SESSION NOTES — ECSE 429 PART A

Build: runTodoManagerRestAPI-1.5.5.jar   
Area Under Test: Categories (incl. relationships & media types)   
Environment: macOS, localhost:4567, Postman + curl   
Start (Date/Time): Oct 5, 2025, ~22:35–23:20 #Duration: ~45 minutes   
Tester (Name / ID / Email): Diana Bodik – 261108544 – [diana.bodik@mail.mcgill.ca](mailto:diana.bodik@mail.mcgill.ca)

CHARTER

Explore /categories endpoints focusing on:   
(a) creation, linking, and retrieval behaviors   
(b) validation errors and XML/JSON response consistency

Identify undocumented or inconsistent responses across media types and CRUD actions.

SESSION LOG

[22:36] Setup & Launch   
Requests: java -jar runTodoManagerRestAPI-1.5.5.jar   
Tools: Postman + curl   
Observation: Server started successfully.

[22:37] Category Creation   
Requests:   
POST /categories {"title":"S1 Category"} → 201 Created   
POST /categories {} → (no response body, silent failure)   
Observation: Missing title field fails silently (no 400 returned).

[22:38] Category ↔ Todo Linking   
Requests:   
POST /todos/{todoId}/categories {"id":"11"} → 201 Created   
(even when todoId invalid)   
Observation: Linking succeeds for non-existent Todo IDs → data integrity issue.

[22:39] Category Retrieval   
Requests: GET /categories   
Observation: Newly created categories sometimes missing until server restart → possible caching bug.

[22:40] XML Response Validation   
Requests: GET /categories Accept: application/xml   
Observation: id attribute missing in XML output (despite Swagger docs).

[22:41] Category Deletion   
Requests: DELETE /categories/{id}   
Observation: Category removed from main list but still present in linked Todo relationships → incomplete deletion.

BUGS LOGGED / CLOSED

BUG-001 (CAT): Silent failure on missing title field → no validation error.

BUG-002 (CAT): Linking category to invalid Todo ID succeeds → data integrity risk.

BUG-003 (CAT): XML responses omit id attribute.

BUG-004 (CAT): Cache delay → GET /categories shows stale results.

BUG-005 (CAT): Deleting a category does not remove references from linked Todos.

ISSUES / CONCERNS

Inconsistent validation may mislead clients into believing failed requests succeeded.

Stale cache data can break UI synchronization and automated tests.

Missing id in XML reduces interoperability with clients expecting it.

LIST OF TESTING IDEAS (NEW)

Add tests for cache invalidation with back-to-back POST/GET calls.

Test malformed XML payload handling and verify proper 400 responses.

Link multiple categories to a single Todo and unlink them sequentially.

Verify that DELETE removes references from all linked Todos.

AREAS OF POTENTIAL RISK

Cache inconsistency → stale read issues.

Missing id in XML → schema breakage for strict clients.

Weak validation → data corruption across relationships.

CAPABILITIES (EVIDENCE)

Script: ../CapabilitiesScripts/categoriesCapabilities.sh

Tooling: Postman collections + curl requests

Outputs: /Bug Summaries/ folder contains detailed bug records.

SUMMARY OF FINDINGS

Category creation/retrieval works for JSON but fails silently for missing fields.

XML responses omit id attribute (BUG-003).

Linking succeeds for invalid Todo IDs (BUG-002).

Cache refresh delay causes outdated GET results (BUG-004).

Deleting category leaves residual links (BUG-005).