Two vulnerabilities makes an Exploit!! (XSS and CSRF in Bing)

Sai Krishna Kothapalli Follow
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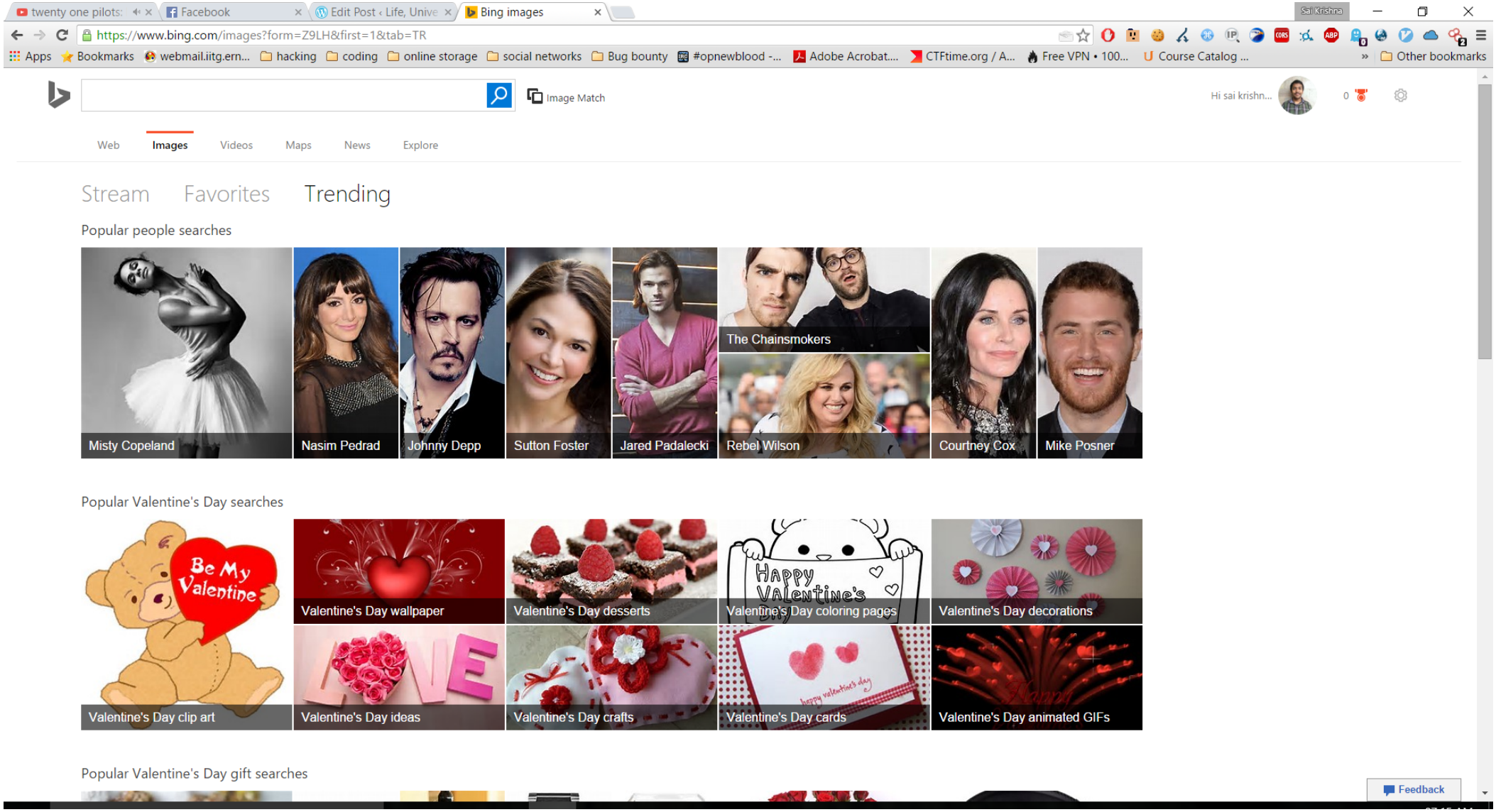
Hello !!

This post will be about my 4th and 5th valid bug reports I submitted to Microsoft. Open the Images in a new tab if you find them difficult to view. I took the screenshots in a 1080p screen.

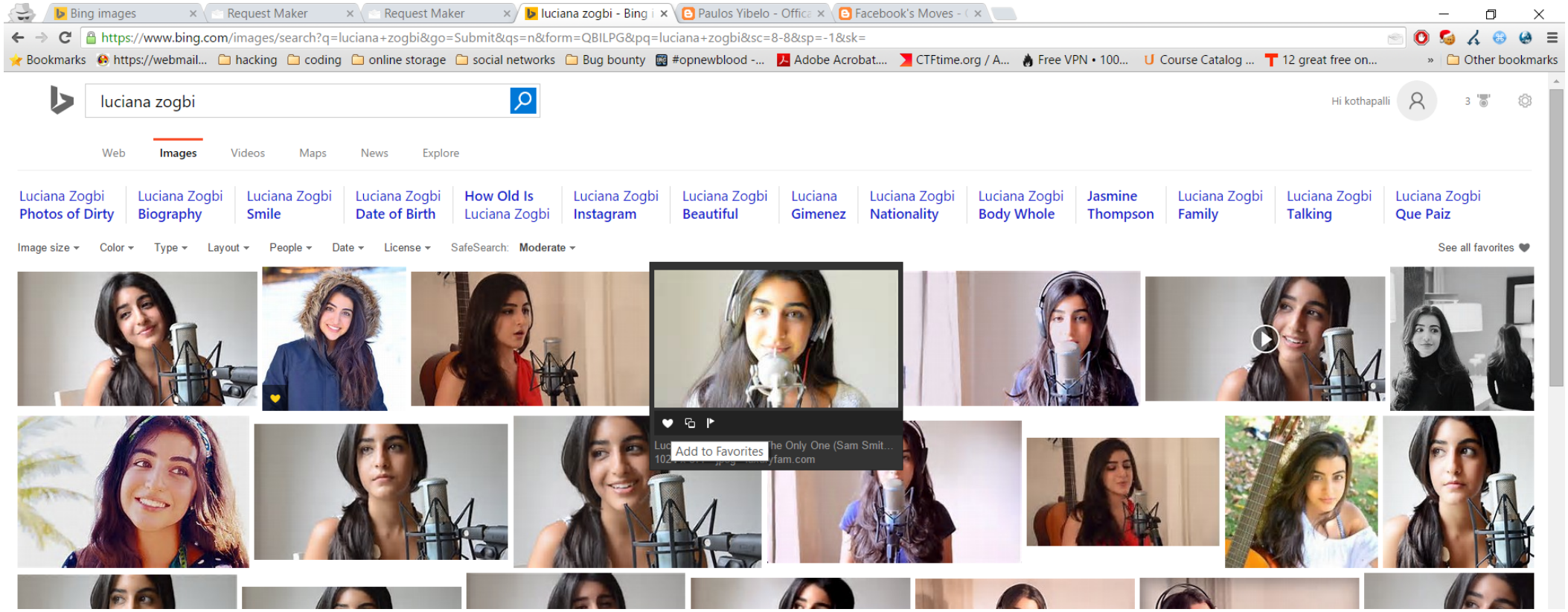
This time I have found a **XSS** and **CSRF** vulnerabilities in `Bing`.

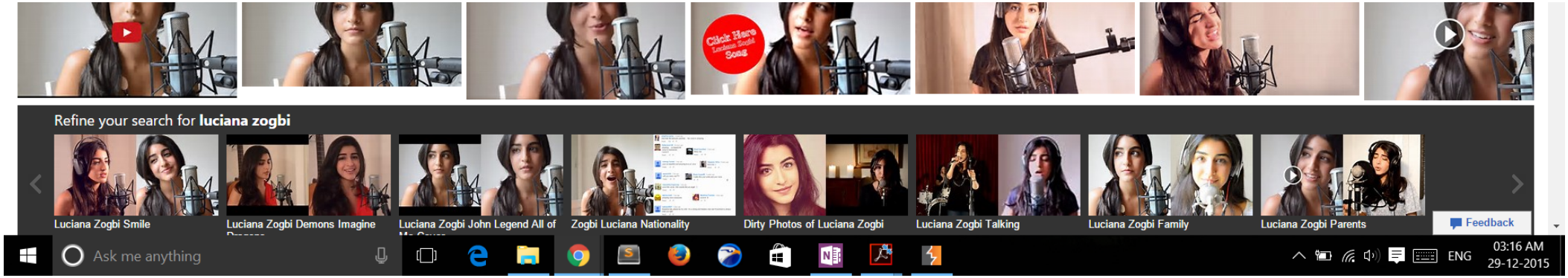
Bing images is testing 3 new features called **Stream** , **Favorites** , **Trending** which are still in beta.



So I was going through this and there is this option where you can search and directly add images to your favourites.

It was cool, So I wanted to take a look at how it is implemented.





When you click on the heart symbol after the image search, the image is added to your favourites.

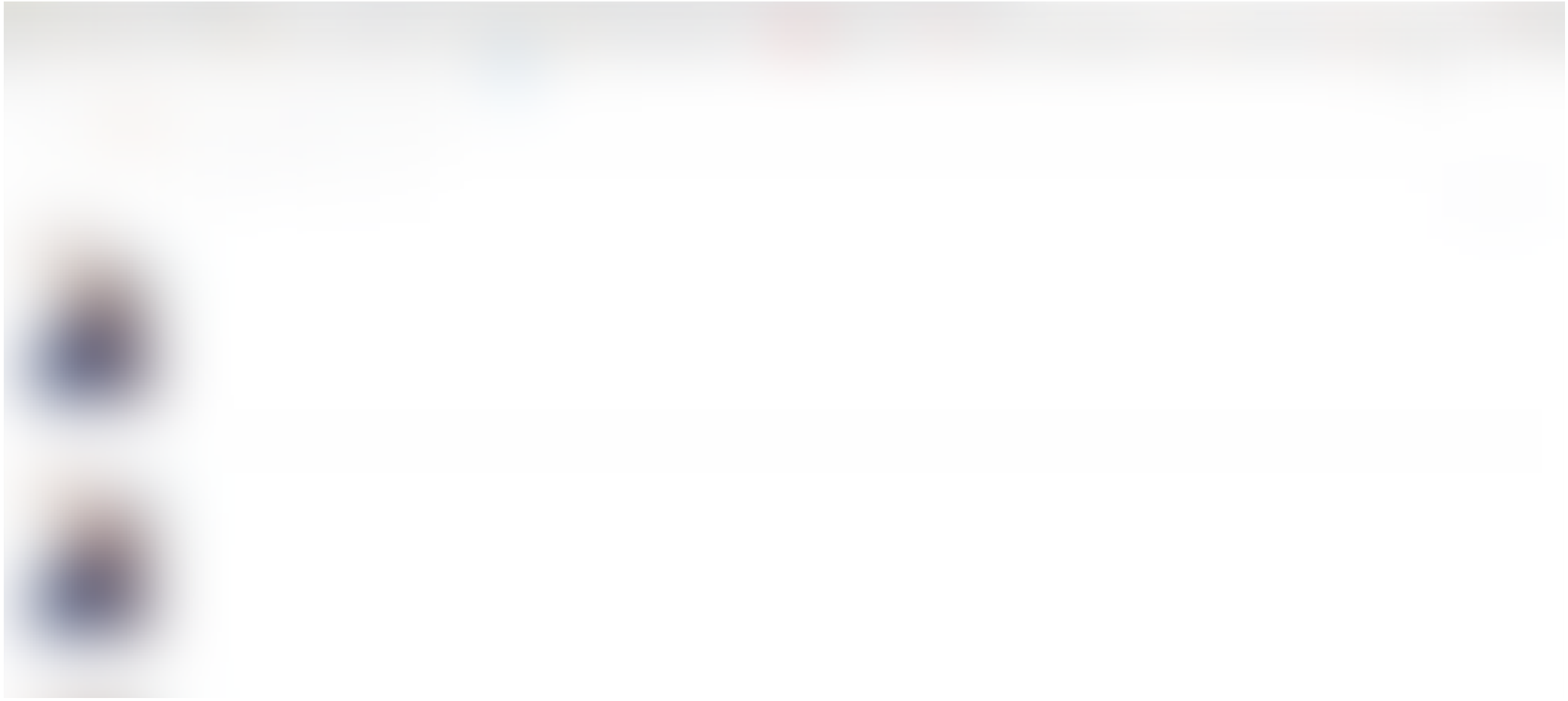
and the request looks like this

It’s URL-Encoded. Once decoded it looks like this

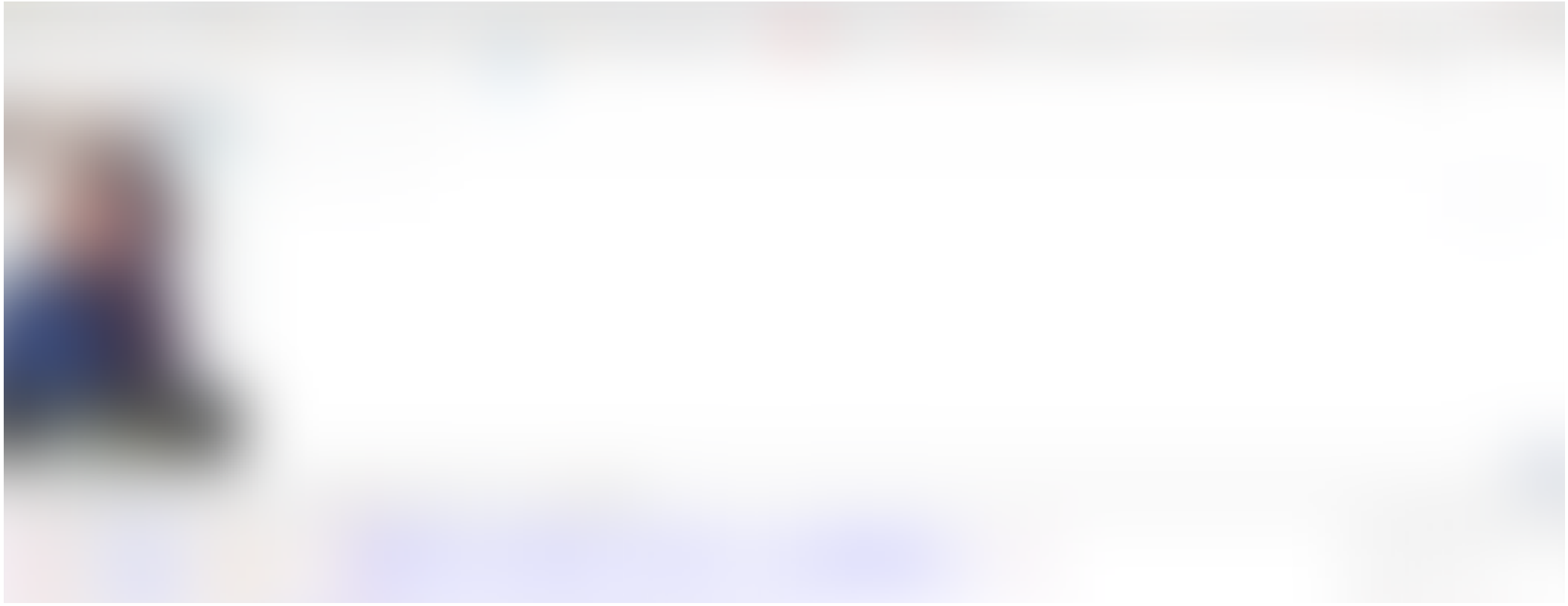

```
{“WriteNewCollection”:true,”query”:”lucianazogbi”,”mid”:”5689B0BFCDB0
E64E595A3B6C2B7A0865A4DC236C”,”description”:”lucianazogbi”,”MediaUrl”
:”https://beautifulgeniuses.files.wordpress.com/2015/01/lucianazogbi.
jpg&#8221;,”SourceUrl”:”http://beautifulgeniuses.com/2015/01/14/lucia
nazogbi/&#8221;,”ThWidth”:300,”ThHeight”:300,”MediaWidth”:640,”MediaH
eight”:640,”MD5":”md5_5c6aa5d2768f0d2255dab627015da340",”MediaFormat”
:””,”ThumbnailId”:“OIP.M5c6aa5d2768f0d2255dab627015da340o2",”Collecti
onType”:0,”ContentId”:”XGql0naP”}
```

Interesting there is no **CSRF token** and there is no `X-Requested-With : XMLHttpRequest` header.

Which means it is vulnerable to **CSRF** attacks. Another interesting thing is the webpage is displaying this data in the Favorites tab.



Then why not try to inject some **JavaScript** there. I tried all the fields but none of them worked. When I almost gave hope I saw this.



This link is vulnerable to **XSS** . It is accepting links `javascript:code` in the <a> href tag .

So when I click on it. BAMN

Our favourite popup.

So, by sending the user to a single malicious site it is possible to compromise his account.

If I have stopped after the CSRF I would have not found the XSS. So, by successfully combining 2 vulnerabilities we made an exploit to compromise Bing.

I reported this to Microsoft and now it is fixed.

Since, that feature is still in beta-testing they took more than 5 months to fix that in order to make it more secure.

My name will be in the March 2016 Hall Of Fame.

Thank you for reading.

Peace :D

Feel free to comment and give some suggestions.

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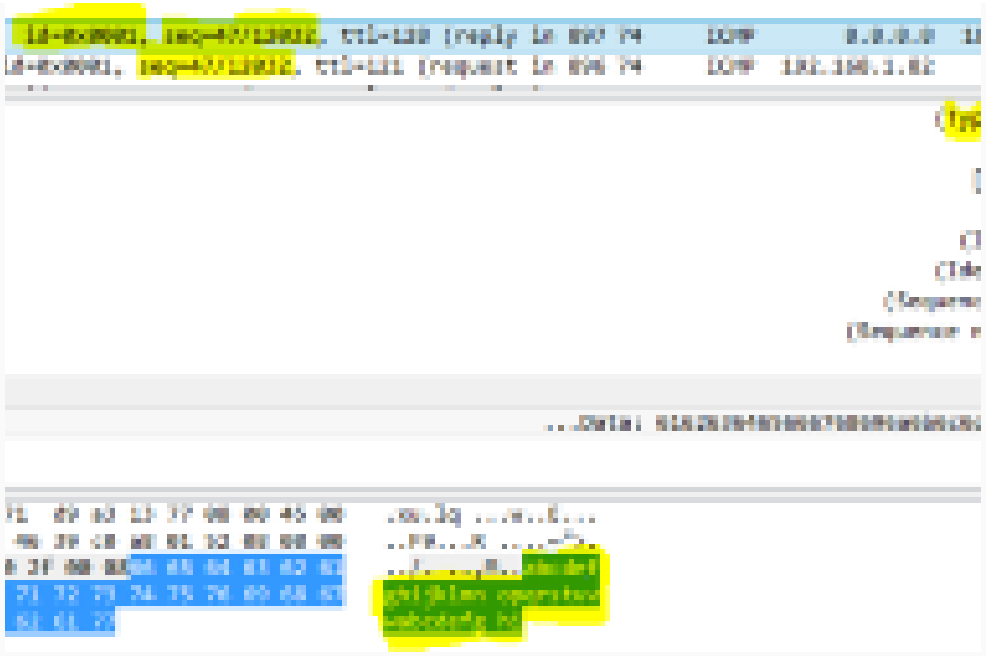

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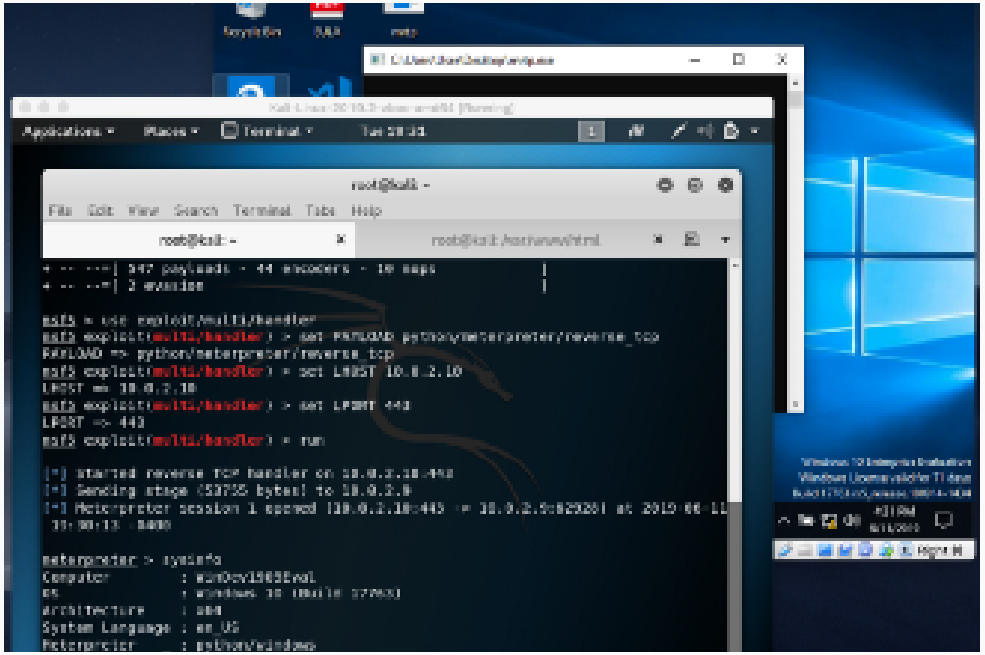

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