Final Project Report

Minigame Website

Ryerson University

CPS 530 – Web Systems Development

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Section 02

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# Project Topic

Our group’s topic of choice was an HTML website inspired by flash-based video gaming websites prevalent during the earlier years of the internet.

# Project Goal

The goal of this project is to bring back a sense of nostalgia to the early 2000’s flash-based gaming websites and provide a good source of entertainment to everyone during this pandemic.

# Type of Contents

Static Pages

Our site contains a homepage with links to each game, as well as high scores, how-to, and about us pages that are static and do not change depending on the user. The high scores page will only change when a score is submitted in the Snake game (if the user’s score is even high enough), and never otherwise.

Dynamic Pages

Each of our games will almost definitely look differently upon completion from user to user. For example, it is very unlikely for two users to have to guess the exact same word with the same incorrect guesses in Hangman, and incredibly unlikely two games of Connect 4 look the same.

# Templates

The headers and footers of every page was a template given to each member in the form of a <?php include ?> so that all the headers and footers remained consistent throughout the entire website architecture.

# Design

We do data validation upon high score submissions in our Snake game. We check if the user enters a valid name. If the user enters nothing or has numbers in their name, we prevent the user from submitting the high score.

# Responsive Design

Across all modern browsers, the website appears the same. Using Internet Explorer, three games’ appearances are improper: Tic-Tac-Toe, Connect 4, and Hangman. Internet Explorer does not provide the support that modern browsers such as Google Chrome, Firefox, or Microsoft Edge do. It is a non-issue; there are no mobile devices that use Internet Explorer as a default browser, and computers generally come installed with newer browsers. There are very few, if any, who still use Internet Explorer.

The website is compatible with screens of all sizes and will automatically adjust based on the size of the window/screen.

# Accessibility

A wide range of colors were used in creating the website, as well as ensuring contrasting colors on each page. For example, the background and titles for each page were always separate dark and light colors, such as a black background and neon-green title on our home page.

One game in particular, Snake, has a colorblind mode that changes the green-colored snake to blue and the red-colored fruit to orange. This affects those with deuteranopia, or red-green color blindness. No tools were used to check for accessibility, though minor research was done into the topic of deuteranopia.

# Use of API

Our team uses Bootstrap API to style and format our web pages and games, such as our landing page, snake, hangman, Simon, connect four, and more. We also used it to separate our pages into a few columns and rows.

# Hosting Environment

The Ryerson public HTML was used to host the website. This hosting environment was chosen due to having free access to it at any hour of the day, as well as our familiarity with it, having hosted several labs/assignments on it prior to this project.

The website does not use anything too incredibly “fancy”, so our group’s requirements for a hosting environment were not very demanding. This means that our website does not need the absolute “best” environment, but one that can satisfy our website’s needs as easily as possible.