

System Vulnerability Allowing Empty Category Names

Description: A vulnerability was discovered where the system could potentially allow the creation of product categories with empty names. Such categories would cause UI rendering issues, navigation problems, and catalog inconsistencies.

Steps to Reproduce:

1. Log in as a Product Manager
2. Navigate to the category management section
3. Attempt to create a new category with an empty name field
4. Submit the form

Expected Behavior: The system should reject the category creation and display an error message.

Actual Behavior: Without validation, the system would create a category with an empty name, causing display and navigation issues.

Severity: Medium

Affected Component: CategoryService

Root Cause: Missing input validation for category name fields.

Fix Implemented: Added validation in the `addCategory` method of `CategoryService.java` to check for null or empty category names and return an appropriate error response: