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ABBREVIATIONS

HTML HyperText Markup Language

CSS Cascading Style Sheet

JS JavaScript

JSON JavaScript Object Notation

AJAX Asynchronous JavaScript and XML

iFRAME HTML Inline Frame element

API Application Programming Interface

WWW World Wide Web

jQuery Javascript Query

DOM Document Object Model

UWI University of the West Indies

STA Saint Augustine

DISCLAIMER

This website was designed and developed by the following students:

- 1) Dexter Cain HTML, JS, image manipulation and logo design
- 2) Chelsea Joyeau CSS styling of all pages and layouts
- 3) Narin Ramnehal JSON files creation and organization

All images on this website were acquired from the following websites and then manipulated and enhanced in Adobe Photoshop 2019:

- 1) UNSPLASH https://unsplash.com/s/photos/gaming
- 2) Google Images https://www.google.com/imghp?hl=en

SOLUTION SUMMARY

Gaming World TT is a gaming store in Trinidad and Tobago. It provides video games, consoles, and accessories as well as a video game trade-in program. An e-commerce website was built, using client-side technologies learned in UWI STA INFO1601 Web Technologies and Programming course, to allow customers to shop for video games and browse information about the business.

This website project consists of HTML, CSS, JS, JSON and image files. The functionality and usage of each file are expounded on later in this document. Apart from the technologies learned in the aforementioned course, other 3RD party libraries and resources were also utilized to build this website. These resources are described later in this document.

FEATURES

1. PROGRAMMING/MARKUP/STYLESHEETS/3RD PARTY FRAMEWORKS USED

- > This website utilizes the following libraries/frameworks:
 - HyperText Markup Language (HTML) 5
 - Used for structuring and presenting the website content on the WWW.
 - Cascading Style Sheet (CSS) 3
 - Used to describe the look and formatting for the pages(documents of markup) of this website.
 - Bulma (CSS framework)
 - A simple, elegant, and modern CSS framework that is used to enhance the normal HTML elements(e.g. Buttons, divisions, etc.) of this website, giving them a clean and pleasant look.
 - Vanilla JS (Void of additional tools or compile steps during execution)
 - This terminology is used with Javascript to refer to native (standards-based, non-extended) JavaScript. We are using the term to basically contrast with jQuery.
 - jQuery (Javascript library)
 - Used for AJAX functionality.
 - With the jQuery AJAX methods, we were able to request JSON data from a remote server, using HTTP Get, and then load that external data directly into selected HTML elements of the web page.
 - JavaScript Object Notation (JSON)

- Used to store and transmit data objects consisting of attribute-value pairs and array data types.
- This file type was used because it is light-weight and allows for easy reading and writing.
- Asynchronous JavaScript and XML (AJAX)
 - Used to update page container elements without reloading the whole webpage.
 - Used to dynamically render the contents stored in the "services.json" and "games.json" files to the services section of the "index.html" page and the section with "gamesContainer" class of the "store.html" page respectively.
- Alertify.js
 - Used to display confirmation, alert and dialog popups on the website.
- FancyBox3 plugin
 - Used to open images into a modal window and provide access to additional media features such as sharing, printing, etc.

2. WEB SERVICES INTEGRATION

- ➤ This website has the following web services integrated:
 - Google Analytics
 - Used to track and report website traffic data.
 - o Google Developer Console
 - Used to create an API key for user authentication and log in via Google account.
 - Facebook Page Like iFRAME

Used to embed and promote the Gaming World TT Facebook page. Just like on Facebook, visitors can like and share the Page without leaving your site.

3. WEBSITE DESIGN AND DEVELOPMENT SOFTWARE

> This website was designed and built using Adobe Dreamweaver 2019.

4. DESCRIPTION OF FUNCTIONALITY

> index.html

- Notifications (using Alertify.js framework)
 - Welcome notification displayed each time a user visits the website.
 - Subscription success and error notifications for the "Newsletter" section.
- JavaScript Object Notation (JSON) dynamic rendering
 - Dynamically renders the contents stored in the "services.json" file to the services section using AJAX.
- Scroll to top of page
 - This functionality is made possible by using jQuery.
- Integration of Google Analytics using firebase
 - This allows for real-time website analytics data such as audiences(location, devices, demographics, interests) and most visited pages.
- Google Account Login
 - User authentication is done using Google Sign-In. An API key was created, via the Google Developer Console, which allows for token creation when a user tries to sign in with their Google account.
 - After a successful sign-in, an alertify alert is rendered on the DOM and a division container, with identifier "g-sign-in-wrapper", in the navigation bar is updated with the user's name and profile image. A sign-out button is also displayed indicating that the user is logged in. Using CSS and WebKit, a green glowing effect was also added

to the "g-sign-in-wrapper" division, which activates when the hover event listener is triggered.

> store.html (games rendered dynamically using AJAX)

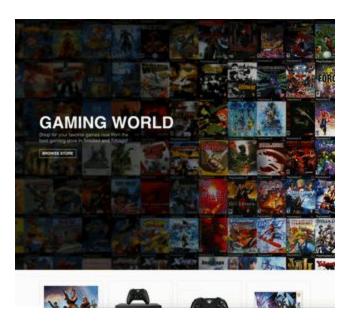
- JavaScript Object Notation (JSON) dynamic rendering
 - Dynamically renders the contents stored in the "games.json" file to the division(div) with identifier "gameContainer" using AJAX.
- Sorting games by platform using checkboxes
- Searching games/JSON objects using AJAX
- Game Photo Gallery
 - The "Read More" button when clicked, opens a modal with full game information such as price, genre, publisher, and screenshots.
 - When the user clicks an image in the "Screenshots" section
 of the modal, another popup image viewer is displayed with
 that particular image. Users can scroll left or right to view
 additional images. This feature is made possible using the
 FancyBox 3 plugin.
- Game Survey
 - A dialog box is displayed 20 seconds after loading the "store.html" page.
 - This prompts the user for their favorite game and displays a thank you message after submission.
- Google Account Login
 - User authentication is done using Google Sign-In. An API key was created, via the Google Developer Console, which allows for token creation when a user tries to sign in with their Google account.

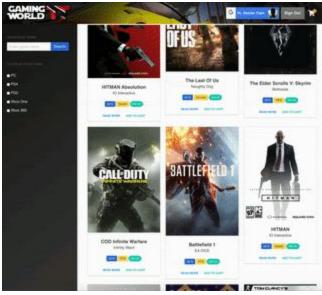
After a successful sign-in, an alertify alert is rendered on the DOM and a division container, with identifier
 "g-sign-in-wrapper", in the navigation bar is updated with the user's name and profile image. A sign-out button is also displayed indicating that the user is logged in. Using CSS and WebKit, a green glowing effect was also added to the "g-sign-in-wrapper" division, which activates when the hover event listener is triggered.

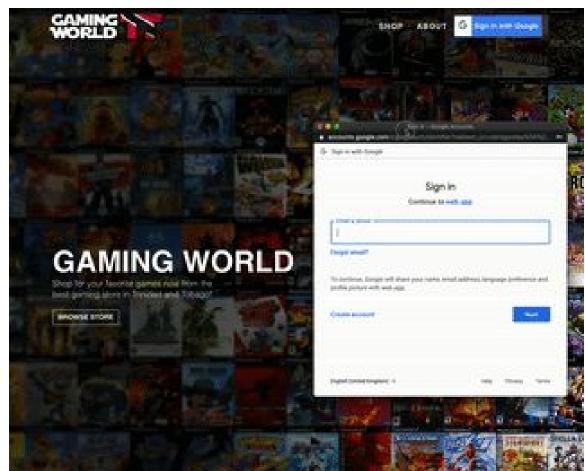
> main.css

- This CSS file contains all custom styling properties for HTML elements, classes and identifiers. Animation properties for some containers are also defined in this file.
- ➤ storeModal.js
- > store.js
- ➤ main.js
- > jquery.js
- ➤ robots.txt
- > services.json
- ➤ games.json

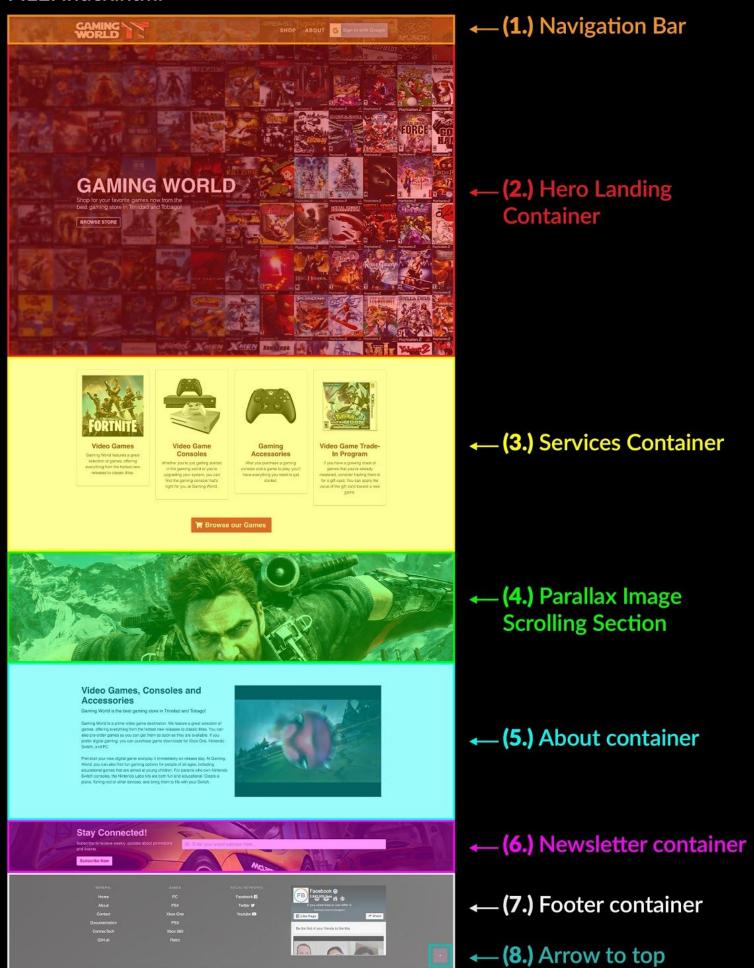
SCREENSHOTS/GIFS



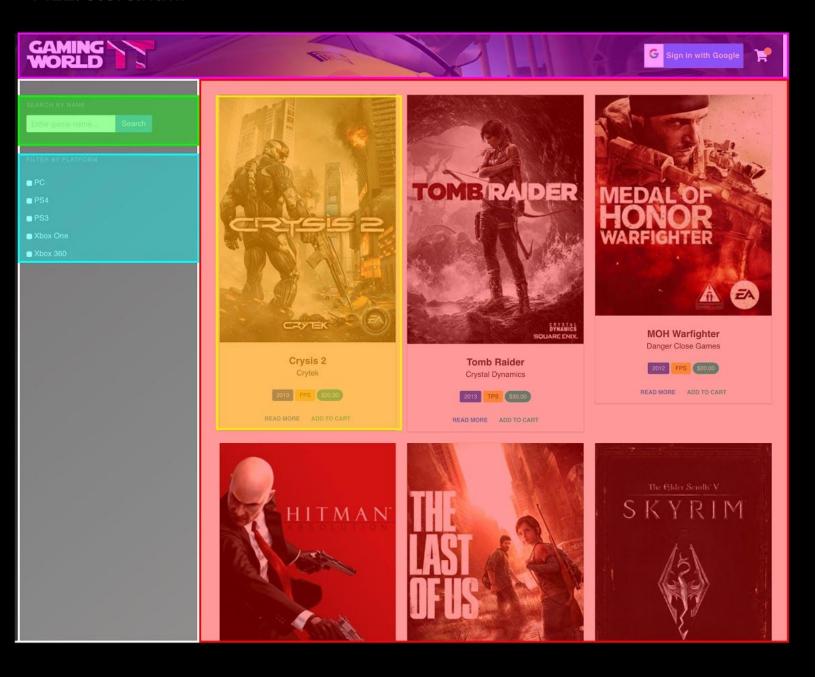




FILE: index.html



FILE: store.html



ELEMENTS







FILE: store.html

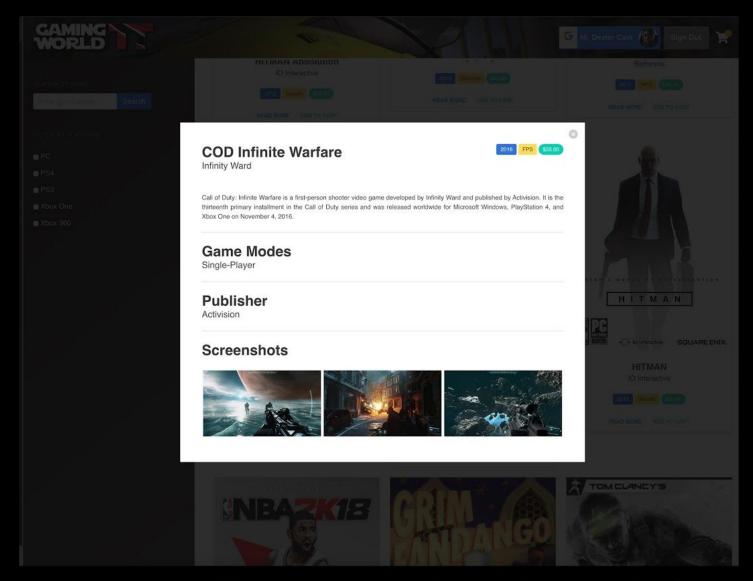


Fig. 1.1 - The image above depicts the modal window of a game. triggered by it's respective "Read More" button.



Fig. 1.2 - The image above depicts an alertify prompt dialog that prompts the user for their favorite game.

This dialog is displayed 20 seconds after the page is loaded.

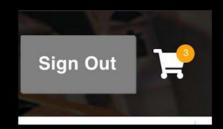


Fig. 1.3 - The image above depicts a section of the navigation bar for a logged in user. The badge on the shopping cart icon displays a count of the number of games that the user has added to the cart (by clicking the "Add to Cart" button).

DELIVERABLE LINKS

- 1. Deployed Application URL: https://gaming-world-tt.web.app/
- 2. Github Repository: https://github.com/DexterUWI/gaming-world-tt