

Honeypot Technique of blocking spambots

Presentation by Gasser Ahmed



— phpot.com
Simple Secure Spam-Free
Contact Form in PHP – Iris



What is a web form?

- An online page that allows for user input
- Rendered in modern browsers using HTML
- Form elements: input, checkbox, submit button, etc.

Name ← **Input**

E-mail

Credit Card Number:

☐ Remember me ← **Checkbox**

← **Submit button**

— Created by author



What is a spambot?

- Software written with a specific purpose of filling out of web forms with irrelevant or fake information
- Created by bots
- Malware downloads or loss of confidential information
- Generate traffic



How to stop a spambot?

- Honeypot
- Captcha
- Test question to your form



Captcha

- Text rendering image
- Human interaction and intelligence verification
- Spambots fail to defeat the challenge



— PowerPoint online pictures



Test question to your form

What is smaller, 8 or 9?

What comes first, E or Y?

What is the capital letter of “g”?

— Created by author



Pause and Think

- Why should we avoid using captcha and test questions techniques?



— Joe Concannon
Telepathy -9 CAPTCHA Alternatives That
Won't Wreck Your UX



What is a honeypot?



Hidden field added to a web form that the user can't see



A spambot fills in a field that valid users can't see, alerting us to their activity



If the honeypot field is filled in, we can reject the form as spam.



Example: Contact Form (Before Honeypot)

form → `<form id="contact-form" action="/submit">`
name label → `<label for="name">Name:</label>`
name input → `<input type="text" id="name" name="name" placeholder="Your name">`
email label → `<label for="email">E-mail:</label>`
email input → `<input type="email" id="email" name="email" placeholder="Your e-mail">`
`</form>`

— Created by author

name input ←

email input ←

→ *contact-form*

— Created by author



Honeypot: Implementation Steps

```
<form id="contact-form" action="/submit">  
  <label for="name">Name:</label>  
  <input type="text" id="name" name="name" placeholder="Your name">  
  <label for="email">E-mail:</label>  
  <input type="email" id="email" name="email" placeholder="Your e-mail">  
</form>
```

label →

input →

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Name: → label

input ←

Your name

E-mail:

Your e-mail

— Created by author



Honeypot: Implementation Steps

1

Create

Create a honeypot field with the same name as one of the default fields

```
<form id="contact-form" action="/submit">
  <label for="name">Name:</label>
  <input type="text" id="name" name="name" placeholder="Your name">
  <label for="email">E-mail:</label>
  <input type="email" id="email" name="email" placeholder="Your e-mail">
  <label for="email">E-mail:</label>
  <input type="email" id="email" name="email" placeholder="Your e-mail">
</form>
```

Name:

E-mail:

E-mail:

— Created by author

— Created by author



Honeypot: Implementation Steps

2

Rename

Rename your default fields to something random

```
<form id="contact-form" action="/submit">
  <label for="nHash">Name:</label>
  <input type="text" id="nHash" name="nHash" placeholder="Your name">
  <label for="eHash">E-mail:</label>
  <input type="text" id="eHash" name="eHash" placeholder="Your e-mail">
  <label for="email">E-mail:</label>
  <input type="email" id="email" name="email" placeholder="Your e-mail">
</form>
```

Name:

E-mail:

E-mail:

— Created by author

— Created by author



Honeypot: Implementation Steps

3

Hide

Hide your field

```
<style>
  .nohoney {
    → opacity: 0;
    → position: absolute;
    → top: 0;
    → left: 0;
    → height: 0;
    → width: 0;
    → z-index: -1;
  }
</style>

<form id="contact-form" action="/submit">
  <label for="nHash">Name:</label>
  <input type="text" id="nHash" name="nHash" placeholder="Your name">
  <label for="eHash">E-mail:</label>
  <input type="text" id="eHash" name="eHash" placeholder="Your e-mail">
  <label class="nohoney" for="email">E-mail:</label>
  <input class="nohoney" type="email" id="email" name="email" placeholder="Your e-mail">
</form>
```

Name:

E-mail:



Honeypot: Implementation Steps

4

Verify and block

Verify if your honeypot field came filled



Honeypot: Implementation Steps

1

Create

Create a honeypot field with the same name as one of the default fields

2

Rename

Rename your default fields to something random

3

Hide

Hide your field

4

Verify and block

Verify if your honeypot field came filled



Honeypots: Wrap up

- Don't inconvenience users
- Improve software quality
- A modern programming practice
- Use all weapons against spambots

