Zach Kim

**Prof Hillary Gross** 

**INFO 303** 

25 April 2024

For my performance project I decided to make a snake game that is pokemon themed to create a sense of nostalgia. The title of the web page is "Pokemon Snake Game" because it introduces the player to what game they are playing and an idea of what to expect during the playing of the game. The web page has no scroll bar and this is by design so the player doesn't accidentally scroll in the middle of the game. This also allows everything to fit within the player's view. The player is first greeted by a welcome screen that displays the pokemon logo, tells the user to hit the enter key to play the game, and tells the player to move the pikachu snake by using the arrow keys. This is the starting screen because it introduces the player to the theme of the game and tells them how to play the game so they don't don't have to figure out the instructions in the middle of the first round. I chose the enter button because that is a common way for a game to begin play. I chose the arrow keys to move the snake because arrow keys are a common way to move a character in any video game. Most people know how to use the arrow keys and I wanted the game to be very simplistic and easy to understand. The background of the web page itself is grass from Pokemon Diamond/Pearl which are two of the first pokemon games that came out in color. I chose grass from an earlier game because I wanted the player to feel like they are immersed in the Pokemon universe and also wanted to help create that sense of nostalgia by using a lower quality image that doesn't have as much detail compared to the newer games. For the font I chose VT323 because it looks pixelated and gives off old schooled arcade vibes.

The score and high score are placed above the right and left side respectively because that is a common convention for games to follow. The scores have three digits because that is another typical convention for older style games. I made the scores a lighter shade of white because I wanted them to stand out on the green background. The high score only displays after the player has played one game because they don't have a high score unless they play one round. The snake itself is composed of pikachu because that is the most recognizable character from the franchise and is the pokemon that Ash chose to be his starter. I wanted to choose a pokemon that most people would know and specifically I chose the 1998 version of pikachu because the image has lower quality to give the game more of a retro feel to it. The head of the pikachu initially starts in the beginning of the screen because this gives the player the most flexibility to locate the first food and find a route to get to it. As the pikachu gets bigger, dotted lines separate the individual pikachu pictures. I chose to do this because I wanted the player to have a better visual of how big the snake is without having to look at their score. The dotted lines make it clear where the pikachu snake is and how big it is. When the snake gets bigger and faster it can be difficult to locate the pikachu snake's borders, but the dotted border draws the attention of the player and signifies that's where the snake is. For the food that the pikachu eats, I chose ketchup because ketchup is pikachu's canonical favorite food. The ketchup that pikachu eats has a gray border surrounding them to let the player know where the ketchup is and where its borders are. In order to gain points, the head of the snake has to collide exactly with the pixel that the ketchup is on. By having the borders, it allows the player to easily identify how close they are to eating the ketchup. The pikachu and ketchup are both squares because I wanted to have blocky characters to help resemble an old school style game. As the game progresses, the snake gets faster and

faster and faster to make the game more challenging to play. I did this because most games get faster or harder as the player gets further along in the game.

The game area itself is located in the middle of the screen, is square in shape with rounded edges, and has three different borders around it. I chose to do this because it reminds me of a gameboy screen that people would play on when they were younger. The main background is green because it resembles the color of the screen of old video games. All three borders have a different thickness to them to draw the player towards the middle of the play area. The middle border is the skinniest, the outer border is the next skinniest, and the inner border is the thickest. The player is drawn to the middle of the screen because the outer border is the darkest in color and their eyes will slowly drift to the center. The game mechanics are very simple and there isn't much on the web page because the simplicity of the game makes it seem retro. "...reducing the player's obsession with decoration underscores the experience of processes while still allowing image, sound, and text to meaningfully clarify the fiction of the game's theme" (Bogost 8). I only created decorations that are essential to the playing of the game. By minimizing the amount on the screen, the player is forced to pay attention to the game and nothing else. Retro style games aren't known for their decorations but are rather known for their simplicity. Because of this, I didn't add any sound. I wanted the player to be focused on the game mechanics and getting the snake as long as possible without colliding with the borders or the snake itself. If a player collides into the snake or collides with the borders of the play area. This is because that is how the snake game is played and without these conditions the game will never end since the snake will be able wrap around itself and the edges of the game board.

This entire game was coded using HTML, CSS, and JavaScript. I decided to use these languages because I haven't used them in a long time and wanted to brush up my skills. I was

deciding between javascript and python to code and looked up tutorials on how to make the snake game using both coding languages. I ultimately decided to use javascript because I am more familiar with that language when it comes to making games. I made a couple games using javascript in high school which allowed me to look at those to help me in the making of this game. Furthermore, javascript seemed to be easier to add functionality to images to make them move. Javascript also allowed me to have a separate background image and separate play area for the player to interact with. I'm not as familiar with making movable objects in python, so I used javascript because I am more familiar with that coding language.

For the code itself, I created three separate files: an html file, a css file, and a javascript file. The html file is called index.html because that is the convention for naming the main file of an html document. It contains everything that blocks off the sections of the page: the area that contains the border and scores.. The css file is called style.css because that is the common naming convention for a css file. It contains all the styling elements: the background image, all the coloring, all the styling, etc. The javascript file is called script.js because that is the common naming convention for a javascript file. It contains everything that has to do with the actual playing of the game: the score increasing, the pikachu snake's movement, the random generation of the food, etc. The game can be made using a single file but with using different types to determine what code goes to which part. However, I prefer having three different files because it helps with the readability of the code and it's easier to find something when things are grouped together in separate files instead of one large file containing all of the information.

## Sources Used

Bogost "How to Do Things with Videogames (Ch. 1 - Art)

snake game tutorial