**1. Product Search & Browsing**

**Test Case ID: TC\_PS\_001**

* **Test Case Description**: Search for a product using a valid keyword.
* **Priority**: High
* **Test Steps**:
  1. Open the ShopforAll website.
  2. Enter "running shoes" in the search bar.
  3. Click the "Search" button.
* **Expected Result**:
  1. The search results page displays a list of products containing "running shoes" in their name or description.
  2. Filters for refining search results (e.g., by brand, price) are available.
* **Pass/Fail Criteria**:
  1. **Pass**: The search results page displays relevant products and filters are available.
  2. **Fail**: The search results are irrelevant, the search page displays an error message, or filters are missing.

**Test Case ID: TC\_PS\_002**

* **Test Case Description**: Search for a product using an invalid keyword.
* **Priority**: Medium
* **Test Steps**:
  1. Open the ShopforAll website.
  2. Enter "asdfghjkl" in the search bar.
  3. Click the "Search" button.
* **Expected Result**:
  1. The search results page displays a message indicating no products were found.
  2. Suggestions for related searches or categories are displayed.
* **Pass/Fail Criteria**:
  1. **Pass**: The search results page shows a "No products found" message and provides suggestions.
  2. **Fail**: The page displays irrelevant products or errors.

**Test Case ID: TC\_PS\_003**

* **Test Case Description**: Apply a price filter to the search results.
* **Priority**: High
* **Test Steps**:
  1. Perform a product search with the keyword "laptop".
  2. Apply a price filter (e.g., $500 - $1000).
* **Expected Result**:
  1. The search results page updates to display only products within the specified price range.
* **Pass/Fail Criteria**:
  1. **Pass**: The products displayed match the price filter criteria.
  2. **Fail**: Products outside the specified price range are displayed.

**Test Case ID: TC\_PS\_004**

* **Test Case Description**: Filter search results by brand.
* **Priority**: Medium
* **Test Steps**:
  1. Perform a product search with the keyword "headphones".
  2. Apply a brand filter (e.g., "Sony").
* **Expected Result**:
  1. The search results page updates to display only "Sony" brand headphones.
* **Pass/Fail Criteria**:
  1. **Pass**: Only "Sony" brand headphones are displayed.
  2. **Fail**: Products from other brands are shown.

**Test Case ID: TC\_PS\_005**

* **Test Case Description**: Use category navigation to find a product.
* **Priority**: High
* **Test Steps**:
  1. Navigate to the "Electronics" category.
  2. Select the "Mobile Phones" subcategory.
* **Expected Result**:
  1. The category page displays a list of mobile phones.
* **Pass/Fail Criteria**:
  1. **Pass**: The page shows relevant mobile phones.
  2. **Fail**: The page displays irrelevant products or errors.

**Test Case ID: TC\_PS\_006**

* **Test Case Description**: Browse products using pagination.
* **Priority**: Medium
* **Test Steps**:
  1. Perform a product search with the keyword "tablet".
  2. Navigate to the second page of search results.
* **Expected Result**:
  1. The second page of search results is displayed with relevant products.
* **Pass/Fail Criteria**:
  1. **Pass**: The second page shows a continuation of relevant search results.
  2. **Fail**: The page fails to load or displays irrelevant products.

**Test Case ID: TC\_PS\_007**

* **Test Case Description**: Sort search results by price (low to high).
* **Priority**: Medium
* **Test Steps**:
  1. Perform a product search with the keyword "camera".
  2. Sort results by price (low to high).
* **Expected Result**:
  1. Products are displayed in ascending order of price.
* **Pass/Fail Criteria**:
  1. **Pass**: Products are correctly sorted by price.
  2. **Fail**: Products are not sorted as specified.

**Test Case ID: TC\_PS\_008**

* **Test Case Description**: Sort search results by rating (high to low).
* **Priority**: Medium
* **Test Steps**:
  1. Perform a product search with the keyword "smartwatch".
  2. Sort results by rating (high to low).
* **Expected Result**:
  1. Products are displayed in descending order of rating.
* **Pass/Fail Criteria**:
  1. **Pass**: Products are correctly sorted by rating.
  2. **Fail**: Products are not sorted as specified.

**Test Case ID: TC\_PS\_009**

* **Test Case Description**: Verify search results display with special characters in the keyword.
* **Priority**: Medium
* **Test Steps**:
  1. Enter "@#$%^&\*" in the search bar.
  2. Click the "Search" button.
* **Expected Result**:
  1. The search results page should handle special characters gracefully without errors.
* **Pass/Fail Criteria**:
  1. **Pass**: The page does not crash and handles the input appropriately.
  2. **Fail**: The page displays an error or crashes.

**Test Case ID: TC\_PS\_010**

* **Test Case Description**: Verify search results for a common misspelling of a product.
* **Priority**: Low
* **Test Steps**:
  1. Enter "iphne" in the search bar.
  2. Click the "Search" button.
* **Expected Result**:
  1. The search results page displays products for "iPhone" or suggests the correct spelling.
* **Pass/Fail Criteria**:
  1. **Pass**: The page shows relevant products or suggests the correct keyword.
  2. **Fail**: The page displays irrelevant products or errors.

**2. Product Details**

**Test Case ID: TC\_PD\_001**

* **Test Case Description**: View product details for a specific item.
* **Priority**: High
* **Test Steps**:
  1. Perform a product search with the keyword "laptop".
  2. Click on a specific product from the search results.
* **Expected Result**:
  1. The product details page displays images, description, specifications, and reviews.
* **Pass/Fail Criteria**:
  1. **Pass**: All relevant product details are displayed.
  2. **Fail**: Missing or incorrect information is displayed.

**Test Case ID: TC\_PD\_002**

* **Test Case Description**: Verify product image gallery functionality.
* **Priority**: Medium
* **Test Steps**:
  1. Navigate to a product details page.
  2. Click through the product image gallery.
* **Expected Result**:
  1. The image gallery allows viewing of multiple product images.
* **Pass/Fail Criteria**:
  1. **Pass**: All images load correctly and can be navigated.
  2. **Fail**: Images fail to load or navigation is broken.

**Test Case ID: TC\_PD\_003**

* **Test Case Description**: Check product specifications accuracy.
* **Priority**: High
* **Test Steps**:
  1. Navigate to a product details page.
  2. Verify that specifications match those provided by the manufacturer.
* **Expected Result**:
  1. All product specifications are accurate.
* **Pass/Fail Criteria**:
  1. **Pass**: Specifications are correct and match the manufacturer's details.
  2. **Fail**: Incorrect or missing specifications.

**Test Case ID: TC\_PD\_004**

* **Test Case Description**: Verify user reviews display correctly.
* **Priority**: Medium
* **Test Steps**:
  1. Navigate to a product details page.
  2. Scroll to the user reviews section.
* **Expected Result**:
  1. User reviews are displayed with ratings and comments.
* **Pass/Fail Criteria**:
  1. **Pass**: Reviews are visible and properly formatted.
  2. **Fail**: Reviews are missing or incorrectly displayed.

**Test Case ID: TC\_PD\_005**

* **Test Case Description**: Verify "Add to Cart" button functionality.
* **Priority**: High
* **Test Steps**:
  1. Navigate to a product details page.
  2. Click the "Add to Cart" button.
* **Expected Result**:
  1. The product is added to the shopping cart.
  2. A confirmation message is displayed.
* **Pass/Fail Criteria**:
  1. **Pass**: Product is added to the cart and confirmation is shown.
  2. **Fail**: Product is not added or no confirmation is displayed.

**3. Shopping Cart & Checkout**

**Test Case ID: TC\_SC\_001**

* **Test Case Description**: Add a single product to the shopping cart.
* **Priority**: High
* **Test Steps**:
  1. Navigate to a product