

Forum:[Hack Forums](#)

Thread: [FloCAPTCHA \(Graphical CAPTCHA System\)](#)

tflo - November 20, 2010, 4:44 pm

Last Update: 9 June 2011

Notes:

- Added three new output formats.
- Still accepting any suggestions!

Features:

- No "l", "i", or zeros (0) in the string generation (avoids confusion).
- Random objects in the background.
- Random text color.
- Distorted text.
- MD5 Hasted solution.
- Built-in compare function.
- Three different output formats.

Formats:

Spoiler ([Click to View](#))

Default, The Random Format

Exact Output

Pattern Output

Source: [C#](#) | [VB](#)

PAGMAN - November 20, 2010, 4:51 pm

You just inspired me. I'm going to try to make my own now. Thanks!

tflo - November 20, 2010, 4:53 pm

(Nov 20, 2010 05:51 PM)1990 Wrote: [\[CITE\]](#) You just inspired me. I'm going to try to make my own now. Thanks!

Haha no problem, good luck!

Blimp - November 20, 2010, 5:41 pm

Does these generate different letters each time?

tflo - November 20, 2010, 5:46 pm

(Nov 20, 2010 06:41 PM)Dark Legend Wrote: [\[CITE\]](#) Does these generate different letters each time?

Yes it does. I just realized I left out some details, you specify the length of the CAPCHA, the text size and the letter spacing.

Kotei - November 20, 2010, 6:00 pm

This is an awesome release, thank you.

tflo - November 20, 2010, 7:52 pm

(Nov 20, 2010 07:00 PM)Xypher Wrote: [\[CITE\]](#) This is an awesome release, thank you.
I'm glad you like it, thanks!

JohnWayne - November 22, 2010, 1:44 am

Thanks for this nice code :)

tflo - May 1, 2011, 10:29 am

Decided to update the thread after I recently used this old class in another project. Optimized code and fixed some bugs, see the main post.

Cody8295 - May 1, 2011, 10:31 am

You should add some random lines or shapes to throw off scripts to try to bypass it.

tflo - May 1, 2011, 10:33 am

(May 1, 2011 10:31 AM)Cody8295 Wrote: [\[CITE\]](#) You should add some random lines or shapes to throw off scripts to try to bypass it.
Good idea, I'll throw that in here.

Doctor07 - May 1, 2011, 10:45 am

Bookmarked the source, will check this out later when im on my laptop dude,
this smells very good though :D

tflo - May 1, 2011, 11:00 am

(May 1, 2011 10:45 AM)ViolentReality Wrote: [\[CITE\]](#) Bookmarked the source, will check this out later when im on my laptop dude,
this smells very good though :D
Thanks.

Update: Added random objects in the background (thanks to Cody for the suggestion).

Th3DON - May 1, 2011, 11:52 am

This is great, may come to use one of these day. Thanks.

bobolobo - May 1, 2011, 11:57 am

this can be read by a program just going for the font color, make the color of each letter diffrent and add diffrent font style and your captcha would be way more secure, but good like always vanquish ;)

tflo - May 1, 2011, 12:41 pm

(May 1, 2011 11:52 AM)Tool Box Wrote: [\[CITE\]](#) This is great, may come to use one of these day.
Thanks.
Thanks.

(May 1, 2011 11:57 AM)bobolobo Wrote: [\[CITE\]](#) this can be read by a program just going for the font color, make the color of each letter diffrent and add diffrent font style and your captcha would be way more secure, but good like always vanquish ;)
Good idea, updated.

DEN1AL - May 1, 2011, 1:09 pm

Source looks good, thanks for sharing!

bobolobo - May 1, 2011, 1:14 pm

A good idea good be diffrent font for each letter or some random effect that would make it more difficult for the OCR tools so it seems less like plain text.

tflo - May 1, 2011, 1:22 pm

(May 1, 2011 01:09 PM)Duttie Wrote: [\[CITE\]](#) Source looks good, thanks for sharing!

Thanks

(May 1, 2011 01:14 PM)bobolobo Wrote: [\[CITE\]](#) A good idea good be diffrent font for each letter or some random effect that would make it more difficult for the OCR tools so it seems less like plain text.

Another good suggestion, added.

bobolobo - May 1, 2011, 1:27 pm

I must say your very fast at adding these updates, very very good job :)

tflo - May 1, 2011, 1:33 pm

(May 1, 2011 01:27 PM)bobolobo Wrote: [\[CITE\]](#) I must say your very fast at adding these updates, very very good job :)

Thanks! If you get anymore suggestions feel free to post!

bobolobo - May 1, 2011, 1:47 pm

Maybe warp the your text ? :)...

tflo - May 1, 2011, 1:52 pm

(May 1, 2011 01:47 PM)bobolobo Wrote: [\[CITE\]](#) Maybe warp the your text ? :)...

I don't think I can do that lol.

Cody8295 - May 1, 2011, 1:58 pm

Make it animated, lol, that would be impossible for bots.

tflo - May 1, 2011, 2:11 pm

(May 1, 2011 01:58 PM)Cody8295 Wrote: [\[CITE\]](#) Make it animated, lol, that would be impossible for bots.

I think I'm going to leave it as is, lol.

Cody8295 - May 1, 2011, 2:11 pm

(May 1, 2011 02:11 PM)Vanquish Wrote: [\[CITE\]](#) I think I'm going to leave it as is, lol.

Never stop adding features and it may be the next global captcha.

bobolobo - May 1, 2011, 2:12 pm

(May 1, 2011 01:58 PM)Cody8295 Wrote: [\[CITE\]](#) Make it animated, lol, that would be impossible for bots.

A bot would then take a screenshot and decapcha from that, but it would sure be a nice feature

and make it more difficult for the bots :)

Fake. - May 1, 2011, 2:33 pm

Nice work there, looks really decent. I took a brief look at your source, and why limit the colours? Use a For Each statement to enumerate through the colours and add them to a List(Of KnownColor). That way you can then use random colours :)

tflo - May 1, 2011, 2:54 pm

(May 1, 2011 02:33 PM)Fake™ Wrote: [\[CITE\]](#) Nice work there, looks really decent. I took a brief look at your source, and why limit the colours? Use a For Each statement to enumerate through the colours and add them to a List(Of KnownColor). That way you can then use random colours :)
Actually when I first used colors I used random RGB values but then I didn't want the text to blend in with the background shapes making the CAPCHA unreadable. Thanks for your input though.

bobolobo - May 1, 2011, 3:00 pm

(May 1, 2011 02:54 PM)Vanquish Wrote: [\[CITE\]](#) Actually when I first used colors I used random RGB values but then I didn't want the text to blend in with the background shapes making the CAPCHA unreadable. Thanks for your input though. You could after making the random shapes behind a letter randomize the letters colour. Then compare it to the colour of the shape. If its too close then re-randomize the colour of the letter :)..

idb. - May 1, 2011, 3:03 pm

You should add some rotation to the letters as well. When you leave them all in the same direction it makes it a lot easier to defeat with OCR. Just a suggestion.

tflo - May 1, 2011, 3:22 pm

(May 1, 2011 03:00 PM)bobolobo Wrote: [\[CITE\]](#) You could after making the random shapes behind a letter randomize the letters colour. Then compare it to the colour of the shape. If its too close then re-randomize the colour of the letter :)..
It's not that simple (:D).

(May 1, 2011 03:03 PM)idb Wrote: [\[CITE\]](#) You should add some rotation to the letters as well. When you leave them all in the same direction it makes it a lot easier to defeat with OCR. Just a suggestion.
Thanks, updated.

Notice: Increased CAPCHA canvas size by one half to allow rotation to work properly.

bobolobo - May 1, 2011, 3:25 pm

What about adding some style to them like: Bold, italic, and underlined?

tflo - May 1, 2011, 3:30 pm

(May 1, 2011 03:25 PM)bobolobo Wrote: [\[CITE\]](#) What about adding some style to them like: Bold, italic, and underlined?
Good idea, added.

CATMAN - May 1, 2011, 3:36 pm

You should sharp the letters so whole CAPTCHA will look more HQ.

Cody8295 - May 1, 2011, 4:08 pm

(May 1, 2011 03:30 PM)TylerFlo Wrote: [\[CITE\]](#) Good idea, added.

you should take a list of dictionary words, choose a random one, randomize the characters, and insert some random numbers letters.

Doctor07 - May 1, 2011, 5:22 pm

Every single time i check back, its been updated.

Great work here vanq.

tflo - May 1, 2011, 7:14 pm

(May 1, 2011 05:22 PM)ViolentReality Wrote: [\[CITE\]](#) Every single time i check back, its been updated.

Great work here vanq.

Thanks, back just got home, taking more suggestions now.

@Cody - I don't follow what your saying.

@CATMAN - I am stretching the image in the picturebox, so the quality is reduced a little.

MalwareMop - May 1, 2011, 7:52 pm

If you ever feel like making something a little more secure, you could always make the Capcha to be in an encrypted format, like Base-64, Etc. Then you have to decrypt the Capcha. This is just a suggestion. Might be cool for a different project.

vpserver - May 2, 2011, 12:32 am

make it two words like recaptcha. Then each generation of captcha make the 1st (or 2nd) words difficult (like having period or comma) and only the other counterpart word is the only valid captcha. (This is what recaptcha i think works)

Just an idea.

tflo - May 2, 2011, 5:31 pm

(May 2, 2011 12:32 AM)vpserver Wrote: [\[CITE\]](#) make it two words like recaptcha. Then each generation of captcha

make the 1st (or 2nd) words difficult (like having period or comma) and only the other counterpart word is the only valid captcha. (This is what recaptcha i think works)

Just an idea.

Then I would have to use a word database or rely on a network. I'll stick with random string generation.

yahya123 - May 3, 2011, 1:41 am

how should i import System.Drawing.Drawing2D

tflo - May 18, 2011, 9:45 pm

(May 3, 2011 01:41 AM)yahya123 Wrote: [\[CITE\]](#) how should i import System.Drawing.Drawing2D Just create a new class and paste it in, sorry for a late reply.

Stenography - May 18, 2011, 11:20 pm

oh thank you, i loved it <3

tflo - June 9, 2011, 5:56 pm

(May 18, 2011 11:20 PM)PolarX Wrote: [\[CITE\]](#) oh thank you, i loved it <3

No problem! Glad you liked it!

Updated the main program, added three output formats:

- Random (the previous, standard, format).
- Pattern (uses the generation process of my [Formatted String Generator](#) class).
- Exact (input a literal string).

Bigandrewgold - June 9, 2011, 6:12 pm

when i directly c & p your vb code it throws an error

'Public Function Generate([seperation As Integer = 20], [fontSize As Integer = 10]) As System.Drawing.Image' and 'Public Function Generate(length As Integer, [seperation As Integer = 20], [fontSize As Integer = 10]) As System.Drawing.Image' cannot overload each other because they differ only by optional parameters.

tflo - June 11, 2011, 8:30 pm

Fixed that bug, it was a VB error, the C# IDE never registered it as an error.

Anyone got any suggestions to add?

//Last b*mp.

Apple - June 13, 2011, 5:17 pm

I like this, but you're storing 'output' in memory and it doesn't look like you're disposing it or anything, a program could just read the memory address and get the captcha code?

tflo - June 13, 2011, 5:39 pm

(Jun 13, 2011 05:17 PM)Apple Wrote: [\[CITE\]](#) I like this, but you're storing 'output' in memory and it doesn't look like you're disposing it or anything, a program could just read the memory address and get the captcha code?

OK I think I fixed this, I MD5 hashed the CAPCHA solution and I don't store the generated image anymore. Let me know if I missed something!

Thanks btw!

Apple - June 14, 2011, 6:34 am

(Jun 13, 2011 05:39 PM)TylerFlo Wrote: [\[CITE\]](#) OK I think I fixed this, I MD5 hashed the CAPCHA solution and I don't store the generated image anymore. Let me know if I missed something!

Thanks btw!

You're quite welcome, I actually wanted to get some more insight on what I just said myself so I asked the question on [Stack Overflow](#) - some very intelligent people gave me some good answers.

tflo - June 14, 2011, 5:58 pm

(Jun 14, 2011 06:34 AM)Apple Wrote: [\[CITE\]](#) You're quite welcome, I actually wanted to get some

more insight on what I just said myself so I asked the question on [Stack Overflow](#) - some very intelligent people gave me some good answers.

Checked it out, pretty interesting answers the community gave.

Updated the features list to suit the current version of this class.

Bossmous - June 23, 2011, 12:25 pm

Wow this is awesome! Thank you for this great post, will possibly use for future projects!

tflo - June 23, 2011, 1:53 pm

(Jun 23, 2011 12:25 PM)Bossmous Wrote: [\[CITE\]](#) Wow this is awesome! Thank you for this great post, will possibly use for future projects!

Thanks a lot man! Hopefully you can find a good use for this!

Bossmous - June 23, 2011, 3:12 pm

(Jun 23, 2011 01:53 PM)TylerFlo Wrote: [\[CITE\]](#) Thanks a lot man! Hopefully you can find a good use for this!

I certainly will! I am currently making a game and I'd love to develop a multiplayer feature. Then this would come in handy upon the registration :D

Immensify - June 23, 2011, 6:22 pm

Awesome system man, I love it.

Banks? - June 23, 2011, 6:27 pm

I've seen this thread so many times but this is the first time I noticed it...

You spelled CAPTCHA wrong, it's CAPTCHA, not CAPCHA. ?

tflo - June 23, 2011, 8:09 pm

(Jun 23, 2011 06:27 PM)Banksy™ Wrote: [\[CITE\]](#) I've seen this thread so many times but this is the first time I noticed it...

You spelled CAPTCHA wrong, it's CAPTCHA, not CAPCHA. ?

Thanks.

(Jun 23, 2011 06:22 PM)Solarsonic Wrote: [\[CITE\]](#) Awesome system man, I love it.

Thanks a lot glad you like it.

(Jun 23, 2011 03:12 PM)Bossmous Wrote: [\[CITE\]](#) I certainly will! I am currently making a game and I'd love to develop a multiplayer feature. Then this would come in handy upon the registration :D

Awesome! Good luck with that project!