

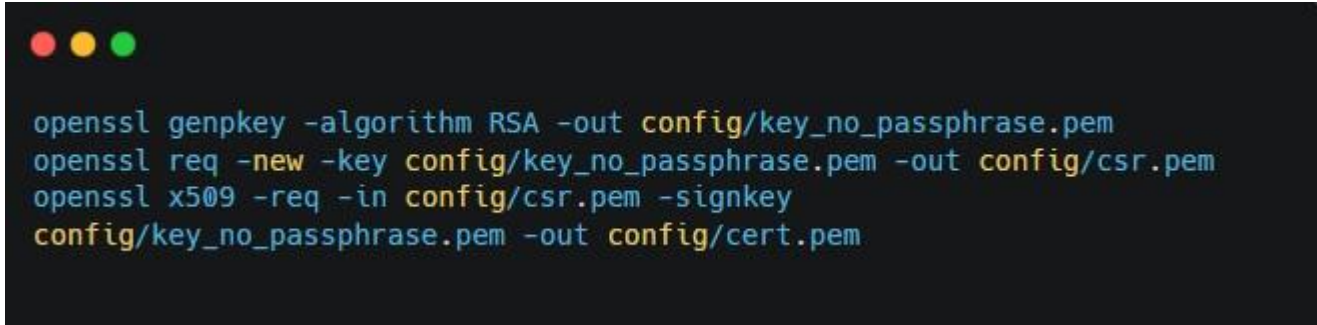
# Capture d'écran - Formulaire de Contact Sécurisé

## 1. Introduction

Le formulaire de contact sécurisé a été conçu pour collecter des informations sensibles (nom, email, message) tout en garantissant la sécurité des utilisateurs. Le projet inclut plusieurs mesures pour assurer la protection des données et se prémunir contre des attaques telles que l'injection SQL, le XSS, les attaques par brute force, et les attaques par CSRF.

### Génération du certificat SSL :

Le certificat SSL a été généré à l'aide d'OpenSSL pour permettre une communication sécurisée sur le serveur local.

A terminal window with a dark background and three colored window control buttons (red, yellow, green) in the top-left corner. It displays four lines of OpenSSL commands used to generate an SSL certificate.

```
openssl genpkey -algorithm RSA -out config/key_no_passphrase.pem
openssl req -new -key config/key_no_passphrase.pem -out config/csr.pem
openssl x509 -req -in config/csr.pem -signkey
config/key_no_passphrase.pem -out config/cert.pem
```

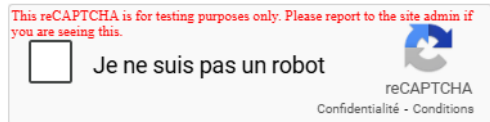
### Vérification côté serveur du Captcha :

Après la soumission du formulaire, le serveur vérifie le reCAPTCHA à l'aide de la clé secrète de Google pour confirmer que la requête provient d'un utilisateur humain.

# Connexion

Email :

Mot de passe :



Se connecter

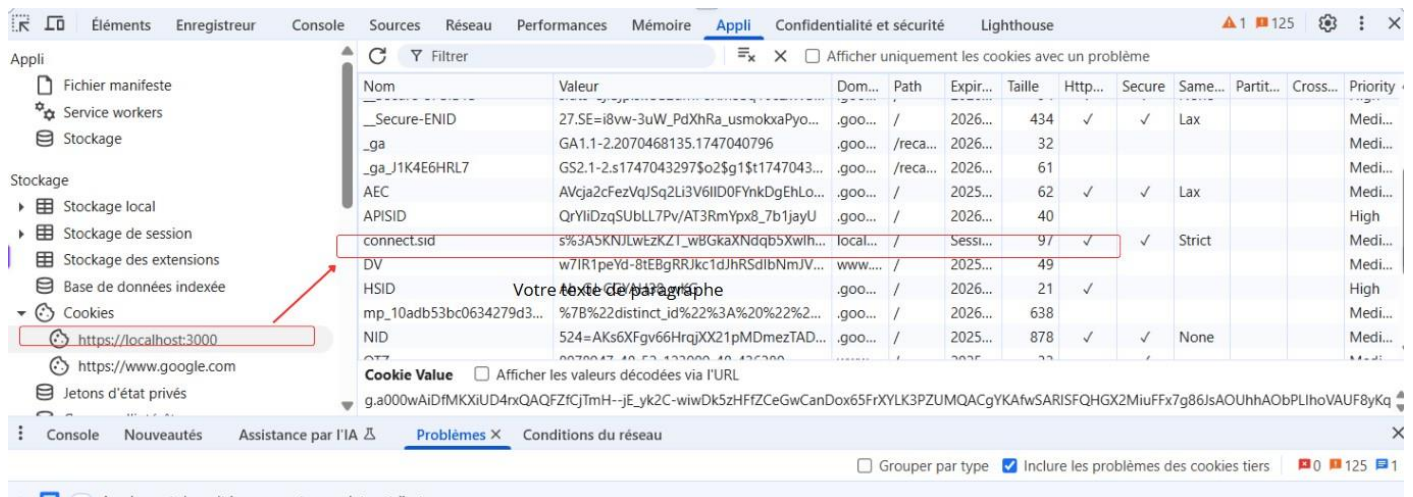
## Hachage des mots de passe dans le code :

Le mot de passe est haché dans le backend à l'aide de bcrypt avant d'être enregistré dans le fichier `users.json`.

```
[
  {
    "email": "admin@example.com",
    "password": "123"
  },
  {
    "email": "massi@gmail.com",
    "password": "$2b$10$0XF9zRVZg3J4hI79QmDiSeDtrmqRJubZeeXi.xQHci2lGtpKfvKay"
  }
]
```

## Sécurisation des cookies avec les flags HttpOnly et Secure

Les cookies sont utilisés pour gérer les sessions des utilisateurs. Pour éviter les attaques **Cross-Site Request Forgery (CSRF)** et **Cross-Site Scripting (XSS)**, les cookies sont définis avec les flags **HttpOnly** et **Secure**, assurant ainsi qu'ils ne peuvent pas être accédés par JavaScript et qu'ils ne sont envoyés que sur des connexions HTTPS.



Les fichiers de logs suivants sont créés :

- **access.log** : Contient les logs d'accès, y compris les requêtes HTTP reçues par le serveur.
- **messages.log** : Contient les logs des messages envoyés par les utilisateurs.



```

2025-05-12T20:01:37.978Z [info]: ::1 - - [12/May/2025:20:01:37 +0000] "GET /login HTTP/1.1" 200 720 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T20:01:53.240Z [info]: Utilisateurs chargés
2025-05-12T20:01:53.346Z [info]: Utilisateur massi@gmail.com connecté
2025-05-12T20:01:53.353Z [info]: ::1 - - [12/May/2025:20:01:53 +0000] "POST /login HTTP/1.1" 302 30 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T20:01:53.372Z [info]: ::1 - - [12/May/2025:20:01:53 +0000] "GET / HTTP/1.1" 200 1463 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T20:01:53.424Z [info]: ::1 - - [12/May/2025:20:01:53 +0000] "GET /css/style.css HTTP/1.1" 304 - "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T20:02:06.758Z [info]: Message reçu - massiiiiiii, beymassinissa@gmail.com
2025-05-12T20:02:06.761Z [info]: ::1 - - [12/May/2025:20:02:06 +0000] "POST /submit HTTP/1.1" 200 29 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T20:02:17.020Z [info]: ::1 - - [12/May/2025:20:02:17 +0000] "GET /admin HTTP/1.1" 404 144 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T20:02:19.042Z [info]: ::1 - - [12/May/2025:20:02:19 +0000] "GET /admin HTTP/1.1" 404 144 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T20:02:19.546Z [info]: ::1 - - [12/May/2025:20:02:19 +0000] "GET /admin HTTP/1.1" 404 144 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T20:02:19.767Z [info]: ::1 - - [12/May/2025:20:02:19 +0000] "GET /admin HTTP/1.1" 404 144 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T20:02:19.954Z [info]: ::1 - - [12/May/2025:20:02:19 +0000] "GET /admin HTTP/1.1" 404 144 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T20:02:20.150Z [info]: ::1 - - [12/May/2025:20:02:20 +0000] "GET /admin HTTP/1.1" 404 144 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T20:02:20.337Z [info]: ::1 - - [12/May/2025:20:02:20 +0000] "GET /admin HTTP/1.1" 404 144 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T20:02:26.408Z [info]: ::1 - - [12/May/2025:20:02:26 +0000] "GET /admin.html HTTP/1.1" 200 1030 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T20:02:26.432Z [info]: ::1 - - [12/May/2025:20:02:26 +0000] "GET /css/style.css HTTP/1.1" 304 - "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T20:02:26.443Z [info]: ::1 - - [12/May/2025:20:02:26 +0000] "GET /admin/messages HTTP/1.1" 200 774 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T20:07:39.937Z [info]: ::1 - - [12/May/2025:20:07:39 +0000] "GET / HTTP/1.1" 200 1570 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T20:07:39.988Z [info]: ::1 - - [12/May/2025:20:07:39 +0000] "GET /css/style.css HTTP/1.1" 200 2556 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T20:07:49.985Z [info]: ::1 - - [12/May/2025:20:07:49 +0000] "GET /admin.html HTTP/1.1" 200 1142 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T20:07:50.046Z [info]: ::1 - - [12/May/2025:20:07:50 +0000] "GET /css/style.css HTTP/1.1" 304 - "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T20:07:50.063Z [info]: ::1 - - [12/May/2025:20:07:50 +0000] "GET /admin/messages HTTP/1.1" 200 774 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T20:07:56.712Z [info]: ::1 - - [12/May/2025:20:07:56 +0000] "GET / HTTP/1.1" 200 1570 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T20:10:42.595Z [info]: ::1 - - [12/May/2025:20:10:42 +0000] "GET /css/style.css HTTP/1.1" 200 2556 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T20:10:48.823Z [info]: ::1 - - [12/May/2025:20:10:48 +0000] "GET /login HTTP/1.1" 200 839 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T20:10:48.852Z [info]: ::1 - - [12/May/2025:20:10:48 +0000] "GET /css/style.css HTTP/1.1" 200 2556 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T20:11:25.189Z [info]: ::1 - - [12/May/2025:20:11:25 +0000] "GET /login HTTP/1.1" 200 839 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T20:11:25.226Z [info]: ::1 - - [12/May/2025:20:11:25 +0000] "GET /css/style.css HTTP/1.1" 200 2554 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T20:12:42.487Z [info]: ::1 - - [12/May/2025:20:12:42 +0000] "GET /login HTTP/1.1" 200 839 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T20:12:42.522Z [info]: ::1 - - [12/May/2025:20:12:42 +0000] "GET /css/style.css HTTP/1.1" 200 2594 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T21:26:24.138Z [info]: ::1 - - [12/May/2025:21:26:24 +0000] "GET / HTTP/1.1" 302 35 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T21:26:24.143Z [info]: ::1 - - [12/May/2025:21:26:24 +0000] "GET /login HTTP/1.1" 200 839 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T21:26:24.211Z [info]: ::1 - - [12/May/2025:21:26:24 +0000] "GET /css/style.css HTTP/1.1" 200 2594 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T21:26:28.751Z [info]: ::1 - - [12/May/2025:21:26:28 +0000] "GET /login HTTP/1.1" 200 839 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T21:26:28.777Z [info]: ::1 - - [12/May/2025:21:26:28 +0000] "GET /css/style.css HTTP/1.1" 304 - "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T21:26:30.270Z [info]: ::1 - - [12/May/2025:21:26:30 +0000] "GET /login HTTP/1.1" 200 839 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T21:26:30.297Z [info]: ::1 - - [12/May/2025:21:26:30 +0000] "GET /css/style.css HTTP/1.1" 304 - "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T21:26:31.125Z [info]: ::1 - - [12/May/2025:21:26:31 +0000] "GET /login HTTP/1.1" 200 839 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T21:26:31.152Z [info]: ::1 - - [12/May/2025:21:26:31 +0000] "GET /css/style.css HTTP/1.1" 304 - "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T21:26:31.912Z [info]: ::1 - - [12/May/2025:21:26:31 +0000] "GET /login HTTP/1.1" 200 839 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"
2025-05-12T21:26:31.933Z [info]: ::1 - - [12/May/2025:21:26:31 +0000] "GET /css/style.css HTTP/1.1" 304 - "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36"

```

Et pour les messages des utilisateur on les sauvegarde haché sur fichier messages.json sous le dossier data comme suit :

```

{
  "date": "2025-05-12T13:19:39.550Z",
  {
    "nom": "rrrr",
    "email": "massi@gmail.com",
    "message": "$2b$10$yqQ05Gg3GWC3oHg92BqsneDVmAHbQ1RIIn8z137Ac1c7SCZZYo4qu",
    "date": "2025-05-12T17:31:06.780Z"
  },
  {
    "nom": "arad",
    "email": "massinissa.bey@univ-constantine2.dz",
    "message": "$2b$10$k3FbI0YP5518fyb6SfQD.ORBc5V6kF98v/wxVR/xisQ8GCrFKgHrW",
    "date": "2025-05-12T19:45:20.336Z"
  },
  {
    "nom": "test",
    "email": "tt@gmail.com",
    "message": "$2b$10$CZmAjMT0sS2Npp6UGTojUOfNUXcOexoOPk3Faqp6pm.4HPJw4.5qq",
    "date": "2025-05-12T19:54:09.392Z"
  },
  {
    "nom": "massiiiiiii",
    "email": "beymassinissa@gmail.com",
    "message": "$2b$10$eH0mw.VfNb32ugwP545m9eEWbyKAoltS48RuccGHdw9E7iMtnkDoS",
    "date": "2025-05-12T20:02:06.757Z"
  }
}

```


# Connexion

Email :

Mot de passe :

This reCAPTCHA is for testing purposes only. Please report to the site admin if you are seeing this.

☐ Je ne suis pas un robot

  
reCAPTCHA  
Confidentialité - Conditions

Se connecter

## Formulaire sécurisé

Nom :

Email :

Message :

This reCAPTCHA is for testing purposes only. Please report to the site admin if you are seeing this.



Je ne suis pas un robot



reCAPTCHA

Confidentialité - Conditions

Envoyer

