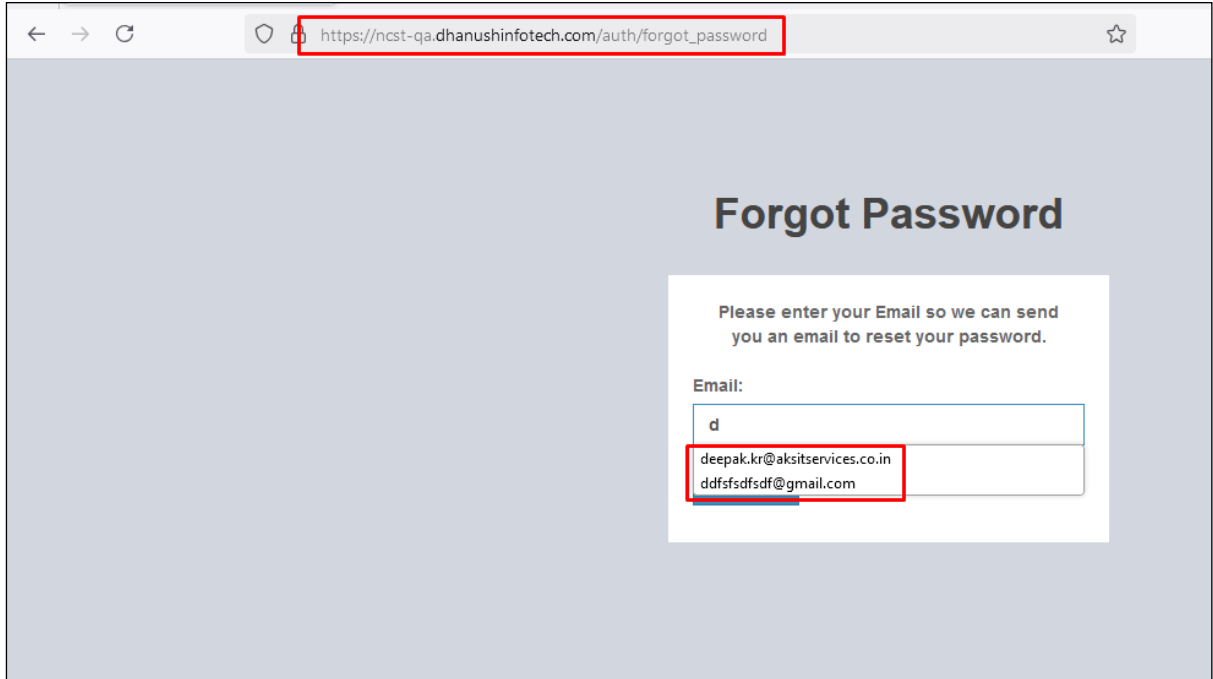


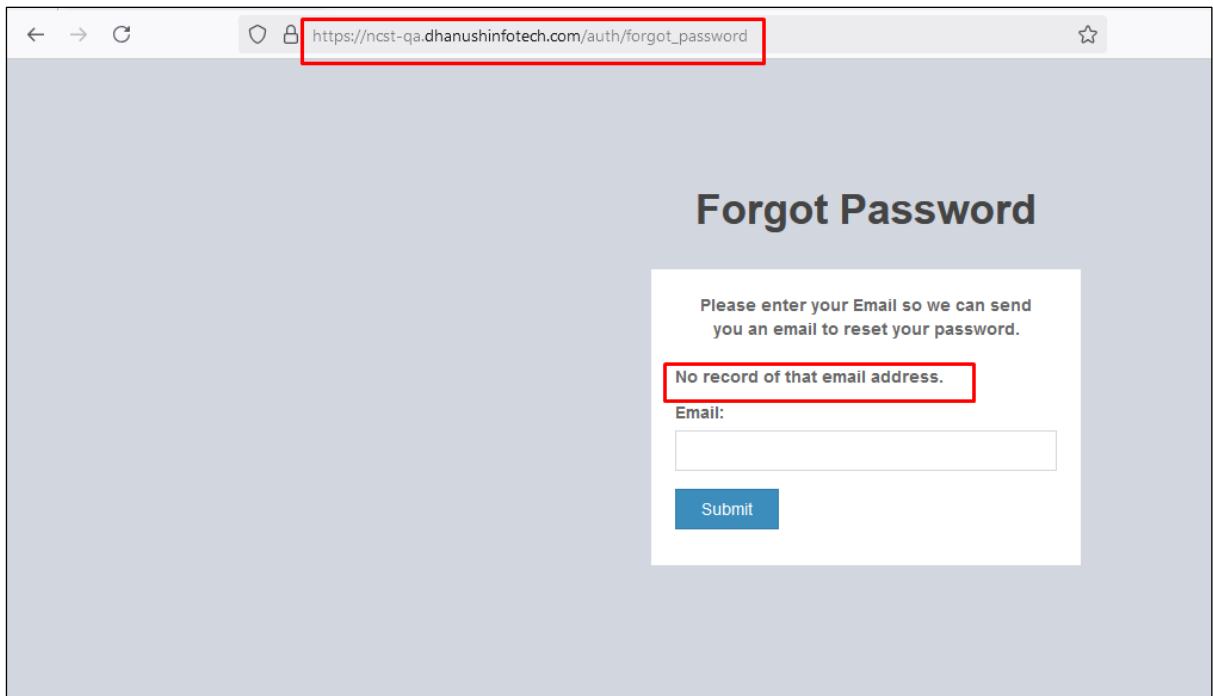
# NCST Final Audit

## 1. Autocomplete Enabled (Already Reported)



Solution: Autocomplete:off

## 2. Username Enumeration



Solution: Generic Message: If user is registered, OTP will be sent to email

### 3. CSP Not Implemented (Already Reported)

The screenshot shows a network request and response in a browser's developer tools. The request is a POST to `/profile/submit_profile` on `https://ncst-qa.dhanushinfotech.com`. The response is an HTTP 200 OK with the following headers:

```
Server: nginx
Date: Thu, 26 Dec 2024 09:05:53 GMT
Content-Type: text/html; charset=UTF-8
Content-Length: 51
Set-Cookie: csrf_cookie=51e46026620b76571b19a39e175265; expires=Thu, 26-Dec-2024 11:05:53 GMT; Max-Age=7200; path=/; HttpOnly
Expires: Thu, 19 Nov 1981 08:52:00 GMT
Cache-Control: no-store, no-cache, must-revalidate
Pragma: no-cache
Set-Cookie: ci_session=d7c50d145d0adpao16d60cen59c3922; expires=Thu, 26-Dec-2024 11:05:53 GMT; Max-Age=7200; path=/; HttpOnly
Content-Security-Policy: default-src 'self'; script-src 'self'; style-src 'self';
X-Content-Type-Options: nosniff
X-Frame-Options: SAMEORIGIN
Strict-Transport-Security: max-age=63072000; includeSubdomains; preload
X-Xss-Protection: 1; mode=block
X-Content-Type-Options: nosniff
Feature-Policy: autoplay 'none'; camera 'none'
Access-Control-Allow-Origin: https://ncst-qa.dhanushinfotech.com
Set-Cookie: Path=/; HttpOnly; Secure
Referer-Policy: strict-origin-when-cross-origin
Permissions-Policy: geolocation=(self), camera=(), microphone=(), fullscreen=(self), payment=(), accelerometer=(), gyroscope=()
{"state": "1", "msg": "Data Updated Successfully"}
```

The screenshot shows a security tool report titled "Content Security Policy (CSP) Not Implemented". The report includes the following information:

- URL:** `https://ncst-qa.dhanushinfotech.com/`
- Attack Details** (expanded):
  - Paths without CSP header:**
    - `https://ncst-qa.dhanushinfotech.com/auth/clogout/1`
    - `https://ncst-qa.dhanushinfotech.com/event-view/`
    - `https://ncst-qa.dhanushinfotech.com/annual-reports`
    - `https://ncst-qa.dhanushinfotech.com/events`
    - `https://ncst-qa.dhanushinfotech.com/robots.txt`
    - `https://ncst-qa.dhanushinfotech.com/related_website/add`
    - `https://ncst-qa.dhanushinfotech.com/system/`
    - `https://ncst-qa.dhanushinfotech.com/uploads/`
    - `https://ncst-qa.dhanushinfotech.com/uploads-dev/rti_application/opt/uploads-dev/rti_application/`
    - `https://ncst-qa.dhanushinfotech.com/slider/add`
    - `https://ncst-qa.dhanushinfotech.com/slider/`
    - `https://ncst-qa.dhanushinfotech.com/uploads-dev/rti_application/opt/uploads-dev/`
    - `https://ncst-qa.dhanushinfotech.com/related_website/`
    - `https://ncst-qa.dhanushinfotech.com/hearing/`
    - `https://ncst-qa.dhanushinfotech.com/hearings-view/`
    - `https://ncst-qa.dhanushinfotech.com/uploads-dev/`
    - `https://ncst-qa.dhanushinfotech.com/auth/`
    - `https://ncst-qa.dhanushinfotech.com/circulars/view/`
    - `https://ncst-qa.dhanushinfotech.com/debug/error_500`
    - `https://ncst-qa.dhanushinfotech.com/debug/`
    - `https://ncst-qa.dhanushinfotech.com/recruitments/view/`

Solution: Implement CSP Header

#### 4. CSP Misconfigured (Already Reported)

**Informational** **Content Security Policy Misconfiguration**

URL: <https://ncst-qa.dhanushinfotech.com/>

**Attack Details** ▾

- **default-src Used in Content Security Policy (CSP)**
  - **First observed on:** <https://ncst-qa.dhanushinfotech.com/auth/login>
  - **CSP Value:** default-src 'self'; script-src 'self'; style-src 'self'; img-src 'self' data; font-src 'self';
  - **CSP Source:** header
  - **Summary:** Acunetix detected that you used default-src in CSP directive. It is important to know that default-src cannot be used as a fallback for the functions below: base-uri, form-action, frame-ancestors, plugin-types, report-uri, sandbox

1. **base-uri:** Controls the sources allowed for <base> tags.
2. **form-action:** Restricts URLs that can be used as form action targets.
3. **frame-ancestors:** Specifies valid parents that may embed the resource (via frames, iframes, etc.).
4. **plugin-types:** Defines allowed MIME types for plugins.
5. **report-uri:** Indicates the endpoint to which CSP violations should be reported.
6. **sandbox:** Applies restrictions on the resource's capabilities (e.g., preventing script execution).

**Remediation-** You should explicitly define these directives in your CSP to ensure comprehensive security coverage. Here's an example CSP update:

```
Content-Security-Policy: default-src 'self'; script-src 'self'; style-src 'self'; img-src 'self' data; font-src 'self'; base-uri 'self'; form-action 'self'; frame-ancestors 'none'; sandbox; report-uri /csp-violation-report-endpoint;
```

**Informational** **Content Security Policy Misconfiguration**

URL: <https://ncst-qa.dhanushinfotech.com/>

**Attack Details** ▾

- **data: Used in a Content Security Policy (CSP) Directive**
  - **First observed on:** <https://ncst-qa.dhanushinfotech.com/auth/login>
  - **CSP Value:** default-src 'self'; script-src 'self'; style-src 'self'; img-src 'self' data; font-src 'self';
  - **CSP Source:** header
  - **Summary:** Acunetix detected data: use in a CSP directive.
  - **Impact:** An attacker can bypass CSP and exploit a Cross-site Scripting vulnerability successfully by using data: protocol.
  - **Remediation:** Remove data: sources from your CSP directives.

 Informational

## Content Security Policy Misconfiguration

URL: <https://ncst-qa.dhanushinfotech.com/>

### Attack Details

- **An Unsafe Content Security Policy (CSP) Directive in Use**
  - **First observed on:** <https://ncst-qa.dhanushinfotech.com/hearings-view/>
  - **CSP Value:** default-src 'self'; script-src 'self' 'unsafe-inline' 'unsafe-eval'; style-src 'self' 'unsafe-inline';
  - **CSP Source:** header
  - **Summary:** Acunetix detected that one of following CSP directives is used: unsafe-eval, unsafe-inline. By using unsafe-eval, you allow the use of string evaluation functions like eval. By using unsafe-inline, you allow the execution of inline scripts, which almost defeats the purpose of CSP. When this is allowed, it's very easy to successfully exploit a Cross-site Scripting vulnerability on your website.
  - **Impact:** An attacker can bypass CSP and exploit a Cross-site Scripting vulnerability successfully.
  - **Remediation:** remove unsafe-eval and unsafe-inline from your CSP directives.

 Informational

## Content Security Policy Misconfiguration

URL: <https://ncst-qa.dhanushinfotech.com/>

### Attack Details

- **Nonce Usage Detected in Content Security Policy (CSP) Directive**
  - **First observed on:** <https://ncst-qa.dhanushinfotech.com/brochures>
  - **CSP Value:** default-src 'self'; script-src 'self' 'nonce-8gCs/938oTCw7Yr4qBafAA=='; style-src 'self' 'unsafe-inline'; img-src 'self' data;; font-src 'self';
  - **CSP Source:** header
  - **Summary:** CSP nonce directives make use of the inline scripts and script blocks possible in a page. However, this feature comes with CSP2 and CSP2 is not supported by all browsers.

 Informational

## Content Security Policy Misconfiguration

URL: <https://ncst-qa.dhanushinfotech.com/>

### Attack Details

- **Content Security Policy (CSP) Nonce Without Matching Script Block**
  - **First observed on:** [https://ncst-qa.dhanushinfotech.com/important\\_links](https://ncst-qa.dhanushinfotech.com/important_links)
  - **CSP Value:** default-src 'self'; script-src 'self' 'nonce-ZSPs2eVaZRXsn6eT1+iYLg=='; style-src 'self' 'unsafe-inline'; img-src 'self' data;; font-src 'self';
  - **CSP Source:** header
  - **Summary:** Acunetix detected that the page does not contain any script blocks with the nonce declared in CSP.
  - **Impact:** N/A
  - **Remediation:** Ensure that all the script blocks has a matching nonce. If this nonce is not necessary then remove it from CSP.

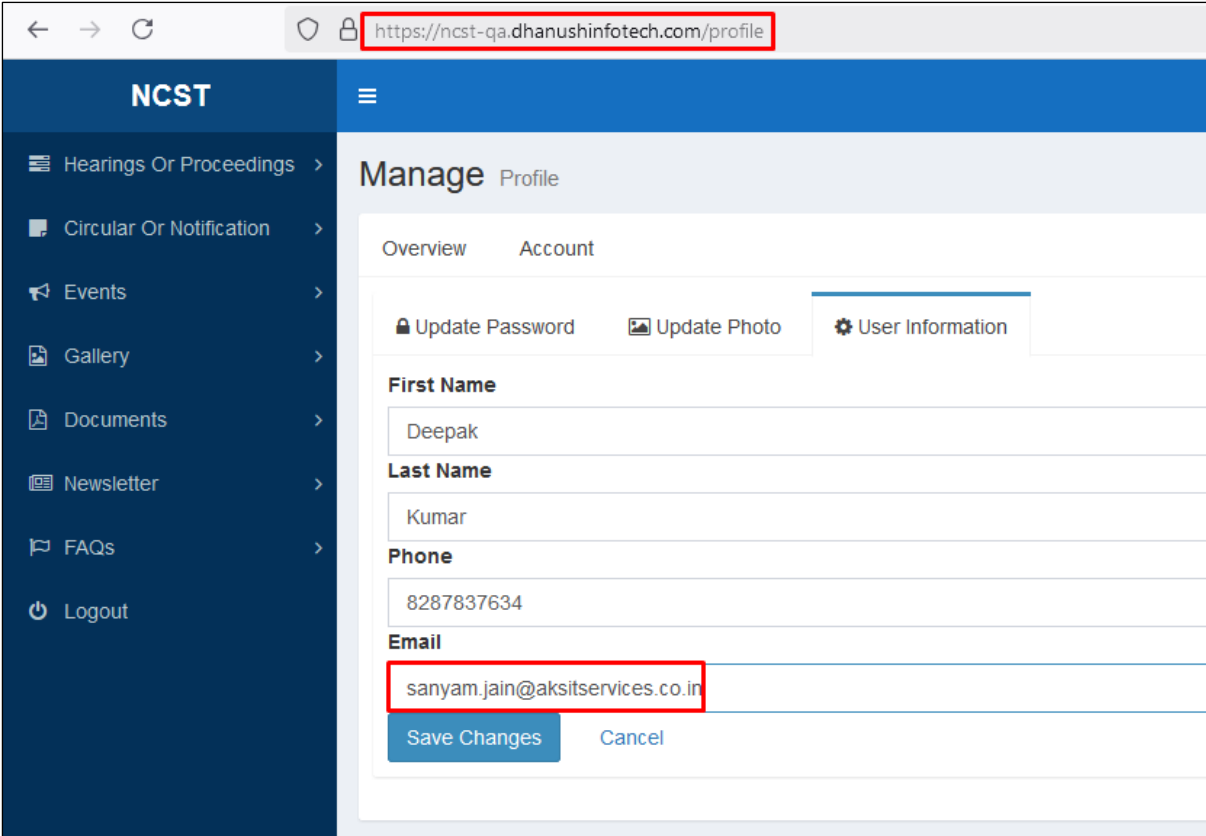
## 5. Missing Cookie Attributes (Already Reported)

The screenshot displays a web browser window with the URL `https://ncst-qa.dhanushinfotech.com/user`. The page shows a user profile for Deepak Kumar. The developer tools storage tab is open, showing a list of cookies. The 'ci\_session' cookie is highlighted, and its attributes are as follows:

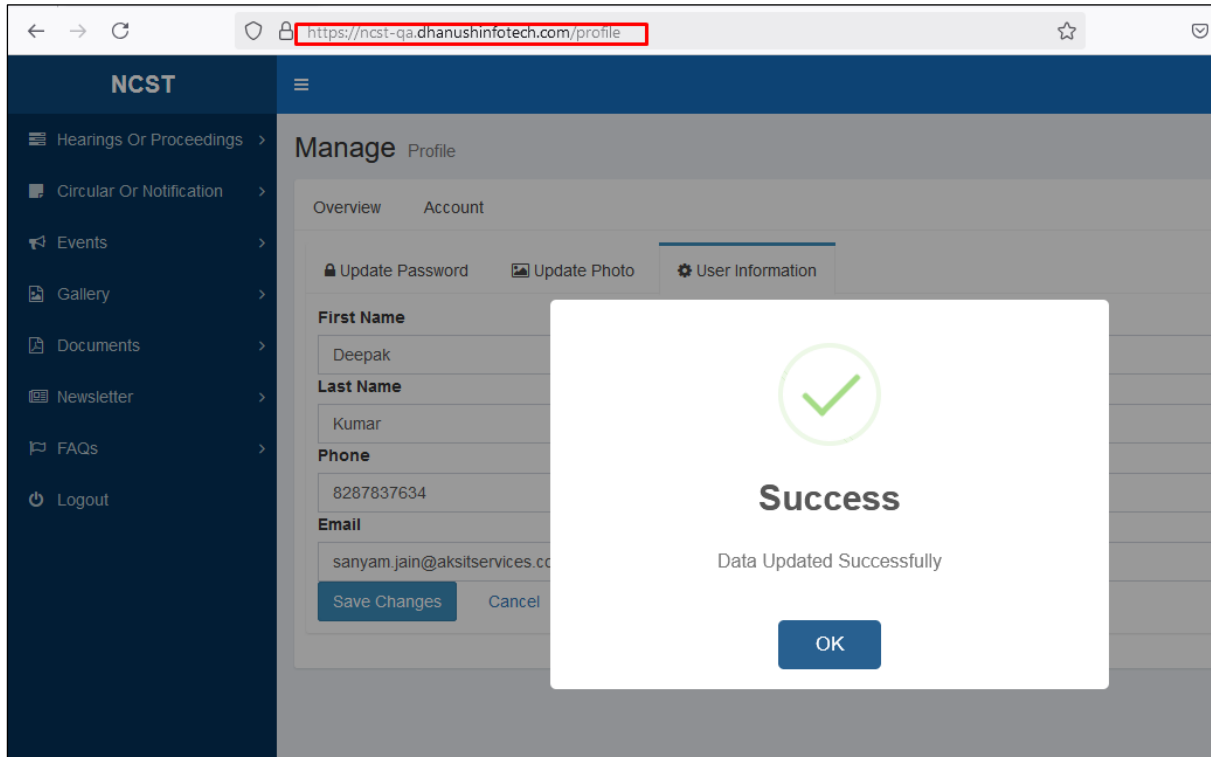
Name	Value	Domain	Path	Expires / Max-Age	Size	HttpOnly	Secure	SameSite	Last Accessed
ci_session	3od4pa5e7hdg0841auq8e...	ncst-qa.dhanushinf...	/	Fri, 27 Dec 2024 09:0...	42	true	false	None	Fri, 27 Dec 2024 07:0...

Solutions: Secure – True, Samesite – Lax/Strict

## 6. Unverified Email Change



The screenshot shows a web browser window with the URL <https://ncst-qa.dhanushinfotech.com/profile>. The page is titled "Manage Profile" and has a sidebar menu for "NCST" with options like "Hearings Or Proceedings", "Circular Or Notification", "Events", "Gallery", "Documents", "Newsletter", "FAQs", and "Logout". The main content area has tabs for "Overview" and "Account". Under the "Account" tab, there are three sub-sections: "Update Password", "Update Photo", and "User Information". The "User Information" section contains form fields for "First Name" (Deepak), "Last Name" (Kumar), "Phone" (8287837634), and "Email" (sanyam.jain@aksitservices.co.in). The email field is highlighted with a red box. Below the email field are "Save Changes" and "Cancel" buttons.



Solution: OTP Authentication mechanism should be there since the email address is used as username on login page.