

Sri Lanka Technology Campus (SLTC)

CCS3311 Software Quality Assurance Lab sheet 1

2025

Instructions:

- i. Submit your answers as a single PDF or DOCX file on or before the deadline provided in the LMS
- ii. Late submission will not be considered for the marking.

Evaluating a Live Website for Features, Failures, Faults, and Errors

Instructions:

- Select a publicly accessible website (e.g., e-commerce, news portal, education platform, etc.).
- Identify more than 10 key features of the website. These can be functional (e.g., search bar, login system) or non-functional (e.g., loading speed, responsiveness).
- Carefully observe and interact with the website.
- Document any failures, faults, or errors you encounter or assume may have occurred during development.
- Use the provided table to categorize each issue accordingly.
- Submit your report as a PDF or Word document.

Selected Website : Amazon.com

Identified Features:

1. **User Account & Login System** – Allows users to register, log in, and manage their accounts.
2. **Product Search Bar** – Lets users search for products using keywords.
3. **Product Listings & Descriptions** – Provides detailed info including images, specs, and reviews.
4. **Add to Cart** – Lets users add items to a virtual shopping cart for purchase.
5. **Wishlist** – Allows users to save products for future reference.
6. **Checkout System** – Secure payment processing for orders.
7. **Order Tracking** – Track package location and delivery status.
8. **User Reviews & Ratings** – Enables feedback and star ratings for products.
9. **Search Filters** – Filters by category, price, brand, rating, etc
10. **Responsive Design** – Optimized for desktops, tablets, and smartphones.
11. **Page Load Speed** – Pages load quickly under normal conditions.

Issue ID	Feature Related	Observed Failure (What)	Suspected Fault (Why)	Possible Error (How)
1	Login System	User is redirected to homepage without logging in	Session token not properly generated	Developer forgot to bind the login action to the session handler
2	Search Function	Some products don't appear for relevant keywords	Poorly tuned search algorithm	Developer did not include all relevant product tags
3	Add to Cart	Cart shows "empty" after adding product	Cart session not updated correctly	Race condition in cart state management
4	Mobile Responsiveness	Sidebar menu overlaps product grid on mobile	CSS media query not handling screen width properly	Developer didn't test layout below 360px screen width
5	Checkout Process	Checkout freezes after selecting payment method	JavaScript error in payment processing	Syntax error in payment form handler
6	Product Reviews	Clicking "Write a Review" doesn't respond	Button not linked to review modal function	Developer missed onclick event handler
7	Wishlist	Some items disappear from wishlist randomly	Data not persisted to user account properly	Missing database commit after item addition
8	Product Images	Zoom function not working on certain images	Image zoom library not initialized for all image formats	Developer applied zoom script only for .jpg, not .webp images
9	Search Filters	Filters reset after page reload	State not saved in URL or local storage	Developer didn't implement state persistence
10	Order History	"Track Package" leads to 404 error on old orders	Broken link or missing backend record	Developer hardcoded a now-invalid tracking URL
11	Loading Speed	Home page takes >6 seconds to load on 3G network	Large image and script files not optimized	No compression or lazy loading of images/scripts applied