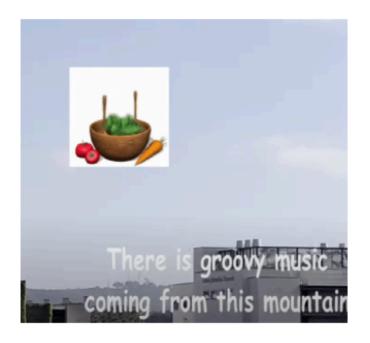
Yep, there's something interesting to be found here:

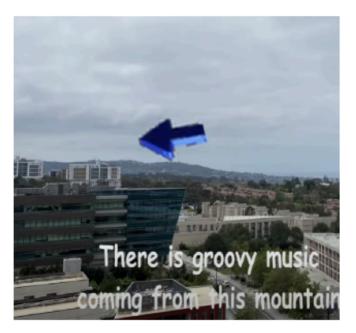
```
const playList = [
["https://www.youtube.com/embed/Xw5AiRVqfqk?si=nH1FhPbvgHuhm3vs&controls=0&autoplay=1", "Aphex Twin", "Selected Ambie
["https://www.youtube.com/embed/JfCNwhWWdCs?si=-3uiK3x1pWvmt4GZ&controls=0&autoplay=1", "Modest By Default", "Permacu
["https://www.youtube.com/embed/yJj24t6nOn4?si=VWEALo7KfD5H3s4w&controls=0&autoplay=1", "Boards of Canada", "Music Ha
["https://www.youtube.com/embed/vGxHVf6RTVY?si=MJQduiebou6UeqkS&controls=0&autoplay=1", "Mabisyo", "Sun Colored Eyes"
["https://www.youtube.com/embed/Ko9p_LL-iiM?si=AwdwMREuQ7Q3lrVf&controls=0&autoplay=1", "Haircuts for Men", "Sadness
["https://www.youtube.com/embed/CftEMc4M02E?si=Gc5iDgt4kbT6mlEv&controls=0&autoplay=1", "nobonoko", "Music For Animal
["https://www.youtube.com/embed/3399f835EJ4?si=Owp_ilGj80Shdqwa&controls=0&autoplay=1", "shh", "keep this a secret"],
```

Of course that last link looks very suspicious to us and when we open it, we find an unlisted Youtube video!

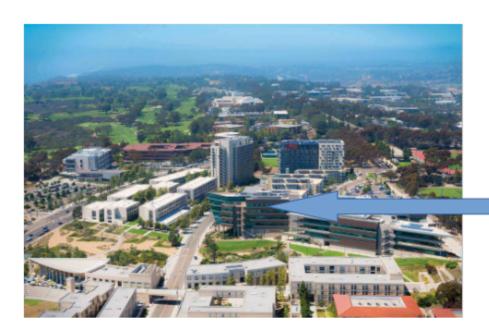
https://www.youtube.com/watch?v=3399f835EJ4

Basically this Youtube video contains 2 photos with a few hints how to go on from here:





Not being familiar with the area at first we try to geolocate the glass building from the second photo. It indeed belongs to San Diego University.



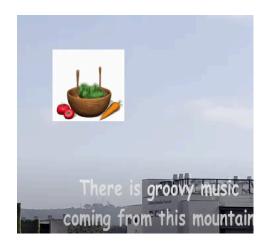
All clues point to the fact that we now have to geolocate the mountain highlighted in the video. Doing this is actually easier in Google Earth as you can see mountain shapes much more clearly.



We find the same angle and navigate to the mountain we see in the back and quickly understand that it's Mount Soledad.

Now remembering the text from the video "there is groovy music coming from this mountain" we look around and see that there are a few radio stations located on Mt. Soledad. After some dead ends we simply google for radio stations mount soledad and find this page https://worldradiomap.com/us-ca/san-diego which lists all radio stations in San Diego. We know that we only have to look at the ones located in Mt. Soledad, but already we see something familiar.

Remembering the video there was a salad bowl in one of the frames:



Considering the above mentioned list we quickly find the station "Groove Salad".



Clicking on this link the radio player opens and we find ourselves another link: the radio station's boradcaster SOMA FM!



We feel that we must be very close to the solution of this challenge and click the link:

https://somafm.com/groovesalad/

Now where would you hide a flag? Right, the page has a guestbook.

```
SOMA fm listen | news | support/donate | store | playlists | mobile | podcasts mailing list | guestbook | about | Mastodon | @instagram | @yelp | contact
```

Of course we click it and the latest entry is a hit!

Groove Salad is by far my favorite station broadcasting on Mt. Soledad (south of UCSD's campus!) I've been listening to DEFCON radio a lot on here too. I really really love old-web style sites that I made one similar for my MUS 15 class! I won't link it but if you'd really like to reverse OSINT it: sdctf{0xc0ff3-FM} -- mojeanmac, May 10, 2024 at 10:20a

Finally we can retrieve the flag!

sdctf{0xc0ff3-FM}