Review Linking to the Product

System Impact Summary
After submitting a review, the new review ID is not added to the
corresponding Product's reviewIds list, causing product pages to omit recently
submitted reviews.

Description

The postReview(Review review) method in ReviewService saves the new review
but fails to associate the review's ID with its Product. As a result, calls to fetch a
product's reviews (by inspecting Product.reviewIds) omit the latest review.

Steps to Reproduce

1. Stub productRepository.findById(productId)
2. Stub reviewRepository.save(review) → testReview with ID R1.
3. Call reviewService.postReview(testReview).
4. Inspect testProduct.getReviewIds().

Expected Behavior: testProduct.getReviewIds() should
contain testReview.getReviewId().

Actual Behavior: testProduct.getReviewIds() remains empty, so the UI will not
display the newly submitted review.

Severity: Medium – Newly submitted reviews do not appear under products,
leading to user confusion and missing feedback.

Affected Component(s): ReviewService, Product entity's reviewIds list

Root Cause: Service implementation omits the step of
adding review.getReviewId() to the product's reviewIds before saving the updated
product record.

Proposed Fix In ReviewService, after saving the review, add: review Id to and then
save the product.