Best practices for e-commerce systems

Matthew Boote

SOFT20181

Table of Contents

[Introduction 1](#__RefHeading___Toc143_377959123)

[Analysis of best practices 1](#__RefHeading___Toc145_377959123)

[Best practices in the design of the websites 2](#__RefHeading___Toc147_377959123)

[Design issues 3](#__RefHeading___Toc542_377959123)

[Conclusion 3](#__RefHeading___Toc149_377959123)

# Introduction

This report is an analysis and design of websites in general and for the Candy King website that looks at the best practices for effective e-commerce websites.

# Analysis of best practices

This part of the report examines the principles behind an effective e-commerce website; it will be divided into two parts that apply to the website as a whole and those that apply to the individual elements.

The practices can be divided into layout and styling of the elements, beginning with the layout of the website. This is an important consideration, firstly because it influences how the user perceives and interacts with the website; users have been found to prefer a site that is easy to use, because the first priority for the users is to buy a product. The site should leave a positive first impression will either cause the user to continue to visit the website and buy products or leave the website.

The layout of the page and elements affects the website, because according to X, there is an optimal distance between the elements; if they are too close together it is difficult to distinguish one element on a page from another, an example is if the products display on the page are too close together, it is difficult to distinguish between the two products. Similarly, elements that are too far apart make navigation difficult, because the user must make an increased effort to move between the elements. A site should be laid out in a way that maximizes user interactivity, by setting the layout and style. It should help customers move easily and quickly through the site by placing elements in a way that guides them through the process of choosing and buying the products.

A similar idea is reducing the number of related items and placing them in a single group. This reduces clutter in the interface, according to X. An example on the website is where the products are grouped under product group menus, that are sub-divided into product type menu items; the chocolate menu item, when clicked displays a drop-down menu that lists the different types of chocolate products. The grouping of the product types reduces clutter in the user interface, an important principle according the Z.

The standard practice on e-commerce websites is divide the site into distinct areas with a top “header” with a control-panel area and the navigation bar. The former contains the site’s logo to identify the site, which when clicked returns the user to the index page. This is a useful navigation feature to increase the user mobility across the site and is a common feature on e-commerce sites. An example is the Amazon website, where clicking on the logo returns the customer to the site’s index page. Next to the logo on the Candy King website is a search bar, according to N, users will want to quick access to information about products and that a search facility is considered faster than browsing many pages of products to find the product they are searching for,”Quote”.

Below the header area is the navigation menu bar that allows customers to select the products; this menu and the control panel area are similar in that they lead to other pages on the site.

An aspect of the e-commerce best practices is the styling of the website, the colours, images and typography and how the style of the elements interacts with the other elements. The colours of the website, should to create an effective user interface, they should be used to lead the user through the interface. An example is the highlighting of menu items when they are hovered over, this is considered a good practice, because it gives feedback to the user so that they know that the interface has responded to their input, a practice that can be applied to many user interface elements was only implemented for the drop-down menus, however, they could have been used.

The website attempts to follow best practices for colours, with a light-coloured background and darker colours placed on top. Using this colour hue scheme is considered a good practice, firstly dark backgrounds make it difficult to see a whole range of colours; dark colours on dark background will obviously be difficult to see. Secondly, dark backgrounds often give make the site seem muted and dull and rather unappealing; light colours will give the site a light, airy feel that when coupled with dark colours placed on top, will create a welcoming website. This, however, is a subjective area, many websites, depending on their function, design and the product they are selling can use darker colours; the tone and hue of the colours is a continuum with the background and foreground colours being relatively light and dark to each other.

The typography, when used correctly, will improve the users experience of the websites. The best practices are to use as few fonts as possible to increase to cohesiveness of the text; using many different fonts can confuse users.

Images of the products are an important part of the website, they provide a visually appealing aspect to the website, consider a website that has a text-only interface, it would be considered unappealing and uninteresting by potential customers; images add a polished, professional feel to the interface. The images themselves should be appealing according the Z; the customer, unlike in a physical shop does not have the ability to examine the products by handling them, so therefore there should be multiple images from many angles to show the product in the fullest possible way. The sweets that are sold on the website did not use this technique, the products on this site would not have benefited from multiple images because the nature of the products, sweets and chocolate

The navigation of the website should be clear cut and intuitive to use; including the layout and styling principles laid out above, the mechanics of the navigation should be fast and smooth to, firstly allow the user to quickly navigate through the website, the user expects to be able to move between elements on a page and between the pages,.

# Best practices in the design of the websites

Following the examination of the general design principles, the report will attempt to apply the principle stated above to the individual pages of the website.

This section of the report will group the product, product management and basket pages together, because they have a similar purpose and they were designed and implemented from the same code and therefore will have

The product information should be as clear and concise as possible, the user will be browsing many products; there is an optimal time of 1 second to decide and will influence their decision to buy or to not buy the product. Clarity of the information means that it should be immediately obvious what the product is. The aspects of the information that increases the readability of the page: is the layout, of the individual products, for example each product uses a large product image, a short name and the price. This is a compromise between needing to show information about the products and conserving space. The level of detail in the information shown is often divided between the product page and an individual item page. The product page displays multiple products that displays the products in a grid view, a method of displaying items that is recommended to increase ease of browsing, dividing

The layout of the management page used a linear list format with very little other information rather than a grid format that fits the functional use for an administrator who will not expect a stylish interface, unlike the customers who will want a clean, usable interface.

# Design issues

Finally, design issues and choices during development will be looked at.

The general design and implementation of the site was straightforward; the top bar and navigation bar were copied and adapted to reference the ASP pages. A similar process was used in the product pages for the content and code. The content page used the CSS style page from the previous website which made adapting the website easier than it would be if a new style sheet was used and the code used and adapted from the worksheets; any extra work was to change it to suit the website.

However, there were problems linking roles to users, the users and roles can be created but it was not able to associate one with the other.

The second design issue was deciding where to store information, initially it was to be stored in the users table in a “basket” column. This however, was found to be limited in space and unworkable, so a second database table was created called Basket that held the information about products the customers have placed into their basket. The database solution was found to be a much more efficient way of storing information.

# Conclusion

The website meets many of the requirements for an e-commerce website.