SimpleCaptcha

Customizing Your Image CAPTCHAs

While the default implementation of SimpleCaptcha will hopefully provide all your needs straight out-of-the-box, you may find it useful to customize your CAPTCHA. SimpleCaptcha provides hooks allowing you to specify how answers are generated (five Latin characters, from a list of words, etc.), how the answer is rendered on the image, how backgrounds are generated, and so forth.

# The Builder

Image CAPTCHAs are generated using `Captcha.Builder`:

```
1  Captcha captcha = new Captcha.Builder(200, 50)
2      .addText()
3      .build(); // Required! Always!
```

This will generate a 200×50 image that looks something like this:



Here, the call to `addText()` on line 2 uses the default behavior to generate an answer: five random Latin characters. Most of the `add*` methods in the `Builder` have two versions: a no-arg version which provides default behavior, and another which will allow you to provide your own behavior. For example, in addition to the `addText()` method there is an `addText(TextProducer)` version. If you had your own `TextProducer`, you could use it with the builder like so:

```
1  Captcha captcha = new Captcha.Builder(200, 50)
2      .addText(new MyTextProducer())
3      .build();
```

Arabic and Chinese `TextProducers` are provided for you. So if you wanted to generate an answer in Arabic, you would do the following:

```
1  Captcha captcha = new Captcha.Builder(200, 50)
2      .addText(new ArabicTextProducer())
3      .build();
```

Let's take a look at a more flushed-out implementation of of the `Builder`.

```
1  Captcha captcha = new Captcha.Builder(200, 50)
2      .addText()
3      .addBackground()
4      .addNoise()
5      .gimp()
6      .addBorder()
7      .build(); // Required.
```

This would yield something like:

Each of the builder methods has a no-args version, and most have one (or more) overloaded versions so you can add your own behavior. Let's take our last example and make it more customized:
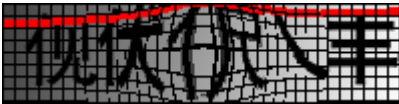
```
1  Captcha captcha = new Captcha.Builder(200, 50)
2      .addText(new ChineseTextProducer(6)) // Answer will
3      .addBackground(new GradiatedBackgroundProducer())
4      .addNoise(new StraightLineNoiseProducer())
5      .gimp(new FishEyeGimpyRenderer())
6      .addBorder()
7      .build(); // Required.
```

Here, each of the methods on lines 2-4 have had non-default types passed to them, and would generate something like this:



Note that the `gimp()`, `addNoise()`, and `addText()` methods can be called multiple times. For example:

```
1  Captcha captcha = new Captcha.Builder(250, 50)
2      .addBackground(new GradiatedBackgroundProducer())
3      .addText(new ChineseTextProducer(2))
4      .addText(new DefaultTextProducer(2))
5      .addText(new ChineseTextProducer(2))
6      .gimp()
7      .gimp(new DropShadowGimpyRenderer())
8      .addNoise()
9      .addNoise()
10     .addNoise()
11     .addBorder()
12     .build(); // Required.
```

This would generate something like this:



SimpleCaptcha is designed to be easy both to use and extend. Feel free to experiment with it to get the behavior you need for your project

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## Download SimpleCaptcha

- **SimpleCaptcha for Java 6** (http://sourceforge.net/projects/simplecaptcha/files/simplecaptcha-1.2.1.jar/download)
- **SimpleCaptcha for Java 1.5** (http://sourceforge.net/projects/simplecaptcha/files/simplecaptcha-1.2-jdk1.5.jar/download)

**Installing (/installing.html)**

## Customizing

- **Custom Image CAPTCHAs (/custom_images.html)**
- **Custom Audio CAPTCHAs (/custom_audio.html)**

## Example Applications

- **Running (/samples.html)**
- **Download Grails Example** (http://sourceforge.net/projects/simplecaptcha/files/SimpleCaptcha/1.1.1/Sample%20Apps/simplecaptcha-grails-example.war/download)

- **Download J2EE Example [(http://sourceforge.net/projects/simplecaptcha/files/simplecaptcha-1.2-j2ee-sample.war/download)](http://sourceforge.net/projects/simplecaptcha/files/simplecaptcha-1.2-j2ee-sample.war/download)**

## Source

- **Building From Source [(/building.html)](/building.html)**
- **Get Source Code [(https://sourceforge.net/scm/?type=git&group_id=147810)](https://sourceforge.net/scm/?type=git&group_id=147810)**
- **Browse Repository [(http://simplecaptcha.git.sourceforge.net/git/gitweb.cgi?p=simplecaptcha/simplecaptcha;a=summary)](http://simplecaptcha.git.sourceforge.net/git/gitweb.cgi?p=simplecaptcha/simplecaptcha;a=summary)**

**Javadocs [(/javadocs/index.html)](/javadocs/index.html)**