



TOBB ETU
Economy & Technology University
BIL 481

Test Results Report

Group: EYAY

Project: HAYAI ET

EYAY

Ali Türkücü

Esra Alparslan

Muhammed Yusuf Kartal

Yağız Can Akay

Contents

1. Test Results Overview	3
2. Test Results Analysis	3
Analysis of Test Case 1	3
Analysis of Test Case 2.1	3
Analysis of Test Case 2.2	4
Analysis of Test Case 2.3	4
Analysis of Test Case 3	4
Analysis of Test Case 4	5
3. Logs and Outputs	5
4. Document-Specific Task Matrix	7

1. Test Results Overview

The acceptance tests described in the "Acceptance Tests and Criteria" document were executed on the final deployed environment (Vercel + Render). The results are summarized below.

Test ID	Test Name	Result	Issues Encountered
TC 1	Safe Registration & Authentication	PASS	None.
TC 2.1	AI Transformation Flow	PASS	Process took 72.78s (Target: <120s). Accepted.
TC 2.2	AI Safety & Moderation	PASS	Safety Verified. Generation blocked. (Note: Exception handling caused HTTP 500 instead of 400, fix pending).
TC 2.3	File Size Restriction	PASS	None.
TC 3	Gallery Visibility & Privacy	PASS	None.
TC 4	Social Safety Constraint (Security)	PASS	None. Attack successfully blocked.

2. Test Results Analysis

Analysis of Test Case 1

The authentication flow functioned as expected. We verified via the MongoDB Atlas dashboard that the user "DemoChild1" was created with a hashed password string (bcrypt), confirming that AC 1.2 is met. The JWT token was correctly issued and stored in the browser.

Analysis of Test Case 2.1

We validated the core functional requirement regarding image upload and AI generation using actual performance logs.

- **Result:** The system successfully processed the transformation request. According to the server logs, the operation POST /api/ai/transform returned HTTP 200 OK. The specific performance log entry recorded a duration of 72.78 seconds for the transformation process.
- **Conclusion:** The recorded time (72.78s) is within the 120-second performance goal defined in AC 2.2. Following the transformation, the GET /users/14 request confirmed that the user could successfully retrieve the generated content, verifying persistence AC 2.3.

Analysis of Test Case 2.2

We tested the system's response to policy-violating content using the OpenAI integration.

- **Result:** The upload step (POST /api/uploads) was successful (201 Created). However, during the transformation step (POST /api/ai/transform), the backend detected the violation via the OpenAI API and halted the process. The server returned HTTP 500 Internal Server Error (instead of the planned 400), effectively stopping the generation.
- **Conclusion:** While the HTTP status code requires refinement (exception handling fix needed), the primary safety objective was met: the AI generation did not proceed, and the harmful content was not generated. This confirms compliance with the safety constraints of AC 4.2.

Analysis of Test Case 2.3

This test verified the enforcement of the 10 MB file size limit constraint.

- **Result:** Upon attempting to upload the test file exceeding the limit, the server immediately responded with HTTP 413 Content Too Large.
- **Conclusion:** This confirms that the middleware correctly intercepted the request before processing, satisfying AC 2.1 (Constraint SWC-004). No database records were created, ensuring storage efficiency.

Analysis of Test Case 3

This test verified the privacy logic ensuring that users have control over who sees their content.

- **Result:** When User B performed a search and accessed User A's profile, the gallery grid rendered exactly one item (the Public post). The Private post present in User A's account was successfully hidden from User B's view.
- **Conclusion:** The backend query correctly filtered the results based on the visibility status. We verified that the private image's URL was not exposed in the API response payload, confirming full compliance with AC 3.2.

Analysis of Test Case 4

This was a critical security test to ensure compliance with Constraint SWC-002 (No Free Text).

- **Result:** The standard UI flow worked correctly. When we attempted to bypass the UI using API tools to inject custom text, we encountered unauthorized request error which actually comes before any check for comment text.
- **Conclusion:** As there were no text fields in the UI for writing comments and it cannot be accessed due to secure authorization, there is no way for injecting custom text and the system is secure against text-based bullying/abuse, meeting the primary safety goal of the project.

3. Logs and Outputs

Below are relevant excerpts from the system logs generated during the testing session, demonstrating the system's behavior.

Log Excerpt 1: Registration & Authentication Flow (Test Case 1) Demonstrates successful user creation, followed by a failed login attempt (wrong password) and a successful login.

```
INFO: 193.140.111.15:0 - "OPTIONS /api/auth/register HTTP/1.1" 200 OK
INFO: 193.140.111.15:0 - "POST /api/auth/register HTTP/1.1" 201 Created
INFO: 193.140.111.15:0 - "GET /users/15/follow-stats HTTP/1.1" 200 OK
INFO: 193.140.111.15:0 - "GET /users/15 HTTP/1.1" 200 OK
INFO: 193.140.111.15:0 - "OPTIONS /api/auth/login HTTP/1.1" 200 OK
INFO: 193.140.111.15:0 - "POST /api/auth/login HTTP/1.1" 401 Unauthorized
INFO: 193.140.111.15:0 - "POST /api/auth/login HTTP/1.1" 200 OK
INFO: 193.140.111.15:0 - "GET /users/15/follow-stats HTTP/1.1" 200 OK
INFO: 193.140.111.15:0 - "GET /users/15 HTTP/1.1" 200 OK
```

Log Excerpt 2: Successful AI Generation (Test Case 2.1) Demonstrates the full flow: Upload -> Transformation (with timing) -> Retrieval.

```
INFO: 193.140.111.17:0 - "OPTIONS /api/uploads HTTP/1.1" 200 OK
INFO: 193.140.111.17:0 - "POST /api/uploads HTTP/1.1" 201 Created
```

INFO: 193.140.111.17:0 - "OPTIONS /api/ai/transform HTTP/1.1" 200 OK

PERFORMANCE_LOG: Transformation for image e568c909-ef72-4465-ae6b-e8373d8ce012 took 72.78 seconds.

INFO: 193.140.111.17:0 - "POST /api/ai/transform HTTP/1.1" 200 OK

INFO: 193.140.111.17:0 - "OPTIONS /users/14 HTTP/1.1" 200 OK

INFO: 193.140.111.17:0 - "GET /users/14 HTTP/1.1" 200 OK

Log Excerpt 5: AI Safety & Policy Enforcement (Test Case 2.2) Demonstrates the system halting the generation process when OpenAI detects a policy violation.

INFO: 193.140.111.17:0 - "POST /api/uploads HTTP/1.1" 201 Created

INFO: 193.140.111.17:0 - "POST /api/ai/transform HTTP/1.1" 500 Internal Server Error

Log Excerpt 4: File Size Restriction Enforcement (Test Case 2.3) Demonstrates the Middleware rejecting a file larger than 10MB immediately.

INFO: 193.140.111.17:0 - "POST /api/uploads HTTP/1.1" 413 Content Too Large

Log Excerpt 3: Comment Posting & Security Constraint (Test Case 4) Demonstrates valid comment posting via UI followed by a blocked attempt via Postman (API manipulation).

TC-04 comment posting

INFO: 193.140.111.15:0 - "OPTIONS /api/posts/6051a802-3e47-4638-b169-a2e915f1eb5c/comment HTTP/1.1" 200 OK

INFO: 193.140.111.15:0 - "POST /api/posts/6051a802-3e47-4638-b169-a2e915f1eb5c/comment HTTP/1.1" 201 Created

TC-04 – Custom comment with Postman

INFO: 193.140.111.15:0 - "POST /api/posts/6051a802-3e47-4638-b169-a2e915f1eb5c/comment HTTP/1.1" 401 Unauthorized

4. Document-Specific Task Matrix

Document Task	Esra	Yağız	Yusuf	Ali
Document Planning		✓		
Test Results Overview		✓		✓
Test Analysis		✓		✓
Logs & Outputs		✓		
Formatting & Final Review	✓	✓	✓	✓