REQUIREMENTS UNDERSTANDING DOCUMENT

Project Name: OpenCart E-Commerce Website

QA Engineer: Tharushi Nimesha

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1. Project Overview

Open cart is an open-source e- commerce platform that allows business to create online store. It include key features such as product management, customer management, shopping cart, checkout, order tracking and user authentication. OpenCart provides powerful customization options that allow you to shape your store according to your needs. Using OpenCart's comprehensive tools, you can unlock the full potential of your online business.

As a QA engineer my goal is to verify that all core features function correctly and align with the expected. Requirements of a standard e- commerce system.

2. Scope

This document covers the main functional module in the open cart website.

- Home page
- Login
- Register
- Product list page
- Product catalog page
- Shopping cart
- Checkout process
- User account management
- Search function
- Wishlist and compare
- Contact us page

3. Functional requirements

Navigating The Shop

The home page is arguably the most important page in the shop, in terms of presentation. In most cases, this will be the first page that a customer interacts with (especially if they are directed to the store site from a search engine). The shop's homepage needs to be user-friendly, while at the same time highlighting the shop's products. The first step in becoming familiar with the store front is understanding the anatomy of the OpenCart default homepage.
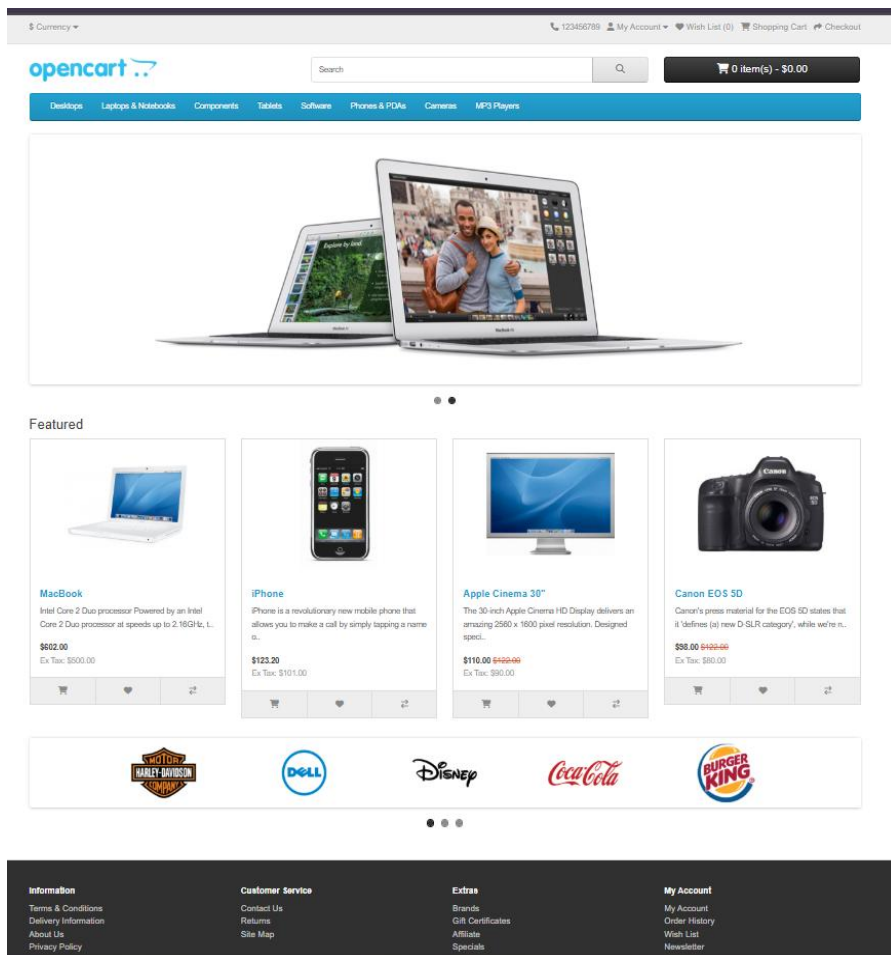
Header

The header will be displayed at the top of the page, on every page of the store; not just the home page.
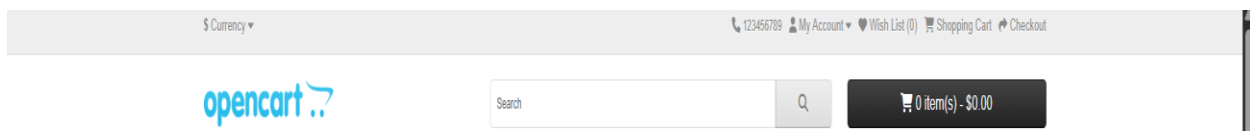
The header has the following navigation options:

• Store logo: Clicking on this logo will direct the customer back to the home page of the store.

 • Currency block: The customer can select which currency the store's products will be in by clicking on any of the currency icons.

• Shopping Cart: Displays the number of items purchased, and the total price of the order. Clicking on the button will containing all of products added to the cart and an option to "View Cart" or "Checkout".
• Search box: The customers can type in the search box to search for a product within the store's product categories.

 • Links: Links the customer to the Home page, Wish List, My Account, Shopping Cart, and Checkout.

• Telephone: Company telephone number.

• My Account: Customer can register or login from here.

The Top Menu

The top menu category only displays the top parent categories of products. Like the header, the top menu will be displayed on every page. When the customer's mouse is dragged over a category, a drop-down menu will display the sub-categories for that parent category.

Desktops	Laptops & Notebooks	Components	Tablets	Software	Phones & PDAs	Cameras	MP3 Players

When a parent category is clicked, the customer will be directed to the category page, which displays all the products within that category.

Slide Show

The slideshow displays several product banners of your choice by alternating the images in a slideshow. After a certain amount of time, one banner will shift to the the next banner. Banners in this slideshow are useful for highlighting certain products to be easily accessible by the customer. When the banner is clicked on, the customer will be directed to the product on the banner's page.

Unlike the top menu and header, the slideshow in the OpenCart default can only be viewed on the home page in this position.

Featured Products

OpenCart gives you the option of featuring specific products of their choosing on the home page.
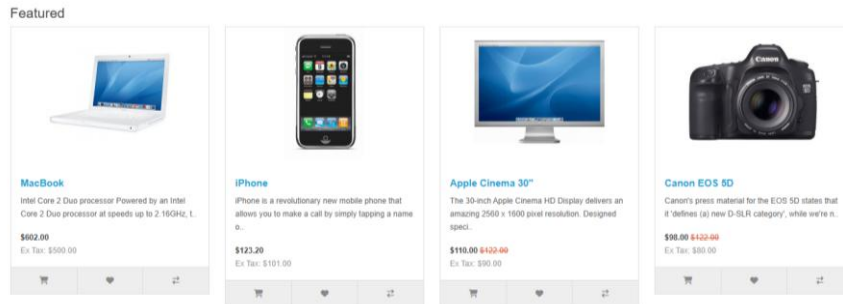
The Featured section includes the product image, name, price and an option to add the product directly to the Shopping Cart. The carousel is only located on the Home Page in the default.

Footer

The footer is located at the bottom of every page, not just the Home Page. This block of miscellaneous links is useful in sorting relevant pages for the customer that may not logically sort anywhere else. The organizational scheme of the footer can be divided into the following sections:

• Information: "About Us", "Delivery Information", "Privacy Policy", "Terms & Conditions"

• Customer Service: "Contact Us", "Returns", "Site Map"

 • Extras: "Brands", "Gift Vouchers", "Affiliates", "Specials"

• My Account: "My Account", "Order History", "Wish List", "Newsletter"
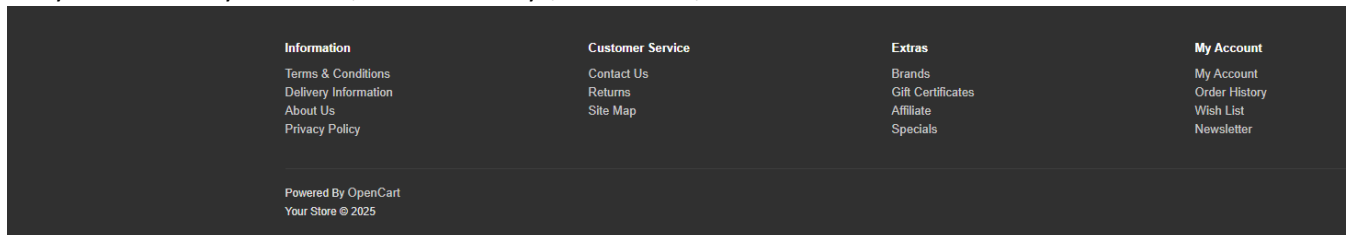
Product Pages

The OpenCart default product page will follow the structural format seen below.
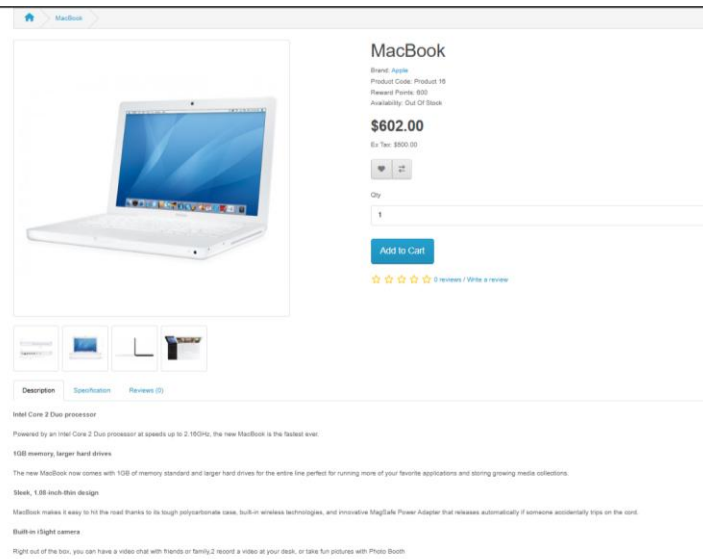
The product page can be divided into the following sections:

• Product image: The product image can be displayed under the title on the left-side, along with alternate views of the product underneath it in smaller box. Clicking on the main image will expand the image within the window for the customer to see it in greater detail.

• Product details: The product code, availability, and price are displayed just right to the product image.
• Cart: The customer can select a quantity and add the product to their cart, wish list, or compare.

• Rating/Sharing: Underneath the cart can rate the product and/or share the product on different social media websites.

• Description tab: An area underneath the main product information to provide a detailed description of the product.

• Review tab: An area for the customer to write a review on the product.

Category Product Listing

Category product listings enable customers to browse products similar to other products within the same category. This is especially helpful for customers looking to compare products, a feature that will be explained under Categories. The category page can be accessed a number of ways. It can be accessed from the top menu, when a customer clicks on one of the parent categories. Also, on product pages a customer can access the category product listing page by clicking on a category on the left side category block.
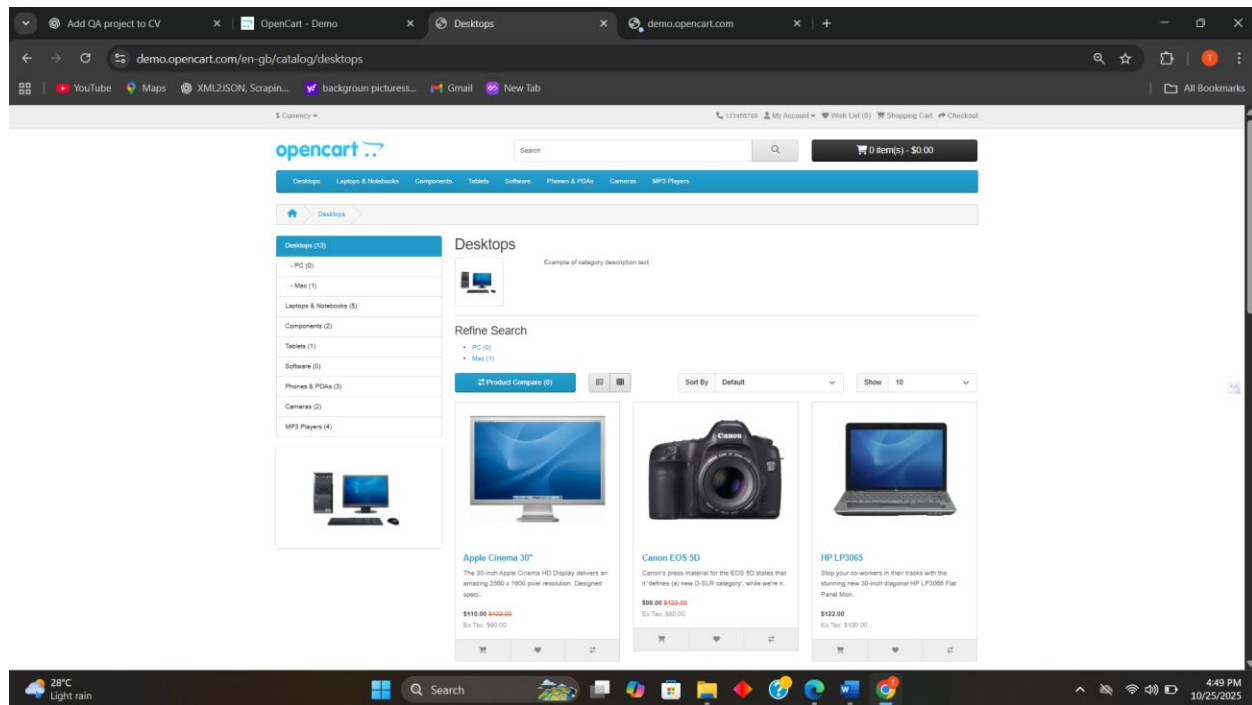
As seen above, the category block is displayed on the left-side like it is in the product page. There is space under the Category title at the top to add a description to the category. The "Refine Search" links to sub categories of that category for the user to browse. The products can be displayed according to the customer's preference: in a list or grid. The above image is sorted in the listing format. The products can be sorted according to name, price, rating, or model in the "Sort By" box. The number of products displayed in the product listing can be changed in "Show" from 15 up to 100. There is a section that gives space for each of the products within the category, providing a product image, description, price, and an Add to Cart option. There is an option to add the product to a wish list. Another option for the product is to "Add to Compare".

Product Comparing

The "Add to Compare" feature in the product section allows the customer to compare the different specifications, features, and price of a number of products s/he might be interested in.

Product Comparison

Product Details		
Product	Canon EOS 5D	Apple Cinema 30"
Image		
Price	$98.00 $122.00	$110.00 $122.00
Model	Product 3	Product 15
Brand	Canon	Apple
Availability	2-3 Days	In Stock
Summary	Canon's press material for the EOS 5D states that it 'defines (a) new D-SLR category', while we're not typically too concerned with marketing talk this particular statement is clearly pretty accura..	The 30-inch Apple Cinema HD Display delivers an amazing 2560 x 1600 pixel resolution. Designed specifically for the creative professional, this display provides more space for easier access to all ..
Weight	0.00kg	12.50kg
Dimensions (L x W x H)	0.00cm x 0.00cm x 0.00cm	1.00cm x 2.00cm x 3.00cm
Processor		
Clockspeed		100mhz
	Add to Cart Remove	Add to Cart Remove

The customer is given the option to add one of the compared products to the cart if they want to. Pressing "Continue" will bring the user back to the home page.

Shopping Cart Page

Once a customer adds a product to the cart, they can access the shopping cart in the header under "Shopping Cart".

Shopping Cart (20.00kg)

Image	Product Name	Model	Quantity			Unit Price	Total
	iPhone ***	product 11	2	⟳	⊗	$123.20	$244.40
						Sub-Total	$202.00
						Eco Tax (-2.00)	$4.00
						VAT (20%)	$40.40
						Total	$246.40

What would you like to do next?

Choose if you have a discount code or reward points you want to use or would like to estimate your delivery cost.

Estimate Shipping & Taxes	⌄
Use Coupon Code	⌄
Use Gift Certificate	⌄

Continue Shopping   Checkout

The shopping cart gives an overview of the product selected by including the categories "Image", "Product Name", "Model", "Quantity", "Unit Price", and "Total". The customer has an option to add a coupon code or gift voucher, or estimate shipping & taxes, before heading to the checkout. The "Continue Shopping" button links back to the homepage.

Creating An Account

Before a customer can continue checking out a product from the shopping cart, the customer needs to select either guest checkout or log into their account. The guest checkout doesn't require log-in details. Returning customers may want to make an account with the store. There are a few ways a customer can make an account:

1. Header – " My Account"

Clicking "My Account" in the header will show the option for customer to the Login or create account. This page gives the customer an option to log in if they already have an account, or create a new account. In the "New Customer" section the customer can click "Continue" under Register Account to be directed to the "Register an Account" page.

Login

Returning Customer

I am a returning customer

E-Mail Address

| E-Mail Address |

Password

| Password |

Forgotten Password

Login

- User enters valid email and password to log in.

- System validates credentials against registered users.

- Displays an error message for invalid credentials.

- After successful login, redirects to the "My Account" page.

Checkout

Once a product has been added to the cart, the customer can continue to the checkout to make their product purchase. The Checkout page can be accessed in the header section of every page (found under the search box). Customer checkout using OpenCart is a simple process that can be completed in 6 steps.

1. Step 1: Checkout options The customer can log into or register their account (as explained above), or select guest checkout.

2. Step 2: Billing details Personal details including "First Name", "Last Name", "E-mail", and "Telephone" are filled into a form. It also requires the customer's address details.

3. Step 3: Delivery details In Billing Details, the user can check a box to indicate that the delivery details and billing details are the same. This will cause it to skip over this step to Delivery Method. If the delivery details are different from the billing details the customer can enter this information in a form in this section.

 4. Step 4: Delivery method A method of shipping is selected here. A comment box is added for the customer to add comments about their order.

5. Step 5: Payment method The customer selects their method of payment here and may add comments in the comment box.

6. Step 6: Confirm order In this last step, the customer will see an overview of their purchase; including the product description, quantity, and price (with tax & shipping).

4. Non Functional Requirements

- Application should load within 3 seconds on broadband internet.

- Responsive design (desktop, tablet, mobile).

- Supports multiple browsers: Chrome, Firefox, Edge, Safari.

- Secure login with encrypted passwords (HTTPS).

5. Assumptionss

- Demo version does not include real payment gateways.

- Product and user data stored in database via admin panel.

- Email notifications use a test mail configuration.

6. References

Open cart website : https://demo.opencart.com/en-gb?route=common/home