

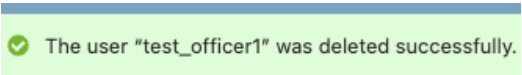






Test No.	Test Description	Test Data	Expected Result	Actual Result	Notes
Base Application					
1	Create User - Admin user can create accounts for Officer user type.	Username: test_officer1 Password: ssd_password	Successful account creation.	 <p>The user "test_officer1" was added successfully. You may edit it again below.</p> <p>Change user</p> <p>test_officer1</p> <p>Username: test_officer1</p> <p>Required. 150 characters or fewer. Letters, digits and @/./+/-/_ only.</p> <p>Password: algorithm: pbkdf2_sha256 iterations: 600000 salt: Wf2Ywv***** hash: V0cbvz*****</p> <p>Raw passwords are not stored, so there is no way to see this user's password, but you can change the password using this form.</p>	Successfully created an account.
	<p>Actual Result</p>  <p>✓ The user "test_officer1" was added successfully. You may edit it again below.</p> <p>Change user</p> <p>test_officer1</p> <p>Username: test_officer1</p> <p>Required. 150 characters or fewer. Letters, digits and @/./+/-/_ only.</p> <p>Password: algorithm: pbkdf2_sha256 iterations: 600000 salt: Wf2Ywv***** hash: V0cbvz*****</p> <p>Raw passwords are not stored, so there is no way to see this user's password, but you can change the password using this form.</p>				
2	Delete User - Admin User can delete accounts.	Username: test_officer1 Password: ssd_password.	Successful account deletion.	 <p>✓ The user "test_officer1" was deleted successfully.</p>	Successfully deleted the account.
3	User Login – Able to login to system and authenticated.	Previously created account with correct username and password Username: ssd_team2 Password: ssd_password	Successful login.	 <p>Welcome to the Dutch National Cybersecurity Centre Cybercrime Repository</p> <p>Welcome, Syntax Squad!</p> <p>Last Login: July 17, 2023, 6:12 a.m.</p> <p>nal Cybersecurity Cen</p> <p>Welcome, Syntax Squad!</p> <p>Last Login: July 17, 2023, 6:12 a.m.</p>	Part of automated testing suite listed below.

Test No.	Test Description	Test Data	Expected Result	Actual Result	Notes
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Base Application					
4	User login – unable to login with incorrect username and password	'username': self.username, 'password': 'wrongpassword'	Invalid login.	<p>Sign in to your account</p> <p>Please enter a correct username and password. Note that both fields may be case-sensitive.</p> <p>Username self.username</p> <p>Password</p> <p>Forgot password?</p> <p>Sign in</p>	Part of automated testing suite listed below.
5	User Logout – Admin and Officer able to logout of system.	Previously logged in account with correct username and password Username: ssd_team2 Password: ssd_password	Successful logout.	<p>Logged Out</p> <p>You have been successfully logged out.</p> <p>Log in again? Return to home page</p>	Successfully logged out.

Test No.	Test Description	Test Data	Expected Result	Actual Result	Notes
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Cases Service														
7	Create Case – Officer Users able to create new artefact known as a case.	'Title': 'New Case', 'Description': 'This is a new case'.	User is able to create case.		Part of automated testing suite listed below									
	Actual Result 													
8	View Cases – Users able to view a list of all cases created.	N/A	User is able to view list of all cases.		Part of automated testing suite listed below.									
	Actual Result Case List <table><tr><th>Case ID</th><th>Title</th><th>Actions</th></tr><tr><td>3</td><td>Active malware</td><td>View Case</td></tr><tr><td>4</td><td>Vulnerability on ABC.net</td><td>View Case</td></tr></table>					Case ID	Title	Actions	3	Active malware	View Case	4	Vulnerability on ABC.net	View Case
Case ID	Title	Actions												
3	Active malware	View Case												
4	Vulnerability on ABC.net	View Case												

Test No.	Test Description	Test Data	Expected Result	Actual Result	Notes
Cases Service					
9	View cases – User is able to see detailed view of single case.	N/A	User is able to view single case.	Case Detail Active malware Case ID: 3 Created by: Syntax Squad Description: There is active malware on XYZ.com	Part of automated testing suite listed below.
10	View cases – User is unable to see detailed view of single case when trying to go to incorrect url.	Go to url/cases/453	User is able to view single case.	<pre> i http://localhost:8000/cases/453/ Page not found (404) No case found matching the query Request Method: GET Request URL: http://localhost:8000/cases/453/ Raised by: cases_service.views.CaseDetailView Using the URLconf defined in base_app.urls, Django tried these URL patterns, in order: 1. [name='home'] 2. cases/ [name='case_list'] 3. cases/ <int:pk>/ [name='case_detail'] </pre>	Part of automated testing suite listed below.
11	Delete Cases – Officer Users able to delete cases.	N/A	User is able to delete single case.		Part of automated testing suite listed below.

Test No.	Test Description	Test Data	Expected Result	Actual Result	Notes
CVD Service					
11	Create CVD Report – The General Public (non-account user) can create a Coordinated Vulnerability Disclosure.	<pre>'first_name': 'Jane', 'last_name': 'Doe', 'email': 'jane@example.com', 'phone': '0987654321', 'vulnerability_type': 'insecure_deserialization', , 'explanation': 'Test explanation', 'vulnerability_reason': 'Test vulnerability reason', 'domain_or_ip': '192.0.2.0', 'pgp_key': 'Test PGP Key'</pre>	User is able to create CVD.	<div><p>First Name: Jane Last Name: Doe Email: jane@example.com Phone: '0987654321' Vulnerability Type: data_exposure Explanation: 'Test explanation', Reason: 'Test vulnerability reason' Domain/IP: 192.0.2.0 PGP Key: 'Test PGP Key'</p><div>View</div></div>	Part of automated testing suite listed below.

Test No.	Test Description	Test Data	Expected Result	Actual Result	Notes
CVD Service					
12	View CVD Reports – Officer Users can view a list of all CVD reports.	N/A	User is able to See all CVD.	<div><div><div>CVD Report List</div><div>Create New CVD</div><div><div>First Name: Syntax</div><div>Last Name: Squad</div><div>Email: syntaxsquad@gmail.com</div><div>Phone: 123456789</div><div>Vulnerability Type: misconfigurations</div><div>Explanation: There is a misconfiguration</div><div>Reason: IT is dangerous</div><div>Domain/IP: 99.11.123</div><div>PGP Key: 123</div><div>View</div></div></div><div><div>First Name: Vulnerability</div><div>Last Name: Reporter</div><div>Email: abc@123.com</div><div>Phone: 011899982753</div><div>Vulnerability Type: availability</div><div>Explanation: The website keeps going down!</div><div>Reason: This is a critical website that needs to stay up</div><div>Domain/IP: Website.com</div><div>PGP Key: 123</div><div>View</div></div><div><div>First Name: Jane</div><div>Last Name: Doe</div><div>Email: jane@example.com</div><div>Phone: '0987654321'</div><div>Vulnerability Type: data_exposure</div><div>Explanation: 'Test explanation',</div><div>Reason: 'Test vulnerability reason'</div><div>Domain/IP: 192.0.2.0</div><div>PGP Key: 'Test PGP Key'</div><div>View</div></div></div>	Part of automated testing suite listed below.

Test No.	Test Description	Test Data	Expected Result	Actual Result	Notes
13	Delete CVD Report – Officer Users able to delete CVD Reports.	N/A	User is able to delete CVD report.	<p>Jane Doe CVD no longer in list seen in test 10</p> <p>CVD Report List</p> <p>Create New CVD</p> <div> <p>First Name: Syntax Last Name: Squad Email: syntaxsquad@gmail.com Phone: 123456789 Vulnerability Type: misconfigurations Explanation: There is a misconfiguration Reason: IT is dangerous Domain/IP: 99.11.123 PGP Key: 123</p> <p>View</p> </div> <div> <p>First Name: Vulnerability Last Name: Reporter Email: abc@123.com Phone: 011899982753 Vulnerability Type: availability Explanation: The website keeps going down! Reason: This is a critical website that needs to stay up Domain/IP: Website.com PGP Key: 123</p> <p>View</p> </div>	Part of automated testing suite listed below.


Additionally Tested Security Functionalities


Logging and Monitoring for Warnings such as Failed Login Attempts

```
Failed login attempt - Username: haarismian1, IP address: 127.0.0.1  
[16/Jul/2023 00:23:43] "POST /accounts/login/ HTTP/1.1" 200 7826  
Not Found: /favicon.ico  
[16/Jul/2023 00:23:43] "GET /favicon.ico HTTP/1.1" 404 4036  
Not Found: /favicon.ico  
[16/Jul/2023 00:23:43] "GET /favicon.ico HTTP/1.1" 404 4036
```


Additionally Tested Security Functionalities

IP Address Blocked after 5 Failed Login Attempts

[Home](#) [Submit CVD Report](#) [View all active cases](#) [Login](#) [Privacy Policy](#)



Sign in to your account

You have exceeded the maximum number of login attempts. Your IP has been blocked for 10 minutes.

Username

haarismian

Password

.....

[Forgot password?](#)

Sign in

Additionally Tested Security Functionalities

Automated Test Code Coverage Report – 87% Coverage (Considered Exemplary)

haarismian@Haariss-MacBook-Pro ncsc_cases_app % coverage report			
Name	Stmts	Miss	Cover
base_app/__init__.py	0	0	100%
base_app/settings.py	24	0	100%
base_app/tests.py	16	0	100%
base_app/urls.py	6	0	100%
base_app/views.py	67	32	52%
cases_service/__init__.py	0	0	100%
cases_service/admin.py	3	0	100%
cases_service/apps.py	4	0	100%
cases_service/migrations/0001_initial.py	6	0	100%
cases_service/migrations/0002_case.py	4	0	100%
cases_service/migrations/0003_remove_case_case_id.py	4	0	100%
cases_service/migrations/0004_delete_choice_delete_question.py	4	0	100%
cases_service/migrations/0005_case_user.py	6	0	100%
cases_service/migrations/__init__.py	0	0	100%
cases_service/models.py	9	0	100%
cases_service/tests.py	46	0	100%
cases_service/urls.py	5	0	100%
cases_service/views.py	60	12	80%
cvd_service/__init__.py	0	0	100%
cvd_service/admin.py	1	0	100%
cvd_service/apps.py	4	0	100%
cvd_service/migrations/0001_initial.py	5	0	100%
cvd_service/migrations/0002_remove_cvdreport_officer.py	4	0	100%
cvd_service/migrations/0003_alter_cvdreport_email.py	4	0	100%
cvd_service/migrations/0004_alter_cvdreport_email_alter_cvdreport_first_name_and_more.py	5	0	100%
cvd_service/migrations/__init__.py	0	0	100%
cvd_service/models.py	16	1	94%
cvd_service/tests.py	37	0	100%
cvd_service/urls.py	4	0	100%
cvd_service/views.py	42	6	86%
manage.py	12	2	83%
TOTAL	398	53	87%

Additionally Tested Security Functionalities

Logging all API Calls

```
[16/Jul/2023 00:23:07] "GET / HTTP/1.1" 200 6243
[16/Jul/2023 00:23:10] "GET /cvd/create/ HTTP/1.1" 200 12110
[16/Jul/2023 00:23:12] "GET /cvd/create/ HTTP/1.1" 200 12110
[16/Jul/2023 00:23:13] "GET /cases/ HTTP/1.1" 200 5123
[16/Jul/2023 00:23:16] "GET /accounts/login/ HTTP/1.1" 200 7689
[16/Jul/2023 00:23:18] "POST /accounts/login/ HTTP/1.1" 302 0
[16/Jul/2023 00:23:18] "GET / HTTP/1.1" 200 6027
```

Successful XSS and SQL Injection Projection

Create New Case		
Case List		
Case ID	Title	Actions
1	<script>alert(123)</script>	Delete Case View Case
2	select title, text from news where id=10 or 1=1	Delete Case View Case

Additionally Tested Security Functionalities

CSRF (Cross-Site Request Forgery) Protection in Codebase on all Forms

Example 1

```
<form
  class="bg-white w-full rounded-lg shadow-lg p-8"
  method="POST"
  action="{% url 'cvd_service:create_cvd' %}"
>
  {% csrf_token %}
```

Example 2

```
2
3 <h2>Register</h2>
4 <form method="post">
5   {% csrf_token %} {{ form.as_p }}
6   <button type="submit">Register</button>
7 </form>
8
```

Additionally Tested Security Functionalities

Role Based Authentication Example

Django administration

You are authenticated as haarismian, but are not authorized to access this page. Would you like to login to a different account?

Username:

haarismian

Password:

.....

Log in

Additionally Tested Security Functionalities

PEP8 Style Guide Linter

```
{  
  "[python]": {  
    "editor.defaultFormatter": "ms-python.autopep8"  
  },  
}
```

Example of Hashed and Secure Passwords

id	password	last_login	is_superuser	username
1	pbkdf2_sha256\$60...	2023-07-15 22:58:...	1	ncscadmin
2	pbkdf2_sha256\$60...	2023-07-16 00:24:1...	0	haarismian

Additionally Tested Security Functionalities


Example of Cookie Consent Popup

Statement of agreement (required)
☐ Data provided by you may be used for communication in relation to the notification you made and for sending a reward if you qualify.

We use cookies to improve your experience. By using our site, you agree to our use of cookies.[I Agree](#)

Example of Form Validation

Statement of agreement (required)
☐ Data provided by you may be used for communication in relation to the notification you made and for sending a reward if you qualify.

 Please check this box if you want to proceed.

Create

Additionally Tested Security Functionalities

Example Demonstrating Personally Identification Information

Create CVD Report

First Name

Eashan

Last Name

Karnik

Email

ekarnik@gmail.com



Phone

4168283115



Vulnerability Type

Broken Access Control

Explanation

test plaintext



Additionally Tested Security Functionalities

db.sqlite3

Search tables... Reset Filters Records: 2 Search 2 records...

Tables (13)	id	first_name	last_name	email	vulnerability_t...	explanation	vul
> django_migrations	Search column...	Search column...	Search column...	Search column...	Search column...	Search column...	Se
> sqlite_sequence	1	5	89 Bytes	89 Bytes	105 Bytes	availability	test
> auth_group_permissions	2	6	89 Bytes	89 Bytes	105 Bytes	access_control	test plaintext
> auth_user_groups							
> auth_user_user_permissic							
> django_admin_log							
> django_content_type							
> auth_permission							
> auth_group							
> auth_user							
> cases_service_case							
> cvd_service_cvdreport							
> django_session							