

Functional Requirements

1) Product Management

- 1.1 — The system shall store product information in products.json.
 - 1.2 — The system shall allow viewing all products.
 - 1.3 — The system shall return products in pages of 10 items.
 - 1.4 — The system shall sort products by dateAdded in descending order.
 - 1.5 — The system shall calculate and show the **average rating** for each product based on all reviews.
 - 1.6 — The system shall allow filtering products by category.
 - 1.7 — The system shall allow searching products by name (case-insensitive).
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2) Review Management

- 2.1 — The system shall allow users to view all reviews for a product.
 - 2.2 — The system shall allow users to **add** a new review for a product.
 - 2.3 — The system shall allow users to **edit/update** an existing review.
 - 2.4 — The system shall allow users to **delete** an existing review.
 - 2.5 — The system shall store all reviews in reviews.json.
 - 2.6 — The system shall allow ratings only in the range of 1 to 5.
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3) Rating & Computation

- 3.1 — The system shall compute averageRating of a product dynamically from all its reviews.
- 3.2 — The system shall update the average rating automatically after add/update/delete review.