

Unit 15 Assignment - Website Development

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Vocational Scenario / Context:

You have recently joined a web development company as a junior web developer. As part of your induction to the company you have been asked to select two web sites and evaluate them. Further, the company has asked for a demo site to show what you have learned.

Task 1 - Website Comparison and Analysis:

I'm going to be producing an in-depth analysis on two different websites. The goal is to showcase the principles of web design within each site and to then compare the two websites, whilst also showcasing their suitability for intended purposes and audiences. Additionally, I plan to analyse and evaluate how the principles of website design are used to produce creative, high performance websites which meet client requirements.

I will be comparing `gamestop.com` to `cdkeys.com`

Introduction and Purpose

GameStop - The first website I have chosen to analyse is GameStop (GME). GameStop is an American video game and consumer electronics retailer which has grown a major ecommerce presence through their own website. Originally a physical storefront, in the early 2010's GME began to migrate their sales efforts online in an attempt to stay competitive with other ecommerce websites like Amazon. Because of this migration, naturally the primary purpose of their website is to host the commercial transaction of goods and services they offer. For example, this may include the sale of consumer electronics, offering a platform for the business to ship products to customers directly. An example of one of GME's services facilitated by their website is the "PowerUp" Loyalty Program. Hosting GameStop's own website allows them to offer this loyalty program to consumers through an effective and accessible login portal.

GameStop considers their primary target demographic groups as children, teenagers all the way through to middle aged groups with an interest in gaming. Additionally, their website has segments dedicated to general consumer electronics which expands their potential audience to anyone with an interest/need for technology. This means the website has to be accessible for a variety of groups.

CDKeys - The second website I am analysing and comparing to GameStop is CDKeys (CDK). CDKeys is an ecommerce storefront based solely upon the sale of digital game keys. Unlike GME, CDK has never had any physical commerce presence and has always been fully online via their website. The digital game keys they sell are redeemable codes for various gaming platforms. Ultimately, this is a modern replacement for physical media. For example, rather than buying a physical game disc and putting it into your console, you can simply buy a game key from a site like CDK and input it into the consoles storefront to own the game digitally. Naturally, the primary purpose of the website is to sell digital goods, CDK's primary difference to other online key sites is that they accept a wider variety of payment methods, such as Cryptocurrencies.

CDKeys have not themselves laid out a primary target audience unlike GME, however since CDK provide a rather niche product we can assume that their target audience is young gamers who are reasonably tech savvy. My justification for this assumption is the fact that young people from ages 12 - 35 are video games largest demographic. In addition, CDK's unique feature of alternate payment methods leads me to believe that the casual market is not their target. This makes casual user friendliness less of a priority in the website design of CDK than GME, since GME has a casual market to capture.

Design - Here are the primary principles of website design and their utilisation on each website:

- GameStop** - Colour - The immediate impression of GME's website is a clean and user friendly design, with a plain white(`#ffffff`) coloured background with buttons and media overlaid at a centred and equal ratio. The secondary colour is a deep grey(`#212322`) which is used with the navbar, search icon and login buttons. This grey is also the same colour as the logo, creating a clean and unified colour palette across the websites various elements. The final fundamental colour is a variant of red(`#e74444`) which is used to highlight attributes like product prices and "Add To Cart" / "Buy Now" buttons. The purpose of this colour scheme is evidently to create a base which contrasts well with media elements like product images and promotional videos. The predominant choice of white is minimalistic and helps direct user focus onto the products and important website elements, keeping the website clean and preventing distraction.
 - CDKeys** - Colour - Unlike GME, CDKeys immediately greets you with a darker and less energetic colour scheme using a consistent, dark purple(`#1f143d`) across every page of the website. Similarly to GME however is the decision to use a limited palette with the only other colours being a secondary white(`#ffffff`) for buttons and a lime green(`#17cf91`) for the "Add to cart" button. Whilst a very specific choice, the colour scheme creates a good canvas for the placement of contents and media just as GME's white background does, achieving the goal of being unique and simultaneously not a distracting choice.
- GameStop** - Typography - The websites primary font is "Open Sans Soft Regular", a sans-serif typeface. This main use of 1 font in all consumer activities on the website is a powerful user friendly choice, creating consistent typographic elements for a visually pleasing experience across the website. All text, even when associated with an image is aligned to the left in an "F-shaped pattern", which makes for a natural experience that's readable to the user.
 - CDKeys** - Typography - CDK uses "Draft B Regular" as its primary font, whilst altering its boldness depending on if it is a heading, subheading or a normal paragraph. It is a clean and readable font which combined with its iconic purple is unique enough to attach a sort of brand identity with CDK. GME's colour scheme and font selection works well and is clean, however it is basic to the point where it is harder to forge a brand identity around it. CDK uses the same left aligned, "F-shaped pattern" text alignment to create a fluent and readable experience for western users.
- GameStop** - Navigation / Layout - GME's website has a consistent and user friendly layout. On the home page, you are immediately confronted with media and text relating to concurrent events, sales and product releases. Scrolling down greets you with a list of all gaming brands that are sold giving the user fast and easy access to any product they may be looking for. Otherwise, they can always use the search bar located in the navbar on top of the site. Scrolling even further presents different product categories, like mobile phones, computer components etc. All products and product category lists are in rows of 5, taking up a small and efficient amount of space on the web page making for an efficient use of the screen space. Without any navigation features, the home page alone presents you with all the avenues to the products you want. This makes navigation rapid and accessible for the users.
 - CDKeys** - Navigation / Layout - The CDK website layout is similar to GME's approach. The landing page immediately greets you with a list of products, in the case of CDK it showcases best sellers and limited time offers. CDK then also divides its products by brand, just as GME does. For example, game keys are divided into the segments of PC games, Nintendo games, Xbox games and Playstation games allowing users to select which brand they intend to buy and immediately filter out the majority of unwanted results. In addition, CDK also has a search bar which is much more prominent in comparison to GME, further proving that CDK is catering to a more hardcore audience that may know what they're searching for. Just as GameStop does, all products and product category lists are in rows of 5, taking up a small and efficient amount of space on the web page making for an efficient use of the screen space. Without any navigation features, the home page alone presents you with all the avenues to the products you want. This makes navigation rapid and accessible for the users.
- GameStop** - Content / Media - As an ecommerce website, much of GME's content is made up of images. A lot of the products being showcased and sold are accompanied with high resolution images and in some cases a video. For example, the listing for an iPhone 12 contains 4 high resolution images. The listing for a product accompanied with a video may also include embedded media like YouTube clips, which is a convenient and accessible way of presenting media.
 - CDKeys** - Content / Media - Just as GME is, CDK is made up of a lot of media. Each game on sale has multiple screenshots and videos attached to showcase the look of the game. Additionally, each game has a cover art that would usually be displayed on a disc case physically, but is shown as a thumbnail for the game instead. The quality in resolution of these images seem to range from high quality to downright bad. This could be to either a lack of available high resolution artwork, or even CDK not wanting to host such high resolution content.

GameStop - Compatibility - To maximise compatibility across various devices and screen sizes, the website automatically scales its attributes and contents to whatever size the window is. On a desktop, the website is shown in its 16:9, typically intended presentation. When opened on a mobile phone, the layout of the website will adapt to the screen size and be presented in a different way, most likely designed for improved efficiency on a portrait device. In GME's about section, they claim the website is optimised for Internet Explorer, Microsoft Edge, Firefox, Google Chrome and Safari browsers. Whilst this is just their recommendation, the website will likely run on many browsers, but with a potential impact to intuitiveness and presentation.

CDKeys - Compatibility - In terms of compatibility and scalability, CDK and GME share the exact same attributes, as listed and described above.

GameStop - Performance Considerations - Since the website consists of many high resolution images, performance can vary on a device by device basis. Using Google Chromes performance analysis tools, I measured a 3199ms load time which includes processes like scripting and rendering. Rendering the web page took up the most of all the processes, at 1200ms of the load time. To keep the website as accessible to as many devices as possible, GameStop uses server-side scripting to perform the scripting of the website away from the local device, therefore reducing load times. Taking the load away from the client-side is crucial to improving performance and supporting as many devices as possible.

CDKeys - Performance Considerations - With the Google Chrome performance analysis tools, CDK clocked in at 3600ms load times to the main page. This is rendering similar contents to GME, if anything, at a lower quality. This could be a disadvantage on the part of CDK potentially due to the way the site has been built differently, maybe even with a lower budget and lower quality code optimisations.

GameStop - Client Requirements - The corporate overlords that commissioned the development of `gamestop.com` are likely very satisfied with its current state as it fits all the criteria for a modern and successful ecommerce storefront. It has:

- Recognisable domains that match with the company
- Uses Transport Layer Security (Formerly SSL) for a secure site connection
- Appeals to company target audience
- Utilises keywords/search engine optimisation appropriately to maximise business reach
- Allows for dynamic stock, anything can be sold or taken down from the storefront at any time
- Marketed affordably via google ads, social media etc

CDKeys - Client Requirements - The companies existence hinges on the quality of the website. With this in mind and CDK's long standing operation as a reliable storefront, it is likely that the higher ups are satisfied with the website and would agree it meets their requirements.

- Domain is the companies identity as an online only storefront
- Uses Transport Layer Security (Formerly SSL) for a secure site connection, like many other sites including GME
- Appeals to company target audience based on the evidence we have available
- Utilises keywords/search engine optimisation appropriately to maximise business reach
- Marketed affordably via google ads, social media etc. In addition to these ad methods, CDK has their own YouTube channel for streaming games and showcasing their latest offers.

Task 2 - Produce a Website:

My website is hosted here: <https://github.com/reece-us/morbius-fan-websiteunit-15/>

The demo website I have produced showcases all of the web design principles I have learned of:

- It has a greyscale colour palette to match the tone and colour grading of the movie
- It contains text in the Ariel font to display information about the movie
- It has multiple images
- It has functioning buttons which can direct you to a web page of my choosing
- And finally, it contains one other type of media, an embedded YouTube link.