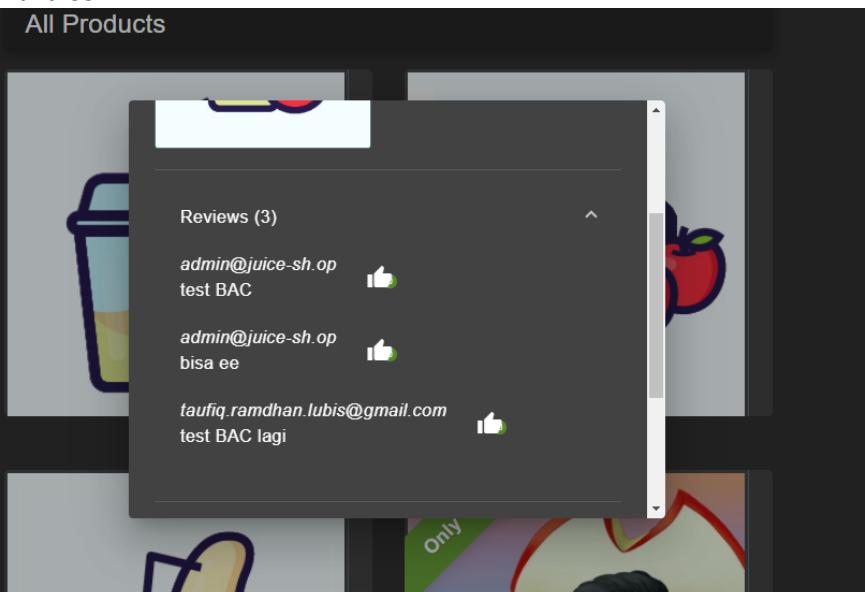
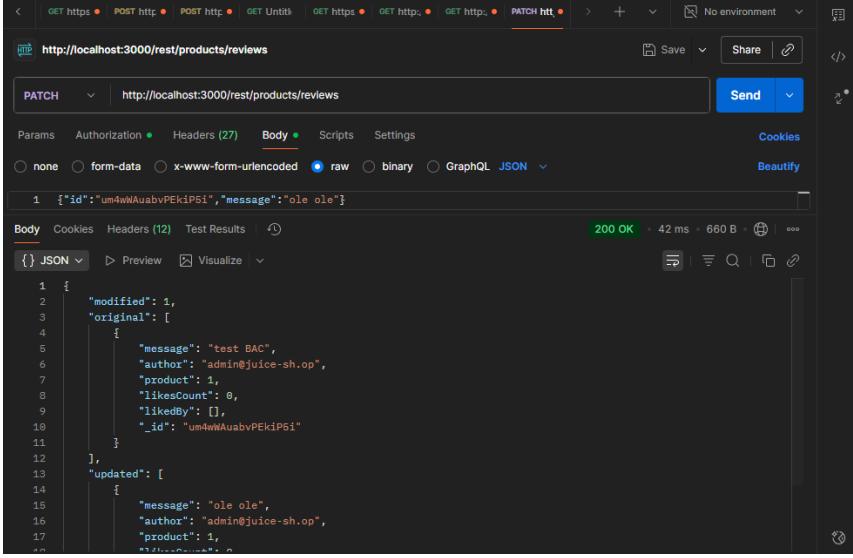
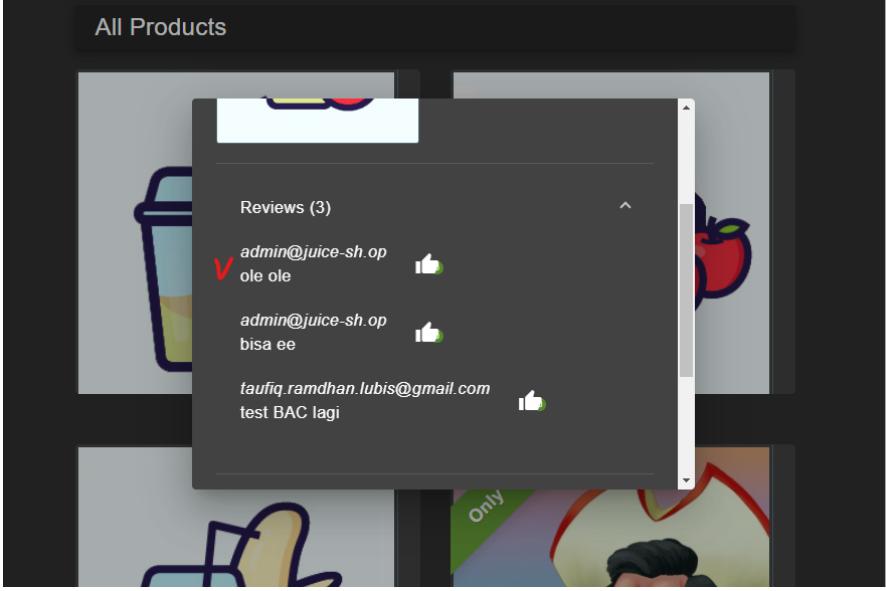


| No. | Uraian BAC  |
|-----|---|
| 1.  | Mengubah review orang lain (login dengan akun selain admin@juice)   |
|     | <p>Bukti SS</p>  <p>Network tab in developer tools showing a POST request to '/reviews'. The response body contains the modified review data:</p> <pre> data: [   {     message: "ole ole",     author: "admin@juice-sh.op",     product: 1,     likesCount: 0,     likedBy: []   },   {     message: "ole ole",     author: "admin@juice-sh.op",     product: 1,     likesCount: 0,     likedBy: []   },   {     message: "bisa ee",     author: "admin@juice-sh.op",     product: 1,     likesCount: 0,     likedBy: []   },   {     message: "test BAC lagi",     author: "taufiq.ramdhhan.lubis@gmail.com",     product: 1,     likesCount: 0,     likedBy: []   } ] status: "success"   </pre> |

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|  | <p><b>Root Cause Analysis</b></p> <ol style="list-style-type: none"> <li>1. Server tidak melakukan otentikasi/otorisasi pada route update review.</li> <li>2. Endpoint menerima id review dari client dan langsung melakukan UPDATE tanpa memeriksa pemilik (owner) review.</li> <li>3. Client-side validation dipercaya (salah) — semua pemeriksaan harus di server.</li> <li>4. Koneksi DB / query tidak membatasi berdasarkan user_id.</li> </ol>   |
|  | <p><b>Rekomendasi</b></p> <ol style="list-style-type: none"> <li>1. Wajibkan otentikasi (user harus login).</li> <li>2. Otorisasi: pastikan user adalah owner resource sebelum izinkan update/delete.</li> <li>3. Enforce ownership di query DB sendiri (WHERE id = ? AND user_id = ?).</li> <li>4. Audit &amp; logging untuk perubahan resource sensitif.</li> <li>5. (Opsional tapi disarankan) DB-level protections: Row-Level Security (Postgres) atau stored-procedure checks.</li> </ol> |

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|  | Verification scenario |
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1. Return 403 Forbidden bila user bukan owner.