

Forum:[Hack Forums](#)

Thread: [dCaptcha - Advanced Captcha System](#)

debug - February 14, 2016, 6:33 pm

I've released this project on my github page as I never got around to finishing it:

<https://github.com/debug-hf/Captcha>

Hello again guys,

After seeing VirusCrafter5's [captcha thread](#), it inspired me to make my own captcha system. So far I've put about 2 hours of work into this and I'm pretty happy with the early results.

InformationGenerates 5 characters

Has 3 difficulties: Easy, Medium, Hard

ColorMode - Chooses from color list (Text colors disabled for now)

Utilizes my [SecureRandom Class](#)

In Action

OldSpoiler ([Click to View](#))

Samples OLD

Easy - <https://i.imgur.com/WEidHWI.png>

Medium - <https://i.imgur.com/MkagKjL.png>

Hard- <https://i.imgur.com/tuawlvU.png>

Give these a test against any OCR you have access too and let me know the results!

TODOCentralize pens, brushes, etc. rather than creating anonymous instances over and over.

Rotate Characters

Work out the color schemes (Make sure everything is legible)

Remove ambiguous characters (0 and O)

Come up with other obscuring techniques.

Test against more OCR engines.

Take your suggestions!

Source

Coming soon! -- I will post the source once it is a bit more stable.

So, if you have any feedback or suggestions let me know! Feel free to test it against any OCR you have access too and let me know the results. So far, none have been successful against my attempts. And thanks again to VirusCrafter5 for the inspiration. This is a fun little project.

debug

\$lick - February 14, 2016, 6:37 pm

Sucks pretty fucking bad, creating a bot for this would be easy.

Unknown - February 14, 2016, 6:38 pm

(Feb 14, 2016 07:37 PM)Nexus™ ?? Wrote: [\[CITE\]](#) Sucks pretty fucking bad, creating a bot for this would be easy.

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In all seriousness; I couldn't have done any better, it seems like a pretty cool project

+Haze - February 14, 2016, 6:39 pm

Nice work, love it :)

"Remove ambiguous characters (0 and O)"

I don't think you should really worry about it, the user should be able to distinguish between o O and 0. They're both different, the letter 0 is more oval than the letter.

VmX5 - February 14, 2016, 7:17 pm

Hiiii Thanks for reading my thread ;) <3

I like how your project worked out, but the image should be a bit more difficult.

debug - February 14, 2016, 7:19 pm

(Feb 14, 2016 08:17 PM)VirusCrafter5 Wrote: [\[CITE\]](#) Hiiii Thanks for reading my thread ;) <3

I like how your project worked out, but the image should be a bit more difficult. I know, I have a few ideas in mind. ;)

SIM-1676753 - February 14, 2016, 7:21 pm

I'd be pretty easy making a solver for this.

Cecilia - February 14, 2016, 7:27 pm

(Feb 14, 2016 07:39 PM)+Haze Wrote: [\[CITE\]](#) Nice work, love it :)

"Remove ambiguous characters (0 and O)"

I don't think you should really worry about it, the user should be able to distinguish between o O and

0. They're both different, the letter 0 is more oval than the letter.

With different fonts things can get out of hand, especially with fonts designed to be as hard to read as possible.

debug - February 14, 2016, 7:30 pm

(Feb 14, 2016 08:21 PM)Mr. Trvp Wrote: [\[CITE\]](#) I'd be pretty easy making a solver for this. Yes, as it has been stated several times already Q_Q
I plan on making it more complex.

(Feb 14, 2016 08:27 PM)LaPanthere Wrote: [\[CITE\]](#) With different fonts things can get out of hand, especially with fonts designed to be as hard to read as possible. Yeah, that was my thinking.

SIM-1676753 - February 14, 2016, 7:33 pm

I'd be pretty easy making a solver for this.

ttyler333 - February 14, 2016, 7:34 pm

I think making zero's appear as a Zero with a line through it would be amazing.

As well maybe add some random incomplete letters to the background like an upside down V (maybe check to make sure no "v" is in the captcha). A part of a U angled or upside down. Actually you can offer the alphabet upside down.

Incorporate Symbols as a "Extra difficult" option.

edit: Creating letters using a "dot" formation to help combat OCR due to spacing between the dots. Maybe use dashes or comma's to help create this feature.

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(Feb 14, 2016 08:34 PM)ttyler333 Wrote: [\[CITE\]](#) I think making zero's appear as a Zero with a line through it would be amazing.

As well maybe add some random incomplete letters to the background like an upside down V (maybe check to make sure no "v" is in the captcha). A part of a U angled or upside down. Actually you can offer the alphabet upside down.

Incorporate Symbols as a "Extra difficult" option.

edit: Creating letters using a "dot" formation to help combat OCR due to spacing between the dots. Maybe use dashes or comma's to help create this feature. Solid ideas. I'll keep them in mind.
Thanks!

SIM-1984933 - February 14, 2016, 7:40 pm

i made something sim to this after i saw his thread too, i use numbers 1-9 and chars a-z, then i used windows GDI to draw squares and lines into the picture box

+Haze - February 14, 2016, 7:41 pm

(Feb 14, 2016 08:27 PM)LaPanthere Wrote: [\[CITE\]](#) With different fonts things can get out of hand, especially with fonts designed to be as hard to read as possible.
Didn't think about font.

@Debug, I got a good idea. Include a check method inside your class whereby you pass in the user's text and an object representing the captcha object returned. Then the check method will do

the check and return a percentage which determines how much of the captcha they got correct. Therefore, the developers can choose how lenient they want to be with their captchas and this will also remove the need to distinguish between 0 and o since that can be dealt with internally inside the check method. I mean it's not essential I just think it would be a cool idea.

debug - February 14, 2016, 7:44 pm

(Feb 14, 2016 08:41 PM)+Haze Wrote: [\[CITE\]](#) Didn't think about font.

@Debug, I got a good idea. Include a check method inside your class whereby you pass in the user's text and an object representing the captcha object returned. Then the check method will do the check and return a percentage which determines how much of the captcha they got correct. Therefore, the developers can choose how lenient they want to be with their captchas and this will also remove the need to distinguish between 0 and o since that can be dealt with internally inside the check method. I mean it's not essential I just think it would be a cool idea. Yeah I was planning on doing something just like that. I'll have to figure out the criteria I want to use, or many just make a formula based on the difficulty.

I've added rotation and 'phantom text.' I think it came out nicely:

SIM-1676753 - February 14, 2016, 8:11 pm

(Feb 14, 2016 08:44 PM)debug Wrote: [\[CITE\]](#) Yeah I was planning on doing something just like that. I'll have to figure out the criteria I want to use, or many just make a formula based on the difficulty.

I've added rotation and 'phantom text.' I think it came out nicely:

I'd be hard making a solver for this.. maybe.

debug - February 14, 2016, 8:12 pm

(Feb 14, 2016 09:11 PM)Mr. Trvp Wrote: [\[CITE\]](#) I'd be hard making a solver for this.. maybe. ;) It's only going to get more difficult from here mate.

Ninja - February 15, 2016, 7:31 am

I saw an image where 2 characters were right above each other so which one goes first...?

debug - February 15, 2016, 8:06 am

(Feb 15, 2016 08:31 AM)Tyranitar Wrote: [\[CITE\]](#) I saw an image where 2 characters were right above each other so which one goes first...? Yeah I saw that. It does left to right no matter the orientation. I may work it out so there is a better distinction.

Forecraft - February 15, 2016, 4:15 pm

In my opinion, the rectangles don't really fit in there.

If I were you, I'd probably get rid of them, unless you remove the black borders.

debug - February 15, 2016, 4:18 pm

(Feb 15, 2016 05:15 PM)Nacorpio Wrote: [\[CITE\]](#) In my opinion, the rectangles don't really fit in there. If I were you, I'd probably get rid of them, unless you remove the black borders. So you think random lines would be better? I had that as well but I kind of liked the look of the boxes, but I will

admit, they may be a bit overkill.

Here's what it looks like with lines instead:

Forecraft - February 16, 2016, 2:53 am

That actually looks better to be.

Maybe that is just a personal preference.

Ninja - February 16, 2016, 3:45 am

(Feb 15, 2016 05:18 PM)debug Wrote: [\[CITE\]](#) So you think random lines would be better? I had that as well but I kind of liked the look of the boxes, but I will admit, they may be a bit overkill.

Here's what it looks like with lines instead:

Remove all pixels that are not solid, dark black. You are left with the letters and lines. Then 'shrink' all black areas (scrape off sides) so you are left with thin letters and no lines. Enlarge the black areas again and you are left with just the letters. Try having the letters the same color as the background noise (gray spots) and just outline them with a thin black line. This will make it harder to OCR.

debug - February 16, 2016, 7:50 am

(Feb 16, 2016 04:45 AM)Tyranitar Wrote: [\[CITE\]](#) Remove all pixels that are not solid, dark black. You are left with the letters and lines. Then 'shrink' all black areas (scrape off sides) so you are left with thin letters and no lines. Enlarge the black areas again and you are left with just the letters. Try having the letters the same color as the background noise (gray spots) and just outline them with a thin black line. This will make it harder to OCR. Call me dense but I didn't exactly understand that. Were you explaining how you would code a bot to easily solve this using OCR?

Ninja - February 16, 2016, 11:27 am

(Feb 16, 2016 08:50 AM)debug Wrote: [\[CITE\]](#) Call me dense but I didn't exactly understand that. Were you explaining how you would code a bot to easily solve this using OCR?

Yes I was. I was explaining how easy it was to remove the noise (grey areas, lines, distortion) from the image.

The CrackerZ - February 17, 2016, 4:44 pm

Nice work mate ket it up !

debug - May 19, 2016, 6:17 pm

<https://github.com/debug-hf/Captcha>

Released as I never got around to finishing it.

o??law - May 19, 2016, 10:53 pm

Thanks OP, was bored and having fun playing around with this. ? Not very secure in its current implementation though, was able to remove most of the junk in <5 min. Whoever plans on continuing this project, make sure the letters are not always the same color or it's almost too easy. Fun share though.

BashPyKali - May 21, 2016, 8:07 pm

For a moment i thought that you just uploaded some pictures with some captcha designed with paint in your vb editor but that should be too easy... a 15 minutes work with paint And 5 minutes with the editor.. After that i read it again and i said only wow! Your "paint program" was integrate in your code! Ahah, this is a compliment, i think that your project is advanced And i will love to see more from you!

Ps. Does the program paint And write the captcha random And automatic right? So there is an high quantity of possible captcha?

Edit: i think that there is some possibility with a bit more of editing in the code to make IT more difficult for the other person to make a program that can "read" the captcha And bypass it.. But i think that you can figure IT out later

debug - May 21, 2016, 9:44 pm

(May 21, 2016 08:07 PM)BashPyKali Wrote: [\[CITE\]](#) For a moment i thought that you just uploaded some pictures with some captcha designed with paint in your vb editor but that should be too easy... a 15 minutes work with paint And 5 minutes with the editor.. After that i read it again and i said only wow! Your "paint program" was integrate in your code! Ahah, this is a compliment, i think that your project is advanced And i will love to see more from you!

Ps. Does the program paint And write the captcha random And automatic right? So there is an high quantity of possible captcha?

Edit: i think that there is some possibility with a bit more of editing in the code to make IT more difficult for the other person to make a program that can "read" the captcha And bypass it.. But i think that you can figure IT out laterYes this is completely randomized and easily customizable. You can run a loop and generate as many as you want.

Uttamraj - May 21, 2016, 10:08 pm

Thankyou i want the source of this :)

Vape Lord Nord - May 22, 2016, 10:48 am

(May 21, 2016 10:08 PM)Uttamraj Wrote: [\[CITE\]](#) Thankyou i want the source of this :)
Here you go.

(May 19, 2016 06:17 PM)debug Wrote: [\[CITE\]](#) <https://github.com/debug-hf/Captcha>

Released as I never got around to finishing it.

SIM-1676753 - May 23, 2016, 5:31 pm

<https://github.com/MrTrvp/dCaptcha>

Changed some stuff.

debug - May 23, 2016, 6:29 pm

(May 23, 2016 05:31 PM)Mr. Trvp Wrote: [\[CITE\]](#) <https://github.com/MrTrvp/dCaptcha>

Changed some stuff.Looks nicely formatted. I never got around to that. ?

labroca - May 23, 2016, 6:30 pm

Does anyone on this website actually know how to code in real-world languages? Sorry for the flame, just taking it out on HF.

Edit: code is decent

debug - May 23, 2016, 6:33 pm

(May 23, 2016 06:30 PM)?Globe Wrote: [\[CITE\]](#) Does anyone on this website actually know how to code in real-world languages? Sorry for the flame, just taking it out on HF.

Edit: code is decentMy code in this project is far from optimal. It was mainly an experiment, as I was inspired by another persons' post.

SIM-1676753 - May 23, 2016, 7:03 pm

(May 23, 2016 06:29 PM)debug Wrote: [\[CITE\]](#) Looks nicely formatted. I never got around to that. ?
I'm gonna update it again as you finish each of the TODO items.

Sniper Pal - June 28, 2016, 6:49 pm

professional coding
nice and amazing pro