

National University of Computer and Emerging Sciences



Lab Quiz 4

for

Web Engineering (SL3003)

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Section	6B
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API for Fine tracking (30 Minutes) [total marks 10]

Objective:

Build a simple Fine Tracking API using Express.js that allows:

1. Adding a fine (POST)
 2. Updating fine status by ID (PATCH/PUT)
 3. Proper response codes
 4. File structure follows best practices
 5. Test your endpoints in Postman and attach screenshots
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Evaluation Criteria (Total 10 Marks)

Criterion	Marks
Correct file structure	2
POST /fine implementation	2
PATCH/PUT /fine/:id with checks	2
Proper status codes used	2
Postman screenshots attached	2

Instructions

1. **Create a simple To-Do item schema:**
 - o Fields: `title` (String, required), `createdAt`, `updatedAt`, `status`, `id` (auto-increment)
 2. **Add a Fine**
 - o Method: `POST /fine`
 - o Body:

```
{ "title": "over speeding", "status": "pending" }
```
 - o Respond with appropriate code and message
 3. **Update a fine**
 - o Method: `PUT/PATCH /fine/:id`
 - o If item exists: update its status to paid. Respond with appropriate code and message
 - o If not found: Respond with not found and appropriate code
 4. **Use correct status codes** and send JSON responses.
 5. **Test using Postman**, and attach screenshots:
 - o One for adding a to-do
 - o One for deleting an existing to-do
 - o One for deleting a non-existing to-do
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Response Codes

Code	Type	Meaning	When to Use
200	✓ Success	OK – Request succeeded	GET, PUT, PATCH, DELETE operations when everything is fine
201	✓ Created	Resource created	POST request when a new user or gadget is successfully created
204	✓ No Content	Success, no data to return	DELETE request when item is successfully removed
400	✗ Client Error	Bad Request	Invalid input, missing required fields
401	🔒 Unauthorized	Authentication required	Used when user is not logged in
403	🚫 Forbidden	Access denied	e.g. normal user tries to access admin functionalities
404	? Not Found	Resource not found	e.g. user ID doesn't exist
500	💣 Server Error	Internal server error	Uncaught error, DB failure, server crash